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Teachers' Reading Comprehension and Use of Reading Strategies Levels: A Study on the Secondary School Teachers

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Abstract
As highlighted by international assessments, the reading comprehension levels of Turkish students are far from the desired level. In this sense, the competencies of teachers who play a vital role in promoting students' reading comprehension skills are of high importance. The expectation that teachers who have a long educational life will have a high level of reading comprehension skills is the central starting point for this study. Identifying the level of reading comprehension of teachers is crucially important in terms of revealing competency levels of teachers. In this study, a descriptive screening model, one of the quantitative research methods, was employed to identify teachers' levels of reading comprehension and use of reading strategies. The universe of the research consists of teachers working in secondary schools in Denizli province. Stratified sampling, which is based on probability sampling, was used for the selection of the sample. The sample included a total of 418 teachers. The research findings indicate that the teachers' reading comprehension and use of reading strategies levels differ by the branch variable, and Turkish teachers exhibit better reading comprehension than other teachers since it is their field of study. In addition to that, it is seen that there is a positive and significant relationship between the level of use of reading strategies and the level of reading comprehension. Therefore, it is thought that an effective instruction of reading strategies will enable teachers of other branches to yield better performance.

Keywords: Reading Comprehension, Reading Strategy, Secondary School Teachers

1. Introduction

People are born in different mother tongues and the mother tongue shapes their experience of the world. Language is the house of thoughts and the main component of life. Further, the capacity of people's world of thought can expand as much as the limits of their own language structure (Heidegger, 2002). The form of thinking is determined by language and thus it is the major factor that directs peoples' lives (Berger & Luckmann, 2008). The way of using language is the main tool in revealing the world of thought. Verbal and written communication processes in daily life are present in the context of language. Building healthy relationships in the society depends on the interaction of individuals' basic language skills. The development of these skills enables the existing world of thought to emerge in the best possible way. Reading activity is not a process limited to vocalizing the alphabet the

letters. Because the meaning is constructed from the text through reading activity. In addition to that, the message in the text is comprehended more accurately in the meaningful reading (Habermas, 2001). The improvement of reading process is directly proportional to the individuals' relationship with their environment. The development process of language skills begins in the zone of proximal development and those skills progress in a systematic and cumulative way throughout people's lives (Bügel & Buunk, 1996; Tayşi, 2007).

Despite the constant changes in the education and training programs, the number of reading comprehension studies is insufficient in our country. This shortcoming is observed especially in international assessments of reading comprehension and Turkish students are far from the desired level. This negative picture is at the center of the discussions towards educational and training activities (PISA, 2015; MEB, 2019; Baltacı, 2017; Kurnaz & Akaydın, 2015). For this reason, reading comprehension competencies are always at the center of the curriculum development efforts. In this process, it may not be enough to focus only on student competencies. Therefore, it is very important to consider the competencies of teachers who will contribute to students' reading comprehension skills. Teachers should also have qualified reading comprehension skills so that students can be able to reach the desired level in reading comprehension. In this frame, determining the reading comprehension level of teachers will both contribute to students' language and comprehension skills and allow them to better express themselves in the social process. Not only student competencies but also teacher competencies have long been one of the most discussed topics in our country. Reading comprehension skills are also one of the discussion topics. In this respect, identifying the reading comprehension levels of teachers will make an important contribution to reading comprehension skills. One of the most important goals of the education and training process is to develop students' reading comprehension skills (Çam, 2006). In this respect, studies have been carried out since primary school years. It is known that reading comprehension at a certain speed is very effective on the student's academic success. Therefore, improving students' reading comprehension skills can make learning and teaching activities more effective. (Suna, 2005). Further, it is important to note that exams should be implemented and evaluated in this regard and school activities for reading and comprehension skills should be developed.

Reading and comprehension process is the most effective way of understanding the reality of everyday life, facilitating the acquisition of information, and gaining a critical perspective on phenomena. In this context, reading involves skills such as understanding, analysis, synthesis and assessment (Ehri, 2005). To describe the reading activity as a real action, the individual must understand what he/she reads. This situation indicates that cognitive awareness or reading comprehension strategies work through reading (Coelho & Correa, 2017). The thoughts and emotions written down by others are reconstructed depending on the individual's reading comprehension skills. Thus, the individual who obtains the information through the reading activity can create differences in terms of cognitive, affective or behavioral aspects. The process of making a difference in the message of the read text is called the ability of reading comprehension (Saracaloğlu & Karasakaloğlu, 2011). The real aim of reading is to quickly grasp the text's message and create a distinct cognitive, affective, or behavioral difference in the person. The more the person interacts with the text he/she reads, the greater the probability of comprehending the message in the text (Davey, 1983). Reading comprehension skill requires the inclusion of various mental and affective processes regarding any text. Posing verbal or written questions about the basic message of the reading text is sufficient to reveal the level of reading comprehension at the cognitive and affective levels. Following the assessment of students' answers to the questions posed, students' reading comprehension levels can be easily understood. However, it is very difficult to determine the effect of the texts read on attitudes and behaviors (Karatay, 2007; Vega, 1996). To illustrate, it may require quite long observations to figure out the effect of some images and texts of social norms on students.

The reading activities in schools in our country are mostly based on a text and carried out in line with the instructions in the textbooks. In fact, reading instruction should enhance individual's affective skills, and it should also involve a series of purposes such as how the individual will read any text, what to pay attention to, what inferences can be made about the text, and how to perceive different types of texts. In this sense, the concept of reading strategies has come to the fore. Many different definitions have been proposed in the conceptualization of reading strategies that we encounter in the language teaching process. Since it is associated with reading skill, it can be expressed in various ways. The difference between the terms "skill" and "strategies" is that skills may suggest only passive abilities which are not necessarily activated, whereas the term "strategies" refers to deliberate

actions that learners or readers select and control to achieve desired goals or object (Carrell, 1989). Reading strategies are the mental operations involved when readers approach a text effectively and make sense of what they read (Barnett, 1988). Reading strategies are a range of problem solving behaviors which readers employ to get meaning from the text (Barnett, 1988, cited in Sim, 2007: 23). Reading strategies are the mental processes that readers consciously choose to use in accomplishing reading tasks (Cohen, 1990). Thus, the notion of reading strategies is a process that can effectively support students to achieve their reading goals. Reading strategies can help individuals develop skills they have unconsciously acquired and gain new skills. Because the concept of strategy refers to an immediate action taken by an individual to address the reading problems. It also contributes to a much more planned and permanent learning process when considered individually as before, during and after reading for the whole reading process.

The reading comprehension process, which emerges depending on the effective use of reading strategies, is one of the most important indicators of the individual's cognitive level of achievement. In addition, reading comprehension can also determine the social awareness levels of individuals. While the level of cognitive achievement can be measured by verbal or written expressions, social awareness can be measured by the change in attitudes and affective behaviors towards that process. Reading comprehension activities may contribute to the development of the individual's cognitive level.

The amount of an individual's vocabulary knowledge is one of the most important factors affecting the reading comprehension process. Teachers access various reading materials throughout their education life and come across many words. One of the most important assumptions about teachers is that they can fluently read their mother tongue with careful attention to grammar rules. The expectation that teachers who have a long educational life will have a high level of reading comprehension skills is the central starting point for this study. Teachers, who come across with various types of texts in their professional life, need to understand these texts correctly and carry out studies accordingly. Identifying the level of reading comprehension of teachers is crucially important in terms of revealing competency levels of teachers. Further, this study aimed at identifying teachers' reading comprehension levels will provide important insights on the adequacy of the teacher training process.

One of the major goals of teachers in the education process is to nurture students' reading comprehension skills by establishing good reading habits. In addition to that, they also encourage students to actively use the mother tongue in daily life through various activities. Classroom teachers enable students acquire reading and reading comprehension skills at the basic level. Students are directly influenced by the language habits of branch teachers as of the second grade. Identifying reading and comprehension skills of teachers, who play an effective role in this process, will provide information about the effectiveness of the education given to the students. This study will make an important contribution for us to gain insight into this topic. One of the most important findings to be obtained from this study is the results about the teachers' level of comprehension of the text's message. Furthermore, given the relevant studies on this topic, findings indicate that reading comprehension skills increase people's communication skills (Bügel & Buunk, 1996), efficiency (Ehri, 2005) and effectiveness within the organization, and enable new job opportunities (Chavez, 2001).

In addition to that, teachers should be able to use reading strategies and be aware of this issue so that they can organize effective educational activities. In this respect, the use of reading strategies enables teachers to increase their cognitive effectiveness in terms of reading comprehension. Therefore, reading strategies are a process that can be used not only in Turkish lessons but also in other lessons and studies. Raising strategy-based readers in our education system is also crucial in terms of increasing the quality of the education environment.

Since there are only few research studies investigating teachers' reading comprehension levels, this study has come forefront. In this sense, this study aims to provide suggestions for educational decision makers, teachers and teacher training institutions. In addition, it is important in every respect that the stakeholders in our education system are "strategic readers". In this respect, it is aimed to examine the levels of reading comprehension and the use of reading strategies of teachers, who are the most important stakeholders of our education system. The research question is whether reading comprehension and use of reading strategies levels of secondary school teachers differ according to various variables and thus the study attempts to find out the relationship between the

levels of reading comprehension and use of reading strategies. To this end, answers to the following questions will be sought:
1. What is the reading comprehension level of secondary school teachers?
2. Is there a significant relationship between the reading comprehension levels of secondary school teachers and their demographic characteristics (gender, education level, branch and seniority)?
3. What is the secondary school teachers' use of reading strategies level?
4. Is there a significant relationship between the use of reading strategies of secondary school teachers and their demographic characteristics (gender, education level, branch and seniority)?
5. Is there a relationship between secondary school teachers' reading comprehension and use of reading strategies levels?

2. Methodology

In this study, descriptive screening model, one of the quantitative research methods, was used to determine teachers' reading comprehension and use of reading strategies levels. Survey models are research approaches which aim to describe a past or current situation in the way it exists (Karasar, 2010). In the descriptive survey model, the research problem is tried to be determined within its context.

2.1. The Study Group

The universe of the research consists of 418 teachers working in secondary schools in Denizli and Adana provinces. Stratified sampling, which is based on probability sampling, was used for the selection of the sample. Using the stratified sampling method, 376 teachers were selected. However, the number of sample was increased to improve the validity of the study and the sample included a total of 411 teachers. Demographic information of the study group is presented in Table 1.

Table 1: Demographic information of the participants

Variable	Group	*Frequency*	%
Gender	Female	241	57.7
	Male	177	42.3
Education Level	Bachelor's Degree	325	77.8
	Graduate	93	22.2
Seniority	1-5 years	92	22.0
	6-14 years	189	45.2
	15-24 years	85	20.3
	25 years and above	52	12.4
Branch	Science	62	14.8
	English	40	9.6
	Mathematics	69	16.5
	Religion Culture	34	8.1
	PCG	51	12.2
	Physical Education	22	5.3
	Social Studies	50	10.0
	Turkish	50	12.0
	Art	25	6.0
	Music	15	3.6

2.2. Data Collection Tools

In this study, "Reading Strategies Scale" developed by Karatay (1998) was used to determine reading strategies. In order to determine the level of reading comprehension, an informative and narrative reading comprehension test developed by Karatay was employed. The response choices in the Reading Strategies scale ranged from 1 to

5. The reliability coefficient calculated by Karatay (2007) for the overall scale was .84. This result implies that the scale is reliable (Şencan, 2005). As a result of the reliability analysis for the scale, the coefficient was calculated as 0.87. The Cronbach Alpha coefficient was utilized to determine the reliability coefficient. The evaluations made in the context of reading comprehension, the correct answers of the participants were scored as "2" and the wrong answers as "0". The total scores and averages were rated on a 100 points-scale. As a result of the analysis, KR-20 reliability coefficient was calculated as .73 for the narrative text and .75 for the informative text. These values indicate that the test is reliable (Şencan, 2005).

2.3. Data Analysis

The research data were obtained in a digital environment by the researcher in the 2020-2021 academic year. The participant teachers were informed about the test and scale. The answers given by the teachers to the Informative and Narrative Reading Comprehension Test and Reading Strategies Scale were converted into numerical form of data to make an evaluation in the computer environment. The scale was rated on a 100- points and the multiple-choice questions in the Reading Comprehension Achievement Test were each worth 2 points. Five categories were employed to interpret the scores obtained from the scale. Accordingly, the average score values are: "very weak" between 0 and 10.00, "weak" between 10.01 and 20.00, "moderate" between 20.01 and 30.00, "good" between 30.01 and 40.00, "very good" between 40.01 and 50. In the Reading Strategies Scale, for each of the items, the participants used a rating scale of “1= Never”, “2= Very Rarely”, “3= Sometimes”, “4 =Very Often” and “5= Always”. The data gathered in the study were analyzed using the SPSS 17 program. The reading strategies scale consisted of 33 items on a 5-point Likert –type scale. The minimum number of points that could be obtained on the scale was 33, while the maximum was 165. The competency level of each sub-dimension were determined. The total points scored by the participants were calculated. In addition to that, skewness and kurtosis coefficients and Kolmogorov-Smirnov test were scanned to see the normal distribution of scores and decide the following analyzes to be performed, and the results are presented below.

Table 2: Normality test results regarding score distributions

Scale	$\overline{X}$	Sd	Kurtosis		Skewness		K-S Test
			Coefficient	SE	Coefficient	SE	
Reading Strategy	176.44	17.713	-867	.513	-1.178	.254	**p=0.611**

According to the data in Table 2, the assumptions of normality and homogeneity of variances were tested before proceeding to the analysis of data. The skewness and kurtosis coefficients were checked for the normality assumption. Looking at the skewness and kurtosis coefficients, it is seen that the skewness and kurtosis values of all sub-dimensions and the total scores of the scale lie between -2 and +2. A skewness value between -1.5 and +1.5 (Tabachnick & Fidell, 2013) and a skewness value between -2 and +2 (George & Mallery, 2010) are considered as an indicator of normal distribution. The kurtosis values of this study were found between -.867 and .513, and the skewness values were between -1.178 and .254. In this context, the scores recorded by 418 students indicate a normal distribution in terms of both the total scale and sub-dimensions. Therefore, t-test and Single Factor Analysis of Variance (ANOVA), which are parametric statistical techniques, were employed to respond to the sub-problems of the scale. Data were analyzed using SPSS 17.0. The significance level (p) was accepted as 0.05 in the analysis process of the data.

3. Results

The descriptive statistics for teachers’ reading comprehension levels are tabulated in Table 3.

Table 3: The descriptive statistics for teachers’ reading comprehension levels

Dimensions	N	$\overline{X}$	Sd	1	2	3
Reading Comprehension Level of Informative Texts	418	22.67	6.25	-		
Reading Comprehension Level of Narrative Texts	418	32.99	5.05	83*	-	
General Reading Comprehension Level	418	27.71	4.64	68*	80*	-

As can be seen in Table 3, the participant teachers' reading comprehension level of narrative texts is good ($\bar{X}$ =32.99) while their reading comprehension level of the informative texts ($\bar{X}$ =22.67) and the overall scale ($\bar{X}$ =27.71) are moderate. When the correlation coefficients between text types are evaluated, a positive and high level (r=.83) relationship is found between informative and narrative texts. Given the relationship between the general reading comprehension level and its sub-dimensions, there is a positive and high level (r=.80) relationship between the general reading comprehension level and reading comprehension level of narrative texts and there is a positive and moderate relationship (r=.68) between the general reading comprehension level and the reading comprehension level of informative texts.

Table 4: Differentiation of teachers' reading comprehension levels by gender variable – independent sample t-test analysis results

Dimensions	**Gender**	**N**	**X**	**Sd**	**Sd**	**t**	**p**
Reading Comprehension Level of Informative Texts	Female	241	24.30	5.89	.38		
	Male	177	21.94	4.64	.35	.708	.000
Reading Comprehension Level of Narrative Texts	Female	241	32.46	4.74	.30		
	Male	177	31.98	4.17	.31	1.093	.252
General Reading Comprehension Level	Female	241	28.38	4.49	.58		
	Male	177	26.96	3.29	.49	1.109	.000

Table 4 indicates the results as to whether the teachers' reading comprehension levels of informative texts differ by the gender variable. Accordingly, it is seen that female teachers' reading comprehension levels ($\bar{x}$=24.30; Sd=5.89) are higher than male teachers' reading comprehension levels ($\bar{x}$=21.94; Sd=4.64) and there is a significant difference in favor of female teachers (t=0.708; p. <0.05). Although there is a significant difference, both female and male teachers comprehend the informative texts at a moderate level. Given the statistical data regarding the reading comprehension level of narrative texts, there is no significant difference between female and male teachers (t=1.093; p>0.05). Teachers in both groups comprehend narrative texts at the moderate level. Given the analysis of the teachers' general reading comprehension levels, it is determined that the female teachers' reading comprehension levels ($\bar{x}$=27.38; SD=4.49) are higher than the male teachers' reading comprehension levels ($\bar{x}$=26.96; Sd=3.29) and the significant difference is in favor of female teachers (t=1.109; p<0.05). When this result is considered together with the sub-dimensions average scores, it can be argued that the main factor revealing this difference emanates from the difference in informative texts. In a broad sense, it can be contended that reading comprehension levels of male and female teachers are moderate in informative texts and good in narrative texts.

The data concerning whether the teachers' reading comprehension levels vary by education level are reported in Table 5.

Table 5: Differentiation of teachers' reading comprehension levels by education level variable – independent sample t-test analysis results

Dimensions	**Education Level**	**N**	**X**	**Sd**	**Sd**	**t**	**p**
Reading Comprehension Level of Informative Texts	Bachelor's Degree	325	21.94	5.51	.30		
	Graduate	93	22.88	4.91	.50	-1.488	.137
Reading Comprehension Level of Narrative Texts	Bachelor's Degree	325	32.30	4.37	.24		
	Graduate	93	32.10	4.98	.51	.380	.704
General Reading Comprehension Level	Bachelor's Degree	325	27.12	3.95	.43		
	Graduate	93	27.49	4.29	.89	-.782	.434

Table 5 shows the results regarding whether the reading comprehension levels of the teachers as regards to the dimension of reading comprehension level of informative texts differ by the gender variable. As can be seen from the table, the undergraduate teachers' reading comprehension level of informative texts is ($\bar{x}$=21.94; SD=5.51), while the graduate teachers' reading comprehension level of informative texts is ($\bar{x}$=22.88; Sd=4.91), and there is

no significant difference between the groups (t=-1.488; p>0.05). In addition to that, the teachers in both groups have a moderate level of reading comprehension of informative texts. Given the statistics regarding reading comprehension level of narrative texts, no significant difference is found in terms of education level variable (t=.380; p>0.05). In a similar vein, the teachers in both groups have a moderate level of reading comprehension of narrative texts. Given the data related to the general reading comprehension level, there is no significant difference (t=-782; p>0.05). According to these results, contrary to expectations, teachers with graduate degree do not have any significant effect on reading comprehension levels.

The statistics on whether the reading comprehension levels of the teachers differ according to the variable of seniority are stated in Table 6. Given the Table 6, the scores of teachers with 1-5 years of seniority regarding the reading comprehension level of informative texts are $\bar{x}$=22.50; Sd=6.49, the scores of teachers with 6-14 years of seniority are $\bar{x}$=23.11; Sd= 6.68, the scores of teachers with 15-24 years of seniority are ($\bar{x}$=22.12; Sd=5.40), and the scores of teachers with 25 years or more seniority are ($\bar{x}$=22.23; Sd=5.52). As a result of the analysis of variance based on these averages, no significant difference was found between the groups (F=.640; p=.590>0.05). Thus, it can be stated that teachers at all seniority comprehend the informative texts at a moderate level.

Given the results of the narrative texts, the reading comprehension scores of the teachers with 1-5 years of seniority are ($\bar{x}$=33.62; Sd=4.55), the reading comprehension scores of the teachers with 6-14 years of seniority are ($\bar{x}$=32.63; Sd=5.51) , the reading comprehension scores of the teachers with 15-24 years of seniority are ($\bar{x}$=32.75; Sd=4.90), and the scores of teachers with 25 years and more seniority are ($\bar{x}$=33.60; Sd=4.32). As a result of the analysis of variance performed, no significant difference was observed between the groups (F=1.108; p=.346>0.05). In view of the data obtained, it can be articulated that teachers at all seniority comprehend the narrative texts at a moderate level.

Table 6: Differentiation of teachers' reading comprehension levels by seniority variable – independent sample t-test analysis results

Dimensions	Seniority	N	X	Ss'	Sd	F	p	Differentiation
Reading Comprehension Level of Informative Texts	1-5 years	92	22.50	6.49	.67	.640	.590	
	6-14 years	189	23.11	6.68	.48			
	15-24 years	85	22.12	5.40	.58			
	+25	52	22.23	5.52	.76			
Reading Comprehension Level of Narrative Texts	1-5 years	92	33.62	4.55	.47	1.108	.346	
	6-14 years	189	32.63	5.51	.40			
	15-24 years	85	32.75	4.90	.53			
	+25	52	33.60	4.32	.59			
General Reading Comprehension Level	1-5 years	92	27.98	4.71	.98	.294	.830	
	6-14 years	189	27.69	5.04	.72			
	15-24	85	27.91	4.30	.93			
	+25	52	27.72	3.65	1.01			

Given the general reading comprehension level of the teachers, the general reading comprehension scores of the teachers with 1-5 years of seniority are ($\bar{x}$=27.98; Sd=4.71), and the scores of the teachers with 6-14 years of seniority are ($\bar{x}$=27.69; Sd=) 5.04), the scores of teachers with 15-24 years of seniority are ($\bar{x}$=27.91; Sd=4.30), and the scores of teachers with 25 years or more seniority are ($\bar{x}$=27.72; Ss=3.61). As a result of the analysis of variance, no significant difference was detected between the groups (F=.294; p=.830>0.05). The findings demonstrate that the general reading comprehension levels of teachers at all seniority levels are moderate. More specifically, it can be argued that seniority has no effect on reading comprehension.

According to Table 7, the reading comprehension levels of the teachers differ significantly by the branch variable. Given the reading comprehension levels of informative texts, it is seen that Turkish teachers' reading comprehension scores are ($\bar{x}$=30.03; Sd=8.60), English teachers' reading comprehension scores are ($\bar{x}$=24.10; Sd=5.32), Mathematics teachers' reading comprehension scores are ($\bar{x}$=21.84; Sd) =6.52), Religious Culture

teachers' reading comprehension scores are ($\bar{x}$=23.50; Sd=5.86), PCG teachers' reading comprehension scores are ($\bar{x}$=22.41; Sd=3.47), Physical Education teachers' reading comprehension scores are ($\bar{x}$=19.64; Sd=2.46) , Social studies teachers' reading comprehension scores are ($\bar{x}$=20.08; Sd=4.09), Science teachers' reading comprehension scores are ($\bar{x}$=19.96; Sd=4.18), Art teachers' reading comprehension scores are ($\bar{x}$=20.52; Sd=3.07), and Music teachers' reading comprehension scores are ($\bar{x}$=20.93; Sd=4.71). As a result of the variance analysis, it was observed that teachers' reading comprehension level of the informative texts differed in terms of the branch variable (F=11.424; p=.000<0.05). According to the Tukey HSD test results, the difference is in favor of Turkish teachers when compared to teachers in all other branches. Following the test between English Teachers and Physical Education, Social Studies, Science and Art Teachers, a significant difference was found in favor of English teachers. Further, given the analysis between Religious Culture teachers and Physical Education, Social Studies, Science and Art Teachers, a significant difference was found in favor of the Religious Culture teachers. In addition to that, it was understood that Turkish teachers comprehend the informative texts at a good level, while the Physical Education and Science teachers comprehend at a weak level, and the teachers in other branches have a moderate level of reading comprehension.

Table 7: Differentiation of teachers' reading comprehension levels by branch variable – independent sample t-test analysis results

Dimensions	Branch	N	X	Sd	Sd	F	p	Differentiation
Reading Comprehension Level of Informative Texts	Turkish	62	30.03	8.60	89	**11.424**	**.000**	**1/2-3-4-5-6-7-8-9-10** **2/6-7-8-9** **4/6-7-8-9**
	English	40	24.10	5.32	.84			
	Mathematics	69	21.84	6.52	.78			
	Religion and Culture	34	23.50	5.86	.86			
	PCG	51	22.41	3.47	.48			
	Physical Education	22	19.64	2.46	.52			
	Social Sciences	50	20.08	4.09	.57			
	Science	50	19.96	4.18	.59			
	Art	25	20.52	3.07	.61			
	Music	15	20.93	4.71	.91			
Reading Comprehension Level of Informative Texts	Turkish	62	36.37	6.56	.83	**7.075**	**.000**	**1/2-3-4-5-6-7-8-9-10** **2/3-6** **4/3-6-7**
	English	40	33.17	3.98	.63			
	Mathematics	69	30.57	5.10	.61			
	Religion and Culture	34	34.18	4.07	.69			
	PCG	51	33.88	3.97	.55			
	Physical Education	22	30.23	4.90	.64			
	Social Sciences	50	32.06	4.10	.58			
	Science	50	32.44	4.32	.61			
	Art	25	32.64	4.18	.83			
	Music	15	33.60	3.68	.95			
General Reading Comprehension Level	Turkish	62	33.20	6.04	.84	**9.333**	**.000**	**1/2-3-4-5-6-7-8-9-10** **2/3-6-7-8** **4/3-6-7-8-9**
	English	40	28.64	3.91	.83			
	Mathematics	69	26.21	5.14	.74			
	Religion and Culture	34	28.84	4.25	.73			
	PCG	51	28.14	2.44	.68			
	Physical Education	22	24.93	2.47	1.05			
	Social Sciences	50	26.07	3.26	.92			
	Science	50	26.20	3.22	.91			
	Art	25	26.58	2.97	.78			
	Music	15	27.26	3.32	.77			

Based on the data on the reading comprehension levels of narrative texts, Turkish teachers' reading comprehension scores are ($\bar{x}$=36.37; Sd=6.56), English teachers' reading comprehension scores are ($\bar{x}$=33.17; Sd=3.98), Mathematics teachers' reading comprehension scores are ($\bar{x}$=30.57; Sd=5.10) , Religious Culture teachers' reading comprehension scores are ($\bar{x}$=34.18; Sd=4.07), PCG teachers' reading comprehension scores are ($\bar{x}$=33.88; Sd=3.97), Physical Education teachers' reading comprehension scores are ($\bar{x}$=30.23; Sd=4.90), Social Studies teachers' reading comprehension scores are ($\bar{x}$=32.06; Sd=4.10), Science teachers' reading comprehension scores are ($\bar{x}$=32.44; Sd=4.32), Art teachers' reading comprehension scores are ($\bar{x}$=32.64; Sd=4.18), and Music teachers' reading comprehension scores are ($\bar{x}$=33.60; Sd=3.68).

As a result of the analysis of variance, it was observed that teachers' reading comprehension level of narrative texts differed by the branch variable (F=9.333; p=.000<0.05). According to the Tukey HSD test results, the difference between Turkish teachers and teachers in all other branches was in favor of Turkish teachers while there was a significant difference in favor of English teachers when compared to Mathematics and Physical Education Teachers. Further, following the analysis between Religious Culture teachers and Mathematics, Physical Education and Social Studies teachers, a significant difference was found in favor of Religious Culture teachers. Consequently, it can be interpreted that there is a significant difference between the mean scores and the reading comprehension scores of the teachers in all branches are at a good level.

According to data on the general reading comprehension scores of teachers, Turkish teachers' reading comprehension scores are ($\bar{x}$=33.20; Sd=6.04), English teachers' reading comprehension scores are ($\bar{x}$=28.64; Sd=3.91), Mathematics teachers' reading comprehension scores are ($\bar{x}$=26.21; Sd= 5.14), Religious Culture teachers' reading comprehension scores are ($\bar{x}$=28.84; Sd=4.25), PCG teachers' reading comprehension scores are ($\bar{x}$=28.14; Sd=2.44), Physical Education teachers' reading comprehension scores are ($\bar{x}$=24.93; Sd=2.47), Social Studies teachers' reading comprehension scores are ($\bar{x}$=26.07; Sd=3.26), Science teachers' reading comprehension scores are ($\bar{x}$=26.20; Sd=3.22), Art teachers' reading comprehension scores are ($\bar{x}$=26.58; Sd=2.97), and Music teachers' reading comprehension scores comprehension scores are ($\bar{x}$=27.26; Sd=3.32). As a result of the variance analysis, it was observed that the general reading comprehension levels of the teachers significantly varied in terms of the branch variable (F=9.333; p=.000<0.05).

The results of Tukey HSD test conducted to reveal the difference between the groups revealed that the difference between Turkish teachers and teachers in all other branches was in favor of Turkish teachers while there was a significant difference in favor of English teachers when compared to Mathematics and Physical Education, Social Studies and Science Teachers. Further, following the comparison between Religious Culture teachers and Mathematics, Physical Education and Social Studies, Science and Art teachers, a significant difference was found in favor of Religious Culture teachers. In addition to that, when the general reading comprehension scores of the teachers were examined, it was concluded that the reading comprehension levels of the Turkish teachers were good, while the teachers in all other branches were at a moderate level. This result is related to the fact that the content of reading comprehension is incorporated into the curriculum of Turkish lessons and Turkish teachers conduct activities on this topic. Looking at the mean scores, it can said that the most successful group after Turkish teachers are English teachers who carry out studies in the context of language education.

Table 8: Descriptive statistics regarding the level of teachers' use of reading strategies

	N	**Minimum**	**Maximum**	$\overline{X}$	**Sd**
Reading Strategies	418	3.27	4.60	3.79	0.26

Statistics on the level of teachers' use of reading strategies are stated in Table 8. Thus, it is seen that the mean level of teachers' use of reading strategies is 'Very Frequent'($\bar{x}$=.3.79; Sd=0.26). When this result is associated with reading comprehension levels, it can be concluded that strategy use is effective on comprehension skills.

Table 9: Variance analysis and t-test results of the level of teachers' use of reading strategies

Variable	Group	*N*	$\overline{X}$	Sd	F/t	p	Differentiation
Gender	Female	241	3.98	0.38	1.412	0.041	
	Male	177	3.79	0.29			
Education Level	Bachelor's Degree	325	3.84	0.57	-.874	.383	
	Graduate	93	3.90	0.32			
Seniority	1-5 years	92	3.80	0.25	.859	.376	
	6-14 years	189	3.89	0.12			
	15-24 years	85	3.86	0.32			
	25 years and above	52	3.78	0.20			
Branch	Turkish	62	4.20	0.19	1.925	.007	**1/2-3-4-5-6-7-8-9-10**
	English	40	3.87	0.21			
	Mathematics	69	3.83	0.33			
	Religion Culture	34	3.88	0.25			
	PCG	51	3.89	0.22			
	Physical Education	22	3.75	0.16			
	Social Studies	50	3.80	0.19			
	Science	50	3.83	0.16			
	Art	25	3.75	0.16			
	Music	15	3.68	0.18			

The data on whether the level of teachers' use of reading strategies differ by demographic variables is shown in Table 9. According to Table 9, gender (t=-1.412; p=0.041<0.05) and branch (F=9.333; p=.007<0.05) variables yield significant differences while there are no significant differences in terms of education level (t=-874; p=383>0.05) and seniority (F=.859; p=.376<0.05). 0.05) variables. When the differences among groups are examined, it is seen that there is a significant difference in favor of female teachers according to the gender variable. This result coincides with the results of the reading comprehension level by the gender variable. According to the Tukey HSD test results related to the branch variable, it is understood that the difference is in favor of Turkish teachers when compared to teachers in all other branches. This result demonstrates that Turkish teachers use reading strategies more frequently than teachers in all other branches. Thus, it is not surprising that they have a high level of reading comprehension.

Table 10: Teachers' results regarding scales and correlation coefficients

	$\overline{X}$	Sd	N
Reading Comprehension	27.71	4.64	418
Use of Reading Strategy	3.79	0.26	418

Correlation	Reading Comprehension	Use of Reading Strategies
Reading Comprehension	1	.623**
Use of Reading Strategy	.623**	1

** p<0,01

The fifth sub-problem of the study attempts to determine whether there is a relationship between teachers' use of reading strategies and their reading comprehension levels. The Pearson product moment correlation results regarding teachers' use of reading strategies and reading comprehension level scores are given in Table 11. As we can see from Table 11, there is a positive, moderate and significant relationship between teachers' use of reading strategies and their reading comprehension level (r=.623, p<.001). In view of the data obtained, as the level of teachers' use of reading strategies increases, their level of reading comprehension also increases.

4. Discussion and Interpretation

The level of reading comprehension has been documented in the literature by several studies. Much attention has been drawn to the relationship between demographic variables and the level of reading comprehension. Previous studies confirm that variables such as gender, education level, branch, and seniority have various effects on reading comprehension (Brantmeier, 2003; Bügel & Buunk, 1996; Chávez, 2001; Pine, 2006; Hsueh-Chao & Nation, 2000; Karatay, 2007; Phakiti, 2003; Suna, 2006; Tayshi, 2007). Contrary to the results of this study, previous studies also indicate that professional seniority has a positive effect on reading comprehension. Teachers gain more experience as they get older and tend to reflect their life experiences on the text they read (Brantmeier, 2003).The reading comprehension process is also significantly affected by teachers' level of education (Bügel & Buunk, 1996; Chavez, 2001).

Given the relevant literature, it is understood that the level of reading comprehension is quite low in some studies conducted with students, pre-service teachers and teachers (Başaran, 2013; Yılmaz, Köse, & Korkut 2009; Ungan, 2008; Kartal & Özteke, 2010; Topuzkanamış & Maltepe, 2010; Saracaloğlu & Karasakaloğlu, 2011). However, it is important to note that different results have been obtained as well. Some other studies reveal that reading comprehension is at moderate or high levels. (Odabaş, Odabaş & Polat, 2008; Can, Türkyılmaz & Karadeniz, 2010). Teachers with high level of reading and comprehension skills play an effective role in providing students with the desired knowledge and skills. One of the most crucial part of the learning and teaching process is teachers' ability to transfer knowledge. Therefore, teachers can transfer their knowledge, skills and behaviors more easily (Friedman & Miyake 2004).

The use of reading strategies is of vital importance in terms of the effectiveness of the reading comprehension process. In the present study, results denoted that the reading comprehension levels of the teachers who could do strategy-based reading were quite high. Given the branch variable, it is seen that Turkish teachers are also very successful in this regard. A positive and significant relationship was also found between the use of reading strategies and reading comprehension levels. Similar to the findings obtained in this study, Van Kraayenoord and Schneider (1999) concluded in their study that there is a positive and significant relationship between reading and reading comprehension processes and reading strategies. With respect to the effectiveness of comprehension strategies, Stevens (1988) conducted a strategy training whereby students' ability to comprehend and identify the main idea of paragraphs improved. Likewise, studies investigating the effects of reading and comprehension strategies on reading comprehension yielded consistent results (Paporello, 1991; Swennumson, 1992; Mayer, 1996; Brandshaw, 1998; Salembier, 1999; Kıroğlu, 2012; Botsas & Padeliadu, 2003; Tok, 2003; Hardebeck, 2006; Fotovatian & Shokrpour, 2007; Aydogan, 2008; Çöğmen, 2008; Clark, 2009). Further, Swennumson (1992) underlined that strategy-based reading also had a positive effect on reading speed. In another study stressing the effect of reading strategy use, Rich and Blake (1994) pointed out that these strategies also had a positive effect on people's recall levels. Previous studies in the relevant literature also unveiled that the use of reading strategy is not effective on reading comprehension skills (Cantu, 2006; Özyılmaz & Alcı, 2011).

Our research findings on the gender variable are supported by several researchers as well. According to previous studies, girls reported statistically significant higher reading comprehension than boys. In their study, Çiftçi and Temizyürek (2008) investigated the reading comprehension success level of fifth grade students and found that female students achieved a higher level of success than boys. Bazaar and Ateş (2009) examined girls' reading comprehension success and attitudes towards reading and posited that girls were better than boys. Ceran, Oğuzgiray Yıldız, and Özdemir (2015) examined students' reading comprehension levels by gender and age variables and they acknowledged that there was a significant difference in favor of female students. Sallabaş (2008)

evaluated the reading comprehension levels and reading attitudes of 8th grade students and reported that there was a gender difference in favor of female students. According to previous studies revealing the effectiveness of language skills such as reading comprehension, girls are more successful than boys. Some scholars associate it with gender-related differences in the maturation process (Akyol, 2005; Güneş 2004).

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A Ghanaian Study on Multiple Intelligences of Pre-Service Science Teachers in Selected Colleges of Education

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Abstract
The Multiple Intelligence (MI) Theory has been recognised for its significance in education. This study aimed to provide a detailed examination of each intelligence and illustrate how different MIs work. The current study seeks to discover and link pre-service science teachers' numerous intellectual domains and learning style profiles. The survey method was used for the study, which included 150 pre-service science teachers. The "multiple intelligence domains inventory for educators" was utilised to collect data for the study. According to the findings, the use of MIs in science teaching is rarely mentioned, with the features of each intelligence in the context of the various science teaching methodologies. Further, the results indicated that the intelligences mentioned by Gardner could be found in the pre-service teachers in beginning their teaching. Logical-Mathematics was highly advanced among pre-service science teachers with the musical intelligence being the lowest. Gender differences were also found to exist between males and females in only two of the eight MIs, specifically, Logical-Mathematics and Visual-Spatial, which was also significant.

Keywords: Academic Performance, Intelligent Quotient (IQ), Multiple Intelligence (MI), Multiple Intelligence Strategy, Pre-Service Science Teachers

1. Introduction

The presence of several capabilities of students in the Ghanaian education system has been noticed over time but due to the inability to exploit these capabilities practically, much harm has been done to the country in terms of academic achievement of the students that could translate into positive social transformation. According to King (2011), education is the basis for the growth and development of a nation in that the human mind makes innovations in every sector when the potential of every mind is unleashed. In light of this, the access to education in Ghana has been expanded appreciably, yet the country lacks the cutting edge on the global front in terms of innovation and invention. This failure to make innovations can be accounted for by having a narrow definition of

intelligence as an Intelligence Quotient (IQ)-based ability. However, Gardner, states that the traditional concept of intelligence based on IQ tests is very much narrow (Armstrong, 2009). It is against this backdrop that Gardner (1983) proposed the theory of Multiple Intelligences (MI) by indicating that learning occurs through various intelligences, with varying levels of each. This theory initially proposed seven types of intelligences: linguistic, logical-mathematical, spatial intelligence, bodily-kinesthetic, musical, interpersonal, and intrapersonal intelligences. He later added an eighth intelligence in 1995 called the naturalist intelligence. Though there are nine identified intelligences currently, for our educational purposes this research limited itself to the first eight intelligences.

The awareness of various intelligences in our schools must emphasise the importance of the MI theory. Students' actions in the classroom during lessons, as well as their behaviours outside of the classroom, contribute to this awareness. Many intelligences are discovered through classroom experiences, where learners gain a variety of inherent abilities. Teachers are therefore responsible for unearthing these abilities via experiences in the classroom by applying a number of pedagogical strategies. Their willingness to make use of these skills and abilities facilitates their career development and placement. These abilities can be harnessed in the classroom by identifying and nurturing the innate ability each student has rather than letting the ability to die out. These innate abilities when properly nurtured, may hand the students very important skills needed in our country for development (Morgan, 2014).

Teachers are extremely crucial in a child's education, and as a result, they must be well-prepared, experienced, and informed (Morgan, 2014). They play the major role of a learner's performance academically. All around the world, science education has been employed as a true instrument for social change with a focus on socio-economic development and empowerment. As a reflection, various insights require that instructor's job is integral to the learning encounters where more realities about learners should be found, explicitly in scholarly execution or in skilled areas. A pre-service science teacher bears a great deal of responsibility for inspiring students to enjoy and learn about integrated science. They should think of fresh ways to make integrated science engaging and enjoyable for their students. Whatever their scientific background, teachers should seek out new methods and resources to improve the quality of chemistry education for all pupils. To accomplish this, the facilitator or the instructor turns to an impetus, an aide and hence the main thrust to recognise the child's capabilities (Ankomah & Kwao, 2019).

One complex and significant subject is science; therefore, science education should be instructed by able educators especially specialised science educators or teachers utilising the more impressive system that will contact every one of learner's possibilities of intensive commitment in a comprehensive assignment. It is against this backdrop that the researchers proposed Multiple Intelligence teaching strategy which is in sharp differentiation to the traditional methodology of comprehension and communicating one's insights. That is to say traditional learning focuses on training one or two typical intelligences, and a learner's performance is evaluated based on his or her achievement in these typical intelligences. In the conventional context, learning is accomplished through teacher-centered instructions that necessitate extensive memorising (Mpho, 2018). If not practiced in a reasonable fashion, this method of instruction may be helpful for student-teachers who are linguistically proficient, but it will be ineffective for others. Multiple Intelligence Teaching Strategy (MITS) is another direction against the seemingly perpetual regular strategies for instructing and making a decision about learners' insight dependent on capacity to tackle issues. Multiple intelligence proponents believe that every learner has these insights that can be incorporated into the science teaching process, where a specific intelligence will not be the sole tool for determining a pre-service science teacher's aptitude in integrated science and where achievement will be judged from a variety of perspectives, though they may not be developed well or successfully.

2. Statement of the Problem

Ghana's educational system suffers from a lack of resources at all stages of education, especially in the first and second cycles (Education, UNICEF Ghana, 2015). In spite of this, teachers continue to use the lecture method to teach students, concentrating on their cognitive dimension. Studies have shown that the bulky nature of the curriculum makes teachers employ the lecture method (Amponsah, 2020; Amponsah, Boateng, & Mohammed; Amponsah & Ochonogor, 2016a & b) to enable them finish the syllabus on time instead of innovative methods

like collaboration, learning cycle, or multiple intelligences (Amponsah, Kotoka, Beccles, & Dlamini, 2018; Amponsah & Ochonogor, 2018). As a result, most students fail their terminal examination and this makes them believe that they are not academically capable (Ponsford & Lapadat, 2001), and they may feel inferior to their peers. However, they are also responsible for establishing their own learning style, which is very disturbing. Meanwhile, such students are not necessarily stupid because they may have other intelligences that teachers have yet to discover and analyse. In some instances, these students may also be completely oblivious of their full potentials (Morgan, 2014), which presents a problem to science teachers in the science classroom. Thus, if these pre-service science teachers are able to identify their MIs, it could be translated into their classroom practice that will go a long way to support their students. As a result, determining their intelligence profile appears to be an important part of exploring each student's capabilities in order to create an all-round learner, which entails knowing about the intelligence dimension and emphasising the more developed one while balancing it with the least developed without ignoring it. For example, if a teacher's performance with verbal and mathematical intelligence is restricted, he or she may be able to achieve more success by utilising other intelligences. Thus, the aim of this research is to classify the various forms of multiple intelligences of a group of Ghanaian pre-service science teachers in order to help them implement same to assist their students to unearth their potentials in the future in their careers. It will also inform them about the relevance of engaging in the Multiple Intelligence strategy.

3. Objectives of the Study

3.1 General objectives

To identify the Multiple Intelligences profile of some Ghanaian pre-service science teachers. It will also unearth the general perceptions of pre-service science teachers about the effects of knowing students' individual intelligences by using MI based teaching instructions.

3.2 Specific objectives

1. To examine the various types of MIs possessed by pre-service science teachers.
2. To identify the predominant Mis that pre-service science teachers possess.
3. To ascertain whether gender accounts for disparity in the intelligences pre-service science teachers possess.

4. Research Questions

This research aims to answer the following questions:

1. What are the different sorts of MIs that pre-service science teachers possess?
2. What are the most common types of MIs among pre-service science teachers?
3. What gender-based disparities in MI do pre-service science teachers possess?

5. Literature Review

5.1 Theoretical Framework

Howard Gardner first introduced the theory of multiple intelligences in his 1983 book "Frames of Mind," in which he expands the understanding of the term and identifies numerous separate sorts of mental prowess. While examining each "candidate" intelligence, Gardner devised a set of eight inclusion criteria based on a number of scientific areas. We may all have these intelligences, he says, but our particular profiles of these intelligences may differ based on genetics or experience. Gardner describes intelligence as a "biopsychological capacity to process information that can be engaged in a cultural situation to solve problems or create products of cultural worth" (Gardner, 2000, p.28).

- This theory questioned the conventional wisdom that there is only one sort of intelligence, also referred

to as "g" for general intelligence, which is solely concerned with cognitive ability.

- Linguistic, Logical/Mathematical, Spatial, Bodily-Kinesthetic, Musical, Interpersonal, Intrapersonal, and Naturalist intelligences were introduced by Gardner to widen this concept of intelligence.
- Linguistic and logical-mathematical modalities are the most prized in school and society, according to Gardner.
- Gardner additionally argues that there may be other "candidate" intelligences, such as spiritual, existential, and moral intelligence, but that these do not fit his initial inclusion criteria (Gardner, 2011).

5.1.1 Linguistic/verbal intelligence

Linguistic intelligence is concerned with language responsiveness, language learning capacity, and the capacity to use language to achieve specific objectives (Marnus, 2020). It is the ability to comprehend words, language, and linguistic meanings. People with this type of intelligence tend to; possess a wide vocabulary in the languages they know, enjoy reading, love reading and writing, possess the ability to learn languages quickly and the last is, possess the ability to understand a sentence structure's complexity. ("Linguistic intelligence and its benefits," n.d.) Linguistic intelligence establishes a foundation for the development of other forms of intelligences. According to a post titled "Importance of linguistic intelligence" (2020), linguistic intelligence may develop our cognitive capabilities, which may assist us in organizing our ideas alongside sharpening our analytical abilities.

5.1.2 Logical-mathematical intelligence

Mathematical/logical intelligence is the range to recognize designs, work with abstract symbols (e.g., geometric shapes, numbers), and perceive relation or see the relationship between separate and clear pieces of information. This intelligence is the ability to assess situations or issues rationally, discover solutions, conduct scientific research, and solve logical or mathematical operations with simplicity (MentalUP Educational Games, 2019). Persons with a high level of mathematical intelligence deconstruct their information by applying logic and examining cause-and-effect links. Over subjective information, they favour explicit facts and realistic figures. Individuals that are mathematically intelligent can also make inferences and make observations. Logsdon (2021), suggests that children with high logical-mathematical intelligence love arithmetic, computer science, technology, drawing, design, chemistry, and other "hard sciences" in school.

5.1.3 Spatial intelligence

Spatial intelligence is the ability to detect and draw understanding from visual input or data. People who have this spatial aptitude are generally able to generate effective pictures that convey concepts and develop prototypes that use spatial reasoning (Fitzgibbons, 2019). Learners that are visual-spatial require the ability to see what they learn. They have remarkable ability to put what they see in their heads into tangible form. They learn best when colour and variety of audiovisual stimuli are used (Fuini & Gray, 2000). They learn through thinking, envisioning, and constructing mental images in their heads. Jigsaw puzzles, maps, colors, and decorations all appeal to these students (Bilgin, 2006).

5.1.4 Bodily-kinesthetic intelligence

Bodily-kinesthetic learning is sometimes known as "hands-on" or "physical" learning. Students' bodies assist them in understanding and remembering as they engage in amusing acts. Such students can recognize the final aim of a physical activity, have a keen sense of timing, and alter their responses quickly. According to Bilgin (2006), this intelligence is found in students that learn best via activities: games, movement, hands-on chores, and building.

5.1.5 Musical/Rhythmic intelligence

This involves the capacities such as identification and usage of the rhythmic and tonal designs and sensitivity to sounds from human voice, the environment and musical instruments. Students with this intelligence can even make up amusing tunes to help them recall historical events, geographic locations, or numerical topics. These are the

ones that are constantly humming or drumming their fingers (Fuini & Gray, 2000). Students with high levels of this intelligence enjoy music and rhythmic patterns, and they are attentive to sounds in their surroundings. They have musical ears, which allows them distinguish various musical patterns and instruments with ease. When there is musical beat to the content of their study, they learn best (Bilgin, 2006).

5.1.6 Interpersonal intelligence

Interpersonal intelligence is defined by sensitivity to the moods, thoughts, temperaments, and motives of others. Bilgin (2006) suggests that this intelligence is shown in children who are clearly people oriented and gregarious. Students can enhance their interpersonal intelligence by working in groups.

5.1.7 Intrapersonal intelligence

Intrapersonal intelligence is concerned with the ability to be introspective and self-reflective. It refers to a thorough knowledge of oneself, including one's strengths and weaknesses. Students will benefit from understanding that laughing at their mistakes is a non-threatening path to increase self-understanding. In fact, the ability to better understand ourselves by laughing at our flaws or blunders is a non-threatening path to increase self-understanding (Bilgin, 2006).

5.1.8 Naturalist intelligence

Chapman (1996) defines naturalist intelligence as the capacity to adapt to and survive in one's environment. Naturalist students must recognize links between their thinking and the natural world (Fuini & Gray, 2000). Students with this sort of intellect may have a deep attachment to the outer environment, which can start at a young age.

5.2 Empirical Review

The literature emphasises the use of multiple intelligences in the classroom and the results produced. Integrated science (biology, chemistry and physics), as one of the most complex subjects, needs more qualified teachers and a more effective strategy to reach all students' potentials through holistic task participation. The multiple intelligences (MI) theory acknowledges that students in the same class have a wide range of abilities (Maphalala, 2017). MI research has been discovered around the world in Europe, Asia and the American continent. In Spain, Gomes's (2007) performed an investigation and the results showed that teacher belief plays a significant role in student performance. Gomes also emphasises the importance of teachers taking into account students' preferences in the learning process. Some research also discovered that an action research study found that using the MI theory could activate each student's full learning potential (Emendu & Udogu, 2013; Morgan, 2014; Winarti, Yuanita, & Nur, 2019; Yalmanci, Gozum, 2013), resulting in a positive effect on both teachers and students.

According to Lunenburg (2014), visual, musical, and bodily-kinesthetic stimuli are used by students in science courses. However, a study about MI found in the U.S from the University of Rochester on organic chemistry students depicts two other different intelligences. Ruffner (2011), found the dominant type of intelligences among some 20 chemistry students to be logical-mathematical, bodily-kinesthetic, and interpersonal intelligences. Hence a teacher teaching such students would have to strategically put up a structure of delivering chemistry to them in a way that enforces or addresses these intelligences more.

In Taiwan, Cheng (2010) conducts a study and finds that gender differences in MI, motivation, strategy utilisation, and learning styles do affect students' performance in English learning to some extent. Also, in India, Kaur (2014) in his quest to understand multiple intelligences in terms gender observed that the majority of the respondents had average levels of aptitude for all eight components of Gardner's multiple intelligences, according to the findings of the inquiry. The survey also discovered that eighth-grade boys scored themselves higher on Visual-Spatial Intelligence than eighth-grade girls. Musical, Logical-Mathematical, Bodily-Kinesthetic, and Naturalist intelligence showed substantial gender differences in ninth grade. It was discovered that in ninth grade, girls took

a little lead, whereas in eighth grade, boys were ahead of girls. Female students, compared to previous research, tended to rank themselves higher in most intelligences, and their means in the areas of naturalistic and existential intelligences were substantially higher than male learners, according to Zare-ee et al. (2015). According to a study conducted in a Malaysian school, both instructors and students recognise MI as an important aspect of successful learning (Zainudin, 2012). According to the statistics, XU (2020) revealed in his study in China that both male and female learners had a high self-perceived Musical Intelligence. Furthermore, there were differences in their self-perceived MI, with male learners self-perceiving three intelligences to be higher than female learners: mathematical-logical intelligence, body-kinesthetic intelligence, and interpersonal intelligence.

6. Method

6.1 Research Design

This research examined multiple intelligences of pre-service science teachers in selected colleges of education using a cross-sectional descriptive survey research design (Ihudiebube-Splendor & Chikeme, 2020). Descriptive cross-sectional studies provide information about the current state of phenomena or their relationships at a specific period. Participants in a cross-sectional study are chosen based on the study's inclusion and exclusion criteria. The use of a cross-sectional descriptive survey design is justified by the fact that it is more cost-effective and faster to collect data. Furthermore, the cross-sectional descriptive survey allows for the collection of a wide range of data while also assuring that a large number of samples are accessed. It also helps to perform a study that will enable one to measure and compare several variables at a single point in time. Furthermore, a higher level of work quality is achieved because more accurate data may be collected under the right conditions. Sample surveys have substantial difficulties when it comes to gathering basic information for every unit of the population. Sampling errors are more prevalent with smaller sample sizes. The advantages of a descriptive sample survey, however, far outweigh the downsides, given the uniformity and size of the study's target population.

6.2 Population and Sample

All the pre-service science teachers of selected Colleges of Education formed the target population but due to the restrictions COVID-19 has imposed on mass gatherings, only levels 200 and 300 pre-service science teachers were easily accessible for participation in the study. The target population was all pre-service teachers in the selected colleges of education. The underlying assumption in selecting students in these levels was as a result of the modular system run by the colleges.

6.3 Sampling

The study was carried out with a total of 150 pre-service science teachers in selected colleges of education. The respondents were selected from levels 200 and 300 pre-service science teachers. Selection of participants was based on convenience and purposive sampling. Students were sent links on various social media platforms to answer the questionnaires created with Google forms.

6.4 Instruments

Multiple intelligence inventory was used to collect data about the multiple intelligence profile and the learning styles of the pre-service science teachers. This inventory has been used in several studies, and considered as valid and reliable. The reliability coefficient for this research was .78. Pre-service science teachers were given the survey questionnaires made up of 24 statements on multiple intelligences to ascertain their opinions about the different learning techniques they have experienced inside and outside the classroom. The questionnaire consisted of four sections. The first section answered questions regarding their demographic information, the second on knowledge on effect of multiple intelligences of pre-service science teachers. Given a scale of 1 to 5, they were asked to rate the extent they agree or disagree on each item provided in the questionnaire. The third section asked about their learning style in connection with the eight types of intelligences in that section, with each MI having three (3) statements. For each statement, students have to write a corresponding number of the scale presented at the

beginning: from 0 to 4 (0 = Unadvanced, 1=Slightly advanced, 2=Moderately advanced, 3=Advanced, 4= Highly advanced). Finally, the last section rates the extent they agree or disagree with the benefits which student-teachers can derive from the multiple intelligences by Howard Gardiner, where participants have to select a corresponding number on the scale of 1 to 5, where 1=Totally disagree, 2=Disagree, 3=Neutral, 4= Agree, 5=Totally agree.

6.5 Procedure for Data collection.

With the use of Google forms, the questionnaire was sent to the sample on their various WhatsApp platforms to be filled with the help of their course representatives. The purpose of the study was explained to them through an introductory letter from the Head of Department of Teacher Education, University of Ghana. The process was monitored until 150 respondents were obtained.

7. Results

7.1 Demographic information

The study sought to find out the following information such as age, gender, level, religious status and learning style about the respondents. With regard to the demographic distribution, the outcome of the responses is presented in Table 1.

Table 1: Descriptive statistical data of socio-demographic details of pre-service science teachers

Variable	Category	Frequency	Percentage (%)
Gender	*Males*	78	52
	Females	72	48
Level of Education	200	85	66.6
	300	65	33.4
Religious status	*Christian*	112	74.7
	Islam	31	20.6
	Traditional	7	4.7
Learning style	Memorization	61	40.6
	Discussion	53	35.3
	Analysis	32	21.3
	Prefer not to say	4	2.7

From Table 1, males were more than females representing 52% and 48% respectively with a mean age of 22 years. On the level of education, it was found out that the level 200 (66.6%) respondents were more than that of level 300 (33.4%). Most of the respondents were Christians followed by the Islam and a few traditionalists of percentages of 74.7%, 20.6% and 4.7% in descending order. Interestingly, respondents have a variety of learning styles, which are defined as the method of learning and the sort of intelligence profile that such a respondent should have, as shown in Table 1.

The multiple Intelligence domains of a Ghanaian Pre-service science teacher

Research question 1: What are the various types of MIs possessed by pre-service science teachers?
Many are the intelligences inherent in most Ghanaian pre-service science teachers. From the research question 1, the intelligences mentioned by Gardner can be found in the pre-service teachers in the beginning of their teaching. In as much as the eight intelligences can be seen in the pre-service science teacher, the intelligence profile is proportioned in a way such that one of the intelligences is exhibited more or developed more than the other intelligences. Table 2 shows that Ghanaian pre-service teachers used in this study exhibit all the eight MIs in the classroom.

Table 2: Multiple Intelligence Profile of Pre-service science teachers

Variable	Frequency (N=150)	Mean	SD
Verbal- Linguistic	150	5.1267	2.43105
Logical-Mathematic	150	6.0200	2.03483
Bodily-Kinesthetic	150	5.7800	2.26994
Visual-Spatial	150	5.6467	2.14925
Musical	150	4.7467	2.37489
Interpersonal	150	5.4667	2.37342
Intrapersonal	150	5.6867	2.11145
Naturalistic	150	5.1267	2.43105

Research Question 2: What is the predominant type of MIs pre-service science teachers have?

Table 3 examined the advancement levels of the pre-service science teachers' multiple intelligence domains. From table 3, it is observed that logical mathematics with a mean score of 6.02 is the highest intelligence found in pre-service science teachers followed by bodily-kinesthetic with a mean score of 5.7 approximately 5.8, the third is Intrapersonal and the least intelligence to be found according to the research is the musical intelligence with a mean score of 4.7.

Table 3: Advancement levels of the pre-service science teachers' multiple intelligence domains

Variables	Mean	SD	Minimum	Maximum	Level
Verbal- Linguistic	5.1267	2.43105	.00	9.00	Moderately advanced
Logical-Mathematics	6.0200	2.03483	2.00	9.00	Highly advanced
Bodily-Kinesthetic	5.6467	2.14925	.00	9.00	Advanced
Visual-Spatial	4.7467	2.37489	1.00	9.00	Slightly advanced
Musical	5.7800	2.26994	.00	9.00	Advanced
Interpersonal	5.4667	2.37342	.00	9.00	Moderately advanced
Intrapersonal	5.6467	2.11145	1.00	9.00	Advanced
Naturalistic	5.1267	2.43105	.00	9.00	Moderately advanced

The Table depicts the intelligences of some being dominant and some less dominant, resulting from their way of learning and how they understand what they have been taught. It was observed that only Logical-Mathematics was highly advanced among pre-service science teachers. This is not surprising as these students have strong mathematical background to be able to pursue science. Similarly, it is also not a coincidence that Bodily-Kinesthetic is advanced in these pre-service science teachers. Science involves practical activities and as such a science student must exhibit the characteristics required to be able to perform hands-on activities.

Research Question 3: What differences in MI do pre-service science teachers have based on gender?

Results on MI on pre-service science teachers based on gender are presented in Table 4. From the Table it is observed that apart from bodily kinesthetic where females have a higher mean than males, all the means in the remaining seven were higher for males.

Table 4: Mean ratings of pre-service science teachers' multiple intelligence domains according to their gender

MIs	Gender	N	Mean	Std. Deviation	Std. Error Mean
Verbal intelligence	males	78	1.7179	.96561	.10933
	females	72	1.6111	1.12031	.13203
Logical-mathematical	males	78	2.3974	.74450	.08430
	females	72	2.0000	.94943	.11189
Bodily-kinesthetic	males	78	1.7949	.95834	.10851
	females	72	1.9167	.96049	.11319

Visual-spatial	males	78	1.9103	1.02166	.11568
	females	72	1.2361	1.05474	.12430
Musical	males	78	1.3590	1.09277	.12373
	females	72	1.2361	.98572	.11617
Interpersonal	males	78	1.9487	.93832	.10624
	females	72	1.6528	1.07677	.12690
Intrapersonal	males	78	2.1667	.79637	.09017
	females	71	2.0986	.95849	.11375
Naturalistic	males	78	2.1026	.81527	.09231
	females	72	1.7917	1.12510	.13259
Total	Respondents	150			

The variances of the two groups in the population are comparable, which is a key assumption of the independent-samples t-test. If you don't stick to this assumption (i.e., if the variances aren't equal), you're more likely to make a Type I error. To formally test if these variances are different across the population, Levene's Test for Equality of Variances was employed. To put it differently, Levene's test assesses if the two samples were chosen from similar populations. In the first section of the Independent Samples Test table, Table 5 presents the results of this test. The premise of homogeneity of variances was breached by linguistic, interpersonal, intrapersonal, and naturalistic intelligences, as shown in Table 5. The modified t-test, also known as the unequal variance t-test, separate variances t-test, or Welch t-test, was used to accept unequal variances and provide a valid test result. However, the assumptions of homogeneity of variances were met for logical-mathematical, bodily-kinesthetic, visual-spatial, and musical, therefore the 'standard' independent-samples t-test result in SPSS Statistics (equal variances assumed) was used for interpretation.

A total of 78 males and 72 females took part in the study. To ascertain if there were any differences in logical-mathematical, bodily-kinesthetic, visual-spatial, and musical abilities between male and female respondents, an independent-samples t-test was used. According to a boxplot assessment, there were no outliers in the data. Shapiro-test Wilk's (p >.05) revealed that logical-mathematical, bodily-kinesthetic, visual-spatial, and musical intelligence scores were normally distributed for both males and females. Additionally, there was homogeneity of variances, as assessed by Levene's test for equality of variances for logical-mathematical intelligence (p = .059); bodily-kinesthetic intelligence (p = .971); visual-spatial intelligence (p = .498); and musical intelligence (p = .089). Males (M = 2.40, SD = 0.74) exhibited more logical-mathematical intelligence than females (M = 2.00, SD = 0.95). Similarly, males (M = 1.91, SD = 1.02) exhibited more visual-spatial intelligence than females (M = 1.24, SD = 1.06). Additionally, males (M = 1.36, SD = 1.03) exhibited more musical intelligence than females (M = 1.24, SD = 0.99). It was however surprising in this study that females (M =1.92, SD = 0.96) exhibited more bodily-kinesthetic intelligence than their male (M = 1.80, SD = 0.96) counterparts.

The study ensured the participation of 78 males and 72 females. For verbal intelligence (p =.028), interpersonal intelligence (p =.014), intrapersonal intelligence (p =.032), and naturalistic intelligence (p =.000), the assumption of homogeneity of variances was broken, as revealed by Levene's test for equality of variances. To investigate if there were gender differences in linguistic, interpersonal, intrapersonal, and naturalistic intelligences, a Welch t-test was employed. A boxplot revealed no outliers, and Shapiro-Wilk's test (p >.05) revealed that the verbal, interpersonal, intrapersonal, and naturalistic scores for each level of gender were normally distributed. Males showed (M = SD = 0.97) verbal intelligence than females (M = 1.61, SD = 1.12). Males (M = 1.95, SD = 0.94) also showed interpersonal intelligence than females (M = 1.65, SD = 1.08). Additionally, males (M = 2.17, SD = 0.80) exhibited more intrapersonal intelligence than females (M = 2.10, SD = 0.96), and finally, males (M = 2.10, SD = 0.96) exhibited more naturalistic intelligence than female (M = 1.79, SD = 1.13).

In spite of the gender differences discussed so far, these differences were not significant. There were however, differences between males and females regarding logical-mathematical (p=.005) and visual-spatial (.000), which were significant.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Verbal/linguistic	Equal variances assumed	4.898	.028	.627	148	.532	.10684	.17041	-.22991	.44358
	Equal variances not assumed			.623	140.739	.534	.10684	.17142	-.23206	.44573
Logical-mathematical	Equal variances assumed	3.626	.059	2.864	148	.005	.39744	.13875	.12324	.67163
	Equal variances not assumed			2.837	134.514	.005	.39744	.14009	.12037	.67450
Bodily-kinesthetic	Equal variances assumed	.001	.971	-.777	148	.439	-.12179	.15679	-.43163	.18804
	Equal variances not assumed			-.777	146.991	.439	-.12179	.15680	-.43168	.18809
Visual-spatial	Equal variances assumed	.461	.498	3.975	148	.000	.67415	.16959	.33902	1.00927
	Equal variances not assumed			3.970	146.154	.000	.67415	.16980	.33856	1.00973
Musical	Equal variances assumed	2.938	.089	.721	148	.472	.12286	.17042	-.21391	.45964
	Equal variances not assumed			.724	147.925	.470	.12286	.16972	-.21252	.45825
Interpersonal	Equal variances assumed	6.128	.014	1.798	148	.074	.29594	.16459	-.02932	.62120
	Equal variances not assumed			1.788	141.372	.076	.29594	.16550	-.03124	.62312
Intrapersonal	Equal variances assumed	4.697	.032	.473	147	.637	.06808	.14390	-.21631	.35246
	Equal variances not assumed			.469	136.584	.640	.06808	.14516	-.21897	.35512
Naturalistic	Equal variances assumed	15.331	.000	1.949	148	.053	.31090	.15955	-.00439	.62619
	Equal variances not assumed			1.924	128.640	.057	.31090	.16156	-.00877	.63056

Table 5: Independent samples t-test of pre-service science teachers' multiple intelligence by gender

Thus, in spite of the foregoing and the differences reported, from the Table 5, it is observed that gender differences that exist between males and females in only two of the eight MIs, specifically, Logical-Mathematics and Visual-Spatial, is significant. The other six were not significant, suggesting that males and females exhibit similar intelligences in them.

4. Discussion

The data analysis determined that the intelligence that pre-service science teachers highly possess is logical-mathematical intelligence followed by bodily-kinesthetic and intrapersonal intelligence, respectively. The least possessed intelligence is musical intelligence. In addition, the data analysis proposes that gender affects pre-service science teachers' intelligence profile since some responses depicted the influence of gender evoked the use of some intelligences. In this study, gender differences that exist between males and females in only two of the eight MIs, specifically, Logical-Mathematics and Visual-Spatial, is significant. The other six were not significant, suggesting that males and females exhibit similar intelligences in them. However, a study conducted by Al-Faoury and Smadi, (2015) indicated that there are gender differences in the test scores of multiple intelligences. The findings

demonstrated that there was a statistically significant difference in adjusted mean scores of students' intelligences owing to gender, with females scoring higher in the linguistic and interpersonal intelligences and men scoring higher in the logical and intrapersonal intelligences. Similarly, Loori (2005) investigated and reported on the variations in multiple intelligences preferences of male and female students learning English as a second language at American higher education institutions. According to the findings, there were substantial disparities in IQ preferences between males and girls. Learning activities requiring logical and mathematical intelligences were chosen by males, whereas learning activities involving intrapersonal intellect were preferred by females. Also, research conducted by Agarwal (2017) revealed that male and female students do not differ with reference to multiple intelligence, although male students had much higher naturalistic intelligence and bodily-kinesthetic intelligence than female students. Male pupils have higher levels of logical, bodily-kinesthetic, and naturalistic intelligence. Female students are smarter than male students in terms of linguistic, spatial, musical, interpersonal, intrapersonal, and existential intelligence.

Individuals should be encouraged to learn using their natural intelligence. Different types of intelligence should appeal to instructional practices. Multiple intelligences make a significant addition to education. Pre-service science teachers will be asked to create lesson plans that incorporate some of the eight intelligences (Campbell, 1997). Many people will still tell you that someone is intelligent if they are skilled at math or science or articulate or speak multiple languages if you ask them. Even though educational methods and theories are constantly evolving, our culture and many school systems continue to place a premium on linguistic and logical-mathematical ability. A significant portion of the learning is devoted to improving those skills, or is presented in a style that appeals to and relies on the talents of a linguistic/logical-mathematical mind. Pre-service science teachers should consider the different types of learners in their classrooms, support all forms of intelligences in each student, and allow for an individual learning process. Allowing our students to discover and develop their various talents can have a variety of advantages for them. The MI theory can be a beneficial tool for pre-service and in-service science teachers to improve the quality of science teaching and learning, which will ultimately improve academic achievement (Amponsah, Bukari, Asano, Boateng, & Darkwa, 2021). Science teachers can use numerous approaches to help students improve their cognitive, social, and emotional abilities by incorporating multiple intelligences into their teaching methodologies.

Quality teaching, according to Normore (2017) and Hattie (2003), is a key component in predicting student learning achievement. According to Vermunt (2014), teachers' teaching approaches can enhance student learning processes, resulting in an increase or change in learning achievement in areas such as subject matter knowledge and understanding, skills, motivation, emotions, and so on. According to Yilmaz (2012), pupils with dominant intellect in mathematical-logical and linguistic activities have a strong correlation with math learning achievement. Furthermore, based on multiple intelligence theory, there is a substantial association between group divisions in cooperative learning and student accomplishment (Abdulkarim & Jadiry, 2012), including collaborative learning. According to Tiantong and Siksen (2013), knowing MI can help students make better use of their unique knowledge and talents. Each intelligence has its own set of qualities, tools, and processes that explain various approaches to problem-solving, learning, and thinking.

Conclusion

This paper sought to find the dominant intelligence among pre-service science teachers and the benefits MI-based instruction has on the work of the pre-service science teachers. Despite the fact that some research has been done, further research in other countries is needed to compare the results of this study. It was found that Ghanaian pre-service teachers used in this study exhibit all the eight MIs in the classroom. This study has shown that only Logical-Mathematics was highly advanced among pre-service science teachers. This is not surprising as these students have strong mathematical background to be able to pursue science. Similarly, it is also not a coincidence that Bodily-Kinesthetic is advanced in these pre-service science teachers. Science involves practical activities and as such a science student must exhibit the characteristics required to be able to perform hands-on activities. Gender differences exist between males and females in only two of the eight MIs, specifically, Logical-Mathematics and Visual-Spatial. The other six were not significant, suggesting that males and females exhibit similar intelligences in them.

Implication

Extra tuition might help one to build and maintain their emotional intelligence. In Ghana, the importance of multiple intelligence is not well emphasized in the colleges of education curriculum, but its inclusion is long overdue. It is thought that this will go a long way toward assisting pre-service science teachers in acquiring these important skills and imparting their students in the world of work. According to this method, learning and teaching should be oriented on each individual's unique intelligences. Gardner stressed that the multiple intelligences reflect different learning techniques as well as diverse topical fields.

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The Interpretations of the Mathematics Teachers Taking Post-Graduate Education to the Expression "You can't add apples and pears"

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Abstract
The study aims to explore how the mathematics teachers taking post-graduate education use their Algebra knowledge for the expression, "You can't add apples and pears" that is expressed in almost every segment of the society, in creating mathematical content. The data of the research consisted of the written answers of the thirty-seven (37) teachers, who had taken the Algebra Teaching course, to the question "There is a rule in mathematics as everyone says; explain the statement 'You can't add apples and pears' mathematically" in the exams from the 2008-2009 academic year to, including 2015-2016 academic year. The participants took the algebra education in the courses named Algebra and Introduction to Algebra courses and sufficient algebra education was provided to answer the question in the courses. The document analysis method was employed in the study and the data were analyzed with the descriptive content analysis. The results indicated that most of the teachers were aware of their algebra knowledge, the number and quality of the mathematical contents in the answers were at a satisfactory level, but the visuals used in some contents were not appropriate.

Keywords: Algebra Knowledge, Algebra Teaching, Awareness, Math Teachers, Fruit-Vegetable Algebra

1. Introduction

1.1 Introduce the Problem

Individuals use the "You can't add apples and pears" expression to state that a work or operation is not correct. Even, with "There is a rule in mathematics. You can't add apples and pears" and by adding the "mathematics" word to the content, they imply that the verification is provided with mathematics and no further proof is needed. Besides, as is can be seen from the examples below, the expression "You can't add apples and pears" is used in many different areas such as design and medicine.

Example 1. "… It is the first thing that our teachers teach us when we start the primary school, perhaps it is one of the most concrete things that we learn in mathematics. You can't add apples and pears!"

Image 1: Sadık Karamustafa, “Sharing Jerusalem: Two Capitals for Two States” Graphist 7th International Graphic Design Days, 2003.

Nevertheless, things have changed in this work of the designer. When it comes to the limitless of the design, it has been tried to emphasize that apples and pears can be added and the result will be two, that is, two different societies can exist together…” (Okur, 2014).

Example 2. “… Reductive expressions are incorrect. Reductive expressions demonstrate apples and pears equal: both are fruits; they both grow on trees, both etc. etc. Hermeneutics teaches us to avoid definitions. Because definitions are reductive…” (Uzun, 2014).

Example 3. “… Children are told that “you can’t add apples and pears” when teaching mathematics. As everyone knows that apples and pears cannot be added, they also know that religious issues cannot be approached with positive science methods…”(Bilgili, 2014).

Example 4. “…One of the most heard statements in mathematics is the expression “you can’t add apples and pears”. Is it possible to add apples and pears? The answer of this question can be conditionally “yes”…” (Akdemir, 2009).

Example 5. “…words can be added with words, sentences with sentences, words cannot be added with sentences. Isn’t this the golden rule of mathematics? “you can’t add apples and pears”. When I first heard this, I was in primary school. I remember I thought “Why can’t they be added? Two apples plus three pears equal five. It equals five, of course, but five what? I wasn’t aware that I should add fruits, two things of the same kind, not apples and pears…” (Hepçilingirler, 2004).

Example 6. “…The “point” unit is probably the most used unit after the “US Dollar”. Because we measure intelligent with points as well as anxiety… Exam mark is also a point and KPSS score, too… Even those who claim that apples and pears cannot be added, do not mind adding the interview score and the score obtained from ALES exam…” (Bilgili, 2014).

Example 7. “…Things that are different from each other by a certain extent are also logically contradictory, as they will not be the same thing. Eventually, it is like to compare apples with pears (one unit with five units)…” (Gümüş, 2005).

Example 8. “…the average amount of antibiotics used for patients will be given or the average amount of antibiotics used for 1000 people in the community in a day (in a way, it becomes possible to add apples and pears)…” (Töreci, 2003).

Example 9. “…Who will win can be predicted when different animals compete in the same running race. In this addition operation, it is similar with the expression that teachers use frequently: you can’t add apples and pears. The fact that the lion and the tortoise are in the same race and that they will race on the same track can show the equality, but it is obvious that it is not fair in terms of physical features…”(Kuzucu, 2018).

It is known that the mathematical symbols and terms are used except for their mathematical meanings and this is most common with the "+" symbol and the "addition" operation (Çetin et al., 2013: Delice & Sür 2015). In addition, as it has been stressed in the examples above, the expression “You can’t add apples and pears” is used in schools and by teachers. It is argued that an approach named “fruit-vegetable algebra” is used by teachers in teaching the

algebraic expressions subject by the teachers (Booth, 1988; Eroğlu, 2016; Kuchemann 1978; Rosnick, 1981; Tirosh, Even & Robinson, 1998; Yıldız, 2020), that this approach may cause mistakes and misconceptions (Eroğlu, 2016; Pimm, 1987; Tirosh, Even & Robinson, 1998). Teachers should consider that while this approach makes it easier for students to learn by concretizing the concept, meets the needs that arise at that moment, at the same time, this approach influences that students' general perceptions that they develop related to mathematics (Eroğlu, 2016) and that it is used independent from the textbooks (Ubuz & Sarpkaya, 2014).

1.2 Explore Importance of the Problem

It is claimed that a teacher, who has a deep content knowledge (Ball, 1990; Fennema, Sowder and Carpenter, 1999), will also plan and implement the teaching process effectively (Ball, Thames & Phelps, 2008; Huang & Kulm, 2012; Wasserman, 2016). The mathematics teachers taking the post-graduate education have the algebra content knowledge as they had taken the algebra course during their post-graduate education. How the teachers, who take Algebra Teaching course that takes place in the postgraduate curriculum, use their knowledge to create mathematical content for the expression "You can't add apples and pears" that almost every segment of the society use was considered to be worth searching.

1.3. Research Purpose

We aimed to explore how the post-graduate mathematics teachers taking post-graduate education use their Algebra knowledge for the expression, "You can't add apples and pears" that is expressed in almost every segment of the society, in creating mathematical content.

1.4. Research Problem

Can the mathematics teachers taking the post-graduate education use their algebra knowledge to explain the expression "You can't add apples and pears"? In other words, are they aware of their knowledge? This research problem was interpreted with the sub-problems given below.

1. Which answers did the mathematics teachers taking post-graduate education give for the expression "You can't add apples and pears"?
2. What is the mathematical content in the answers for the "You can't add apples and pears" expression?

2. Method

In this study, which aims to explore the awareness of algebra knowledge of the mathematics teachers taking the postgraduate education, the document analysis method was employed since we wanted to analyse the data obtained form the exams, in which the question "As everyone says, there is a rule in mathematics: You can't add apples and pears" was asked. The document analysis is the investigation of the written materials consisting of the information about the problem or problems that are wanted to be explored. The document analysis can also be applied alone to make sense of the written materials (Yıldırım & Şimşek. 2016).

2.1. Research Universe and Sample

The data of the research consisted of the written answers of the thirty-seven (37) math teachers. The participants took the algebra education in the courses named Algebra and Introduction to Algebra courses and sufficient algebra education was provided to answer the question in the courses.

2.2. Data Collection Tools

As the data collection tool in the research, the exam papers consisting of the question "Please state the mathematical explanation of 'as everyone says, there is a rule in mathematics: You can't add apples and pears'" asked as a question in the Algebra Teaching course given in the post-graduate program with thesis in each academic year from the 2008-2009 to 2015-2016 academic year including the last year were applied. Since the

exam was given as a research problem, one week of duration was given to the teachers to answer the question. There were answers between one page to seven pages.

2.3. Data Collection Process

The data were obtained from the written answers to the examination questions of the Algebra Teaching course given in the post-graduate program with thesis in each academic year from the 2008-2009 to 2015-2016 academic year including the last year. That is, the study is a longitudinal study that consists of 8 (eight) years.

2.*4. Data Analysis*

To analyse the data obtained within the scope of the research, the descriptive analysis method, which aims to present the obtained findings to the reader in a way as classified and interpreted, was implemented in four stages (Yıldırım & Şimşek 2016) as;

1. Creating themes and sub-themes,
2. Processing the data according to the themes and sub-themes,
3. Findings,
4. Interpreting the findings.

Creating themes and sub-themes. With the help of the data obtained by reviewing the documents, the themes and sub-themes of these themes have been created and are presented in Table 1 below

Table 1: Themes and sub-themes of these themes of the data obtained from the documents.

Themes	Sub-themes
Can't be added	Since the total does not specify a certain result Addition is a binary operation. The elements of the binary operation must belong to the same set. Since Apples and Pears are not the same genus/unit/variable, they can't be added. To add the two sets, the domain set and codomain set must be equal. Can't be added as they don't have consecutive.
It depends on the situation	If the unit is regarded as fruit, it can be added, otherwise not. It can be added if the studied universe/cluster is taken as fruit. If a universe/cluster is taken separately, such as apples and pears, the addition cannot be performed since the closure feature is not provided.

Data processing by themes and sub-themes. The data obtained from the exams were transferred to the computer environment by coding one by one and were classified according to the themes and sub-themes in Table 1.

3. Results

3.1 Findings

3.1.1. The findings related to the 1st sub-problem as Which answers did the mathematics teachers taking post-graduate education give for the expression "You can't add apples and pears"? are presented and interpreted below by using direct citations.

The distribution of the answers by the mathematics teachers taking post-graduate education to the question "you can't add apples and pears" by the themes and sub-themes of these themes are presented in Table 2 below as frequency (f) and rate (%).

Table 2: The distribution of the answers by the mathematics teachers taking post-graduate education to the question "you can't add apples and pears" by the themes and sub-themes of these themes.

What is the mathematical meaning of the expression "you can't add apples and pears"?			
	Themes	f	%
	Can't be added	28	76
	Depends on the situation	9	24
	Total	37	100
Themes	Sub-themes		
Can't be added	Since the total does not specify a certain result	8	29
	Addition is a binary operation. The elements of the binary operation must belong to the same set.	6	21
	Since Apples and Pears are not the same genus/unit/variable, they can't be added.	6	21
	To add the two sets, the domain set and codomain set must be equal.	5	18
	Can't be added as they don't have consecutives.	3	11
	Total	28	100
It depends on the situation	If the unit is regarded as fruit, it can be added, otherwise not.	6	67
	It can be added if the studied universe/cluster is taken as fruit.	3	33
	If a universe/cluster is taken separately, such as apples and pears, the addition cannot be performed since the closure feature is not provided.		
	Total	9	100

As it can be seen in Table 2, while %76 of the teachers (28 teachers) made a comment as "can't be added", %24 (9 teachers) claimed as "it depends on the situation". Since %29 of the teachers (8 teachers), who claimed that "it can't be added", stated that "Since the total does not specify a certain result"; %21 (6 teachers) that "Addition is a binary operation. The elements of the binary operation must belong to the same set."; in addition, %21 (6 teachers) claimed that "Since Apples and Pears are not the same genus/unit/variable, they can't be added"; %18 (5 teachers) that "To add the two sets, the domain set and codomain set must be equal" and %11 (3 teachers) that "Can't be added as they don't have consecutives."

There are some examples among the teachers' answers for each sub-themes of the "can't be added" theme below. The answer of S21 coded teacher among the teachers in the "Since the total does not specify a certain result" sub-theme is presented below.

The answer of the S21 coded teacher.

$(a,b), (c,d) \in N \times N$

Let's show how to add 5 apples and 3 apples.

Let's take Apple=(a,b)

$5(a,b)+3(a,b) =(5a,5b)+(3a,3b)$

$=(8a,8b)$

$=8(a,b)$

=8 apples

Taking Apple=(a,b) and Pear=(c,d);

$(a,b)+(c,d)=(a+b,c+d)$

Since the total does not specify a certain result, apples and pears can't be added.

The S1 coded teacher's answer in the "Addition is a binary operation. The elements of the binary operation must belong to the same set" sub-theme.

The answer of S1 coded teacher.

Two operations should have the same algebraic form. The elements of binary operation must belong to the same set. Addition is a binary operation. There must be a function as $X x X \rightarrow X$. If $X \neq \Phi$ and $Y \neq \Phi$ and X, Y are different,

$X \times Y \rightarrow X$ can't be a binary operation. So, as $X=\{x; x \in apples\}$, $Y=\{ y; y \in Pears\}$, should the function go to X or Y so that it's a binary operation? Here, it is not certain that the function will go to X or Y sets.

Here, let $A= \{a; a \in all\ fruits\}$. It can be $A \times A \rightarrow A$. However, here;

If, Apple + Pear= Banana, the addition of any fruit with Banana is the Banana itself. This is a binary operation. But, it is not well-defined. Because, we have assumed that the addition of Apple and Pear is Banana. Someone else may assume as Strawberry or Watermelon. In order for the binary operation to be well-defined, a set, that goes back to itself from the Cartesian product of itself, must be a well-defined function.

The S34 coded teacher's answer to "Since Apples and Pears are not the same genus/unit/variable, they can't be added" sub-dimension.

The answer of S34 coded teacher

Let $a,b \in N$ be $a+b=c$ and $c \in N$, (The closure property of the set of natural numbers according to the addition operation).

$$a+b=c$$
$$a.1+b.1=c.1 \rightarrow (I)$$
$$1.(a+b)=1.c \rightarrow (II)$$

The natural number "1", which is used in the operations above, represents the same object every time. Otherwise, it will not be possible to put the natural numbers a and b in the "1" common bracket, which is made in the transition from the Ist situation to the IInd situation. In this case, "(c).1" cannot be written as $c \in N$ on the right side of the equation. Thus, the result that there is no $c \in N$ with $a,b \in N$ such that $a+b=c$ emerges. As this result contradicts the closure property of the natural numbers according to the addition operation, the necessity that all the 1's written in I operation to represent the same object emerges.

The answer of S36 coded teacher "To add the two sets, the domain set and codomain set must be equal." Sub-dimension is presented below.

The answer of S36 coded teacher

What is set: A well-defined collection of objects is called a set.

Example. Natural numbers set, integers set, etc.

Apples set: The set that consists of apples are the apples set. Since the set is well-defined object, it is necessary to define the apple set according to its properties.

Features of apples:

- It can grow in all four seasons
- It can be in red and yellow colour.
- Its seed is like a spherical structure.
- The leaves of the tree are in the shape of ellipse. etc.

Pears set: The set that consists of pears are the pears set. Since the set is well-defined objects, it is necessary to define the pears set according to its properties.

Features of pears:

- It can grow in summer.
- It has a yellowish colour.
- Its seed is spicular.
- Its leaves are in narrow shape. etc.

Now, let's see whether apples and pears form the same set or not:

Theorem. Apple and pear are not in the same set.

Proof. Let apple and pear be in the same set, then, each apple in the apples set (E) should be even in the pears set (A).

That is;

$$0 \in E \Rightarrow 0 \in A,\ \forall\ n \in E \Rightarrow \forall\ n \in A$$

Since 0 (zero) is an empty set, it is a subset of every set;

$$0 \in E \Rightarrow 0 \in A$$

Now, let's take any n element from the E (apples set) set. This element must provide the element characteristics above. It one of these characteristics does not provide their characteristics of the A (pears set) set, we will contradict with our acceptance.

The elements of the E set can group in all seasons. The element of A set grows in summer. In this case, our acceptance is wrong. That is;

each $n \in E \Rightarrow$ each $n \notin A$

in this case, E set is different from A set.

Addition: Let $m \in N$ be a set. In this situation;

T1) $t_m(0)=m$

T2) For each $n \in N$ the $t_m(n^+) = (t_m(n))^+$ has only one $t_m:N \rightarrow N$ function that meets the conditions.

It must be $t_m(0)=m$. If $m \in E$, it can't be $m \notin A$.

$t_m:N \rightarrow N$ define function is $m \in E$ it can't be $m \in A$.

That a function is defined to $N \rightarrow N$, is expected that the elements of E set and A set to be the elements of N set. It is only possible to define a set that consists the E and A sets. Otherwise, it is not possible to mention such a situation. The reason why it can't be mentioned is our way out.

The definition above indicates that: in order to perform addition operation on a set, it must be defined on the same set. The apples set and pears set are different sets. This case indicates us that apples and pears cannot be added.

The answer of S26 coded teacher in the "Can't be added as they don't have consecutives" sub-dimension is presented below

The answer of the S26 coded teacher

First, let's define the addition operation on consecutive sets and natural numbers.

Consecutive set: If $\emptyset \in X$ and each $A \in X$ is $A^+ \in X$, X is the consecutive set.

Addition: Let the natural numbers $m, n \in N$ be given. In this case,

t_1: $t_m(0)=m$

t_2: there is one function $t_m:N \rightarrow N$ that provides the $\forall n \in N$ and $t_m(n^+) = (t_m(n))^+$ conditions. This function is called as the addition function. For instance, let's add 2 and 3.

$t_2(0) = 2$

$t_2(1) = t_2(0^+) = (t_2(0))^+=3$

$t_2(2) = t_2(1^+) = (t_2(1))^+=4$

$t_2(3) = t_2(2^+) = (t_2(2))^+=5$ is found.

That is expected from us is to add 3 apples and 4 pears. Such an operation cannot be performed. Because, addition is the operation of counting on. That is, addition operation is a consecutive operation. While adding 3 and 4, we get the consecutive of 3 4 times. If the definition of consecutive set is considered, it should be $a^+ \in X$ for $a \in X$. However, the consecutive of the 3 that we take from the apples set is 4 apples in the apples set. So, the addition operation cannot be performed between two different set elements since we can't get the consecutive of the number, we get from one of the two different sets from the other set. A new operation should be defined to perform this operation.

There are examples of the teachers' answers for the two sub-themes of the "it depends on the situation" theme below.

The answer of the S7 coded teacher that takes place in the "If the unit is regarded as fruit, addition operation can be performed, otherwise not" theme is presented below.

The answer of S7 coded teacher

The expression that apples and pears cannot be added is not correct. Because, it can be added according to the universe that we study. If we accept the universe of apples and pears as fruit, we can gather them together under the fruit set.

For example;

3 apples + 4 pears = 7 fruit

However, if we perform the addition operation by accepting the apples as a different universe and pears as a different universe, among the characteristics of being a group of addition operations, the closure feature is not provided. So, we can't perform the addition operation.

The answer of the S13 coded teacher that takes place in the "If a universe/set is taken separately, such as apples and pears, the addition cannot be performed since the closure feature is not provided" sub-theme is presented below

The answer of S13 coded teacher

An apple + a pear can't be added.
An apple +a pear =2 fruits. When written so, addition operation is performed. Because, both are gathered under a common set (fruit). Let's compare these two questions.

- How many pears should we add to the basket with 2 apples, so there will be 8 apples in the basket?
- How many pears should we add to the basket with 2 apples, so there will be 8 fruits in the basket?

As it is seen in the first question, if apples and pears were collected, we would find the desired number of apples when we add pears to the basket. We can add apples and pears in the second questions, because we name both of them in the common set (fruit).

Let's give a different example.

5 hens +3 cocks cannot be added.

We can state 5 hens+3cocks = 8 animals. Because, we can state a common set (animal).

3.1.2. The Findings related to the second sub-problem as What is the mathematical content in the answers for the "You can't add apples and pears" expression?
The findings related to the answers of the mathematics teachers taking the post-graduate education to the question "you can't add apples and pears" are presented in Table 3 below.

Table 3: The distribution of the algebraic content and findings of the answers of mathematics teachers taking the post-graduate education to the question "you can't add apples and pears" by the themes and sub-themes of these themes.

Themes	There is an algebraic content in answers		There is no an algebraic content in answers		Total	
	f	%	f	%	f	%
Can't be added	23	82	5	18	28	100
It depends on the situation	2	22	7	78	9	100
Total	25	68	12	32	37	100

As it is seen in Table 3, while there is an algebraic content in the answers of the %82 of the teachers (23 teachers) in the theme of " can't be added", there is an algebraic content in the answers of the %22 of the teachers (2 teachers) in the "it depends on the situation" sub-theme. In addition, while there is no algebraic content in the answers of the %28 of the teachers (5 teachers) in the sub-theme of "can't be added", there is no algebraic content in the answers of the %78 of the teachers (7 teachers) in the "it depends on the situation" sub-theme.

While some mathematical contents indicate how strongly the teachers form their algebra knowledge, some mathematical contents are such as an example of not being able to structure information.

The mathematical contents in the teachers' answers are presented in Table 4 below.

Mathematical Contents in the Answers		f	%
1	Binary operation	15	36
2	Function	6	14
3	Formation of natural numbers with Peona axioms	1	2
4	Formation of natural numbers using sets	1	2
5	Consecutively in sets and natural numbers	4	10
6	The binary addition operation in natural numbers	3	8
7	Addition in natural numbers with a constant number	5	12
8	Addition operation on exponential, radical, rational and irrational numbers	1	2
9	Group structure and characteristics	1	2
10	Indirect proof method	2	5
11	With reference use	3	7
Total		42	100

As it is seen in Table 4, the number of algebraic mathematical content that the teachers used in their answers are 42; this number is more than 25 which is the number of answers consisting of the mathematical expression given in Table 3. In addition, as it is understood from Table 4, the "binary operation" was used in the answers most (%36). 3 teachers presented the mathematical contents not directly but in an article content by using the reference in their answers.

While some mathematical contents indicate that how strongly teachers form their algebra knowledge, some mathematical contents, although they are few, are such as to be an example of not being able to structure knowledge. Some of the contents that will be an example of not being able to structure information are presented below.

The expression "… It is not possible to add the sets whose definition sets are different…" in the S23 coded participant's answer is an example to confusing operations between sets and binary operations on sets.

The expression "…Positive integers, which form the basis of mathematics, were characterized axiomatically by the Italian mathematician Peano (1858-1932) in 1889 as follows…" in the S12 coded participant's answer is an example of regarding Natural numbers defined very differently from each other and Positive Integers the same.
The visual in the answer of the S24 coded participant and presented in the Figure 1 below.

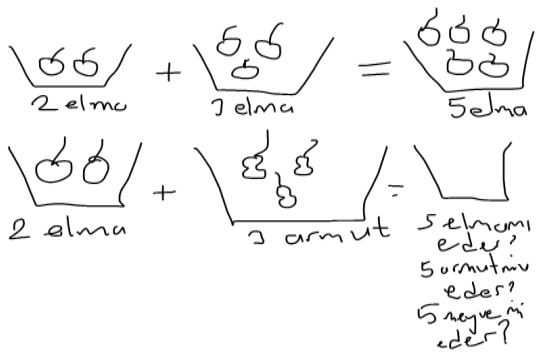

Figure 1: The visual in the answer of the S24 coded teacher

The visual in the answer of the S27 coded participant and presented in the Figure 2 below.

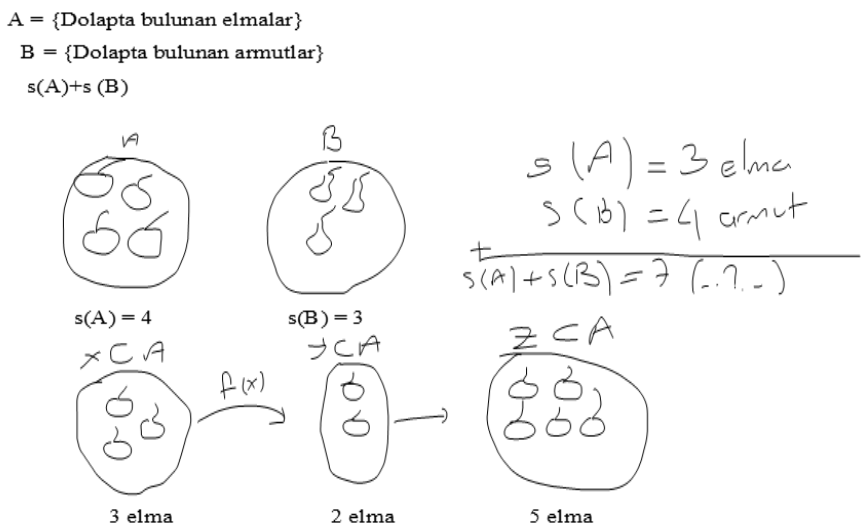

Figure 2: The visual in the answer of the S27 coded participant

The visuals in the Figure 1 and Figure 2 are used by the educators to visualize the addition operation, can cause difficulties in forming the concepts of set, operations in sets and binary operations in terms of mathematical content.

The examples indicating how strongly some teachers form their algebra knowledge are presented below.
The expression in the answer by the S36 coded participant
"…What is set: A well-defined collection of objects is called a set.
Example: Natural numbers set, integers set etc.
Apples set: The set of apples is called as apples set. Since the set is well-defined objects, it is necessary to define the apples set according to its properties. Properties of apples:

- It can grow in all four seasons
- It can be in red and yellow color.
- Its seed is like a spherical structure.
- The leaves of the tree are in the shape of ellipse. etc.

Pears set: The set that consists of pears is the pears set. Since the set is well-defined objects, it is necessary to define the pears set according to its properties.
Features of pears:

- It can grow in summer.
- It has a yellowish color.
- Its seed is specular.
- Its leaves are in narrow shape. etc.

Now, lets find if apples and pears create the same set:
Theorem. Apples and pears are not in the same set.
Proof. Let the apples and pears be the same set. Then, every element in the apples set (E) must be in the pears set (A), too. That is;

$$0 \in E \Rightarrow 0 \in A, \text{ each } n \in E \Rightarrow \text{each } n \in A$$

Since 0 (zero) is the empty set, it is the subset of each set. That is;

$$0 \in E \Rightarrow 0 \in A$$

Now, lets take an n element from any elements in the E (apples set) set. This element must provide the properties of the element above.
In the case, when one of these properties does not provide the properties of A (pears set) set, we contradict with our acceptance.
The elements of the E set grow in all four seasons. The elements of A set grow only in summer. In this case, our acceptance is incorrect. That is;

$$\text{each } n \in E \Rightarrow \text{each } n \notin A$$

in this case, the expression "…the E set is different from A set…" indicates that the teacher has formed the knowledge of algebra in a way that can carry it to current life.
The expression in the answer of the S35 coded participant to the question "…we should not confuse the addition operation with natural numbers with the union operation on sets…" indicates that the teacher forms his/her algebra knowledge at a level that can identify misconceptions.

4. Discussion

4.1. The results related to the 1st sub-problem as Which answers did the mathematics teachers taking post-graduate education give for the expression "You can't add apples and pears"?

When the findings related to the first sub-dimension were analyzed, while most of the teachers claimed that apples and pears can't be added, approximately one fourth of them stated that they can be added according to the situation of the apples and pears. This result indicates similarity with the results reached by Eroğlu, 2016 suggesting that " It was observed that the teachers used 1) adding similar terms, 2) fruit salad approach in the courses" and Yıldız, 2020, that " the teachers used the 'fruit-salad', 'similar terms' and 'non-similar terms' approaches during the algebraic expressions operation process."

The reasons of the teachers who answered as 'cannot be added' are gathered under the sub-themes "as the sum does not refer a result" with 8 (eight) teachers at most; "cannot be added as they don't have consecutives" with 3 (three) teachers at least. These two reasons and the other reasons indicate that teachers associate the content of the question with the subjects of binary operation, formation of natural numbers and addition operation in natural numbers.

While the reasons of the teachers who claimed that 'it depends on the situation' were gathered under the sub-theme of "If the unit is taken as the fruit, addition operation can be performed, otherwise not" with 6 (six) teachers, 3 (three) teachers' reasons were gathered under the sub-theme of "If a universe/set is taken as fruit, such as apples and pears, addition operation cannot be performed since the closure feature is not provided". As it can be realized in these two reasons, the contents that cause the "can't be added" judgement and the contents under the theme of can't be added are almost the same. However, the content "If the unit is taken as the fruit, addition operation can be performed" and "If the universe/set is taken as fruit, addition operation can be performed" present a different point of view and is significant. If these discourses were supported by mathematical content, it would be an algebraically desirable solution.

4.2. The results related to the second sub-problem as What is the mathematical content in the answers for the "You can't add apples and pears" expression?

There is a mathematical content in the answer's majority of all the teachers (68%). While there was a mathematical content in the answers of the majority of the teachers (82%) under the theme of can't be added, in the answers of only 2 (two) teachers, among the 9 (nine) teachers under the theme of it depends on the situation, there is a mathematical content. When the mathematical contents used in the answers are taken into consideration, it is seen that the teachers have sufficient algebra knowledge and are aware of their knowledge. This result contradicts with the result by Yıldız, 2020 suggesting that "The content knowledge of the teachers about the process of processing with algebraic expressions is not at a sufficient level." This case may stem from the the Algebra Teaching course they took in the post-graduate degree in addition to the Algebra course taken by the teachers participating in this study at the undergraduate level. The result reached in the study by Eroğlu, 2016 suggesting that "with professional development activities, teachers show a great change and development in the knowledge and skills they use in their teaching, and this change and development takes place in the context of the use of representations and mathematics teaching knowledge" can be given as the reason for this.

The teachers used 11 (eleven) different mathematical contents in their answers. The mathematical contents that were used most were "binary operation" with 15 (fifteen) students and "function" with 6 (six) students. The mathematical contents that were used least were "Formation of natural numbers with Peona axioms", "Formation of natural numbers using sets", "Addition operation on exponential, radical, rational and irrational numbers", "and "Group structure and characteristics" with 1 (one) teacher. This situation indicates that the teachers who refer mathematical contents in their answers have a deep content knowledge. This result overlaps with the result by Yıldız, 2020 suggesting that "They did not use alternative approaches to the mathematical meaning of the algebraic expression. For this reason, teachers should have a deep content knowledge about the structural feature of algebraic expression, which includes the mathematical meaning."

The visuals that are used in the Figure 1 and Figure 2 and mathematical symbols are regarded as perceptual rather than a mathematical basis by teachers. Since such uses may lead difficulties in teaching the real meanings of mathematical symbols, it would be more appropriate not to be applied by mathematics teachers at least.

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Effect of Digital Game Addiction and Social Anxiety Levels on Recreational Active Adolescents

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Abstract
The aim of the research is to investigate the digital game addiction and social anxiety levels of adolescents who play sports recreationally. 226 adolescents (69 girls, 157 boys) who do sports recreationally participated in the research. In the research, the personal information form prepared by the researcher and the short form of the digital game addiction scale (DGAS-7) developed by Lemmens and friends (2009) and adapted into Turkish by Irmak and Erdoğan (2015) and La Greca and others, (1988) developed by Demir and others, (2000) Social Anxiety Scale for Children which was adapted into Turkish, were used. SPSS 22 statistical program was used in the analysis of the research. Manova analysis and regression analysis were used in the research. The level of significance in the research was taken as $p<.01$. As a result of the analysis, the digital game addiction score averages of boys were found to be significantly higher than girls. As a result of the regression analysis, it was determined that digital game addiction, together with the variables of gender and having a computer at home, predicted social anxiety at a statistically significant level.

Keywords: Digital Game Addiction, Social Anxiety, Adolescent.

1. Introduction

The game has evolved to the present day by going through many stages with the development of technology. It is thought that the first emergence of the game is based on natural behaviors inspired by primitive hunting techniques (Yengin, 2010). The game evolved from these primitive techniques over time; It is considered as an enjoyable leisure time activity that has basic elements such as rule, purpose and time (Altunay, 2004), outside of normal life, without financial gain (Huizinga, 1998). As time passed, the game, which found meaning in other structures, had different reflections in different age groups and became usable for different purposes. It has been observed that game activities for adults, mostly for health and personal development (Son and friends, 2007; Vygotsky, 2004; Yarnal, 2006; Yarnal, Chick, & Kerstetter, 2008), for children; relaxation (Huizinga, 1998), having fun (Aksoy & Dere-Çiftçi, 2018; Hazar, 2018), developing motor skills (Mangır & Aktaş, 1993), being ready for life (Singer & Singer, 2005), developing communication skills, helping each other, it has a very important effect on learning,

gaining experience in life, and psychosocial and language development (Ayan & Memiş, 2012).

The game, which especially affects the psychomotor development of children, has left its place to digital games with the development of technology over time. Digital games are games that are programmed using various technologies and allow users to log in as well as provide a visual environment for users (Çetin, 2013). In digital game platforms, the player plays the game either alone against the machine or against other players on the platform (Bozkurt, 2014). Many factors such as stress, challenge, leisure time, relaxation, fun, and distance from real life lead individuals to digital games (Griffiths & Hunt, 1995; Kirriemuir, 2002; Tüzün, 2004; İnal & Çağıltay, 2005; Wan & Chiou, 2006). In particular, children's inclination towards digital games affects their cognitive, affective and social development, while at the same time they are seen as an important tool in children's learning and realizing the creative activity (Kukul, 2013). However, in addition to these positive effects of digital games, there are also negative aspects such as addiction. Digital game addiction is defined as the inability to control the time spent playing games and feeling psychologically deprived when not playing (Irmak & Erdoğan, 2016; Irmak & Erdoğan, 2015). Digital games have many negative effects besides addiction. As a result of the researches, digital games; Many negative effects have been identified, such as increasing children's aggression tendencies (Anderson & Bushman, 2001; Benrazavi, Teimouri, & Griffiths, 2015), causing a decrease in academic achievement, leading to lying behavior, and weakening interpersonal relationships (Horzum, 2011). In the study conducted by Lieberman and others in 2009, they stated that children who turn to digital games instead of exploratory games face negative consequences such as violence, anger, fear, asocialization, and limited time allocated for physical activities. Eni (2017) also states that children who spend their free time with digital games become asocial and their personalities are shaped in this direction. It is also claimed that content containing violence and fear in digital games causes children to become more angry and aggressive (Asagem, 2008).

Based on the above and previous studies, the aim of this study was to investigate the digital game addiction and social anxiety levels of adolescents who play sports recreationally. As a method for this review, the Digital Game Addiction Scale short FORM (DGAS-7) was developed by Lemmens and his friends (2009) to determine the problematic digital game playing behaviors of adolescents between the ages of 12-18.

2. Method

2.1 Research Design

In the research, a relational screening model was used to investigate the relationship between digital game addiction and social anxiety levels of children who play sports recreationally. Relational screening model; It is a research model that aims to determine the existence and/or degree of co-variance between two or more variables (Karasar, 2013).

2.2 Sample and Data Collection

226 adolescents (69 girls, age = 12.4 ± 1.2; 157 boys, age = 12.2 ± 1.3) who do sports recreationally, participated in the research. Before the questionnaire questions were distributed to the children, a voluntary consent form was distributed. After the questionnaires were collected, incorrect and incompletely filled papers were removed. Answering the survey questions took 15-20 minutes. For the research sample, a personal information form, which was created by the researcher and included the demographic characteristics of the participants, was prepared.

2.3 Digital Game Addiction Scale Short Form (DGAS-7)

The Digital Game Addiction Scale short form (DGAS-7) is a scale developed by Lemmens and others (2009) to determine problematic digital game playing behaviors of adolescents aged 12-18. This form which is used is the 7 item short form of DGAS-21 which consists of 21 items and 7 sub-dimensions. The validity and reliability values of the original DGAS-7 were found to be 0.92 for Cronbach's alpha, CFI=o.904, RMSEA=0.053 (90% CI=0.049 and 0.056), and it has been shown that it can be used in adolescents. The Turkish validity and reliability study was

conducted by Irmak and Erdoğan (2015), and the Cronbach alpha coefficient of the scale was found to be .72. In this study, the Cronbach's alpha coefficient was found to be .60. The scale has a 5-point Likert type, one-factor structure and scores between 1 and 5 (1=never, 5=always) (range: 7-35).

2.4 Social Anxiety Scale for Children

The validity and reliability study of self-report Social Anxiety Scale for Children-Revised Form (SASC-R) scale developed by La Greca and others (1988), was performed by Demir and others (2000). This scale, which originally consisted of 10 questions, was revised in 1993 and turned into a scale of 18 questions. The two components of social anxiety, fear of negative evaluation and distress and discomfort in social environments, were taken as basis in the preparation of the items. In this five-point Likert-type self-report scale, scores range from 18 to 90. The validity and reliability study of the SASC-R in Turkish was made with the participation of 452 students attending classes in 4.-8. by Demir and others (2000). When the internal consistency analysis of the scale was performed according to the Cronbach's alpha method, α=0.813 was found. In this research, the Cronbach Alpha coefficient of the scale was determined as .81.

2.5 Analyzing of Data

SPSS 22 statistical program was used in the analysis of the research. Frequency and percentage analyzes were preferred for the descriptive statistics of the research. Mean and standard deviation analyzes were used to determine the levels of social anxiety and digital game addiction. Manova analysis to determine whether the digital game addiction and social loneliness levels of adolescents who play sports recreationally differ in terms of gender and computer ownership; Standard multiple regression analysis was used to determine the effects of gender, computer ownership and digital game addiction scores on social anxiety. The level of significance in the research was taken as $p<.01$.

3. Results

In this part of the research, there are findings regarding the relationship and effect of digital game addiction and social anxiety levels of adolescents who play sports recreationally, and the effect of gender on digital game addiction.

Multiple analysis of variance was performed to investigate the DGA and Social Anxiety total scores. DGA and Social Anxiety total scores were entered as dependent variables in the model. Gender (female, male) and having a computer (yes, no) variables were entered into the model as independent variables. While Manova results found the main effect of gender to be significant for DGA (λ =.963, $F(2, 221)$= 4.207, p=.016, η^2=.037), it was not significant for social anxiety. The comparison test performed on the finding that the main effect of gender was significant for DGA is presented in Table 1.

Table 1: Comparison test on finding that the main effect of gender was significant for DGA

Dependent Variable	Gender	Mean	SD	F	p	η^2
DGA	Female	1,80	,082	7,755	,006*	,034
	Male	2,06	,050			

*p<,01

As a result of the analysis, the digital game addiction score means of boys were found to be significantly higher than girls ($p<.01$). This significant difference explains 3.4% of the total variance.

Multiple regression analysis was performed to predict social anxiety scores. As an independent variable to the model; digital game addiction (DGA), gender and computer ownership variables were entered. Analysis results are presented in Table 2.

Table 2: Regression analysis for the prediction of social anxiety scores

		R2	Revised R2	β	t	F
Stage 1	DGA	,088	,084	,297*	4,661	21,728*
	DGA			,312*	4,847	
Stage 2	Gender	,108	,096	-,082	-1,255	8,926*
	Having Computer at home			,101	1,573	

*p<,01

As a result of the regression analysis, it was observed that there was a weak positive correlation between social anxiety and DGA (r=.297, p<.001). In addition, it was determined that digital game addiction significantly predicted social anxiety (F=21,728, p<,001). As a result of the hierarchical regression analysis, it was determined that digital game addiction, together with the variables of gender and having a computer at home, predicted social anxiety at a statistically significant level (F=9,926, p<,001). t was determined that while digital game addiction alone explained 8.4% of the total variance in the first stage, digital game addiction explained 9.6% of the total variance together with the gender and having a computer at home in the second stage.

4. Discussion

Today, technology, which is developing more and more every day, has a serious effect on the change of people's life style. Technology, which has an important place in people's daily lives, has also caused a change in the game understanding of individuals. Considering the development of technology in terms of gaming, it has been observed that there is a transition from traditional games to digital games. Computer games, which negatively affect the physical and mental health of young people, have become one of the most important factors that create digital game addiction. The addiction of digital games by individuals has affected them to break away from social environments and drift into loneliness. In this study, the effects of digital games on social loneliness were investigated and as a result of the analysis of the data obtained from the field research, findings indicating the existence of the effect were reached.

As a result of this research, the main effect of gender was found to be significant in favor of males for DGA. There are similar studies and similar findings in favor of male students in the literature (Göldağ, 2018; Öncel & Tekin, 2015; Gentile, 2009; Onay, Tüfekçi & Çağıltay, 2005; Tüfekçi, 2007; Gökçearslan & Durakoğlu, 2014; Mustafaoğlu & Yasacı, 2018; Hastings & others, 2009; Griffiths, Davies & Chappell, 2003; Morahan-Martin & Schumacher, 2000; Tekindal & Çalışkan, 2016). n addition, in the studies conducted by researchers such as Buchman & Funk (1996), Sherry (2001) and Fromme (2003), it was concluded that the rate of playing digital games is higher in boys than in girls. Erboy and Vural (2010) found that there was a significant difference in favor of boys between male and female students in their study in which they investigated computer game addiction on 4th and 5th grade primary school students. Akçay and Özcebe (2012), on the other hand, reported that there is a significant relationship between school-age range and playing computer games, and the frequency of playing computer games increases as children get older. The fact that boys prefer digital games more than girls compared to other activities was evaluated in this study as the reason why boys are more addicted to digital games than girls. In addition, the fact that boys in our country can access computers and digital games more easily than girls are among the reasons for the difference.

In some studies on digital game addiction in which the variable of not having a computer was used, it was found that computer ownership did not affect game addiction (Bilgin, 2015; Gökçearslan & Durakoğlu, 2014; Tüfekçi, 2007; Yılmaz, 2008; Öncel & Tekin, 2015), some, on the other hand, in studies, a contrary result was obtained with the findings that having a personal computer affects digital game addiction (Göldağ, 2018; Şahin & Tuğrul,

2012; Erboy & Vural, 2010; Durdu, Hotomaroğlu & Çağıltay, 2005). In this study, however, the main effect of the variable of having computer or not was not significant for DGA and social anxiety.

As a result of this research, it was determined that digital game addiction, together with the variables of gender and having a computer at home, predicted social anxiety at a statistically significant level. With this result, it is understood that one of the factors affecting social anxiety is digital game addiction. It is thought that the addiction of adolescents to digital games distracts them from social life and therefore they hesitate while exhibiting behaviors in social life. As a result of this situation, it is thought that adolescents feel all the attention on themselves due to the personal myth, which is one of the developmental characteristics of the period, and it affects their fear while exhibiting behaviors. As a result, it can be stated that digital game addiction drags adolescents to social anxiety.
It is stated that game addiction causes physical, mental and social disorders for social anxiety, which is seen as one of the consequences of playing digital games too much by children (Ayhan & Çavuş, 2015). Parallel to this situation, as a result of digital game addiction, violence, increase in aggression level, reluctance to communicate with speech, isolation from the environment, biological disorders, decreases in social skill levels occur, and as a result of these situations, the communication between family and child directly affects negatively (Arslan and friends, 2015; Mustafaoğlu & Yasacı, 2018; Güvendi, Tekkurşun Demir & Keskin, 2019).

Similar to this study, in the research conducted by Karaca and others in 2016 on the relationship between computer game addiction and social anxiety of secondary school students, about half of the participants investigated were computer game addicts, however, their social anxiety levels were not as high as expected, and as a result of the research, it has been reported that there is a moderate relationship between social anxiety and computer game addiction.

5. Conclusion

In general, when the findings of the study were evaluated, it was concluded that there was a significant relationship between digital game addiction and gender, and more addiction in favor of males. In light of this result, the importance of developing contemporary methods in preventing digital game addictions of males, especially with the things brought by the age, becomes evident. In addition, both families and teachers need to display a stakeholder view in developing methods that catch up with the era and can be effective on young people in guiding young people.

Recommendations

When the relationship between digital game addiction and social anxiety was examined, it was seen that it was effective on social anxiety in children. It may be necessary to increase the motivation of children to participate in various sports in order to increase their peer relations and make them more socially active. For this reason, children's spending more time both at school and in sports clubs may contribute to a more active and social life.

Limitations

This study was carried out on children who do sports recreationally. Considering the limitations in the study, it can be expressed as the sample size and the type of the selected sample. We think that examining the differences between licensed and active sports children and children who play sports recreationally in future studies will reveal other results.

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Develop English Electronic Module for Tourism Through Analysis of Learner's and Context

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Abstract
Tourism development in Lampung province has been developing rapidly and the need for English communication skills at the tourism workplace is highly required due to a lot of visitors are foreigners. The state Polytechnic of Lampung has opened a new program study of tour and travel to support the government in the tourism sector and train students to have better English skills therefore need to develop good materials for teaching which meet with tourism industry. Developing good English materials for tourism based on an Android smartphone is needed since students lack academic hours for learning English. The objective of this research is to develop an electronic module (e-module) of English for tourism based on analysis learners and context that become important step in Dick and Carey Model. The development of e-module of English for tourism applied collaboration of research and development (R&D) that focus on the third of ten steps of Dick and Carey Model. The result of this research is a prototype of e-module of English for tourism that has been validated and published on google play store.

Keywords: E-Module, English for Tourism, Learners' Analysis

1. Introduction

ASEAN Economic Community (AEC) policy was applied in 2015, cooperation between ASEAN countries in trading will be expanded in services and products. Communication and adaptability are very important and the main keys for the running well of cooperation. Building cooperation among ASEAN countries could have a problem if the stake holders do not competent in foreign language communication. The barrier to foreign languages, especially English, is a challenge for Indonesia in the MEA. The ASEAN Study Center stated that the quality of Indonesian skilled or professional workers, the use of English is only around 44%, 36% computer use, 30% fast learning ability, 33% thinking skills and 13% basic skills (Keliat, 2013). One of the things that are urgent to become a priority in the development of every individual and organization of business actors is the mastery of foreign languages, especially English. Mastery of foreign languages such as English and Arabic is very important to access religious and business knowledge (Muhammad, 2014). Students who did internships at multinational companies in the ASEAN region experience problems in English, especially in speaking and listening skills, while reading and writing skills are rarely used in work apprenticeships. Students from Asian countries generally have difficulty speaking English in speaking and writing during education due to differences in learning styles, culture, and other social problems. Even though English language skills are needed when working in the global tourism industry.

The global tourism industry is growing rapidly and opening big workplaces in Indonesia, especially in provinces that have great tourism potential. Lampung Province as the main gateway to the island of Sumatra has very good tourism potential, especially data on natural tourist attractions. Based on data released by the Lampung provincial tourism office, it shows that from January to June 2019 there were 100,469 foreign tourists visiting Lampung province and more than four million domestic tourists, namely 4,525,127. The increase in tourist visits in Lampung province was 17.07 percent compared to 2017 (Ikhwan & Qodratul Ikhwan, 2019). This has caused the tourism industry in Lampung province to grow better. The tourism industry plays an important role in Lampung province because it is one of the mainstays of Lampung's income sector. The development of the tourism industry makes English communication skills even more important. Employees who work in the tourism sector must be able to communicate with foreigners using a foreign language such as English. Based on the results of interviews with regional administrators of the Indonesian Tour Guides Association (DPD HPI) Lampung, it shows that the English language skills of tourism guides are still lacking, especially speaking, reading and writing skills and the TOEIC score is still below the SKKNI standard for competence. English. Tour guides who have good English skills will provide comfort for foreign tourists and will have a positive impact on all things in the tourism industry sector (Erazo et al., 2019).

The global tourism industry is growing rapidly and opening big workplaces in Indonesia, especially in provinces that have a big tourism potential. Lampung Province as the main gateway of Sumatra island has very good tourism potential, especially in natural tourist attractions. Based on data released by the Lampung provincial tourism office, it show that from January to June 2019 there were 100,469 foreign tourists visiting Lampung province and more than four million domestic tourists about 4,525,127. The increase in tourist visits in Lampung province was 17.07 percent compared to 2017 (Ikhwan & Qodratul Ikhwan, 2019). As a result the tourism industry in Lampung province grow much better. The tourism industry plays an important role in Lampung province because it is one of the mainstays sector of Lampung's income. The development of the tourism industry makes English communication skills more important. Employees who work in the tourism sector must be able to communicate with foreigners using a foreign language such as English. Based on the results of interviews with regional administrators of the Indonesian Tour Guides Association (DPD HPI) Lampung, it could be concluded that the English language skills of tourism guides are lack of English skills, especially speaking, reading and writing skills and the TOEIC score is also still below the SKKNI standard for English competency. Tour guides who have good English skills will provide comfort for foreign tourists and will have a positive impact to all things in the sector of tourism industry (Erazo et al., 2019).

The Minister of Manpower and Transmigration of the Republic of Indonesia has made a decision in the tourism sector in the tour and travel sub-sector Indonesian National Work Competency Standards (SKKNI: 2004) that English communication competence are speaking, reading and writing at the level of basic work skills, proficiency intermediate work and advanced work skills. The tourism sector requires English skills; speaking (100%), listening (75%), writing (25%), and reading (25%) and facing several problems such as lack of training for hotels and tourism, not actively working with the tourism industry to strengthen the business network of all tourism stakeholders, lack of practice in reading and explaining tourism city maps, and difficulty understanding English accents such as English speakers from China, Japan, India (Puspitasari, 2018).

World Bank data shows that the Indonesian quality of skills and professional workers having competence in English communication skills is 44%, computer skills 36%, learning abilities 30% faster, thinking skills 33% and basic skills 13% (Maskur, 2016). In addition, the Ministry of Manpower and Manpower noted that Indonesia's obstacle in the ASEAN Economic Community was English communication. The results of the EPI (English Proficiency index) survey in 2018 were held in 88 countries, Indonesia was ranked 51st out of 88 countries and ranked 13th out of 21 Asian countries. Indonesia remained from 2017 in the low proficiency category with a score of 51.58 (low proficiency). Meanwhile, Singapore is in fifth place with a score of 68.63 (very high proficiency), Malaysia is in 13th place with a score of 58.32 (high proficiency) and the Philippines is in 15th place with a score of 61.84 (high proficiency). These data show that Indonesia is left behind in English skills compared to other countries in ASEAN (EF EPI, 2018).

State Polytechnic of Lampung (Polinela) as a vocational higher education needs to prepare its graduates in the field of knowledge studied and the ability to communicate in foreign languages, especially English. Communication skills

are very important in the 21st century learning era (21stcentury learning; 4C: collaboration, Communication, Creative, and Critical Thinking). Polytechnic is a vocational higher education that aims to prepare students to get a job with certain applied skills to the maximum equivalent of an undergraduate program (S1). Polinela's curriculum has provided learning English 1, 2 and 3 courses for students in all study programs. Unfortunately, implementation has not made a significant contribution to improving students' English communication skills. The results of the TOEIC (English Language Test for International Communication) test conducted by ETS (Educational Testing Service) in 2018 showed that on average 329, students' English communication skills were categorized at the basic level (average score 329). There are five students (1%) at the level of basic work proficiency (score 605-780), at the intermediate level or elementary proficiency plus (score 405-600) as many as 155 students (25%), at the elementary level or elementary proficiency (scores of 255-400) totaled 311 students (51%), and at the beginner level or basic proficiency (scores 5-250) there were 138 students (23%). It can be concluded that in general, students' skills in English communication are very low.

The learning outcomes of students in the first semester of the 2017/2018 school year for English courses can be categorized as quite good where out of a total of 537 students, 219 students (40.8%) scored A (40.8%), B's 208 people (38.7%)) and a C value of 110 people (20.5%). Although the first semester's English scores can be said to be quite good, the initial test results of students' English proficiency using the TOEIC average have low abilities with a score of 255 - 400 or Elementary (55.7%) and a score of 5-250 or Novice (35%). The initial TOEIC test results specifically for travel students also show that the students' English language skills are still very low with an average score of 280. The English skills of students (53 students) in the travel study program are at the basic level or basic proficiency (46%) and at the elementary or elementary proficiency (48%).

Based on the results of observations by researcher that the English tourism material delivered by the lecturer used English text books and in the form of a compilation of material packaged in practical learning modules which compiled by the lecturer. Tourism English learning material in the first semester focuses more on grammar based or provides a lot of grammar training and activities are mostly cantered on the teacher not on students (student center) so that it does not provide opportunities for students to practice language (language exposes) in online class between students (pair practice) and lecturers. Learning English obstacles in tourism experienced by students while learning English according to Polinela's lecturers, among others, feeling of shame, fear of speaking English wrongly, lack of confidence, less motivated and lack of vocabularies.

The results of observations by researcher show that independent tourism English learning resources (modules, handouts and web learning) are very limited. The problem of the availability of independent learning resources is a priority to be resolved considering that there are very few opportunities to practice tourism English outside the classroom or on the Polinela campus. Another problem in learning English for tourism in the Tourism Travel Study Program in Polinela is the lack of opportunities for students to practice their English skills. Common problems in learning a foreign language include the lack of opportunities to use foreign languages by teachers and students in their environment (Roblyer, Margareth D and Doering, 2010). One way to solve this problem is the need to develop independent learning materials based on student analysis and analysis of tourism stakeholders (context). Tourism English electronic module material can be accessed anytime and anywhere. Independent learning materials such as electronic modules are expected to help improve students' English competency.

The development of an electronic module (e-module) for English learning materials needs to consider student's needs and the needs of graduate users, namely tourism stakeholders. Electronic module development also requires creativity, productive thinking habits, creating active, effective, innovative and pleasant conditions. Lecturers should develop their own multimedia applications so that they can contribute effectively in solving some learning problems (Babiker, 2015). Material development should be based on the analysis of students and tourism stakeholders (Dick, W. & Carey, 2015). English in tourism according to the Indonesian National Work Competency Standards (SKKNI) issued by the Ministry of Manpower in the tourism sector in the tourism travel agency sub-sector (No. Kep 238 / MEN / X / 2004) is divided into three categories, namely basic, intermediate operational competences. and high. The three competencies in tourism English include speaking, reading and writing skills.

Based on the description of the importance of intervening in learning conditions both internally and externally so that the learning process is optimal, it is necessary to develop e-modules for learning English for tourism based on the analysis of Learners and Context at the Lampung State Polytechnic as an alternative source of supplementary learning materials. It can provide a solution for improving the competencies of English tourism for students.

2. Method

Developing electronic modules of English for tourism through analysis of learners and context is research and development (R &D). R and D has purposed to develop and improve the quality of instruction. It used mix method that presented the data analysis of qualitative and quantitative. Research on developing English for tourism e-module through analysis leaners and context using the third steps of the Dick and Carey Model design that is analysis learners and contexts.

The study of developing e-module for English for tourism was based on analysis of learners and context. The analysis of learners was conducted by having questioners to students of Polinela at tourism study program and stake holder of tourism industries in Lampung province. The questioner has distributed online through google form. It is used to know learners entry behaviour, English level, students motivation in learning English for tourism. While the context analysis has been conducted by gathering some information from stake holders from tourism sectors using questioner and observation. The participants were students of tour and travel study program of Politeknik Negeri Lampung and tourism stake holders of Lampung province including association of tourism destination (PUTRI), guide (HPI), tour and travels (ASITA), hotels (PHRI) and also local governments. The purposive random sampling was used as the sampling technique in this study. There were 136 students involved in the study and 158 from tourism stake holders of Lampung province.

This study used two methods to collect data; questioner and library study. Questioners are instruments that used to get information from respondents both students and stake holders, while library study was used to obtain relevant theories to make instruments of research in the form of questioners and used for analyzing the needs. The data analysis method that had been used in the study was descriptive method. It was used to describe and analyze the of learners and contexts or stake holders of English of tourism. The results of this analysis used to develop teaching materials that is electronic module (e-module) for English for tourism.

3. Results and Discussion

Based on the result of analyzing data that has been collected, the students responds from the questioners classified into three language skills based on Indonesian National Work Competency Standards (SKKNI) issued by the Ministry of Manpower in the tourism sector in the tourism travel agency sub-sector (No. Kep 238 / MEN / X / 2004 including; 1) speaking, 2) reading and 3) writing and students perception about the role of English in tourism work place.

1. Student's ability in speaking

The student's competences in English speaking skills have been identified based on the result of the questioners analysis. Questioners cover three aspects of speaking abilities communicate in spoken English with tourists and colleagues, understanding and using polite and friendly sentences verbally both formal and informal, and speaking by telephone. The following table indicates the results of students competences in speaking skills related to English for tourism in workplace.

Table 1: Student's speaking competences in speaking skills

No.	Tourism English competency (SKKNI)	Very Bad	Enough	Good	Very Good
1	My ability to communicate in spoken English with tourists and colleagues on matters related to basic and daily activities at work and tourist service activities		59,6%	34,6%	
2	My ability to understand and use polite and friendly sentences verbally and know when to use formal or informal sentences in English.	5,9%	43,4%	48,5%	
3	My ability to speak by telephone (greeting, leaving a message, asking apology, and offering helps) in English.	3,7%	43,4%	50,0%	2,9%

The table showed if the student's speaking skills related to communication with tourists and colleague dealing with basic and daily activities at work and tourist service activities were enough while understanding and using polite and friendly sentences verbally and know when to use formal or informal was as good as speaking by telephone.

2. Student's ability in reading

The second analysis was the reading competences based on Indonesian National Work Competency Standards (SKKNI) issued by the Ministry of Manpower in the tourism sector in the tourism travel agency sub-sector (No. Kep 238 / MEN / X / 2004) is as follow;

Table 2: Student's competences in reading skills

No	Tourism English competency (SKKNI)	Very Bad	Enough	Good	Very Good
1	My ability to read the general signs (signate, logo / image, and signs) of the tourism industry in English	5,1%	46,3%	43,4%	5,1%
2	My ability to read work documents (brochures, leaflets, memos, e mails and facsimiles) in English in tourism.	5,1%	41,2%	45,6%	8,1%
3	My ability to read and understand work instructions and work procedures in English (guidance module, memos, e-mails, and leaflets / brochures).	4,4%	44,1%	47,8%	3,7%
4	Ability to read charts / charts / graphs in English (tourism trend graphs, reports, etc.)	6,6%	61,8%	29,4%	2,2%

From the result of the student's reading ability dealing with English for tourism in table above, it can be seen that students competences in reading the general signs of the tourism industry in English were enough, for reading work documents was as good as reading and understanding work instructions and work procedures, while ability in reading charts was enough.

3. Student's ability in writing

There are three competences in writing which considered as standard of Indonesian National Work Competency Standards (SKKNI) in tourism work place that stated in questioners, they are; ability to write message, ability to complete or fill out form and write basic and every day documents at work place. The result analysis toward student's skills in writing ability are shown as follow:

Table 3: Student's competences in writing skills

No	Tourism English competency (SKKNI)	Very Bad	Enough	Good	Very Good
1	My ability to write messages, instructions, identity in English whe receiving a telephone.	3,7%	46,3%	44,1%	5,9%
2	My ability to complete or fill out forms in English (registration form, travel schedule form, insurance claim form, passport form, visa form, report form, map form and graphics).	2,9%	43,4%	47,1%	6,6%
3	My ability to write basic and everyday documents in English at w (leaflets, messages, correspondence, memos, e-mails, simple instructions / procedures, customer instructions etc.)	9,6%	52,9%	35,3%	2,2%

Based on the result of analysis on student's writing skill indicate that the student's competences in writing messages, instructions, identity in English when receiving a telephone was as enough as writing in basic and everyday documents in English at work. While the competences in completing or filling out forms were good.

4. Student's opinion about the role of English in tourism

The results of the questionnaire showed that students think about mastering English for tourism is very important 57.4% and important 21.3% and quite important 21.3%. Students believe mastering tourism English can improve my future career in the world of work very confident 77.2% and 14.7% confident. Students want to improve their tourism English skills on speaking skills of 94.9%, listening 46.3%, reading 32.4% and writing 36%.

Based on the result of analyzing data of the context analysis or tourism industry stakeholders that have been collected from the stake holders which involved the association of tourism destinations (PUTRI), guides (HPI), tours and travels (ASITA), hotels (PHRI) and also local governments also classified into three language skills based on Indonesian National Work Competency Standards (SKKNI) issued by the Ministry of Manpower in the tourism sector in the tourism travel agency sub-sector (No. Kep 238 / MEN / X / 2004 including; 1) speaking, 2) reading and 3) writing.

1. Stake holder's ability in speaking

The stake holder's competences in English speaking skills have been identified based on the result of the questioners analysis. Questioners cover three aspects of speaking abilities communicate in spoken English with tourists and colleagues, understanding and using polite and friendly sentences verbally both formal and informal, and speaking by telephone. The following table indicates the results of stake holder's competences in speaking skills related to English for tourism in workplace.

Table 4: Stake holder's competences in writing skills

No	Tourism English competency (SKKNI)	Very Bad	Enough	Good	Very Good
1	My ability to communicate in spoken English with tourists and colleagues on matters related to basic and daily activities at work and tourist service activities	3,6%	26,6%	43,7%	23,4%
2	My ability to understand and use polite and friendly sentences verbally and know when to use formal (formal) or informal (in formal) sentences in English.	3,8%	24,1%	41,1%	31,0%
3	My ability to speak by telephone (greeting, leaving a message, asking apology, and offering helps) in English.	3,8%	26,6%	38,0%	31,6%

The table showed if the stake holder's speaking skills related to communication with tourist and colleague dealing with basic and daily activities at work and tourist service activities, understanding and using polite and friendly sentences verbally and know when to use formal or informal and speaking by telephone were good.

2. Stake holder's ability in reading

The second analysis regarding to the reading competences of stake holders covered about reading the general signs of the tourism industry in English, reading work documents and reading and understanding work instructions and work procedures, while ability in reading charts was enough. The results of the analysis as follow;

Table 5: Stake holder's competences in reading skills

No	Tourism English competency (SKKNI)	Very Bad	Enough	Good	Very Good
1	My ability to read the general signs (signate, logo / image, and signs) of the tourism industry in English	6,3%	29,1%	34,8%	29,7%
2	My ability to read work documents (brochures, leaflets, memos, e mails and facsimiles) in English in tourism.	2,5%	30,4%	39,9%	27,2%
3	My ability to read and understand work instructions and work procedures in English (guidance module, memos, e-mails, and leaflets / brochures).	3,8%	27,2%	43,7%	25,3%
4	Ability to read charts / charts / graphs in English (tourism trend graphs, reports, etc.)	6,3%	39,9%	38,0%	15,8%

From the result of the stake holder's reading ability in English for tourism in table above, it can be seen that students competences in reading the general signs of the tourism industry in English were good, for reading work documents was also as good as read and understand work instructions and work procedures, while ability in reading charts was also good.

3. Stake holder's ability in writing

There are three competences in writing which are considered as standard of Indonesian National Work Competency Standards (SKKNI) in tourism work place that stated in questioners, they are; ability to write message, ability to complete or fill out form and write basic and every day documents at work place. The result analysis toward stake holder's skills in writing ability are shown as follow:

Table 5: Stake holder's competences in reading skills

No	Tourism English competency (SKKNI)	Very Bad	Enough	Good	Very Good
1	My ability to write messages, instructions, identity in English whe receiving a telephone.	5,1%	27,8%	38,6%	28,5%
2	My ability to complete or fill out forms in English (registration form, travel schedule form, insurance claim form, passport form, visa form, report form, map form and graphics).	4,4%	25,3%	46,2%	24,1%
3	My ability to write basic and everyday documents in English at w (leaflets, messages, correspondence, memos, e-mails, simple instructions / procedures, customer instructions etc.)	7,0%	27,2%	41,8%	24,1%

Based on the result of analysis on stake holder's writing skill indicated that the stake holder's competences in writing messages, instructions, identity in English when receiving a telephone were as good as writing in basic and everyday documents in English at work. While the competences in completing or filling out forms were good.

4. Stake holder's opinion about the role of English in tourism

The results of the questionnaire indicate that stake holder think that mastering English for tourism is very important and can improve my future career in the world of their work. Stake holders also want to improve their tourism English skills on speaking, listening, reading and writing.

Regarding to the result of the analysis of learners and context indicated that student's competences in English for tourism mostly were enough while stake holder's competences were good, therefore it can be a consideration in developing electronic module of English for tourism. The result of the analysis of learners and context could be as recommendation in structuring e-module of English for tourism especially about the difficulty of the lessons and topics in the e-module. As results the developing of e-module will be more communicative and meets with student's and stake holder's needs.

Developing e-module of English communication skills for tourism are suggested to include; general language skills namely speaking, listening, reading and writing (Man & Leong, 2011), (Prachanant, 2012), (Chaudhary & Kaur, 2016) and special English skills in the tourism workplace such as; writing and sending e-mails and faxes, making tickets online, surfing the internet, making online hotel reservations and offering destination guides (Zahedpisheh et al., 2017), complex written documents such as letters or budgets, telephone conversations, making presentations to audiences, attending exhibitions and conferences and understanding all types of written information about tourist destinations (Zahedpisheh et al., 2017). Tourism industry workers must be able to communicate English in several tourism services with English topics such as; greetings, facial expressions and body movements (non-verbal communication), cross-cultural understanding, types of accommodation, hotel facilities, staffing and internal organization, reservation and check-in, hotel and restaurant services, phone calls, complaints and solutions, describing tourism skills objects, tour guides and presentations (Puspitasari, 2018).

Basic English skills in tourism, especially hospitality, they are; how to greet guests, provide necessary information, respond to questions and requests, use prompts, body language, resolve customer difficulties, and respond to complaints well (Blue & Harun, 2003). Khalida (2020) adds that the need for tourism English language skills needed as human resources in the tourism sector in hotels, among others; greeting, giving directions, meetings, presentations, handling complaints, offering laundry services (offering laundry services), tourism places, travel plans and schedules (tourism plans and schedules), room facilities, and hotel services and facilities (Khalida, 2019).

English for tourism and hospitality has been categorized in English for special purposes (ESP) and is very important and essential in all professional fields especially in the tourism and hospitality industry due to its specific nature and concept (Zahedpisheh et al., 2017). English communication is an essential element of the hospitality industry. Excellent speaking skills and written communication skills are highly rated as important skills for hospitality practitioners in various places (Bobanovic, 2011). The study of English for tourism shows that students and employees in the tourism and hospitality sector experience English communication skills problems in their workplace. The English problems faced by tourism sector workers in general are; oral communication (speaking) (Gani & Damayanti, 2018), listening (reading), writing (writing) and reading (Al-khatib, 2005), inability to understand foreign accents or accents, words (words) and inappropriate expressions , inadequate vocabularies, and a lack of grammar knowledge (Prachanant, 2012). Problems related to English for tourism are the quality of lecturers, English subjects in the tourism curriculum, teaching materials, student opportunities to communicate in English and the assessment process (Khoung et al., 2017).

English proficiency according to the Indonesian National Work Competency Standards (SKKNI) issued by the Ministry of Manpower in the tourism sector in the tourism travel agency sub-sector (Kep. 238 / MEN / X / 2004) is divided into three categories, namely basic, intermediate and high. Basic operational level English competency units, namely;

1) The skills and attitudes required by travel and tourism industry employees dealing with English-speaking customers and colleagues in order to be able to communicate orally at a basic operational level. This includes basic and daily conversations, such as welcoming guests, giving goodbye and serving guests both face-to-face and by telephone, while for intermediate it includes speaking and listening skills about routine and non-routine matters, serving customers, negotiating and maintaining customer relationships with respect to the appropriate level of responsibility of the employee concerned. The high level includes effective and fluent oral communication and is able to negotiate and provide complete information, but is not intended to reflect the skills of a professional translator.

2) The skills and attitudes required by travel and tourism industry employees dealing with English-speaking customers and colleagues to read in English at an operational level. This includes basic daily activities such as reading basic reports, e-mails, facsimiles, letters, diagrams and brochures and recognizing common signs. Meanwhile, the middle level includes routine and non-routine activities such as reading reports, e-mails, facsimiles, letters, diagrams and brochures. The high level includes the ability to read a number of complex working documents and, if required, provide informal translations and summaries at a high level of complexity and fluency. However this is not intended to reflect the skills of a professional translator.

3) The skills and attitudes required by tourism and travel industry employees dealing with English-speaking customers and colleagues to write in English at the basic operational level in the workplace. This includes basic everyday activities such as writing basic reports. E-mail, facsimile, letters and diagramming. Meanwhile, at the middle level, it includes routine and non-routine activities such as writing reports, e-mails, facsimiles, letters and diagrams suitable for intermediate level of supervision and operations. The high level includes the ability to write a number of complex work documents and, if needed, provide informal and summary translations but are not intended to reflect the skills of a professional translator.

The tourism English competency unit in accordance with the SKKNI above can be applied to the entire tourism sector and includes oral communication skills, reading and writing in English at the basic operational level. Examples of oral competency topics for tourism English competence include; welcome, say thank you and say goodbye to customers and colleagues, answer requests, provide factual information, communicate via telephone and face to face. Other examples of transacting using simple tourism English or providing assistance include; buy souvenirs, pay restaurant or hotel bills, pay for travel services, provide directions, schedules and other arrangements, choose a meal menu, help check entry and exit procedures, and provide time-related advice.

Tourism destination where the English language for tourism includes; facilities, local attractions, areas of interest, shopping locations, tour registration locations, pick-up and drop-off for tours, bus terminals, taxis, and transportation services. Other information on the location of tourist destinations includes; opening and closing hours, tour procedures, exchange of money and exchange rates, prices and fees, room and floor numbers, safety regulations, travel guides, dictionaries, brochures, menus and maps.

4. Conclusion

The quality of e-module tourism based on learners and context is one of a component of successful learning instruction. It could be designed by considering leaner's needs and context or stakeholder's needs (tourism industry and government). Tour and travel companies, hotels and restaurants really need human resources who able to communicate English for tourism very well both in spoken and written. The problems of English for tourism based on SKKNI (Indonesian national standard working competencies) commonly in speaking skills, listening skills, reading skills and writing skills. While specific problems of English competences which identified by researchers are writing and sending email and faxes, making on-line ticketing, browsing the internet, making online hotel booking and offering destination guides, elaborate written documents such as letters or budgets, telephone conversations, make presentations to audiences, attend fairs and conferences and understand all types of written information on tourist destinations.

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Research and development (R&D) electronic modules (e-modules) learning English based on learners and context-based tourism aims to help solve problems of mastery and improvement of English, especially for tourism for students of the Lampung State Polytechnic Tourism Study Program (Polinela) and tourism sector stakeholders in general. This research and development requires seriousness, innovation and creativity in packaging English language materials for tourism. Realizing quality research results that have benefits and contributions in the tourism sector certainly requires assistance and support from various parties. Thanks to the Promoter Prof. Dr. Basuki Wibawa, M.Pd. and Co promoter Prof. Dr. Syarif Sumantri, M.Pd. who have guided and provided input, suggestions,

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Are We Aware of What We Wear? The Awareness of Pre-Service Turkish Language Teachers About T-Shirt Catch-Phrases

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Abstract
The present study, conducted with the phenomenology method, a qualitative research design, aimed to determine the awareness of pre-service Turkish language teachers about the catchphrases printed on t-shirts that individuals notice or do not notice in daily life or do not pay much attention even if when they notice them. The study sample included 39 volunteering pre-service teachers (19 males and 20 females), attending the department of Turkish language education during the 2018-2019 academic year. The sample was determined with the convenience sampling method. An interview form that included open-ended questions and a questionnaire that aimed to determine participant demographics were applied to the sample. Furthermore, t-shirt texts in several foreign languages were determined by the author and the pre-service teachers were asked whether they knew the Turkish translations of these texts and whether they preferred foreign language or Turkish texts. Descriptive analysis was conducted on the responses of the pre-service teachers. Since these responses were considered important, direct quotes were included in this paper. The study findings demonstrated that 69% of the pre-service Turkish language teachers did not care about the texts on the t-shirts they purchased and prioritized the model of the t-shirts. Since this was a non-negligible rate, it was suggested that the study would contribute to the literature and raise awareness.

Keywords: Turkish Language Education, Lingual Degeneration, T-Shirt Texts, T-Shirts with Turkish Text

1. Introduction

It is known that the most important means of communication is language in a society. Furthermore, the language of a nation is the philosophical and commentary wealth of that nation. If a nation thinks only in the native language, it becomes independent and would have the chance to transfer its culture. On the other hand, the culture, which is the way of life manifested in the perceptions, interests, attitudes and behaviors of a nation and developed over the centuries, the sum of material and spiritual values that have been passed down from generation to generation, is the reflection of the emotions and thoughts that surround individuals in every stage of life (Göçer, 2012).

It is known that language is the carrier of culture. Culture lays the groundwork for a language to demonstrate its possibilities. Language is manifested in concrete products via the cultural values in a society. Thus, every topic of conversation is a reflection of the culture in social life through language.

The traces of the cultural values of a society are manifested in the language, which best reflects the characteristics of the very society. Thus, language is known as the most important tool that ensures the continuity of the culture as well as serving as a transmitter of the culture (Akarsu, 1998).

Culture and language are the most important main dynamics that ensure the continuity of a nation. It is known that several societies that could not preserve their native language and cultural values in history were erased from the history. These societies could not preserve their native language, and they were alienated to their culture, which was the foundation of their identity, over time (Gürbüz, 2017).

One of the most important elements that sustain a society is not only technological and civil developments, but also national and moral values. These values are passed on to future generations through language. Thus, a nation that cannot protect its native language from the influence of foreign languages is alienated to its culture and values. The new generations would not know the past of the nation and preserve national values.

Since ancient times, people felt the need to express themselves and expressed themselves through various methods. This need was initially reflected in cave wall paintings and extended to the clothing worn in daily life. Such clothing is known to be a form of visual communication. It could be suggested that the most common clothing that assumed this role is the t-shirts.

T-shirts, which were described as "generally short-sleeved, cotton sportswear" (https://sozluk.gov.tr/access 15.12.2020) in the Turkish Language Association Dictionary, are the most preferred comfortable and healthy, easy to wear, clean, and carry clothing that prevents sweating by allowing the body to breathe more, and facilitates human movement, and the most common product after underwear. This clothing is called "T-shirt" due to its T-shaped form (Ok, 2007).

A T-shirt we wear reflects our likes, dislikes, hobbies. Thus, the face of the T-shirt is a mobile canvas. Anything one desires could be written and painted on a t-shirt, emotions and ideas could be communicated on this mobile canvas. This canvas travels to several places with its owner and conveys its message to several individuals (Ok, 2007). It is impossible to ignore a product with such a great power of expression.

Individuals send messages to other parties via the texts, prints or images on the t-shirts they wear. Not everyone notices the meaning of the foreign language texts on these t-shirts, mostly won in summer months. Some prefer these t-shirts because they do not care about such things, while others only care about the model of the t-shirt. Perhaps an ordinary citizen is not very sensitive to these details. However, pre-service teachers, especially the pre-service Turkish language teachers, should have the knowledge and sensitivity about these. The idea behind the present study emerged when pre-service teachers could not tell the meaning of the texts on their t-shirts in the classroom. It was suggested that such a study would contribute to the training of a more sensitive generation in t-shirt selection, one of the most purchased products in daily life.

1.2 The Aim of the Study

The present study aimed to investigate the awareness of the pre-service Turkish language teachers about the texts displayed on t-shirts.

2. Method

The research design, study sample, data collection instruments, and data analysis are discussed in this section.

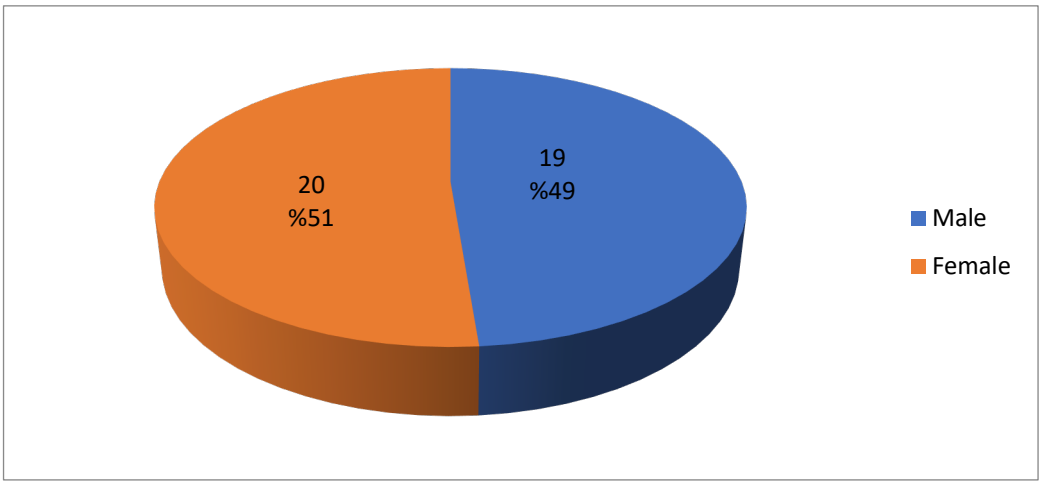
2.1 The Research Design

The current research is qualitative study and conducted with adequate processes. The phenomenology approach, a qualitative research design, was employed in the study. Since the phenomenological approach focuses on known phenomena that are not known in detail and phenomena could be experiences in various forms such as events, experiences, perceptions, trends, concepts and situations in the world (Yıldırım & Şimşek, 2008), the above-mentioned approach was adopted in the study.

2.2. The Study Sample

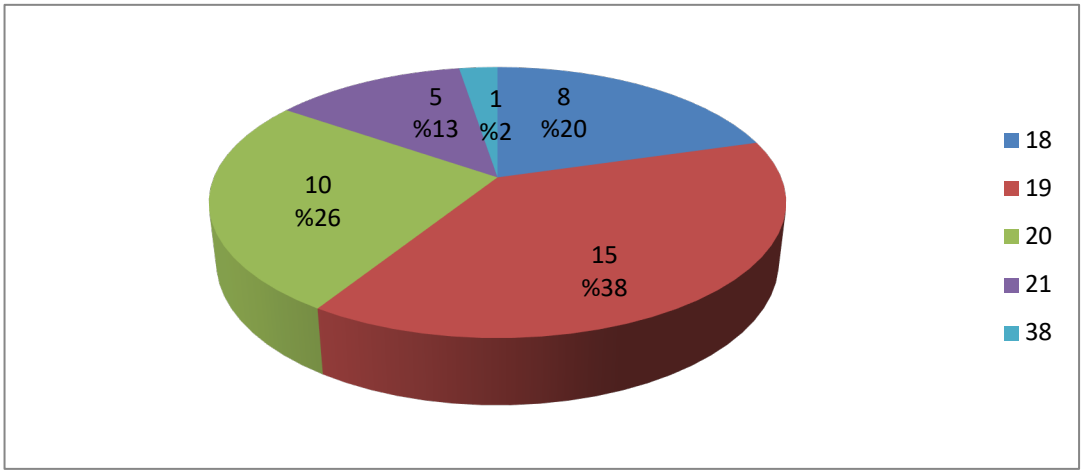
The study sample included freshman students attending the Department of Turkish Education. Thirty-nine pre-service teachers responded to the call to complete the semi-structured interview form that included open-ended questions. Participant demographics are presented in Charts 1 and 2.

Chart 1: Participant gender



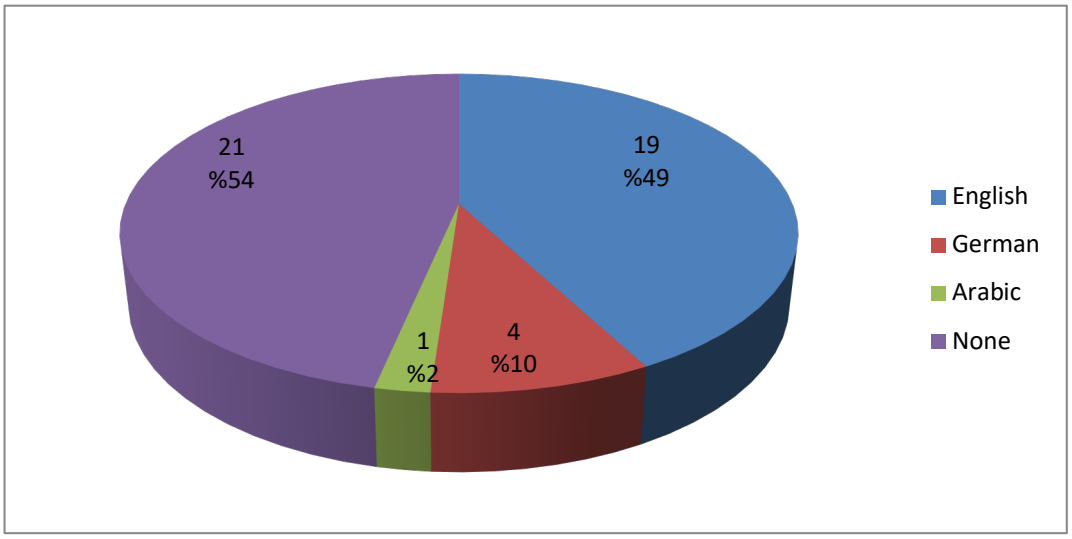
As seen in Chart 1, 51% of the study sample were female and 49% were male pre-service Turkish language teachers.

Chart 2: Participant age



As seen in Chart 2, 38% of 39 pre-service Turkish language teachers were 19 years old, 26% were 20 years old, 20% were 18 years old, 13% were 21 years old, and 2% were 38 years old.

Chart 3: Foreign languages spoken by the participants



*Certain participants spoke 2 foreign languages.

As seen in Chart 3, 54% of the participants did not speak any foreign language, 49% spoke English, 10% spoke German, and 2% spoke Arabic.

2.3. Data Collection and Analysis

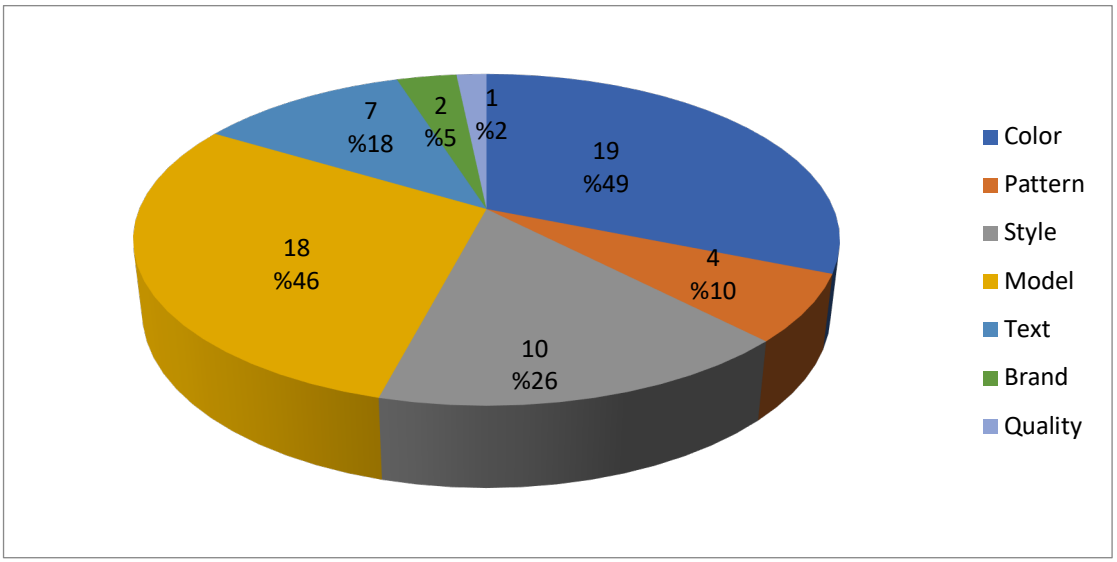
In the study, the perceptions of the pre-service Turkish language teachers about t-shirt texts were determined based on the data collected with a semi-structured interview form that included open-ended questions during the 2018-2019 academic year fall semester. The interview form was developed based on the review of the form (expert opinion) to determine the face validity. The reliability of the study was determined with the below-mentioned reliability formula suggested by Miles and Huberman (1994). The study data were analyzed independently by the author and a field expert. With the comparison of these analyses, and when there was an agreement between the author and the field expert, the reliability study was finalized. The reliability of the study was determined as 93% with the formula. A reliability coefficient of above 70% is considered reliable (Miles & Huberman, 2016).

The interview form included two sections. The first section included participant demographics. The second section included open-ended questions that aimed to determine the awareness of pre-service Turkish language teachers about the texts displayed on t-shirts. In the study, the data were presented with an organized manner including interpretations for easy comprehension and reuse. Direct quotes were also included to demonstrate the participant responses more clearly. In the process, “M” depicted female participants and “M” depicted the male participants. The interview form included two sections. The first section included participant demographics. The second section included open-ended questions that aimed to determine the awareness of pre-service Turkish language teachers about the texts displayed on t-shirts. The study data were analyzed with the descriptive analysis technique. The study data were presented with an organized manner including interpretations. To reflect the views of the participants, the positive and negative views of the pre-service Turkish language teachers on the T-shirt texts were represented with direct quotes.

3. Findings

In this section, the study findings are presented. The study group responses to the interview questions are presented in the charts below.

Chart 4: What is your primary concern when purchasing a t-shirt?



*Certain participants included more than one choice.

As seen in Chart 4, 49% of the participants paid attention to the color of the t-shirt 46% paid attention to the model, 26% paid attention to the style, 18% paid attention to the text on the t-shirt, 10% paid attention to the pattern, 5% paid attention to the brand, and 2% paid attention to the quality when buying t-shirts. Certain participant responses are presented below:

"I pay attention to the fit and how it looks on top of my pants." (10M)

"The model because people should wear what suits them." (11M)

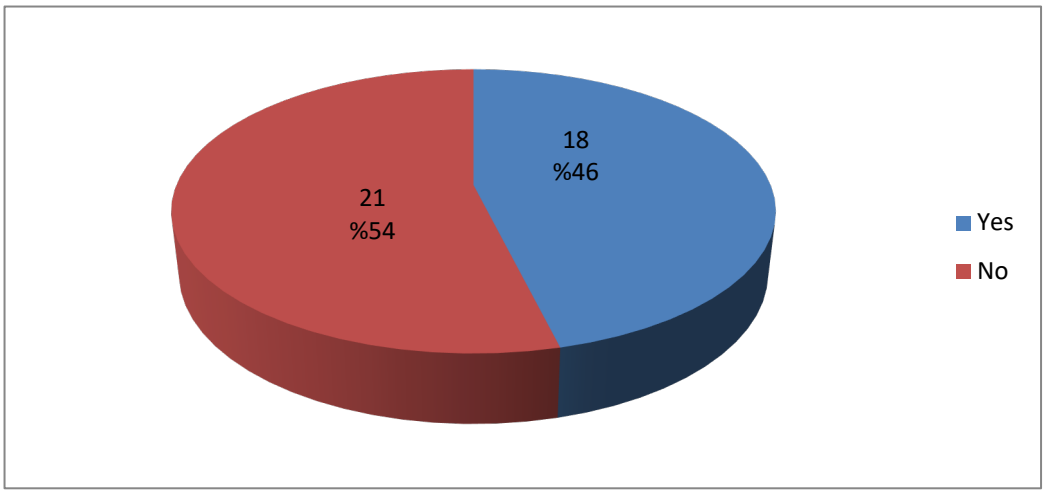
"The color. I do not prefer the ones with writing." (12M)

"Since I usually wear them in summer, I prefer light and pleasant colors (blue and tones), the t-shirts that fit me perfectly, with a printing of my favorite historical buildings and short literary phrases." (15M)

"If it has a picture, I pay attention to what the picture evokes, if it has a text in a foreign language, I pay attention to the meaning." (19M)

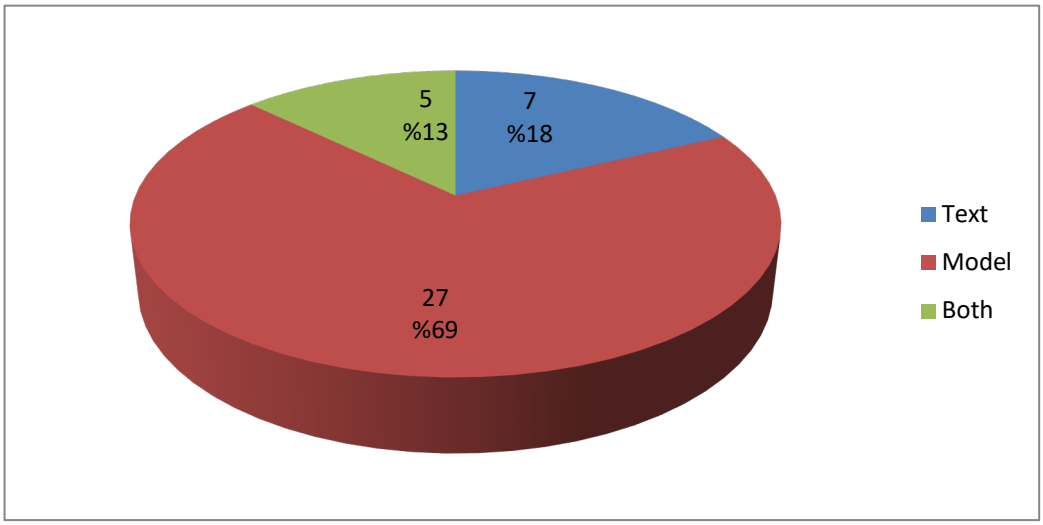
"I make sure that there are no foreign texts the meaning of which I do not know." (27F)

Chart 5: Did you ever have a t-shirt with a Turkish text?



As seen in Chart 5, 54% of the participants never had a t-shirt with Turkish text, and 46% had.

Chart 6: Is the text on t-shirts or the t-shirt model important for you? Why?



As seen in Chart 6, 69% of the participants were not interested in the t-shirt text and they paid attention to the model of the t-shirt. It was observed that only 18% of the participants cared about the text on t-shirts during purchase. 13% of the participants stated that they paid attention to both the model and the text during purchase. Certain participant responses are presented below.

"Actually, the text on a t-shirt is important. But today, it is more important that the T-shirt attracts attention, in other words, the model." (2M)

"Generally, the model. I like Polo t-shirts, so I pay attention to the model of the t-shirt." (3M)

"The model matters. The text on the t-shirt does not matter if it suits my taste." (5M)

"I do not pay much attention to the text. I purchase based on the model." (13M)

"Both are important. I pay attention to the model to see if it is beautiful, I check the text out to determine if it is something bad." (14M)

"First, the model is important. However, if there is text, the model is more important for me. If the text is absurd, I would give up." (19M)

"Usually, the model because I am never concerned about the meaning." (24F)

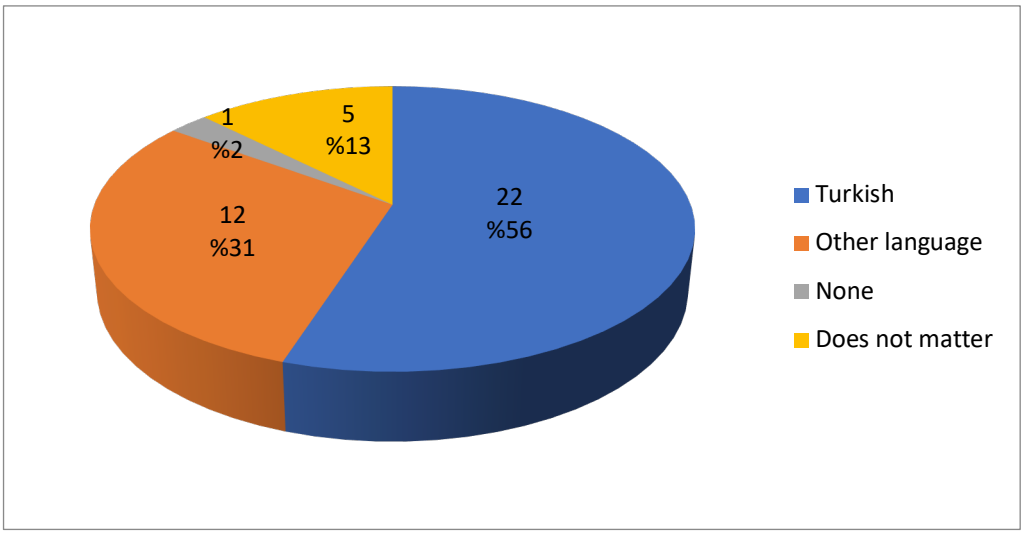
"The text is important. Because it may be inappropriate." (27F)

"The model, because I usually think most people would not understand [the text]." (31F)

"Both are important. But even if it is a comfortable t-shirt, I would not buy it if the text is nonsense." (37F)

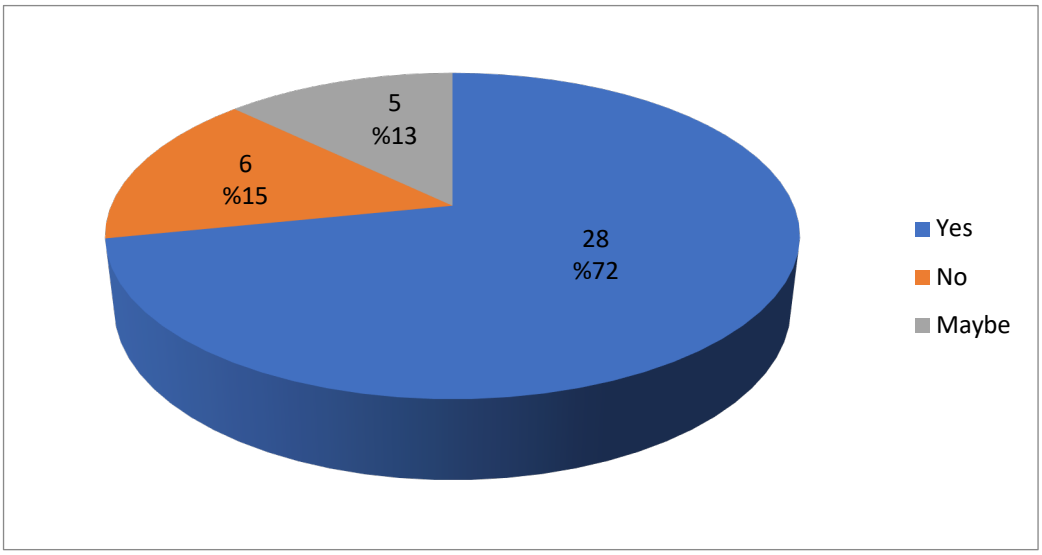
"I pay attention to the text. What it means is important because I will carry it on me." (38F

Chart 4: Would you prefer a text in Turkish or in another language on a t-shirt you would buy? Why?



As seen in Chart 4, 56% of the participants preferred the text on the t-shirt to be in Turkish. 31% of the pre-service Turkish language teachers stated that they would prefer the text on the t-shirt to be in another language. It did not matter for 13% of respondents, while 2% preferred neither. Certain participant responses are presented below.
“I prefer it in Turkish. I personally do not admire foreigners. That is why I prefer Turkish." (3M)
“It should be in Turkish. It is important to know the meaning.” (5M)
“I prefer it to be in a foreign language, I love English. (7M)
“Since the translation of some English phrases is more striking than Turkish, I also have t-shirts with English texts on them. But the text should be in Turkish.” (10M)
“I would prefer Turkish. But on an appealing t-shirt, I do not care about the language of the text.” (18M)
“I do not prioritize Turkish because I do not want to wear something that everyone can understand.” (37F)

Chart 5: Do you think t-shirt texts should be in Turkish? Why?



As seen in Chart 5, 72% of the pre-service Turkish language teachers stated that t-shirt texts should be in Turkish, 15% stated that they should not be in Turkish. 13% stated that they could be.
“Yes, it should be. Native language texts instead of a foreign language could help the development of our language.” (2M)
“Let it be in Turkish. The place we live in is Turkey and the language we use should be Turkish. Let us not popularize admiration of the foreigners." (3M)
“Some of them should be in a foreign language. Because when translated into Turkish, they have a different meaning.” (19M)
“I think they should be in Turkish. But I do not prefer these. Since it is our native language, many people would notice it when we walk on the street, and this would be disturbing. But since not everyone is fluent in a different language, it may not attract the attention.” (29F)
"Not necessary. People should express themselves the way they want to.” (7M)

4. Concluding Remarks, Discussion and Recommendations

In this section, the analysis results are interpreted, and associated discussions and recommendations are presented. The following conclusions were reached for the study sub-problems:

1- Among the pre-service Turkish language teachers, 49% paid attention to the color, 46% paid attention to the model, 26% paid attention to the style, 18% paid attention to the text, 10% paid attention to the design, 5% paid attention to the brand, and 2% paid attention to the quality when purchasing t-shirts.
2- 54% did not own a t-shirt with a text in Turkish, while 46% did.
3- 69% did not care about the text on the t-shirts they buy and prioritized the t-shirt model, while 18% cared about the text.

4- 56% preferred Turkish text on their t-shirts, 31% preferred texts in another language, 13% did not care, and 2% preferred neither.
5- 72% stated that these texts should be in Turkish and 15% stated that these texts should not be in Turkish.

Literature review revealed that there were no empirical studies on t-shirt texts. Ok (2007) investigated the expressionist patterns on printed t-shirts. In the study, it was reported that t-shirts are used for different purposes and are important visual communication elements. Ok's study is important since it revealed the communication power of the t-shirts, consistent with the present study findings.

Ayata (2012) analyzed the clothing in general, and t-shirts in particular, based on five categories: 1. Foreign Place Names, 2. Brand Names, 3. Innocent Foreign Texts, 4. Obscene Texts, and 5. Turkish Texts. In the study, it was emphasized that foreign texts, photographs and signs that people carry on the t-shirts without realizing the features that contradict to Turkish culture and Islamic beliefs.

Küçükbezirci (2014) reported that individuals send messages to other parties via the texts, prints or images on the t-shirts they wear. Thus, it was determined that although these messages look like conscious, a substantial number of people do not recognize what is written on their clothing, do not research, only like the color or model, or say that they wear it because it was given as a gift. Thus, the findings reported by Küçükbezirci are consistent with the present study results.

The following could be recommended based on the study results:

- Empirical studies should be conducted to raise awareness about t-shirt texts. These studies could reach masses and the awareness of a higher number of people could be raised.
- Such studies should also be conducted with the primary, middle and high school students, and their awareness should be raised as stated in the proverb "as the twig is bent, so grows the tree."
- It is necessary to raise awareness of both students and parents. As is known, not everyone is fluent in a foreign language; thus, they may not know what the t-shirt text means or may not pay attention to the text. However, if they are informed, parents would at least wonder what these tests mean when they buy t-shirts for their children, and they would stop buying clothes with texts the meaning of which they do not know.
- In the study, it was observed that almost half (54%) of the university students did not speak any foreign language. Thus, it is important to encourage students to learn at least one foreign language.
- It is the duty of everyone, especially teachers, to own national and moral values, to preserve our language and culture against degeneration. It is important to conduct this type of studies with teachers, who train future generations, to raise awareness.

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A Functional Analogy on Instructor-Learner Interaction and Reversible Work-Meaningful Learning

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Abstract
Analogies can be powerful teaching tools because they can make new material intelligible to students by comparing it to material that is already familiar. In assisting students to understand chemistry concepts, teachers occasionally use analogies. These analogies are believed to help the students to structure the new knowledge and they are considered to be especially useful for topics of an abstract or submicroscopic nature. However, analogies have also been identified as a factor in the students' misunderstanding of chemical concepts. By a functional analogical approach constructed onto the two fundamental concepts (learning and the work in thermodynamics) in this study, the presentation of the similarities between the interactive nature of learning and the requirements enabling a mechanical change such as the reversible expansion is aimed.

Keywords: Analogies, Rote learning, Constructivism, Learning theories, Thermodynamics

1. Introduction

Analogical reasoning, the ability to understand phenomena as systems of structured relationships that can be aligned, compared, and mapped together, plays a fundamental role in the technology rich, increasingly globalized educational climate of the 21st century (Richland and Simms 2015). The use of analogies is well linked to science in both historic and contemporary settings. Well renowned theorists such as Maxwell, Rutherford, and Einstein are reported to have used analogical reasoning as a tool to aid problem solving (Curtis and Reigeluth 1984). Further, it has been proposed that analogies are traditionally used both in explaining science and in the processes of science (Thiele and Treagust 1991). Good teachers frequently use analogies to render unfamiliar matters comprehensible to their students (Thagard 1992). Analogies are most often used to help students understand new information in terms of already familiar information and to help them relate that new information to their already existing knowledge structure. It has been argued that knowledge is constructed in the mind of the learner. As they construct knowledge, learners seek to give meaning to the information they are learning, and the comparative nature of analogies promotes such meaningful learning (Orgill and Bodner 2004). Learning is the change that could be achieved by the learners themselves, as depending on the interaction qualifications of the teaching medium in terms of the quality of outcomes (Piaget 1976). All activities formatted by the instructor organized in class for the realization of learning may be defined as a process of teaching, or a course (Cochran-Smith and Lytle

1993). Firstly we'll consider on the validity of the statement which “The learning only depends on changes in the cognitive levels of learners before and after the teaching" from the point of view of thermodynamics. For this purpose, we have developed a functional analogy, which is based on thermodynamics. In this analogical approach, the exciting analogies were established using pairs such as the ideal gas with the instructor/teacher and the learner/student with the reversible or irreversible expansion produced by the pressure change, and the concept of learning with the achieved work. The proposed analogy is thematically illustrated in Fig.1.

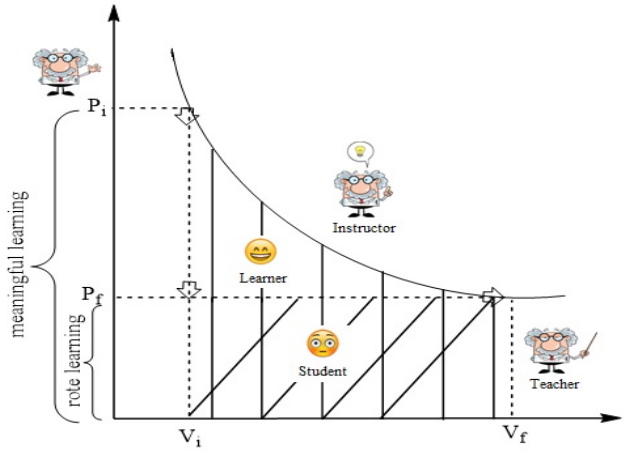

Figure 1: A thematic illustration for the proposed analogy

A reversible change in thermodynamics is a change that can be reversed by an infinitesimal modification of a variable. There is obviously a very close relationship between reversibility and equilibrium: systems at equilibrium are poised to undergo reversible change. Suppose a gas is confined by a piston and that the external pressure is set equal to the pressure of the confined gas. Such a system is in mechanical equilibrium with its surroundings because an infinitesimal change in the external pressure in either direction causes changes in volume in opposite directions. In either case the change is reversible in the thermodynamic sense (Gürses and Ejder-Korucu 2012). If, on the other hand, the external pressure differs measurably from the internal pressure, then change in the external pressure infinitesimally will not decrease it below the pressure of the gas, so it will not change the direction of the process. Such a system is not in mechanical equilibrium with its surroundings and the expansion is thermodynamically irreversible (Atkins and De Paula 1990). To achieve reversible expansion we set the external pressure equal to the internal pressure at each stage of the expansion. Large and small areas under the curve in the p-V diagram depicted in Fig.1 correspond to the reversible and irreversible mechanical work, respectively. In the case of a reversible expansion, the gas particles can be expanded against to a higher pressure at each step of volumetric changes and the process is accomplished over infinitesimal steps. In other words, the more steps and hence more action-reaction equilibrium, the more work. In contrast, in the case of the irreversible expansion, the expansion takes place against to a constant pressure in a single step with a monotonous action-reaction scheme, and the progress of process is controlled by the external pressure.

2. Results and Discussions

The main goal of this analogical approach constructed onto the two fundamental concepts (learning and the work in thermodynamics) is to form awareness on the similarities between the interactive nature of learning and the requirements enabling a mechanical change such as the reversible expansion of a gas. According to the theory of constructivism describing how learning happens, which is generally attributed to Jean Piaget, learner constructs new knowledge from their experiences through processes such as accommodation and assimilation. The learning environment should also be designed to support the learner's inductive thinking skills and enable a more effective instructor-learner interaction (Rosenshine and Stevens 1986). The critical goal is to achieve meaningful learning by supporting the learner in becoming an effective thinker. This can be achieved by ascribing multiple mutual roles for instructor and learner. So now we can claim the existence of a logical relationship between the predicted requirements of this theory regarding the roles of the instructor and learner, and their mutual interaction in the context of meaningful learning or conceptualization and the requirements that enable the reversible expansion of

a gas. As will be known, behavioral learning perspective is focused on behavior changes which have been shaped using external reinforcement, where the desired behavior is rewarded and undesirable behavior is punished. The classical conditioning as the important behavioral analytic process used by the behaviorists reveals a behavior acquiring mechanism based on natural reflex by ignoring mental or other internal processes. The behavioral practices in the classroom give teachers the opportunity to control mentally and physically their students, where the educator as a teacher presents the learning content using the deductive approach with the extremely weak mutual interaction, in the meantime, students also are a part of the process as a typical listener. In such a process that will probably provide the rote learning outcomes; the significant similarities between teacher, students, and resulting change and gas compressed (external pressure), expanding gas particles, and irreversible expansion in single step (work) may be noticed.

3. Conclusion

According to this, we can say that an instructional activity should be assessed as a continuous and interactive process that determines the achievement of the learner, the quality of the learning experience and courseware. Therefore, teaching should be considered as the two-way interactive process based on the interactions between instructor and learner. Especially, instruction termed teaching activities cannot be certainly evaluated as the process executed by one person, such as an instructor. So, by approaching from thermodynamic perspective to learning, it can be realized the exciting operational similarity between the learning as a mental change and the mechanical work as a path-dependent change. In other words, the quality of cognitive construction or mental change that occurred after any teaching process cannot be only evaluated by considering of the quality differences between the initial and final learning outcomes. As a result, this analogical assessment has provided a new thermodynamic support to favor the implementations involving constructivist learning approach and active learning to the all teaching activities.

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Study on Private Upper Secondary Education in Ho Chi Minh City, Vietnam

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Abstract
Private educational institutions are established by social organizations, socio-professional organizations, economic organizations or individuals when permitted by competent state agencies. The source of investment in the construction of infrastructures and the maintenance of operating funds of private educational institutions is the non-state budget. The main purpose of this study is to empirically test the private upper secondary education in Ho Chi Minh City, Vietnam. The author collected secondary data from previous studies. The results of the research show that (i) Class and School size; (ii) Administrative officials and teachers; (iii) Facilities; (iv) Implementation of teaching and educating activities; including: The development of action plans; teaching activities; about extracurricular activities, job orientation and education outside the classroom. Based on the findings, some recommendations are given to improve the quality of private upper secondary education.

Keywords: Education, Private Upper Secondary, School, Class, Teacher

1. Introduction

Upper secondary education accepts students who have completed the lower secondary education program. During high school, students can transfer to an intermediate vocational training program if they wish and meet the requirements of the program. Upper secondary education is conducted for 3 school years, from 10th grade to 12th grade. High school graduates can go on to university or attend vocational education programs.

Private educational institutions are established by social organizations, socio-professional organizations, economic organizations or individuals when permitted by competent state agencies. The source of investment in the construction of infrastructures and the maintenance of operating funds of private educational institutions is the non-state budget.

General education plays a particularly important role, and is the cultural foundation of a country, the future of a nation, the basic premise for continuing, lifelong education to all individuals. Education at private high schools in Ho Chi Minh City has contributed to the general achievements of the city's education and training. The report on

the implementation results of the 9th Congress of the city committee's resolution stated that: Education - training has had positive movements; improved the quality of human resources.

The goal of general education is to help students develop comprehensively in virtue, mind, body, beauty and basic skills, develop personal capacity, dynamism, creativity, and shape human personality of socialist Vietnam, build citizenship status and responsibilities. The ultimate objective of general education is to have every citizen prepare for the process of studying or living, working, participating in the construction and defense of the fatherland.

The budget for investment in education - training increases every year. The state has made many improvements in education – training, such as: developing the spacious and modern facilities and infrastructure; standardizing the contingent of teachers in all disciplines and levels of study; innovates teaching methods, which focus on personality, lifestyle, moral and ideal education for students. The socialization of education - training achieved positive results; the non-public education and training system contributes significantly to human resource training; the management of education - training is innovated actively and effectively; the role of family in the cooperation with the school and society in educating the young generation is promoted; the quality of teaching and learning has been improved, which is the basis for the fundamental and comprehensive renovation of education and training in Ho Chi Minh City.

Vietnam has its own characteristics in terms of institutions, is a developing country which approaches a socialist-oriented market economy and is in the process of international integration. Thanks to the innovation policy, the process of educational socialization and the development of the private school system have also developed. From the above reasons, research on private upper secondary education in Ho Chi Minh City, Vietnam is necessary and meaningful.

2. Theoretical Background and Literature Review

In the world, private general education has developed very early and there have been many researches on private general education, namely

James and Benjamin (1988) studied public and private schools in Japan and the ways in which they interacted to create Japan's widespread education. Political goals have influenced the size of public schools and the influence of the labor market on the education sector has attracted investors. They mainly make investments in the Japanese private education sector, in which the high school and higher education are paid more attention. The authors carried out a very elaborate and exhaustive study of Japan's educational policy options. The Japanese government has succeeded in creating a congruence between the public and private sectors in education (James & Benjamin, 1988)

Le Grand and Bartlett (1993) argued that the education industry market is an accepted term in education. It is a special market, which is different from the market for goods or the market in other areas of services. In the education market, besides the competition mechanism and private education providers, the state still plays the leading role in education provision, quality control, and protection of learners' interests to ensure the social equity in education (Le Grand & Bartlett, 1993)

Lockheed and Jimenez (1994) study the reality of the public-private balance in education and the policy debates on this issue. The authors compare the performance of public and private schools in five developing countries with diverse educational backgrounds: Colombia, Dominican Republic, Philippines, Tanzania and Thailand. The authors also focused their differential analysis on input, process and school management in two ways: using available data and directly gathering insights from a small sample of public and private schools in these five countries. Research has an important influence on public education policy when it is confirmed that public schools can be effective by applying the management style of private schools (Lockheed and Jimenez, 1994)

Wolff et al. (2005) assessed how public policies in the region affect the performance of private schools. The authors describe the current state of policies and relationships between the public and private sectors in education in six countries: Argentina, Chile, Colombia, Guatemala, Peru and Venezuela. Research results confirm the

importance of private education and the concept of "privatization" in education is an outdated concept. To be more specific, the difference between public and private schools is less important than the recognized public interests of each. With the right policies, high-quality public education can coexist with the development of private education. The authors also point out that, contrary to common assumptions, private education not only serves the well-off but also the poor and needy classes in society (Wolff et al., 2005).

Besides international studies, there have been a few domestic studies on this topic. Some of notable researches are mentioned below:
Glewwe and Patrinos (1988) used survey data in Vietnam to collect the reasons why households choose public or private schools for their children and the costs and benefits of private schools. The study analyzed the current situation of non-public education (NPE) in Vietnam and analyzed the impact of economic, social and geographical factors on non-public education (NPE). Research results show that well-off households in Vietnam are less likely to choose private schools, but tend to choose private schools for their children to attend when their income is low. An increase in family incomes can lead to an increase in their willingness to spend on education. Religion and ethnicity have little influence on the choice of public or private school. In addition, in terms of salary policy, employees working for private schools will receive higher wages than employees working for public schools (Glewwe & Patrinos, 1988).
Dan (1998) has pointed out the theoretical and practical bases for building the regulation of private high schools such as: the viewpoint of the Party on education and educational socialization, the role of social participation in education, the actual status of organization and operation of private high schools before the year 2000.
Anh (2006) analyzed and assessed the current situation of NPE schools majoring in preschool, general education, and professional education in Hanoi from the time of renovation to 2004 and proposed solutions to strengthen, develop NPE schools. The author presented the results achieved by NPE schools majoring in preschool, high school, and professional education in Hanoi such as: The growth in the number of schools, the number of students, development of facilities, innovation of educational content and methods. In addition, the author pointed out weaknesses such as: the management capacity of the Board of Directors, the principal and the lack of a permanent teaching staff; quality of education; inadequacies in state management of preschool, general education and professional education schools in Hanoi. From that, the author has proposed a series of solutions to strengthen and develop NPE schools.
The above research topics have overviewed the development of the private high school system in some localities and countries; the role and position of the private high school system; clarified the market factors of private education services and pointed out some inadequacies in the current educational management mechanism. Inheriting the results of the above studies, this study analyzes and evaluates private high school education in Ho Chi Minh City, Vietnam.

3. Methodology

This study uses qualitative research methods. The author used techniques of synthesis, analysis, comparison to evaluate the private high school education in Ho Chi Minh City, Vietnam. In addition, the author collected previous studies. Qualitative research methods orientated and refined the research results of previous studies; from there, this study inherited and applied.

4. Research Result and Discussion

4.1. Class and School size

Since 1996, on average, 3 to 5 new schools have been founded every year. In the school year 2004 - 2005, the Department of Education and Training (DOET) managed 36 non-public high schools, including 29 people-founded schools and 07 private schools. In the total of 22,735 students of these schools, the number of students registering permanent residence outside the city is 12,467. Non-public high schools are mainly located in urban and suburban districts.

From the school year 2005-2006 to the school year 2009 -2010, educational socialization policies were implemented, and to accommodate the increasing demand of students from the city as well as other provinces, non-public high schools were rapidly developing in terms of both quality and quantity. In this period, according to provisions of the charter of high schools, several people-founded high schools went through a transition process to become private schools, which resulted in a decreasing number of people-founded schools, together with an average increase of 4 to 5 new private schools every year. This period recorded the most rapid increase of the number of students in non-public high schools (including those from other provinces) since 2005 till now. As a result, 41 new private high schools were founded during this time, and students' education needs were fulfilled. The number of non-public schools witnessed the most significant increase in three years: 2009 with 10 new schools were founded; 2010 with 15 new schools; 2011 with 12 new schools.

By the end of the school year 2009-2010, the total number of non-public high schools in the city was 73, including 11 people-founded and 62 private schools, with the total number of students being 33,730; including 16,267 students whose permanent household residence registration was outside the city. The development of private high school quantity (from 2005 to 2014) is illustrated in figure 1.

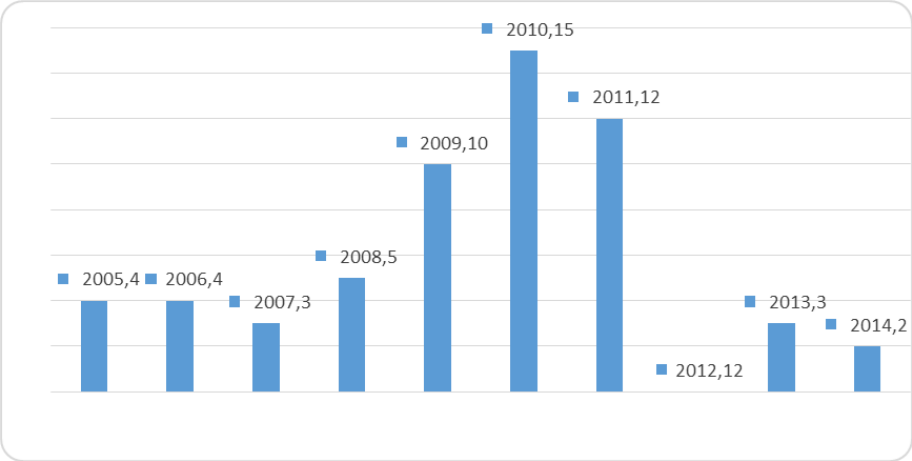

Figure 1: The development of private high school quantity (from 2005 to 2014)

Sources: HoChiMinh city' Department of Education and Training (2015)

The development of the number of students in the city is illustrated in Figure 2.

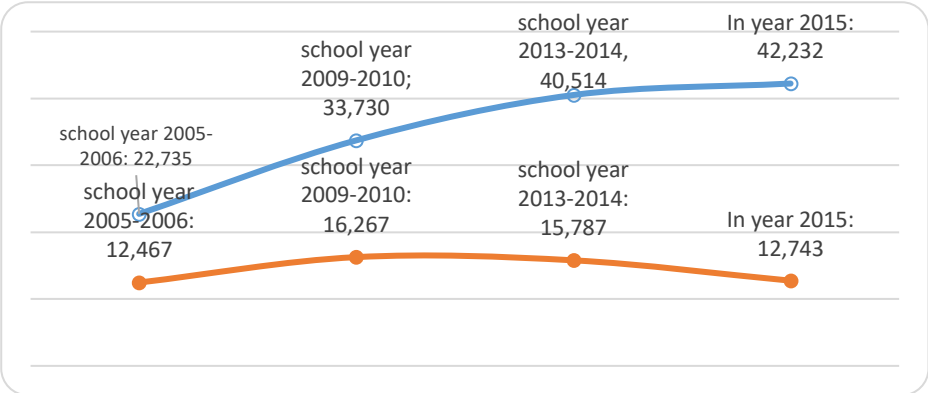

Figure 2: The development of the number of students in the city (from 2005 to 2015)

Sources: HoChiMinh city' Department of Education and Training (2015)

By the school year 2015 - 2016, there were 85 private high schools in Ho Chi Minh City (HCMC), with more than 100 institutions in all districts. Among them, 18 schools comprised 3 levels: primary - secondary – high school and 36 comprised 2 levels: secondary and high school. There were 31,968 high school students, with 1,056 classes in total (30.3 students per class on average) from all districts (see table 1).

Table 1: Statistics results of private schools/classes/students in Ho Chi Minh City

District	Quantily	Quantily of classes				Quantily of students			
		Total	Inside			Total	Inside		
			10' class	11' class	12' class		10' class	11' class	12' class
1	04	75	36	27	12	1.524	758	530	236
2	01	3	1	1	1	50	18	20	12
3	02	12	5	5	2	273	110	123	40
5	04	51	23	19	9	1.447	722	513	212
6	04	34	17	11	6	893	508	251	134
7	04	45	20	16	9	1,176	576	415	185
9	02	48	22	15	11	1,421	647	455	319
10	03	42	22	13	7	1.016	519	336	161
11	04	105	50	34	21	3.563	1.742	1.158	663
12	06	62	30	17	15	1,763	899	485	379
Go Vap	09	86	39	26	21	2.764	1.347	831	586
Tan Binh	10	202	75	67	60	7.811	2.979	2.650	2.182
Tan Phu	16	191	85	57	49	5.703	2.734	1.652	1.317
Binh Thanh	04	15	8	5	2	384	210	130	44
Phu Nhuan	03	17	6	6	5	293	109	103	81
Thu Đuc	02	25	10	9	6	645	300	209	136
Binh Tan	05	37	18	11	8	1,177	613	323	241
Binh Chanh	02	6	3	2	1	65	31	19	15
Total	**85**	**1,056**	**470**	**341**	**245**	**31,968**	**14,822**	**10,203**	**6,943**

Sources: HoChiMinh city' Department of Education and Training (2015)

In the total of 31, 968 students, the number of students whose permanent household residence was registered outside the city is 12,833 (accounting for 40.1%). Students were not evenly distributed among all the schools, as 29 schools had fewer than 100 students.

Some schools with a large number of students are Nguyen Khuyen Secondary and High School with 5,589 students; Truong Vinh Ky Secondary & High School with 3,208 students; Hong Ha Secondary and High School with 1,277 students; Hong Duc Secondary and High School with 1,002 students.

Schools with foreign elements mainly admitted foreign students and employed foreign courses. To meet the demand of the society, a few schools were in experiment to gain permission for admitting Vietnamese students, such as Khai Sang Primary, Secondary and High School, Anh Viet International Primary, Secondary and High School, International School Ho Chi Minh City (Binh, 2002).

The learning outcomes of students in private high schools is demonstrated as follows:

In the school year 2005 - 2006, the number of students with learning outcomes ranked as excellent was 3,222 (14.2% of all students), as good was 8,531 (37.5%), as average was 9,960(43.8%), as weak/poor is 1,022(4.5%); The high school graduation rate was over 95%, some schools achieved a 100% rate.

In the school year 2009 - 2010, a total of 4,871 students (14.5%) were ranked as excellent in learning outcomes; 14,176 (42.0%) were ranked as good; 14,353 (42.6%) were ranked as average; and 330 (0.9%) were received a weak/poor ranking. It can be observed that the rate of excellent and good students had increased, while the rate of graduation had remained stable.

In the school year 2013 - 2014, the number of students with learning outcomes ranked as excellent was 10,964 (27.1%); as good was 17,907 (44.2%); as average was 10,649 (26.3%); as weak/poor was 994 (2.4%). Several schools achieved a 100% high school graduation rate thanks to their continuous efforts to enhance education quality.

The learning outcomes of students in private high schools (see figure 3):

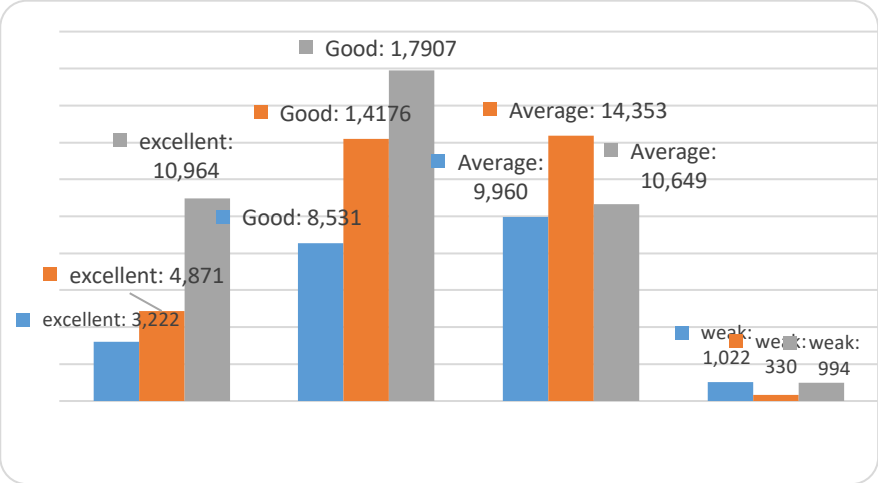

Figure 3: The learning outcomes of students in private high schools

Sources: HoChiMinh city' Department of Education and Training (2015)

With the current trajectory, to satisfy the demand for educational revolutionising, many private high schools are implementing different methods to further improve teaching quality, prominently: Ngo Thoi Nhiem Primary, Secondary & High School; Nguyen Khuyen Primary, Secondary & High School, etc.

4.2. Administrative officials and teachers

According to statistics for the school year 2015 - 2016, there were 216 officials on administrative duty in private schools in HCMC (2.6 officials per school on average). The number of administrators varied from 1 - 6, depending on the scale of the school. Noticeably, a few schools had 5 vice principals, such as Duc Tri Secondary & High School, Nguyen Khuyen Secondary & High School.

In recent years, administrators in private schools mostly used to be former-officials at public schools, who are in good health and have experience in operating schools. Moreover, private high schools have paid close attention to fostering the next generations of officials by sending teachers to take professional training courses in school administration; thus, younger administrators with management skills, creativity and dynamism to operate schools have been appointed.

According to the statistics for the school year 2015 - 2016, the number of teachers in private schools in HCMC was 3,384 (3.2 teachers per class on average); among them, 14.5% had university or higher degrees (Central

Committee of Thought and Culture, 2001). Some schools also appointed specialized teachers in positions of managing the school's Ho Chi Minh Communist Youth Union & HCM Young pioneers Organization.

Teachers of private schools are recruited from a variety of backgrounds such as freelance teachers, retired teachers, or visiting teachers from public schools. Some schools use foreign teachers to teach foreign languages and life skills education topics. Most of the teachers of private schools are formally trained to meet and exceed standards; have a high sense of responsibility; be enthusiastic about their job; gain experience in teaching; be passionate for their profession; care for students; consciously train their ethics, political qualities, lifestyle; always study to improve qualifications and teaching efficiency.

4.3. Facilities

According to the statistics of the school year 2015-2016, the total number of non-public classrooms is 1,583; 1,529 of which are secured and durable.

In general, facilities such as classrooms, equipment, libraries, etc. are becoming more and more invested for the sake of the students' learning. In their development history, many schools have purchased new teaching equipment to meet standards, such as: Ngo Thoi Nhiem Primary, Secondary and High School; Nguyen Khuyen Primary, Secondary and High School; Bac My Secondary and High School; Ngoi Sao Secondary and High School; Tri Duc Secondary and High School; Nhan Van Secondary and High School; Thanh Binh Primary, Secondary and High School; Sao Viet Secondary and High School; Duy Tan Secondary and High School; Hoa Binh High School; Hong Duc Secondary and High School; Van Hanh Primary, Secondary and High school, etc. However, a few schools still had to rent facilities, which are buildings renovated into teaching facilities with relatively adequate equipment, good teaching service conditions and commitment to develop with the schools after 5 years of operation. In addition, schools with foreign elements have a large ground area, and a lot of investment in facilities, which makes their classrooms more spacious, clean and good-looking. Most of the schools can adequately provide the facilities for accommodation and daily activities for boarding students at the schools.

4.4. Implementation of teaching and educating activities

4.4.1. The development of action plans

Every year, in accordance with the orientation of the Department of Education and Training, private high schools develop and organize plans in order to achieve teaching and educational goals according to the school year objectives. Different types of plans that can be developed and implemented include: School year plan; Political and Ideological Education plan; Professions plan; extra-curricular plan; Plan for vocational training and careers guidance; 02 sessions/day teaching plan, etc. All these plans are inspected and approved by the Department of Education and Training.

4.4.2. Teaching activities

Schools have to follow national curriculum pursuant to Decision No.16/2006/QD-BGDDT on December 5, 2006 by the Ministry Of Education and Training (MOET) regarding knowledge and skill standards as well as required attitudes. From the 2011-2012 school year onwards, content for each subject has been subtly moderated pursuant to Official Dispatch No. 5842/BGDDT-VP on September 1, 2011 by MOET to conform to knowledge and skill education standards, teaching duration and other region-specific conditions.

Schools devise and implement an educational plan that is aimed to develop students' capabilities in terms of knowledge, skill and attitude standards of each educational stage in the general education program within the universal 37-week school year timeframe as instructed by the MOET, and to ensure adequate time for the training, revising, experimenting and exercising along with organizing on-the-field and creative activities as well as periodic assessments.

Schools with adequate staff and facilities and the approval of students' families also provide, besides the 2 sessions per day curriculum, a certain number of optional courses related to official subjects, and supplementary classes for foreign language, computer science and other important subjects.

Additionally, several integrated educational topics are implemented in accordance with MOET 's guide: Morals education, Moral examples of President Ho Chi Minh; Law Education; Anti-corruption Education; Education of National Sovereignty On Borderlands, Sea and Islands; Economical and effective energy use guides; Environment protection; Biological Diversity And Natural Conservation; Handling, preventing and alleviating consequences of climate change and natural disasters; Traffic safety education; Heritages studies.

Teaching methods receive more and more modification with a view to bolstering positivity, proactivity and creativity in students; replacing the one-sided indoctrination and rote memory method; improving student's application of knowledge and skills; teaching mindset and manner and self-study; ensuring a balance of academic education and behavior education; classifying students based on knowledge and skill standards of the general education program; diversifying learning methods, especially with practical, creative and scientific activities; promoting information technology and multimedia application in teaching and learning. The application of skills and knowledge in problem-solving could fundamentally develop students' abilities, which helps students determine their attitudes and motivations to learn.

Students and teachers are oriented to actively take part in learning, teaching and exchanging information in the online archive called "Interactive School" by MOET in favor of Official dispatch No. 3535/BGDDT-GDTrH of May 27, 2013 regarding "Research-based Learning" and other positive teaching methods; MOET's Official dispatch No.5555/BGDDT-GDTrH of October 8, 2014. Problem solving, practical skills and project-based learning are encouraged to be integrated in school subjects. STEM education - Science, Technology, Engineering and Math - are also integrated and applied more and more in related subjects of the general education program.
Testing and assessment based on the orientation of developing students' competencies and qualities have been innovated. All forms of testing and assessment are designed to boost students' abilities, as the assessment can be used to support students with learning methods, encourage and motivate students. Posing questions is also under strict and serious supervision in accordance with the regulations at all stages, including supervising, marking and commenting and evaluating students, to ensure objectivity, honesty, fairness, proper assessment of students' ability and progress. Formative assessment also receives a great deal of attention: classroom assessment; assessment by records; assessment by observation; project and presentation evaluation; and assessment results should include progress evaluation and summative assessments at the end of each semester. There should be a flexible combination of subjective and objective tests, theoretical and practical tests. Test structure should be strictly followed; and multi-select objective questions with multiple correct answers are advised to replace single-select questions. Software and applications are developed to prepare and manage test and exam questions, and to construct a "testing and evaluation question bank". It is also important to develop an "Open learning materials archive" of high-quality questions, exercises, exam questions, lesson plans, and reference materials on the websites of the Ministry of Education and Training (http://truongtructuyen.edu.vn/).

Most schools have promoted the application of information technology in management and teaching, such as: Electronic scoring books in accordance with the guidance of official Dispatch No. 3260 / GDDT-GDTrH dated 09/10/2015 of Ho Chi Minh City Department of Education and Training; Management staff, teachers and children are better equipped with projectors, interactive whiteboards; E-learning-oriented software to assist in preparing lesson plan with a view to improving the information technology skills and capabilities of educational management staff, teachers and students; the implementation of advanced teaching methods: interactive teaching on the Internet environment, E-learning, simple and friendly software for creating online lectures (for examples: Adobe Presenter, i-Spring and Articulate) It is also encouraged to hold competitions on the application of information and communication technology in teaching and learning such as the "Designing E-learning lecture records" contest, the "Innovative teachers with information technology" etc organized by the MOET.

4.4.3. About extracurricular activities, job orientation and education outside the classroom

Institutions also pay great attention to literature-physical-beauty, ethics, consciousness, ideals, and ambitions of students by organizing extracurricular activities, career guidance, after-school hours, outdoor activities, etc. which induce students' comprehensive mental and physical growth.

Vocational training activities for students are carried out according to the general education program promulgated under Decision No. 16/QD-BGDDT dated May 5th, 2006 and current guiding documents of the MOET with a total of 9 lessons/school year including 3 themes: (i) September theme: The youth study and train for the cause of industrialization and modernization of the country; (ii) December theme: The youth construct and defend the country; (iii) March theme: The youth with career development.

Some schools consult with the party committees and local authorities to mobilize businesses, socio-economic entities, universities, colleges, etc. to participate in the process of vocational education for students.

Extra-curricular activities are integrated with a number of contents according to the document No. 3092/GDDT-TrH dated September 4th, 2014 of the Department of Education and Training and include 2 lessons/month during regular school hours according to 9 topics specified in the school year. The homeroom teacher guides and advises students to independently organize and administer activities during extra-curricular hours.

Many schools have arranged extra-curricular activities for students with creative and practical content and forms. For example: Viet Uc High School organized a talk show for students with Mr. George F. Smoot who won the 2006 Nobel Prize in Physics at the International University - Vietnam National University Ho Chi Minh City; held a meeting with the New Zealand Embassy at the February 3 campus; organized a visit to the Thermal Power Plant in Ba Ria; Viet My Anh High School organized for students to visit the Ceramic Factory; Bamboo Village conservation area in Binh Duong province; Viet My High School organized a trip for students to visit and study at the candy factory and beekeeping facility in Ben Tre province; Viet Au High School organized an extra-curricular activities program in which students in Nha Trang visited the historical site of Ben Duoc temple in Cu Chi; Van Lang High School organized excursions with extracurricular learning activities for students.

5. Conclusion

The current situation of private upper secondary education in Ho Chi Minh City has achieved remarkable results, specifically as follows:

Achievements:

The network of private schools and classes is developed in accordance with the local situation, meeting the learning needs of the local students and students from other provinces. Many new schools were built in the direction of solidification and standardization. Facilities and equipment are invested and enhanced synchronously and modernly to meet the needs of teaching and learning.

Teaching and educational activities are organized to ensure compliance with industry regulations. Learning and training results are increasingly improved.

Managers, teachers and staff of the schools are insufficient number, dedicated to the profession, responsible, dynamic, creative, active in teaching activities and participating in emulation movements. The management and teaching capacity is constantly improved.

The reason of the above results, first of all, is due to the political stability, the socio-economic development achievements of the city. They have created the foundation for the development of education in general and private education in particular. The City Department of Education and Training has been closely involved in directing, managing and organizing the implementation of tasks; implemented programs and subjects according to the standards of knowledge and skills, ensuring flexibility, fit, suitable for students and reality; implemented innovation of teaching methods; strengthened inspection and supervision of teaching activities at private schools. The majority of administrators and teachers are enthusiastic always uphold the sense of responsibility and do their best to overcome difficulties and complete tasks.

Besides the achieved results, private high school education in Ho Chi Minh City still has limitations such as:
Resolution of the 10th Party Congress of Ho Chi Minh City for the term 2015-2020 has assessed the city's education and training: The quality of education and training has not yet met the needs of development and integration. Educational content and methods are slow to innovate, not linked to reality. The teaching staff and education management staff have not met the needs in terms of quantity and quality. Management of educational activities of NPE has not met the requirements. The construction of a learning society has not been substantive, which has low results (Y, 1999).
The quality of education has been gradually improved, but not high yet. The work of traditional education, moral and ideal education has not been focused. There are still many students with average academic ability, lack in quality and morality, showing many signs of violating school rules, being playful, lazy to study, dishonest in exams.
Managers and teachers are recruited from many different sources with unequal professional qualifications. Some are not bold and actively innovate in management as well as in teaching. The capacity of managers is not up to the task requirements. Management in some schools is still loose, subjective and not very effective. The number of permanent teachers is still small. Most of the teachers are contract teachers, and they frequently change jobs. There are, so, many difficulties in operating and directing professional activities. Some administrators and teachers are still hesitant to innovate, not proactive when just waiting for the guidance of their superiors. They maintain their one-way-imposition management style and teaching methods, which just focus on knowledge transmission and assessment, but not focus on developing students' capacity. This limits students' ability to be active and proactive. Entrance students often have weak academic performance, poor behavior. Students frequently move in and out during the school year, leading to the continuous fluctuations in the number of students at the school. Students do not have the appropriate learning motivation. Many students are affected by social networks and external factors, so there are still some negative manifestations in their lifestyle, in the way they behave with people around, and in their awareness of social ethical standards.
Teaching facilities and equipment in some schools are not enough to meet teaching needs.

The reasons for these limitations are:
Perceptions, psychology and actions of some administrators and teachers on educational innovation have not been consistent with practical requirements; the lack of being active and proactive in carrying out the task of fundamentally and comprehensively renewing school education as required by Resolution No. 29-NQ/TW of the Eighth Conference of the Central Executive Committee, XI.
The capacity of some school administrators is not enough to meet the current educational reform requirements, the management skills and qualifications are limited. Most work based on personal experience, not using development strategy and operational plans. The working style is still awkward, some managers are still not proactive, not creative, but just rely on the instructions of their superiors. They are still slow to solve problems, have no flexibility in management. Their ability to persuade the public is still limited and the working method has not really met the requirements of the task.
Some teachers have the mindset of being a staff, lack of enthusiasm. They have not made effort in teaching and educational activities, or tried to cultivate and practice moral qualities and professional capacity. Their skills in using equipment, gadgets and information technology application in teaching are still limited. They hardly make innovation in teaching methods. All of these reasons mentioned above lead to low quality of teaching.
The coordination between school, family and society is not really effective. The negatives in society strongly affect the awareness and lifestyle of young people while many parents are not aware of the importance of education. Others have difficult circumstances, so they are not really aware of the critical value of education and helping their children with studying. Many students' parents are busy with business, pay little attention to students, do not have time to remind and guide them in study and in daily life. There are also many cases of parents' helplessness in raising children, letting the education institutions take all of such responsibility.
In addition, because it is a private school, the funds provided by the Board of Directors are mainly for salaries, while the budgets for movement and commendation activities are very limited. This leads to the lack of encouragement for teachers and students, not promoting teaching-studying emulation activities effectively. Some state management mechanisms and policies for private schools also have many shortcomings, causing many obstacles to the development of schools.

Therefore, the Ho Chi Minh City government needs to have many specific policies to create favorable conditions for private schools to access land rental to build and expand the size of schools and classes; ensure equality between public and private schools; improve the quality of management apparatus in schools; renovate the teaching materials; strengthen the state management for NPE high schools in the area. In addition, the Board of Directors of non-public education schools should pay more attention to movement activities and improve incomes for employees (administrative department, teachers). Furthermore, administrators and teachers must always improve their professional capacity, enthusiasm for the profession, innovation and creativity in order to improve the quality of education.

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Burnout Status of U18 Women's National Ice Hockey Team Players in Turkey

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Abstract
This study aimed to determine the athletic burnout of the under-18 (U18) women's ice hockey national team players and examine their burnout levels in terms of age, education level, sports history, training frequency, inability to participate in a match due to COVID-19, and history of injury. The research population consisted of the U18 women's ice hockey national team players in Turkey. The sample comprised 27 athletes randomly selected from the target population based on voluntariness. A questionnaire consisting of two parts was used as a data collection tool. The first part of the questionnaire included a personal information form developed by the researcher to determine the characteristics of the participants, such as age, education level, sports history, training frequency, whether they missed any ice hockey matches due to COVID-19, and history of injury. In the second part, the Athlete Burnout Questionnaire, developed by Raedeke and Smith in 2001 and adapted to Turkish by Kelecek et al. in 2016, was administered to measure the athletic burnout levels of the participants. The research findings revealed that the athletes' burnout levels were generally low, but those with a history of disability lasting longer than three months and those that missed ice hockey matches due to COVID-19 had higher burnout levels compared to the remaining participants.

Keywords: Women's Ice Hockey, Burnout, COVID-19

1. Introduction

1.1 Introduce the Problem

In ice hockey, which is described as one of the most difficult team sports in the world (ESPN, 2021), athletes go through an intense, difficult, and long process in order to reach a high level of performance. The ongoing pandemic conditions have further complicated this process since athletes have had to deal with additional situations, such as tournament/league/match and training cancellations and being deprived of athletic activities. This difficult process experienced can cause both physical and psychological exhaustion in athletes, which emerges as burnout.

1.2 Explore Importance of the Problem

In history, the concept of burnout was introduced by Freudenberger (1974), and later Maslach and Jackson (1981) developed the Maslach Burnout Inventory to measure the hypothesized aspects of this concept. Since the Maslach Burnout Scale was developed, it has been used in research in various fields to reveal the effects of burnout on the life of individuals. Maslach and Jackson (1981) and Maslach and Goldberg (1998) divided burnout into sub-scales, describing it as a three-component psychological syndrome consisting of emotional exhaustion, depersonalization, and reduced personal accomplishment.

In the following years, burnout was adapted to the sports environment and redefined by Raedeke (1997) as a syndrome with three basic dimensions: emotional/physical exhaustion, reduced athletic accomplishment, and sport devaluation. Athletes experiencing burnout first report a depletion of emotional and physical energy due to the high demands of training and matches. Then, they perceive a lower sense of achievement because they often fail to meet their goals and it seems difficult to achieve desired results. Finally, they begin to devalue sports. It can be stated that as athletes' interest in sports decreases, their sensitivity to their performance also decreases (Raedeke, 1997). Brenner (2007) argued that burnout in athletes usually occurs due to the loss of endurance and continued fatigue caused by excessive effort. From this argument, it can be deduced that ice hockey players are prone to burnout due to the effort required by this sports activity. Gould et al. (1996a) suggested two types of burnout: In the first, athletes abandon sports completely while in the second, they continue these activities at a lower level than their previous performance.

1.3 Describe Relevant Scholarship

A prominent factor for an athlete to perform at an optimum level is mental endurance, which can be considered as a quality that combines various human characteristics and allows an athlete to constantly make the most of his/her physical abilities. Mental endurance in athletes is a collection of values, attitudes, emotions and behaviors that enable them to overcome obstacles, distress or pressure to which they are exposed, as well as helping them maintain their concentration and motivation to reach their goals consistently. It is suggested that mental endurance required by these attitudes protects athletes from burnout (Gucciardi and Gordon, 2009; Madigan and Nicholls, 2017).

A previously unidentified new type of coronavirus, which was determined as the cause of several pneumonia cases in late 2019 in Wuhan, China, was declared a 'pandemic' by WHO in March 2020. The disease, known as coronavirus disease 2019 (COVID-19), has been responsible for infecting millions of cases and resulting in deaths worldwide due to its rapid spread (Lu et al., 2020).

One of the sports branches affected by the COVID-19 pandemic is undoubtedly ice hockey. The postponement/cancellation of international leagues and organizations by relevant authorities with the onset of the COVID-19 pandemic has also affected local organizations and brought about many changes with it (Kurudirek, 2021).

The under-18 (U18) women's national ice hockey team of Turkey, which won the silver medal in its division in Mexico in 2020 (TBHF, 2020), was not able to perform in the U18 Women's Ice Hockey World Championship Division 2 Group B matches planned to be held in Kocaeli/Turkey from 28 to 31 January 2021 due to the cancellation announced on September 17, 2020 (IIHF, 2020). The International Ice Hockey Federation (IIHF) canceled a total of 28 world championship organizations to be held in the 2020-2021 season including the top-division Men's World Championship, U20 Men's World Championship, U18 Men's World Championship, and U18 Women's World Championship (IIHF, 2021). Interestingly, despite the cancellation of U18 Women's Ice Hockey World Championship planned to be held in Sweden from 5 to 12 January 2021, in the same season, the U20 Men's Ice Hockey World Championship was held from December 25, 2020, to January 5, 2021, without any cancellation.

1.4 State Hypotheses and Their Correspondence to Research Design

As for the 2022 season, on December 24, 2021, IIHF announced that all the January 2022 tournaments were cancelled (IIHF, 2021). This announcement, made only 15 days before the closest event, undoubtedly reached many countries while in the pre-tournament training camp. Of the seven world championship organizations to be held in January 2022, five are U18 women's and two were U20 men's organizations. The cancellation of the U18 women's ice hockey world championship organizations for two consecutive years is important in terms of determining the associated burnout caused by this situation in athletes.

This study aimed to determine the athletic burnout of the U18 women's ice hockey national team players and examine their burnout levels in terms of age, education level, sports history, training frequency, inability to participate in a match due to COVID-19, and history of injury.

2. Method

A questionnaire consisting of two parts was used as a data collection tool in the research. The first part of the questionnaire included a personal information form prepared by the researcher to determine the participants' age, education level, sports history, training frequency, inability to participate in matches due to COVID-19, and history of injury. In the second part of the questionnaire, the Athlete Burnout Questionnaire, which was developed by Raedke and Smith in 2001 and adapted into Turkish by Kelecek et al. in 2016, was administered to measure the athletic burnout levels of the participants. This questionnaire contains a total of 13 items under three dimensions, namely emotional/physical exhaustion, reduced athletic accomplishment, and sport devaluation. The Cronbach alpha coefficient of this five-point Likert-type scale was determined as .874.

2.1 Study Population and Sample

The research population consisted of the Turkish U18 women's ice hockey national team players. The sample group comprised 27 athletes randomly selected from the target population based on voluntariness to participate in the research.

2.2 Data Collection Tools

A questionnaire consisting of two parts was used as a data collection tool in the research. The first part of the questionnaire included a personal information form prepared by the researcher to determine the participants' age, education level, sports history, training frequency, inability to participate in matches due to COVID-19, and history of injury. In the second part of the questionnaire, the Athlete Burnout Questionnaire, which was developed by Raedke and Smith in 2001 and adapted into Turkish by Kelecek et al. in 2016, was administered to measure the athletic burnout levels of the participants. This questionnaire contains a total of 13 items under three dimensions, namely emotional/physical exhaustion, reduced athletic accomplishment, and sport devaluation. The Cronbach alpha coefficient of this five-point Likert-type scale was determined as .874.

2.3 Statistical Analysis

SPSS v. 20 software package was used to analyze the data. After the data collected with the data collection tool were transferred to the electronic environment, first the normality test was carried out. Upon determining the data did not show a normal distribution, non-parametric analyses were undertaken. Accordingly, the Mann-Whitney U test was used to compare two-group variables related to the demographic characteristics of the participants, such as descriptive statistics, education level, and disability history, while the Kruskal Wallis H test was used to compare variables with more than two groups; e.g., age, sports history, training frequency, and inability to participate in matches due to COVID-19.

3. Results

Most of the participants had a high school education level, did not have a history of disability for more than three months, and were 18 years old. It was also determined that most had a sports history of for four to five years and engaged in weekly training of three or 10 hours. When the distribution of the participants according to the number of matches they missed due to COVID-19 was examined, it was observed that the groups had an equal distribution (Table 1).

Table 1: Demographic Variables of the Participants

		n	%
Education level	High school	17	63
	University	10	37
History of disability (longer than three months)	Present	9	33.3
	Absent	18	66.7
Age (years)	16	6	22.2
	17	6	22.6
	18	15	55.6
Sports history (years)	4-5	12	44.4
	6-7	9	33.3
	8+	6	22.2
Length of weekly training (hours)	3	9	33.3
	5	6	22.2
	10	9	33.3
	12	3	11.1
Missed matches due to COVID-19 (number)	1-5	9	33.3
	6-10	9	33.3
	11+	9	33.3
Total		27	100

The participants' total mean score in the Athlete Burnout Questionnaire indicated that their burnout levels were generally low. When examined according to the dimensions of the questionnaire, it was determined that the participants had a low score in emotional/physical exhaustion, moderate score in reduced athletic accomplishment, and low score in sport devaluation (Table 2).

Table 2: Participants' Mean Scores in the Athlete Burnout Questionnaire

	n	**Min**	**Max**	**X ± SD**
Emotional/physical exhaustion	27	1.2	4.46	2.4 ± .796
Reduced athletic accomplishment	**27**	2.25	4.8	3.19 ± .847
Sport devaluation	**27**	1	4.75	1.97 ± 1.056
Total	**27**	1.69	4.46	2.46 ± .789

No statistically significant difference was found in the mean ranks of the total and dimension scores of the Athlete Burnout Questionnaire according to the education level of the participants. However, it was observed that the participants with university education had a higher mean rank than those with high school education in relation to the emotional/physical exhaustion and sport devaluation dimensions while the latter had a higher mean rank in reduced athletic achievement dimension compared to the former (Table 3).

Table 3: Comparison of the Participants' Mean Scores in the Athlete Burnout Questionnaire According to their Educational Level

Factor	Variable (education)	n	Mean rank	Sum of ranks	U	Z	P
Emotional/physical exhaustion	**High school**	17	13.29	226	73	-.608	.543
	University	10	15.20	152			
Reduced athletic accomplishment	**High school**	17	15.24	259	64	-1.069	.285
	University	10	11.90	119			
Sport devaluation	**High school**	17	12.76	217	64	-1.107	.268
	University	10	16.10	161			
Total	**High school**	17	14.35	244	79	-.303	.762
	University	10	13.40	134			

A statistically significant difference was found in the mean ranks of the total and dimension scores of the scale according to the presence of a history of disability lasting longer than three months. According to the result, for the total scale and all its dimensions, the participants with a history of disability lasting longer than three months had statistically significantly higher mean ranks compared to those without a disability history (Table 4).

Table 4: Comparison of the Participants' Mean Scores in the Athlete Burnout Questionnaire According to the History of Long-Term Disability

Factor	Variable (history of disability)	n	Mean rank	Sum of ranks	U	Z	P
Emotional/physical exhaustion	**Present**	**9**	22.50	202.50	4.500	-3.973	.000
	Absent	**18**	9.75	175.50			
Reduced athletic accomplishment	**Present**	**9**	18.50	166.50	40.500	-2.112	.035
	Absent	**18**	11.75	211.50			
Sport devaluation	**Present**	**9**	21.50	193.50	13.500	-3.646	.000
	Absent	**18**	10.25	184.50			
Total	**Present**	**9**	22.00	198.00	9.000	-3.724	.000
	Absent	**18**	10.00	180.00			

When examined according to age, the 16-year-old participants had a statistically significantly higher mean rank than the 17-year-old participants in relation to the total scale and the reduced athletic accomplishment dimension (Table 5).

Table 5: Comparison of the Participants' Mean Scores in the Athlete Burnout Questionnaire According to Age

Factor	Variable (age)	n	Mean rank	SD	X^2	p	Difference
Emotional/physical exhaustion	**16**	6	17.00	2	4.719	.094	
	17	6	8.00				
	18	15	15.20				
Reduced athletic accomplishment	**16**	6	22.25	2	8.626	.013*	1 < 2
	17	6	11.00				
	18	15	11.90				
Sport devaluation	**16**	6	12.50	2	2.872	238	
	17	6	10.25				
	18	15	16.10				
Total	**16**	6	21.50	2	8.970	.011*	1 < 2
	17	6	8.00				
	18	15	13.40				

Concerning the evaluation made according to the length of sports history of the participants, those who had been involved in sports for four to five years and six to seven years had statistically significantly higher mean ranks in the reduced athletic accomplishment dimension than the group with more than eight years' sports history. In addition, the participants with a sports history of six to seven years had a statistically significantly higher mean rank in the sport devaluation dimension and total scale compared to those with more than eight years' sports history (Table 6).

Table 6: Comparison of the Participants' Mean Scores in the Athlete Burnout Questionnaire According to Sports History

Factor	Variable (sports history)	n	Mean rank	SD	X^2	p	Difference
Emotional/physical exhaustion	**4-5**	12	12.13	2	5.690	.058	-
	6-7	9	19.00				
	8+	6	10.25				
Reduced athletic accomplishment	**4-5**	12	16.63	2	13.946	.001*	3 < 1, 2
	6-7	9	17.50				
	8+	6	3.50				
Sport devaluation	**4-5**	12	9.50	2	13.650	.001	1 < 2
	6-7	9	21.50				
	8+	6	11.75				
Total	**4-5**	12	14.00	2	9.028	.011*	3 < 2
	6-7	9	19.00				
	8+	6	6.50				

Another statistically significant difference was observed according to the weekly training durations of the participants. The participants who trained for five hours a week had a statistically significantly lower mean rank in the emotional/physical burnout dimension than those who trained for 10 hours a week (Table 7).

Table 7: Comparison of the Participants' Mean Scores in the Athlete Burnout Questionnaire According to the Length of Weekly Training

Factor	Variable (weekly training hours)	n	Mean rank	SD	X^2	p	Difference
Emotional/physical exhaustion	**3**	9	12.00	3	11.434	.010*	2 < 3
	5	6	6.50				
	10	9	19.50				
	12	3	18.50				
Reduced athletic accomplishment	**3**	9	12.50	3	.532	.912	-
	5	6	14.75				
	10	9	15.00				
	12	3	14.00				
Sport devaluation	**3**	9	18.00	3	5.692	.128	-
	5	6	8.75				
	10	9	13.00				
	12	3	15.50				
Total	**3**	9	12.00	3	3.178	.365	-
	5	6	11.00				
	10	9	17.00				
	12	3	17.00				

Lastly, statistically significant differences were found between the groups in terms of the mean ranks of the total scale and emotional/physical exhaustion dimension according to the number of matches missed due to COVID-19. The participants who missed six to 10 matches due to COVID-19 had a statistically significantly lower mean rank in the emotional/physical exhaustion dimension than those that missed one to five or more than 11 matches, and the participants who missed one to five matches due to COVID-19 had a statistically significantly higher mean rank in the total scale compared to those that missed six to 10 matches (Table 8).

Table 8. Comparison of the Participants' Mean Scores in the Athlete Burnout Questionnaire According to Missed Matches due to COVID-19

Factor	Variable (missed matches due to COVID-19)	n	Mean rank	SD	X^2	p	Difference
Emotional/physical exhaustion	**1-5**	9	18.50	2	14.056	.001*	2 < 1, 3
	6-10	9	6.00				
	11+	9	17.50				
Reduced athletic accomplishment	**1-5**	9	17.00	2	1.983	.371	-
	6-10	9	12.50				
	11+	9	12.50				
Sport devaluation	**1-5**	9	14.50	2	2.442	.295	-
	6-10	9	11.00				
	11+	9	16.50				
Total	**1-5**	9	18.00	2	6.067	.048*	1 < 2
	6-10	9	9.00				
	11+	9	15.00				

4. Discussion

Gould et al. (1996a,b; 1997) listed factors causing athletic burnout as injury, overtraining, feeling tired all the time, lack of physical development, irregular performance, losing matches, constant traveling, limited time spent with friends and social environment, believing that one's life is dominated by sports, family and environment pressure, negative team atmosphere, rival teams cheating to win, not enjoying sports, urge to please others, need to feel valuable, and expectation of winning. This is in agreement with the findings of our study revealing that the participants who had a history of disability lasting for more than three months had a statistically significantly higher mean rank in the Athletic Burnout Questionnaire than those without this history.

It is estimated that 6% to 11% of athletes suffer from high levels of burnout (Raedeke, 1997; Eklund and Cresswell, 2007). In athletes, burnout is associated with many negative consequences, such as reduced motivation and decreased performance, which ultimately leads to quitting sports (Gustafsson et al. 2017). In the current study, the burnout status of the participants can be explained by the cancellation of all their official international matches for the last two seasons and most players not being able to play in the U18 category again due to the age limit despite their achievement in having won the silver medal in the last official organization. Taking part in national teams may cause high-level athletes to bear a more stressful process and burden them with more responsibility for national success (Çelebi, 2020). Similarly, it can be stated that world championship organizations, which were planned to be held in Turkey but were canceled twice in a row, have further increased the stress levels of national athletes. It is also observed that due to the cancellation of tournaments in the international arena, some national ice hockey events have been organized for young athletes to gain match experience by taking certain preventive measures, and this has positively affected the motivation of athletes who compete in certain age categories (U20 and U18).

IIHF continues to hold some events in environments where strict measures are taken, called 'bubbles'. This means that players, coaches, officials, and other personnel in the bubble cannot leave the safe zone, which includes the hotel, arena, and close-knit training ground, and in most cases, they do not even have to move to another building. Participants in the hotel are limited to their team's floor, with meeting rooms and dining rooms being allocated to the team. If someone leaves the safe zone, including the hospital, they cannot return to the bubble and can no longer participate in the event (IIHF, 2020).

In this study, the high mean rank of the burnout status of the athletes can be explained by their inability to participate in international matches due to the cancellation of seven organizations, of which five were for women's teams, as announced by the international ice hockey federation, despite the continuation of U20 Men's Ice Hockey World Championship. This finding of our research is in line with Maslach and Leiter (1997) reporting that underwork causes as much stress in individuals as overwork.

In light of all the results obtained from the study, we consider that support should be provided by sports psychologists to ensure the continuation of ice hockey activities of young athletes in developing countries, such as Turkey and to eliminate or reduce burnout among these individuals. A similar study can be undertaken with U18 and U20 male ice hockey athletes and sports branches that have been affected by the cancellation of international organizations due to the ongoing pandemic.

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Examination of Teachers' Perceptions of Self-Efficiency and Program Literacy

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Abstract
The purpose of this research; It consists of determining teachers' self-efficacy perceptions and curriculum literacy and examining whether there is a relationship between them. In this study, the relational survey model, one of the scientific research models, was used. The universe of this research consists of a total of 900 teachers working in the Bucak district of Burdur province. The sample is; consisted of 352 teachers, 133 male and 219 female. The data of the research collected with "Personal Information Form," "Teacher Self-Efficacy Perception Scale" and "Curriculum Literacy Scale." The collected data were analyzed with computer package programs. In this study, it was seen that teachers' self-efficacy perceptions were at a high level and these self-efficacy perceptions were the least in the dimension of student motivation and the most in the classroom management dimension. Teachers' self efficacy perceptions; It was concluded that there was no significant difference according to gender, age, educational status and graduated higher education institutions. It was concluded that the curriculum literacy of the teachers, the other dimension of this research, is at a high level. In other words, it was concluded that the teachers had a high level of program literacy. Program literacy of teachers; While there is no significant difference according to gender and graduated higher education institutions; differed significantly according to the educational institutions they worked in. It has been revealed that there is a positive, positive and moderate colleration between teachers' self-efficacy perceptions and their curriculum literacy.

Keywords: Perception, Teacher, Self-efficacy, Program, Program literacy

1. Introduction

Education; expected acculturation studies that progress with programmed steps and include learning-teaching practices whose objectives are determined by passing through certain filters (Bolat, 2014). Education is the process of creating a deliberate and expected change in an individual's behavior through his/her own life (Ertürk, 1985). In this process, teachers provide individuals with a set of knowledge, skills, interests and attitudes.

Teaching is a profession whose subject is human, and it is known that it is important to have competencies related to positive human relations and problem-solving skills as well as field knowledge in this profession. As schools

are institutions that have the important mission of preparing individuals for life, enabling them to integrate with the society, raising well-equipped individuals who have the knowledge and competencies needed by the society as a result of educational activities (Alev, 2019). Teachers' ability to raise individuals who can research, solve problems, question, access information and have self-confidence depends on teachers' self-efficacy and being aware of it. Since teachers' self-efficacy beliefs affect students' motivation, these beliefs ensure that students' attitudes are positive and their academic success increases significantly. In addition, it is known that teachers with strong self-efficacy beliefs tend to make good planning and strive to teach better (Eker, 2014). It can be said that teacher self-efficacy is an important factor that directly affects the quality of education (Şahin, C. & Şahin, 2017). For this reason, the programs of teacher training institutions are constantly updated according to these competencies and features that teachers are expected to gain (Şişman, 2009). The ability of the updated programs to achieve the desired result depends on the teachers' having certain qualifications, and one of these competence areas is self-efficacy.

Self-efficacy, one of the basic concepts of Bandura's (1988) social learning theory; It is an individual's belief in his or her own capacity to bring learning and behavior to the required levels. Self-efficacy is the person's thinking about what the person is capable of doing. . In other words, self-efficacy is not a function of an individual's skills, but a result of the individual's judgments about what the person can do by using his/her skills. According to Bandura (1998), self-efficacy is the individual's belief in his/her ability to cope with different situations and to achieve a certain activity, and this belief of the individual depends on his/her belief on his/her abilities. This belief is also necessary to organize a certain behavior to achieve certain goals and to realize it (as cited in Azar, 2010). Self-efficacy belief includes the psychological-cognitive processes that are effective in acquiring a behavior, creating a change in this behavior or ending the behavior, and these psychological processes are effective on the expectations of individuals regarding the perception of efficacy. In this regard, self-efficacy relates to the strength of one's belief in one's own effectiveness. A high level of belief reflects the individual's ability to cope with difficult situations (Bandura, 1977; 1997, cited in Duru & Arslan, 2021). Individuals set certain goals that they believe they can achieve in their lives. Perception of self-efficacy enables individuals to realize how much effort they need to spend to achieve these goals and how they can cope with the difficulties they face. Individuals can develop some strategies to overcome the difficulties they face. Their beliefs about whether they can use these strategies effectively and whether they will be successful are related to their self-efficacy perceptions (Pajares & Schunk, 2001).

According to Arslan (2008), there are four main sources of self-efficacy perception. The first of these is exact and true lives. This is the most effective way to develop a strong sense of self-efficacy. While successes increase the perception of self-efficacy, failures harm the perception of self-efficacy. This harm occurs especially if it occurs before the sense of self-efficacy is completely established. If people only experience easy successes, they become more discouraged by failure. The second way to create and strengthen the perception of self-efficacy is to have indirect experiences through social models. Seeing people who are similar to their own traits succeed by making constant efforts increases their self-efficacy perceptions. Again, according to Arslan (2008); Social persuasion is the third way to strengthen the perception of self-efficacy. Verbally persuaded people, when faced with a problem, make great efforts to solve it. Finally, the mood of the person affects the perception of self-efficacy. The way to achieve this is to get people away from stress and to get rid of negative emotions.

Self-efficacy perceptions are not the skills of individuals, but the perceptions of competence related to their skills and can affect the outcome of a job, behavior or situation regardless of whether individuals have the qualities that will enable them to perform a job, behavior or situation (Zimmerman, 1995). The fact that individuals have a high self-efficacy perception about a particular job means that individuals will insist on achieving the job in question, will be self-confident and will be less affected by failures in general (Bandura, 1997). On the other hand, if individuals have low self-efficacy perceptions about a particular job, it means that individuals will spend less effort in achieving the job in question, do not trust their own skills enough, and may give up immediately in the face of failures (Bandura, 1997).

Teacher self-efficacy is; It expresses the belief of the teacher regarding the capacity and ability of the students to create the desired learning outcomes, as well as a strong structure related to the student outcomes related to success,

motivation and competence (Tschannen-Moran, Woolfolk-Hoy, AW. & Hoy, 1998). 2021). According to Alev (2019), it has been determined that teachers' self-efficacy perceptions have an important role in the effective execution and planning of educational activities, in coping with the difficulties encountered, and on student success. Teacher self-efficacy perception is one of the most important concepts related to the concept of self-efficacy. Teacher self-efficacy perceptions are defined as teachers' perceptions of their ability to display the necessary behaviors to successfully fulfill their duties and their capacity to influence students' performance (Aston, 1984; Ekici, 2008). Teachers' individual beliefs about the extent to which they can use their teaching situations in a given situation are defined as teacher self-efficacy (Gavora, 2011). In other words, teacher self-efficacy is the judgment of teachers that they have the ability to ensure the success and learning of all students, including low motivation and difficult students (Tschannen-Moran & Woolfolk, 2001; Yılmaz & Çimen; 2008). Teachers with a high sense of self-efficacy are more open to new ideas, as well as being willing to try new methods to better the needs of their students (Tschannen-Moran & Woolfolk Hoy, 2001). According to Bandura (1994); Teachers with a high perception of self-efficacy support their students to reach their goals, spend more effort so that their students can learn, and encourage their students to be successful in their work.

Along with the teachers' self-efficacy perceptions, it is necessary to examine and measure their skills such as curriculum literacy. Such studies and their results will make important contributions to the determination of qualifications, gaining them and shedding light on practices, as well as determining new policies during the training process of teachers.

Educational programs are a guide to the teacher in the education-teaching process. What kind of an individual education systems aim to raise and what kind of content they need to achieve these goals, what kind of path will be followed in the process and at what level the outputs of the system reach the goals are determined through education programs (Çetinkaya & Tabak, 2019). Educational program; explaining to students what, how, when and why they will learn. Educational programs, which are a legal educational tool, try to realize government policies and various social demands while achieving important learning outcomes for students. The basic economic, social and cultural problems of the society can be solved with this tool. The education program that provides social and social agreement, which is used to convey the points that the society cares about, is a technical document (Sarıgöz & Özkartal, 2016). According to Varış (1988); The education program is all of the activities that national education institutions provide for students to achieve their goals.

The implementation of these training programs starts in schools after trial processes. Teachers have an important role in the effective and efficient implementation of the programs (Özdemir, 2012). It is informed through the training programs that what, why and how to teach the teacher; as for the manager, what physical facilities will be needed; to the inspector what and how to evaluate; the student what he will learn and what is expected of him; which finished product to buy for the employer (Doğan, 1997). According to Özer and Acar (2011), it shows that in which level the educational programs guide teachers in order to realize planned education reach their goals. Whether the implemented training program is successful or not depends on the intelligibility of that training program. Teachers are expected to be well literate in the curriculum so that they can understand the curriculum (Kasapoğlu, 2020). Curriculum literacy is a field of competence that enables the evaluation of education and training programs after they are understood and implemented, and the skills it includes are having program knowledge, understanding the program correctly, designing the implementation processes and evaluating the learning-teaching process. Program literacy of teachers is defined as having the skills related to understanding, applying and evaluating the program at a minimum level (Akyıldız, 2020).

Curriculum literacy can be said to be beneficial in understanding and interpreting educational programs, as well as guiding teachers in the preparation and implementation of programs and in the development of a new program. Determining the curriculum literacy levels of teachers in terms of learning-teaching processes and determining what kind of situations this literacy is affected by are considered important in terms of contributing to both teachers and the literature. When the literature on teacher self-efficacy and curriculum literacy is examined, there are no studies that directly examine these two elements and the relationship between them. It is seen that some of the researches are related to teacher self-efficacy and some of them are related to curriculum literacy.

Some of the researches on teacher self-efficacy; Woolfolk-Hoy and Spero (2005), Arslan (2008), Üstüner, Demirtaş, Cömert and Özer (2009), Er and Gürgan (2011), Telef (2011), Korkut and Babaoğlan (2012), Yeşilyurt (2013), Singh and Arora (2014), Molding, Stewart and Dunmeyer (2014) Gun and Steel (2013), Eker (2014), Tuluk (2015), Buluç and Demir (2015), Toy and Duru (2016), Yurdakul and Bostancı (2016)), Dolapcı and Demirtaş (2016), Deniz and Tican (2017), Ocak, G., Ocak and Kalender (2017), Döş and Özşahin (2019), Akbulut and Aküzüm (2020), Öktem and Kul (2020), Ellez (2020) and Duru and Arslan (2021). Regarding the curriculum literacy of teachers, which is the second dimension of this research; Jiayi and Ling (2012), Singh (2013), Skaalvik and Skaalvik (2014), Grissom, Loeb and Nakashima (2014), Shilingford and Karlin (2014), Sarigöz and Bolat (2018). Research by Aslan and Gürlen (2019), Akyıldız (2020), Kahramanoğlu (2019), Çetinkaya and Tabak (2019), Kasapoğlu (2020), Boncuk (2021), Güneş Şinego and Çakmak (2021), and Sarıca (2021) can be counted.

1.2. Purpose of the Research

The purpose of this research; The purpose of this study is to determine the self-efficacy perceptions of the teachers working in the Bucak district of Burdur province and their curriculum literacy and to examine whether there is a relationship between them.

1.3. The Problem of Research

The problem of the research is how are teachers' self-efficacy perceptions and curriculum literacy?

1.3.1. Sub-Problems of the Research

The research sought answers to the following sub-problems:
1. What are the teachers' self-efficacy perception levels?
2. Teachers' perceptions of self-efficacy; Does it show a significant difference according to gender, age, education level, branch, education level, graduated higher education/faculty and satisfaction with the school?
3. What is the literacy level of the teachers in the curriculum?
4. Curriculum literacy levels; Does it show a significant difference according to gender, age, education level, branch, education level, graduated higher education/faculty and satisfaction with the school?
5. Is there a significant relationship between teachers' self-efficacy perception levels and curriculum literacy levels?

1.4. Importance of Research

This research, which aims to determine the self-efficacy perceptions and curriculum literacy of the teachers working in the Bucak district of Burdur province, and to examine the relationship between them comparatively, is important in terms of first examining the teachers' self-efficacy and curriculum literacy separately and then examining the relationship between them. Because teachers' self-efficacy perceptions are high or low will show their willingness to fulfill their professional duties. It can be said that this degree of desire also affects the professional performance of teachers. Likewise, it can be said that it is valid for the curriculum literacy of teachers.

The determination of these two elements and the examination of their effects on the profession of teachers will add a special importance to the research. It is thought that new suggestions will be brought as a result of the research, which will add a special importance to the research.

2. Method

2.1. Model of the Research

In this study, which aims to examine the self-efficacy perceptions of teachers working in the Bucak district of Burdur province and their curriculum literacy, and to determine whether there is a significant relationship between them, the relational survey model, one of the scientific research models, was used. Survey models are research

models that aim to describe a past or present situation in its current form (Karasar, 2012). In the relational survey model, which is included in the general survey method, it tries to determine whether there is a change in the variables or not (Karasar, 2012).

2.2. Universe and Sample

The universe of this research consists of all teachers working in Bucak district of Burdur province. The universe can be defined as the group whose results will be valid and interpreted as a result of the analysis of the data to be collected in the research (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz, & Demirel, 2018).

The sample of the study consisted of teachers determined by simple random sampling method from the universe. The reason why the teachers forming the sample were determined by the simple random sampling method was that there were programs for each level and branch.

The sample can be defined as the limited part of the population selected to collect information about the population (Büyüköztürk et al., 2018). In the simple random sampling method, each unit in the universe has an equal and independent probability of being selected for sampling. In other words, all individuals have the same probability of being selected, and the choice of one individual does not affect the choice of another individual. The valid and best way to select a representative sample is random sampling (Balcı, 2018; Büyüköztürk et al, 2018).

Table 1: Demographic Characteristics of Teachers Constituting the Sample of the Study

Variables Category		***Frequency***	***Percent (%)***
Gender	Male	*133*	*37,8*
	Female	*219*	*62,2*
	Total	*352*	*100,0*
Age	20-29	28	8,0
	30-39	161	45,7
	40-49	119	33,8
	50 and over	44	12,5
	Total	352	100,0
Graduated Educational Status	Bachelor's Degree	306	86,9
	Post-graduated	46	13,1
	Total	352	100,0
Branch	Preschool Teacher	68	19,3
	Class Teacher	110	31,3
	History, Guidance, Geography, Social Studies Teacher	29	8,2
	Mathematics Teacher	24	6,8
	English Teacher	25	7,1
	Vocational High School Religion C. Computer System Teacher	33	9,4
	Turkish Teacher	24	6,8
	Physics, Chemistry, Biology, Science Teacher	23	6,5
	Visual Art, Music, Physical Education Teacher	16	4,5
	Total	352	100,0
Teaching institution	Primary School	141	40,1
	Secondary School	103	29,3
	High School	78	22,2
	Preschool	30	8,5
	Total	352	100,0
Graduated Higher Education	Faculty of Education	291	82,7
	Science and Literature	23	6,5

	School of Education /Institute	20	5,7
	Faculty of Vocational Education	18	5,1
	Total	352	100,0
Place of Duty Satisfaction	No	5	1,4
	Partly	73	20,7
	Yes	274	77,8
	Total	352	100,0

As seen in Table 1, 219 (62.2%) of the 352 teachers who made up the sample were female and 133 (37.8%) were male. According to this, it is seen that the teachers who make up the sample are mostly women of the sample; 28 (8.0%) were 20-29 years old, 161 (45.7%) were 30-39 years old, 119 (33.8%) were 40-49 years old and 44 (12.5%) were 50 consists of teachers who are aged and above. In other words, it is seen that there are mostly teachers aged 30-39. Looking at the graduations of the teachers, 306 (86.99%) are undergraduates, while 46 (13.1%) have graduate degrees. 31.3% Classroom Teachers, 29 (8.2%) History, Guidance, Geography, Social Studies Teachers, 24 (6.8%) Mathematics Teachers, 25 (7.1%) English Teachers, 33 (% 9.4% were Vocational High School, Religion C., Computer Systems Teachers, 24 (6.8%) Turkish, 23 (6.5%) Physics, Chemistry, Biology, Science Teachers and 16 (4%) ,5% of them were Visual Arts, Music and Physical Education Teachers Distribution of the teachers according to the educational institutions they work in: 141 (40.1%) primary school, 103 (29.3%) secondary school, 78 (22%) 2) of them are in high school and 30 (8.5%) of them are in pre-school education institutions.

2.3. Data Collection Tools

In the research; "Personal Information Form" prepared by the researcher for teachers' personal information, and the "Teacher Self-Efficacy Perception Scale", first developed by Tschannen-Moran and Woolfolk Hoy (1998) and then edited by Köse (2007) to determine their self-efficacy perceptions" scale was used.

"Teacher Self-Efficacy Perception Scale"; It consists of 3 dimensions and 24 items, 8 in the dimension of Student Motivation, 8 in the dimension of Classroom Management, and 8 in the dimension of Instructional Strategies. Scale; It is a five-point Likert type scale as "Never", "Rarely", "Sometimes", "Often" and "Always". Information on the reliability of the Teacher Self-Efficacy Scale, which was revealed by the application of the Teacher Self-Efficacy Scale to the research group, is given in Table 2.

Table 2: Reliability of Teacher Self-Efficacy Scale Regarding the Research Sample Applied

Dimension	N	$\bar{X}$	Ss	KS	Cronbach's Alpha
Student Motivation	352	4.23	.50	.076	.872
Classroom Management	352	4.30	.50	.101	.893
Instructional Strategies	352	4.29	.50	.089	.876
Scale	352	4.28	.47	.063	.951

As seen in Table 2, first of all, the reliability of the data was examined in order to carry out statistical analyzes in accordance with the final version of the teacher self-efficacy scale applied to the research group. According to Özdamar (2015), a Cronbach's Alpha value between .70 and .90 indicates that the scale has high reliability, and a value between .60 and .70 indicates that the scale has sufficient reliability. Accordingly, as a result of the Cronbach's Alpha analysis, 872 (high) in Student Motivation, 893 (high) in Classroom Management, 876 (high) in Instructional Strategies, and 951 (high) in the Overall Scale were found to be appropriate for the study.

In the research, the "Curriculum Literacy Scale" developed by Bolat (2017) was used to measure the curriculum literacy of teachers. The "Curriculum Literacy Scale" consists of 2 dimensions, 15 in the Reading dimension and 14 in the Writing dimension, and 29 items (Bolat, 2017). Expressions of skills in the scale; It is a 5-point Likert type, which is "I totally disagree", "I agree little", "I agree at a moderate level", "I agree a lot", "I totally agree". Information on the reliability of the Curriculum Literacy Scale, which was revealed by the application of the Curriculum Literacy Scale to the research group, is given in Table 3.

Table 3: The Reliability of the Teachers' Curriculum Literacy Scale in the Sample

Dimension	N	$\bar{X}$	ss	KS	Cronbach's Alpha
Reading	**352**	4.27	.59	.114	.961
Writing	**352**	4.05	.69	.088	.965
Scale	**352**	4.17	.61	.089	.976

First of all, the reliability of the data was examined in order to carry out statistical analyzes in accordance with the final version of the Curriculum Literacy Scale applied to the research group. According to Özdamar (2015), Cronbach's Alpha value. with 70. A value between 90 indicates that the scale has high reliability, with .60. A value between 70 indicates that the scale has sufficient reliability. Accordingly, as a result of the Cronbach's Alpha analysis performed, it was seen that the reliability was appropriate for the study to be 961 (high) in the Reading Dimension, 965 (high) in the Writing Dimension and .976 (high) in the Overall Scale.

2.4. Analysis of Data

The data collected with the relevant scale were coded and analyzed using computer package programs. Calculations such as frequency (f) and percentage (%) were made. In Likert type items, the same ranges from positive to negative were taken as reference. The "Teacher Self-Efficacy Scale" was applied to the research group and the data were collected. In order to make appropriate statistical analyzes of the data obtained from the scale, the skewness coefficient, arithmetic mean, median and mode were checked, and then (K-S) Kolmogorov-Smirnov normality test was performed since the number of participants in the research group was more than 50. When the skewness and kurtosis values of the "Teacher Self-Efficacy Scale" are examined; Skewness .589, Kurtosis .697 in the dimension of 'Student Motivation'; Skewness in Classroom Management Dimension .762, Kurtosis .996; The Skewness in the Dimension of Instructional Strategies was .626, the Kurtosis was .634, the Skewness was .653, the Kurtosis was .920 in the range of ± 1, and the significance value was p=.00 (p<.05) as a result of the Kolmogorov-Smirnov Test. The fact that the skewness and kurtosis values are in the range of ± 1 is interpreted as the scores do not deviate significantly from the normal distribution (Büyüköztürk, 2009, Özdamar, 2015). Therefore, it was decided to use parametric statistical tests in the analysis of the data.

Due to the normal distribution of the data obtained from the scale, in the sub-problems of the research; Unrelated t-test was used to test whether the data obtained from two unrelated samples differed significantly from each other, and one-way analysis of variance (ANOVA) was used to test whether the data obtained from more than two unrelated samples differed significantly from each other. If there is a significant difference between the groups as a result of this test, first of all, the homogeneity of the variances was examined. It was observed that the variances were homogeneous in all sub-problems in which the data obtained from two or more samples were included. Therefore, the LSD test, which is one of the tests used in homogeneous variance distributions, was applied to determine between which variables the difference was. The obtained data were interpreted by making tables, and the difference between independent variables was tested at the p=.05 level (Büyüköztürk, 2009).

The value ranges in Table 4 were taken into account in the interpretation of the mean values of the scores obtained by the teachers from the Teacher Self-Efficacy Scale.

Table 4: Teacher Self-Efficacy Scale Evaluation Score Ranges

Range	Value	Comment
1.00-1.79	Never	Negative
1.80-2.59	Rarely	Negative
2.60-3.39	Sometimes	Negative
3.40-4.19	Mostly	Positive
4.20-5.00	Always	Positive

As seen in Table 4; Range 1.00-1.79 Never negative, range 1.80-2.59 Rarely negative, range 2.60-3.39 Sometimes negative, range 3.40-4.19 Most often positive, and range 4.20-5.00 Always positive.

3. Findings and Comment

In the research, "What Level Are Teachers' Self-Efficacy Perceptions?" The findings related to the question are given in Table 5.

Table 5: Descriptive Statistics on Teachers' Perceptions of Self-Efficacy

Dimension	N	$\bar{X}$	Ss
Student motivation	352	4.23	.50
Classroom management	352	4.30	.50
Instructional strategies	352	4.29	.50
Scale	352	4.28	.47

As can be seen in Table 5, the arithmetic mean of the total scores of the teachers constituting the sample group obtained from the scale of self-efficacy perceptions ($\bar{X}$=4.28); standard deviation (Ss=.47) was calculated. The arithmetic mean of student motivation dimension scores ($\bar{X}$=4.23), standard deviation (Ss=.50), arithmetic mean of classroom management dimension scores ($\bar{X}$=4.30) standard deviation (Ss=.50), arithmetic mean of teaching strategies dimension scores ($\bar{X}$=. 4.29) was calculated as the standard deviation (Ss=.50). From these results, it can be said that teachers' self-efficacy perceptions are at a high level ($\bar{X}$=4.28). Teachers have the least self-efficacy perception in student motivation ($\bar{X}$=4.23) and the most in Classroom Management ($\bar{X}$=4.30).

3.1. Findings and Interpretation on the Sub-Problem of the Research

In order to examine whether the teachers' self-efficacy perceptions differ according to their gender status, an independent t-test was conducted, and the analysis findings are given in Table 6.

Table 6: Statistical Distribution of Teachers' Self-Efficacy Perceptions by Gender

Dimension	**Gender**	**N**	**$\bar{X}$**	**Ss**	**sd**	**t**	**p**
Student Mootivation	Male	133	4,1805	,56311	1,663	350	,097
	Female	219	4,2717	,45571			
Classroom Management	Male	133	4,2998	,57672	,272	350	,786
	Female	219	4,3151	,46576			
Instructional Strategies	Male	133	4,2914	,54805	,067	350	,947
	Female	219	4,2951	,48505			
Scale	Male	133	4,2572	,51944	,710	350	,478
	Female	219	4,2939	,43814			

As can be understood from the examination of Table 6, it is seen that there is no significant difference in teachers' self-efficacy perceptions according to the gender variable. According to the results of the independent t-test conducted in the sub-dimensions of self-efficacy, in the Dimension of Student Motivation [t(350)=1.663, p>.05], in the Dimension of Classroom Management [t(350)=.272, p>.05], in the Dimension of Instructional Strategies [t(350)=.067, p>.05] and [t(350)=.478, p>.05] there is no significant difference across the scale.

One-Way Analysis of Variance (ANOVA) test was conducted in order to examine whether the teachers' self-efficacy perceptions differ according to their age, descriptive statistics are given in Table 7 and analysis findings are given in Table 8.

Table 7: Statistical Distribution of Teachers' Self-Efficacy Perceptions by Age

Dimension	Age	N	X̄	Ss
Student motivation	20-29	28	4,2813	,41335
	30-39	161	4,2166	,45495
	40-49	119	4,2195	,55377
	50 and over	44	4,3324	,55703
Classroom management	20-29	28	4,3080	,43632
	30-39	161	4,2570	,49415
	40-49	119	4,3309	,56668
	50 and over	44	4,4432	,42663
Instructional strategies	20-29	28	4,2946	,49326
	30-39	161	4,2679	,44958
	40-49	119	4,2742	,57127
	50 and over	44	4,4403	,53747
Scale	20-29	28	4,2946	,41169
	30-39	161	4,2472	,42660
	40-49	119	4,2749	,53200
	50 and over	44	4,4053	,47280

Table 8: Statistical Analysis of Teachers' Self-Efficacy Perceptions by Age

Dimension	Source of variation	Sum of squares	Sd	Mean of squares	F	P
Student motivation	Between groups	,558	3	,186	,742	,527
	Within groups	87,259	348	,251		
	Total	87,817	351			
Classroom Management	Between groups	1,285	3	,428	1,657	,176
	Within groups	89,930	348	,258		
	Total	91,215	351			
Instructional strategies	Between groups	1,099	3	,366	1,419	,237
	Within groups	89,839	348	,258		
	Total	90,938	351			
Scale	Between groups	,874	3	,291	1,321	,267
	Within groups	76,704	348	,220		
	Total	77,578	351			

When Table 8 is examined, teachers' self-efficacy perceptions according to their age are in the Student Motivation Dimension [F (3-348)=,742, p>.05], in the Classroom Management dimension [F(3-348)=1.659, p>.05], It is seen that there is no significant difference in the Dimension of Instructional Strategies [F (3-348) =1.419, p>.05] and in the Scale-General [F (3-348) = 1,321, p>.05].

In order to examine whether the teachers' self-efficacy perceptions differ according to their educational status, an independent t-test was conducted, and the analysis findings are given in Table 9.

Table 9: Statistical Distribution of Teachers' Self-Efficacy Perceptions by Educational Status

dimension	Education Status	N	X̄	ss	sd	t	p
Student motivation	Bachelor's degree	306	4,2373	,50631	350	,012	,991
	Master degree	46	4,2364	,46265			
Classroom Management	Bachelor's degree	306	4,3068	,51702	350	,239	,811
	Master degree	46	4,3261	,46359			
Instructional strategies	Bachelor's degree	306	4,2864	,52064	350	,696	,487
	Master degree	46	4,3424	,42527			
Scale	Bachelor's degree	306	4,2768	,47730	350	,333	,739
	Master degree	46	4,3016	,42348			

When Table 9 is examined, teachers' perceptions of self-efficacy according to their educational status are in Student Motivation Dimension [t(350)=,012, p>.05], Classroom Management Dimension [t(350)=.239, p>.05], Instructional Strategies Dimension [t(350)=.669, p>.05] and overall scale [t(350)=.333, p>.05] there is no significant difference.

One-Way Analysis of Variance (ANOVA) test was conducted in order to examine whether the teachers' self-efficacy perceptions differ according to their branch status, descriptive statistics are given in Table 10 and analysis findings are given in Table 11.

Table 10: Statistical Distribution of Teachers' Self-Efficacy Perceptions by Branch Status

Dimension	Branch	N	X̄	Ss
Student Motivation	Pre-school Teacher (1)	68	4,3805	,48553
	Classroom teacher (2)	110	4,3705	,42090
	History, Guidance, Geography, Social Studies Teacher (3)	29	4,2112	,51115
	Mathematics Teacher (4)	24	3,9010	,62007
	English Teacher (5)	25	4,0200	,53116
	Vocational High School, Computer System Teacher (6)	33	4,1402	,44935
	Turkish Teacher(7)	24	4,1354	,23578
	Physics, Chemistry, Biology, Science Teacher (8)	23	4,0761	,57621
	Visual art, Music, Physical Education Teacher (9)	16	4,1875	,64711
Classroom Management	Pre-school Teacher (1)	68	4,2923	,50215
	Classroom teacher (2)	110	4,3977	,52248
	History, Guidance, Geography, Social Studies Teacher (3)	29	4,2888	,45452
	Mathematics Teacher (4)	24	4,1771	,62437
	English Teacher (5)	25	4,2050	,52152
	Vocational High School, Computer System Teacher (6)	33	4,3333	,43037
	Turkish Teacher(7)	24	4,3438	,31331
	Physics, Chemistry, Biology, Science Teacher (8)	23	4,1141	,61111

	Visual art, Music, Physical Education Teacher (9)	16	4,3516	,53855
Instructional Strategies	Pre-school Teacher (1)	68	4,3713	,55398
	Classroom teacher (2)	110	4,3807	,45446
	History, Guidance, Geography, Social Studies Teacher (3)	29	4,2629	,46212
	Mathematics Teacher (4)	24	4,0833	,69711
	English Teacher (5)	25	4,2200	,44820
	Vocational High School, Computer System Teacher (6)	33	4,2311	,44647
	Turkish Teacher(7)	24	4,1927	,35734
	Physics, Chemistry, Biology, Science Teacher (8)	23	4,1522	,57524
	Visual art, Music, Physical Education Teacher (9)	16	4,3359	,63034
Scale	Pre-school Teacher (1)	68	4,3480	,48258
	Classroom teacher (2)	110	4,3830	,42310
	History, Guidance, Geography, Social Studies Teacher (3)	29	4,2543	,44255
	Mathematics Teacher (4)	24	4,0538	,61538
	English Teacher (5)	25	4,1483	,48264
	Vocational High School, Computer System Teacher (6)	33	4,2348	,41337
	Turkish Teacher(7)	24	4,2240	,24008
	Physics, Chemistry, Biology, Science Teacher (8)	23	4,1141	,57368
	Visual art, Music, Physical Education Teacher (9)	16	4,2917	,56005

Table 11: Statistical Analysis of Teachers' Self-Efficacy Perceptions According to Their Branches

Dimension	Source of variance	Sum of squares	Sd	Mean of squares	F	P	Significant difference
Student Motivation	Between groups	8,457	8	1,057	4,569	,000	1 / 4-5-6-7-8
	Withing groups	79,361	343	,231			2 / 4-5-6-7-8
	Total	87,817	351				3/4
Classroom Management	Between groups	2,536	8	,317	1,226	,283	
	Withing groups	88,679	343	,259			
	Total	91,215	351				
Instructional Strategies	Between groups	3,331	8	,416	1,630	,115	
	Withing groups	87,607	343	,255			
	Total	90,938	351				
Scale	Between groups	3,939	8	,492	2,293	,021	1/ 4-8
	Withing groups	73,639	343	,215			2/ 4-5-8
	Total	77,578	351				

When Table 11 is examined, there is no significant difference between teachers' self-efficacy perceptions in Classroom Management Dimension [F (8-343)=1,226, p>.05] and Teaching Strategies Dimension [F (8-343)=1,630, p>.05] according to their branch status. ; There was a significant difference in Student Motivation Dimension [F (8-343)=4.569, p<.05] and Overall Scale [F (3-348)=2.293, p<.05]. The homogeneity of the variances was checked to determine which groups had the differences and it was seen that they were homogeneous. As a result of the LSD test performed; In the dimension of student motivation, preschool teachers ($\bar{X}$=4.38) are more than Mathematics teachers ($\bar{X}$=3.90), English teachers ($\bar{X}$=4.02), Vocational High School teachers ($\bar{X}$=4.14), Turkish teachers ($\bar{X}$=4). ,13), from the Science Group teachers ($\bar{X}$=4.07); Classroom teachers ($\bar{X}$=4.37) Mathematics teachers ($\bar{X}$=3.90), English teachers ($\bar{X}$=4.02), Vocational High School teachers ($\bar{X}$=4.14), Turkish teachers ($\bar{X}$=4.13), From the Science Group teachers ($\bar{X}$=4.07); History, History, Guidance, Geography, Social Studies teachers ($\bar{X}$=4.21) have higher self-efficacy than Mathematics teachers ($\bar{X}$=3.90). Preschool teachers across the scale ($\bar{X}$=4.34); Mathematics ($\bar{X}$=4.05) and Science Group teachers ($\bar{X}$=4.11), Classroom teachers ($\bar{X}$=4.38); Mathematics ($\bar{X}$=4.05), English ($\bar{X}$=4.14) and Science Group teachers ($\bar{X}$=4.11) have higher self-efficacy.

One-Way Analysis of Variance (ANOVA) test was conducted in order to examine whether the teachers' self-efficacy perceptions differ according to the educational institution they work in. Descriptive statistics are given in Table 12 and analysis findings are given in Table 13.

Table 12: Statistical Distribution of Teachers' Self-Efficacy Perceptions by Educational Institutions

Dimension	Educational institution	N	$\bar{X}$	Ss
Student motivation	Primary school(1)	141	4,3493	,44584
	Secondary school (2)	103	4,1189	,50408
	High school(3)	78	4,0978	,56359
	Pre school (4)	30	4,4792	,32840
Classroom management	Primary school (1)	141	4,3475	,51735
	Secondary school (2)	103	4,2561	,52492
	High school (3)	78	4,2612	,50572
	Pre school (4)	30	4,4375	,40571
Instructional strategies	Primary school (1)	141	4,3617	,47802
	Secondary school (2)	103	4,2112	,52307
	High school (3)	78	4,2003	,53994
	Pre school (4)	30	4,5000	,42675
Scale	Primary school (1)	141	4,3528	,44016
	Secondary school (2)	103	4,1954	,49228
	High school (3)	78	4,1864	,49714
	Pre school (4)	30	4,4722	,34382

Table 13: Statistical Analysis of Teachers' Self-Efficacy Perceptions by Educational Institutions

Dimension	Source of variance	Sum of squares	Sd	Mean of squares	F	p	Significant difference
Student motivation	Between groups	6,485	3	2,162	9,250	,000	1/2
	Within groups	81,332	348	,234			1/3 2/4
	Toplam	87,817	351				3/4
Classroom management	Between groups	1,171	3	,390	1,509	,212	
	Withing groups	90,044	348	,259			
	Total	91,215	351				
Instructional strategies	Between groups	3,311	3	1,104	4,383	,005	1/2
	Within groups	87,627	348	,252			1/3 2/4
	Total	90,938	351				3/4

	Between groups	3,277	3	1,092	5,116	,002	1/2
Scale	Within groups	74,301	348	,214			1/3 2/4
	Total	77,578	351				3/4

When Table 13 is examined, there is no significant difference in the Classroom Management Dimension [F (3-348) =1.509, p>.05] according to the teachers' self-efficacy perceptions according to the educational institutions they work in; Student Motivation Dimension [F (3-348) =9,250, p<.05], Instructional Strategies Dimension [F (3-348) =4.383, p<.05] and Overall Scale [F (3-348) =5,116, p<.05] revealed a significant difference. The homogeneity of the variances was checked to determine which groups had the differences and it was seen that the variances were homogeneous. As a result of the LSD test performed; In the dimension of student motivation, teachers working in primary schools ($\bar{X}$=4.34) compared to teachers working in secondary schools ($\bar{X}$=4.11) and teachers working in high schools ($\bar{X}$=4.09); Teachers working in pre-school education institutions ($\bar{X}$=4.47) have higher self-efficacy than teachers working in secondary schools ($\bar{X}$=4.11) and teachers working in high schools ($\bar{X}$=4.09).

In the Dimension of Instructional Strategies, teachers working in primary schools ($\bar{X}$=4.36) are among the teachers working in secondary schools ($\bar{X}$=4.21) and teachers working in high schools ($\bar{X}$=4.20); Teachers working in pre-school education institutions ($\bar{X}$=4.50) have higher self-efficacy than teachers working in secondary schools ($\bar{X}$=4.21) and teachers working in high schools ($\bar{X}$=4.20).

Across the scale, teachers working in primary schools ($\bar{X}$=4.35) compared to teachers working in secondary schools ($\bar{X}$=4.19) and teachers working in high schools ($\bar{X}$=4.18); Teachers working in pre-school education institutions ($\bar{X}$=4.47) have higher self-efficacy than teachers working in secondary schools ($\bar{X}$=4.19) and teachers working in high schools ($\bar{X}$=4.18).

One-Way Analysis of Variance (ANOVA) test was conducted to examine whether the teachers' self-efficacy perceptions differ according to the type of higher education institution they graduated from. Descriptive statistics are given in Table 14 and analysis findings are given in Table 15.

Table 14: The Distribution of Teachers' Self-Efficacy Perceptions by the Status of the Higher Education Institution they graduated from

Dimension	Graduated Higher Education Institution	N	$\bar{X}$	Ss
Student Motivation	Faculty of Education	291	4,2247	,51061
	faculty of science and literature	23	4,4130	,46837
	School of Education/Institute	20	4,3063	,43201
	Faculty of Vocational Education	18	4,1389	,40649
Classroom Management	Faculty of Education	291	4,2955	,52622
	faculty of science and literature	23	4,4783	,40880
	School of Education/Institute	20	4,3688	,43956
	Faculty of Vocational Education	18	4,2500	,39991
Instructional Strategies	Faculty of Education	291	4,2732	,51245
	faculty of science and literature	23	4,5000	,47374
	School of Education/Institute	20	4,4625	,38066

	Faculty of Vocational Education	18	4,1736	,55097
Scale	Faculty of Education	291	4,2645	,48223
	faculty of science and literature	23	4,4638	,39535
	School of Education/Institute	20	4,3792	,38353
	Faculty of Vocational Education	18	4,1875	,39921

Table 15: Statistical Analysis of Teachers' Self-Efficacy Perceptions According to the Status of the Higher Education Institution they graduated from

Dimension	Source of variance	Sum of squares	Sd	Mean of squares	F	p
Student Motivation	Between groups	1,026	3	,342	1,372	,251
	Within groups	86,791	348	,249		
	Total	87,817	351			
Classroom Motivation	Between groups	,846	3	,282	1,086	,355
	Within groups	90,369	348	,260		
	Total	91,215	351			
Instructional Strategies	Between groups	1,931	3	,644	2,516	,058
	Gruplar içi	89,007	348	,256		
	Toplam	90,938	351			
Scale	Between groups	1,198	3	,399	1,819	,143
	Within groups	76,380	348	,219		
	Total	77,578	351			

When Table 15 is examined, teachers' self-efficacy perceptions are in Student Motivation Dimension [F (3-348) =1.372, p>.05], Classroom Management Dimension [F(3-348)=1.086, p>.05] according to the status of the higher education institution they graduated from. ; It was found that there was no significant difference in the Dimension of Instructional Strategies [F(3-348)=2,516, p>.05] and [F(3-348)=1.819, p>.05] in the Scale-General.

One-Way Analysis of Variance (ANOVA) test was conducted in order to examine whether the teachers' self-efficacy perceptions differ according to their job satisfaction, descriptive statistics are given in Table 16 and analysis findings are given in Table 17.

Table 16: The Distribution of Teachers' Self-Efficacy Perceptions by Job Satisfaction Status

Dimension	Place of Duty Satisfaction	N	X̄	ss
Student Motivation	No (1)	5	4,4250	,47269
	Partly(2)	73	4,1182	,54282
	Yes (3)	274	4,2655	,48523
Classroom Management	No (1)	5	4,5500	,43839
	Partly (2)	73	4,1729	,54031
	Yes (3)	274	4,3412	,49725
Instructional Strategies	No(1)	5	4,4250	,52738
	Partly (2)	73	4,1318	,58143
	Evet (3)	274	4,3344	,48051
Scale	No (1)	5	4,4667	,45682

Partly (2)	73	4,1410	,52721
Yes(3)	274	4,3137	,44817

Table 17: Statistical Analysis of Teachers' Self-Efficacy Perceptions According to Job Satisfaction

Dimension	Source of variance	Sum of squares	Sd	Mean of squares	F	p	Significant difference
Student Motivation	Between groups	1,431	2	,715	2,890	,057	-
	Within groups	86,387	349	,248			
	Total	87,817	351				
Classroom Management	Between groups	1,926	2	,963	3,765	,024	2/3
	Within groups	89,289	349	,256			
	Total	91,215	351				
Instructional Strategies	Between groups	2,452	2	1,226	4,836	,008	2/3
	Within groups	88,486	349	,254			
	Total	90,938	351				
Scale	Between groups	1,897	2	,948	4,373	,013	2/3
	Within groups	75,681	349	,217			
	Total	77,578	351				

When Table 17 is examined, it has been revealed that there is no significant difference in Student Motivation Dimension [F (3-349) =2.890, p>.05] according to teachers' self-efficacy perceptions and job satisfaction. Classroom Management Dimension [F (3-349) =3,765, p<.05], Instructional Strategies Dimension [F (3-349) =4.836, p<.05] and Overall Scale [F (3-349) =4.373, p<.05] revealed a significant difference. The homogeneity of the variances was checked to determine which groups had the differences and it was seen that the variances were not homogeneous. As a result of the LSD test performed; In the classroom management dimension, teachers who are satisfied with their workplace ($\bar{X}$=4.34) have a higher level of self-efficacy than teachers who are partially satisfied ($\bar{X}$=4.17). Teachers ($\bar{X}$=4.33) who are satisfied with the dimension of teaching strategies have a higher level of self-efficacy than teachers who are partially satisfied ($\bar{X}$=4.13). Teachers who are satisfied with their place of work ($\bar{X}$=4.31) in the scale have higher self-efficacy than teachers who are partially satisfied ($\bar{X}$=4.14).

The findings regarding the curriculum literacy of the teachers who constitute the sample in the study are given below. The findings regarding the level of curriculum literacy of the teachers are given in Table 18.

Table 18: Descriptive Statistics on Teachers' Education Program Literacy Levels

Dimension	**N**	$\bar{X}$	ss
Reading	**352**	4.27	.59
Writing	**352**	4.05	.69
Scale	**352**	4.17	.61

When Table 18. is examined, it is seen that the curriculum literacy of the teachers is in Reading ($\bar{X}$=4.27), Writing ($\bar{X}$=4.05) and overall scale ($\bar{X}$=4.17). From these results, it can be said that the curriculum literacy of the teachers is at a high level ($\bar{X}$=4.17). Teachers have the least program literacy in the writing dimension ($\bar{X}$=4.05) and the most in the Reading dimension ($\bar{X}$=4.27).

An independent test was conducted to examine whether the curriculum literacy of the teachers differed according to their gender status, and the analysis findings are given in Table 19.

Table 19: Statistical Analysis of Teachers' Program Literacy by Gender

Dimension	Gender	N	X̄	ss	sd	t	p
Reading	Male	133	4,2291	,69551	1,134	350	,258
	Female	219	4,3038	,53284			
Writing	Male	133	4,0559	,75947	,050	350	,960
	Female	219	4,0597	,65779			
Scale	Male	133	4,1454	,69659	,599	350	,550
	Female	219	4,1860	,56042			

When Table 19 is examined, the curriculum literacy of the teachers according to the gender variable is in the Reading Dimension [t(350)= 1.134, p>.05], in the Writing Dimension [t(350)= .050, p>.05] and in the Overall Scale [t(350)= .599, p>.05], there is no significant difference.

One-Way Analysis of Variance (ANOVA) test was conducted in order to examine whether the curriculum literacy of the teachers differed according to their age, descriptive statistics are given in Table 20 and analysis findings are given in Table 21.

Table 20: Distribution of Teachers' Program Literacy by Age

Dimension	Age	N	X̄	Ss
Reading	20-29	28	4,1286	,62904
	30-39	161	4,3031	,55075
	40-49	119	4,1989	,66247
	50 and over	44	4,4758	,52858
Writing	20-29	28	3,9949	,70441
	30-39	161	4,1025	,66862
	40-49	119	3,9640	,74364
	50 and over	44	4,1916	,64732
Scale	20-29	28	4,0640	,62716
	30-39	161	4,2063	,57877
	40-49	119	4,0855	,66524
	50 and over	44	4,3386	,56216

Table 21: Statistical Analysis of Teachers' Program Literacy by Age

Dimension	Source of variance	Sum of squares	Sd	Mean of squares	F	p
Reading	Between groups	3,190	3	1,063	3,008	,030
	Withing groups	123,017	348	,353		
	Total	126,208	351			
Writing	Between groups	2,267	3	,756	1,563	,198
	Withing groups	168,198	348	,483		
	Total	170,464	351			
Scale	Between groups	2,626	3	,875	2,343	,073
	Withing groups	130,027	348	,374		
	Total	132,653	351			

When Table 21 is examined, it is seen that there is no significant difference in the Writing Dimension [F (3-348) =1.563, p>.05] and the Scale-General [F (3-348) =2.343, p>.05] according to the curriculum literacy and age status of the teachers. There was a significant difference in Reading Dimension [F (3-348) =3,008, p<.05]. The

homogeneity of the variances was checked to determine which groups had the differences and it was seen that the variances were not homogeneous. As a result of the LSD test, teachers in the age group of 50 and over ($\bar{X}$=4.47) have higher levels of program literacy than teachers in the 20-29 age group ($\bar{X}$=4.12) and teachers in the 40-49 age group ($\bar{X}$=4.19) has.

An independent test was conducted to examine whether the curriculum literacy of the teachers differed according to the type of higher education institution they graduated from, and the analysis findings are given in Table 22.

Table 22: Distribution of Program Literacy of Teachers by Educational Status

Dimension	Education status	N	$\bar{X}$	ss	sd	t	p
Reading	Bachelor's degree	306	4,2806	,60570	,406	350	,685
	Postgraduate	46	4,2420	,56277			
Writing	Bachelor's degree	306	4,0521	,69651	,429	350	,668
	Postgraduate	46	4,0994	,70574			
Scale	Bachelor's degree	306	4,1703	,61757	,030	350	,976
	Postgraduate	46	4,1732	,60239			

When Table 22 is examined, according to the variable of the curriculum literacy of the teachers, in the reading dimension [t(350)=,406, p>.05], in the writing dimension [t(350)=.429, p>.05] and in the scale [t(350)= .030, p>.05] it is seen that there is no significant difference.

One-Way Analysis of Variance (ANOVA) test was conducted in order to examine whether the curriculum literacy of the teachers differed according to their branch status, descriptive statistics are given in Table 23 and analysis findings are given in Table 24.

Table 23: Statistical Distribution of Teachers' Program Literacy by Branches

Dimension	Branch	N	$\bar{X}$	ss
Reading	Pre-school Teacher (1)	68	4,3912	,53407
	Classroom teacher (2)	110	4,3467	,59995
	History, Guidance, Geography, Social Studies Teacher (3)	29	4,1609	,62119
	Mathematics Teacher (4)	24	4,1639	,79999
	English Teacher (5)	25	4,2267	,61524
	Vocational High School, Computer System Teacher (6)	33	4,0747	,48125
	Turkish Teacher(7)	24	4,3306	,40930
	Physics, Chemistry, Biology, Science Teacher (8)	23	4,1304	,71731
	Visual art, Music, Physical Education Teacher (9)	16	4,2875	,66208
Writing	Pre-school Teacher (1)	68	4,2910	,57492
	Classroom Teacher (2)	110	4,1455	,62284

	History, Guidance, Geography, Social Studies Teacher (3)	29	3,8473	,84854
	Mathematics Teacher (4)	24	3,8304	,97866
	English Teacher(5)	25	3,8486	,61801
	Vocational High School, Computer System Teacher (6)	33	4,0649	,55050
	Turkish Teacher (7)	24	3,8423	,68154
	Physics, Chemistry, Biology, Science Teacher (8)	23	4,0435	,74441
	Visual art, Music, Physical Education Teacher (9)	16	3,8527	,89991
Scale	Pre-school Teacher (1)	68	4,3428	,53774
	Classroom Teacher (2)	110	4,2495	,57857
	History, Guidance, Geography, Social Studies Teacher (3)	29	4,0095	,70228
	Mathematics Teacher(4)	24	4,0029	,86029
	English Teacher (5)	25	4,0441	,58870
	Vocational High School, Computer System Teacher (6)	33	4,0700	,47847
	Turkish Teacher (7)	24	4,0948	,51511
	Physics, Chemistry, Biology, Science Teacher (8)	23	4,0885	,71056
	Visual art, Music, Physical Education Teacher (9)	16	4,0776	,72162

Table 24: Statistical Analysis of Teachers' Program Literacy by Branches

Dimension	Source of variance	Sum of squares	Sd	Mean of squares	F	p	Significant difference
Reading	Between groups	4,095	8	,512	1,438	,179	
	Within groups	122,112	343	,356			
	Total	126,208	351				
Writing	Between groups	9,958	8	1,245	2,660	,008	1/ 3 1/4
	Within groups	160,507	343	,468			1/5 1/7 1/9
	Total	170,464	351				2/3 2/4 2/7
Scale	Between groups	5,294	8	,662	1,782	,079	
	Within groups	127,358	343	,371			
	Total	132,653	351				

When Table 24 is examined, it has been revealed that there is no significant difference in Reading Dimension [F (8-343) =1.438, p>.05] and Overall Scale [F (8-343)=1,782, p>.05] according to teachers' curriculum literacy branch status. There was a significant difference in the Writing Dimension [F (8-343) =2.660, p<.05]. The homogeneity of the variances was checked to determine which groups had the differences and it was seen that the variances were not homogeneous. As a result of the LSD test, pre-school teachers ($\bar{X}$=4.29); History, Guidance, Geography, Social Studies Teachers ($\bar{X}$=3.84), Mathematics Teachers ($\bar{X}$=3.83, English Teachers ($\bar{X}$=3.84), Turkish Teachers ($\bar{X}$=3.84) and Visual Arts, Music has a higher writing level than Physical Education Teachers ($\bar{X}$=3.85). Classroom Teachers ($\bar{X}$=4.14) have a higher writing level than History, Guidance, Geography, Social Studies Teachers ($\bar{X}$=3.84), Mathematics Teachers ($\bar{X}$=3.83) and Turkish Teachers ($\bar{X}$=3.84).

One-Way Analysis of Variance (ANOVA) test was conducted in order to examine whether the curriculum literacy of the teachers differs according to the educational institution they work in. Descriptive statistics are given in Table 25 and analysis findings are given in Table 26.

Table 25: Statistical Distribution of Program Literacy of Teachers by Educational Institution Status

Dimension	Educational institution	N	$\bar{X}$	ss
Reading	Primary school (1)	141	4,3418	,57048
	Secondary school(2)	103	4,1618	,64159
	High school (3)	78	4,2316	,60031
	Pre-school(4)	30	4,4689	,51476
Writing	Primary school (1)	141	4,1444	,59989
	Secondary school (2)	103	3,9147	,76866
	High school (3)	78	3,9560	,73533
	Pre-school(4)	30	4,4119	,60017
Scale	Primary school (1)	141	4,2465	,55177
	Secondary school (2)	103	4,0425	,66790
	High school (3)	78	4,0986	,63422
	Pre-school(4)	30	4,4414	,53981

Table 26: Statistical Analysis of Program Literacy of Teachers by Educational Institution Status

Dimension	Source of variance	Sum of squares	Sd	Mean of squares	F	p	Significant difference
Reading	Between groups	3,224	3	1,075	3,041	,029	1/2 1/4
	Within groups	122,984	348	,353			
	Total	126,208	351				
Writing	Between groups	7,735	3	2,578	5,514	,001	1/2 1/4
	Within groups	162,729	348	,468			3/4
	Total	170,464	351				
Scale	Between groups	5,106	3	1,702	4,644	,003	1/2 1/4
	Within groups	127,546	348	,367			3/4
	Total	132,653	351				

When Table 26 is examined, the curriculum literacy of the teachers in the Reading Dimension [F (3-348) =3,041, p<.05], in the Writing Dimension [F (3-348)=5.514, p<.05] and in the Overall Scale [F (3-348)=4.644, p<.05] revealed a significant difference. In order to determine which groups these differences were, the homogeneity of the variances was examined and it was seen that the variances were not homogeneous. As a result of the LSD test, teachers working in primary school ($\bar{X}$=4.34) in Reading dimension compared to teachers working in secondary

school ($\bar{X}$=4.16); Teachers working in preschool ($\bar{X}$=4.46) have a higher reading level than teachers working in primary school ($\bar{X}$=4.34). In the writing dimension, teachers working in primary school ($\bar{X}$=4.14) were compared to teachers working in secondary schools ($\bar{X}$=3.91); Preschool teachers ($\bar{X}$=4.41) have a higher writing level than primary school teachers ($\bar{X}$=4.14) and high school teachers ($\bar{X}$=3.95). In the scale, teachers working in primary school ($\bar{X}$=4.24) are among teachers working in secondary schools ($\bar{X}$=4.04); Teachers working in preschool ($\bar{X}$=4.44) have a higher program literacy level than teachers working in primary school ($\bar{X}$=4.24) and teachers working in high schools ($\bar{X}$=4.09).

One-Way Analysis of Variance (ANOVA) test was conducted in order to examine whether the curriculum literacy of the teachers differed according to the type of higher education institution they graduated from, descriptive statistics are given in Table 27 and analysis findings are given in Table 28.

Table 27: The Distribution of Teachers' Program Literacy of the Status of the Higher Education Institution they graduated from

Dimension	Graduated Higher Education Institution	N	$\bar{X}$	ss
Reading	Faculty of Education	291	4,2639	,61478
	faculty of science and literature	23	4,5188	,46491
	School of Education/Institute	20	4,2667	,60292
	Faculty of Vocational Education	18	4,1630	,44116
Writing	Faculty of Education	291	4,0729	,70790
	faculty of science and literature	23	4,0932	,69900
	School of Education/Institute	20	3,9321	,66016
	Faculty of Vocational Education	18	3,9167	,56042
Scale	Faculty of Education	291	4,1717	,62933
	faculty of science and literature	23	4,3133	,54173
	School of Education/Institute	20	4,1052	,59804
	Faculty of Vocational Education	18	4,0441	,46667

Table 28: Statistical Analysis of Teachers' Program Literacy According to the Status of the Higher Education Institution they graduated from

Dimension	Source of variance	Sum of squares	Sd	Mean of squares	F	p
Reading	Between groups	1,630	3	,543	1,518	,209
	Within groups	124,577	348	,358		
	Total	126,208	351			
Writing	Between groups	,769	3	,256	,526	,665
	Within groups	169,695	348	,488		
	Total	170,464	351			
Scale	Between groups	,843	3	,281	,742	,528
	Within groups	131,810	348	,379		
	Total	132,653	351			

When Table 28 is examined, the curriculum literacy of the teachers is in the Reading Dimension [F (3-348) =1.518, p>.05], in the Writing Dimension [F (3-348)=,526, p>.05] according to the status of the higher education institution they graduated from. and there was no significant difference across the scale [F (3-348) =,742, p>.05].

One-Way Analysis of Variance (ANOVA) test was conducted to examine whether the curriculum literacy of the teachers differed according to their job satisfaction, descriptive statistics are given in Table 29 and analysis findings are given in Table 30.

Table 29: Statistical Distribution of Teachers' Program Literacy by Job Satisfaction Status

Dimension	Place of Duty Satisfaction	N	X̄	ss
Reading	No (1)	5	4,3467	,65727
	Partly(2)	73	4,1005	,71812
	Yes (3)	274	4,3209	,55642
Writing	No (1)	5	3,9286	,64484
	Partly (2)	73	3,9051	,73502
	Yes(3)	274	4,1014	,68365
Scale	No (1)	5	4,1448	,64943
	Partly (2)	73	4,0061	,68702
	Yes (3)	274	4,2150	,58824

Table 30: Statistical Analysis of Teachers' Program Literacy by Job Satisfaction Status

Dimension	Source of variance	Sum of squares	Sd	Mean of squares	F	p	Significant difference
Reading	Between groups	2,827	2	1,414	3,999	,019	-
	Within groups	123,380	349	,354			
	Total	126,208	351				
Writing	Between groups	2,307	2	1,153	2,394	,093	2/3
	Within groups	168,157	349	,482			
	Total	170,464	351				
Scale	Between groups	2,517	2	1,258	3,375	,035	2/3
	Within groups	130,136	349	,373			
	Total	132,653	351				

When Table 30 is examined, there is no significant difference in Reading Dimension [F (2-349) =3,999, p>.05] according to teachers' curriculum literacy and satisfaction with the educational institution they work for; There was a significant difference in the Writing Dimension [F (2-349) =2.394, p<.05] and the Scale-General [F (2-349)=3.375, p<05]. The homogeneity of the variances was checked to determine which groups had the differences and it was seen that the variances were not homogeneous. As a result of the LSD test, teachers who are satisfied with their job (X̄=4.10) in the writing dimension have a higher writing level than teachers who are partially satisfied (X̄=3.90). Teachers who are satisfied with their job (X̄=4.21) in general have a higher curriculum literacy level than teachers who are partially satisfied (X̄=4.00).

Table 31: Pearson Correlation Analysis Results of the Relationship Between Teachers' Perceptions of Self-Efficacy and Program Literacy

	Self-efficacy	Self-efficacy Motivating the Student	Self-efficacy classroom management	Self-efficacy Instructional strategy

Program literacy	Pearson Correlation	***,707*** **	,682**	,610**	,678**
	Sig. (2-tailed)	,000	,000	,000	,000
	N	352	352	352	352
prgreading	Pearson Correlation	,698**	,659**	,614**	,671**
	Sig. (2-tailed)	,000	,000	,000	,000
	N	352	352	352	352
prgwriting	Pearson Correlation	,649**	,638**	,549**	,621**
	Sig. (2-tailed)	,000	,000	,000	,000
	N	352	352	352	352

As seen in Table 31, there is a positive, moderate and moderate relationship between teachers' curriculum literacy and self-efficacy (Pearson r=,707, p<.01). From this result, it can be said that as the curriculum literacy of the teacher's increases, their self-efficacy also increases positively or as the teachers' self-efficacy perceptions increase, the curriculum literacy levels increase positively.

4. Conclusion and Discussion

The following results were reached in this research, which aims to examine teachers' self-efficacy perceptions and curriculum literacy.

1. In this study, it was concluded that teachers' self-efficacy perceptions were at a high level. It has been seen that the self-efficacy perceptions of the teachers are the least in the dimension of student motivation and the most in the classroom management dimension. This result coincides with the research results of Swan, Wolf and Cano (2011), Buluç and Demir (2015), Toy and Duru (2016), Döş and Özşahin (2019), Ellez (2020) and Akbulut and Aküzüm (2020). . Again, when this result is compared with the self-efficacy levels of the pre-service teachers and the results of the research; Arslan (2008), Yeşilyurt (2013) and Tabancalı and Çelik (2013) seem to overlap. Because, in the aforementioned studies, it was concluded that teachers and teacher candidates have a high level of self-efficacy. On the other hand, this result, Üstüner, Demirtaş, Cömert and Özer (2009), Eker (2014), Reilly, Dhingra and Boduszek (2014) and Ocak, G., Ocak, İ. and Kalender (2017) research results. Because the results of this research revealed that teachers' self-efficacy levels are at a medium level.

2. Teachers' perceptions of self-efficacy; It was concluded that there was no significant difference according to gender, age, educational status and graduated higher education institution. This result, Üstüner, Demirtaş, Cömert, M. and Özer (2009), Telef (2011), Tabancalı and Çelik (2013), Reilly, Dhingra and Boduszek (2014), Öktem and Kul (2020), Ellez (2020) and It coincides with the research results of Akbulut and Aküzüm (2020). Because in these studies, no difference was found in self-efficacy according to gender and educational status. In the results of the research, it was concluded that the self-efficacy levels of women differ in favor of women, that is, the self-efficacy levels of women are higher than men. Again, this result, Korkut and Babaoğlan (2012). It also does not coincide with the research results of Yeşilyurt (2013), Dolapcı and Demirtaş (2016), and Deniz and Tican (2017). According to the results of this research, it was seen that male teachers and teacher candidates have higher self-efficacy than females.

3. Self-efficacy perceptions of teachers according to their branches; It was found that there was no significant difference in the dimensions of classroom management and teaching strategies, but there was a significant difference in the dimension of student motivation and overall scale. This difference; in the dimension of student motivation; Preschool teachers, Mathematics, English, Vocational High School, Turkish and Science group teachers, Classroom teachers; It was concluded that mathematics, English, Vocational High School, Turkish and Science group teachers had higher levels of self-efficacy. Again, History, Guidance, Geography and Social Studies teachers have higher self-efficacy than Mathematics teachers. In general, Preschool Teachers; Compared to the Mathematics and Science group teachers, Classroom Teachers have a higher level of self-efficacy than the Mathematics, English and Science group teachers. This result is similar to the research results of Yeşilyurt (2013) and Tabancalı and Çelik (2013). The results of the research conducted by Yeşilyurt (2013) and Tabancalı and Çelik (2013) on the self-efficacy of teacher candidates differed according to the departments they studied. In

Yeşilyurt's (2013) research, it was determined that the self-efficacy perception levels of teacher candidates studying in mathematics teaching were lower than those studying in other programs. In the study of Tabancalı and Çelik (2013), it was concluded that the candidates studying in the fields of social sciences had higher self-efficacy than the candidates in the fields of science-mathematics and foreign language. On the other hand, this result of the research does not coincide with the results of Üstüner, Demirtaş, Cömert, and Özer (2009) and Ellez (2020. Because, in the results of Üstüner, Demirtaş, Cömert and Özer (2009), it was seen that teachers' self-efficacy did not differ according to branches.

4. Self-efficacy perceptions of teachers according to the type of educational institution they work; It was concluded that there was no significant difference in the dimension of classroom management, but there was a significant difference in the dimensions of student motivation, teaching strategies and overall scale. This difference; In the dimensions of student motivation and instructional strategies, that is, in both dimensions; Teachers working in primary school, middle school and high school teachers; Teachers working in pre-school education institution; It has been found that teachers working in secondary and high schools have a higher level of self-efficacy. A similar result is seen in Üstüner Demirtaş, Cömert and Özer (2009). In the said study, it was concluded that teachers' self-efficacy differs in the student participation sub-dimension according to the type of school they work in, and teachers working in Anatolian and Science High Schools have higher self-efficacy than teachers working in General High Schools and Vocational Technical High Schools.

5. Teachers' self-efficacy perceptions according to job satisfaction; It has been revealed that there is no significant difference in the dimension of Student Motivation, but there is a significant difference in the dimensions of Classroom Management, Instructional Strategies and the Scale. Teachers who are satisfied with classroom management, instructional strategies, and place of work across the scale have higher levels of self-efficacy than teachers who are partially satisfied.

6. Program literacy of teachers, which is the other dimension of this research; It was concluded that the scale was at a high level in the dimensions of reading and writing in general. In other words, it can be said that teachers have a high level of program literacy. This result coincides with the research results of Çetinkaya and Tabak (2019), Aslan and Gürlen (2019), Güneş Şinego and Çakmak (2021), Boncuk (2021) and Sarıca (2021). Because in these studies, the curriculum literacy of the teachers was found to be high and sufficient. On the other hand, it was concluded that it partially overlaps with the research results of Kahramanoğlu (2019) because the curriculum literacy of the teachers is at a moderate level in the research.

7. Program literacy of teachers; It was concluded that there was no significant difference according to gender and graduated higher education institutions. This result coincides with the research results of Aslan and Gürlen (2019), Güneş Şinego and Çakmak (2021), Boncuk (2021) and Sarıca (2021). However, it does not coincide with the research results of Sarıgöz and Bolat (2018) and Kahramanoğlu (2019). Because, in the research results of Kahramanoğlu (2019), there was a significant difference according to gender and this difference was found in favor of female teachers.

8. Program literacy of teachers according to their age; It was found that there was no significant difference in the Writing Dimension and the Scale-General, while there was a significant difference in the Reading Dimension. Teachers aged 50 and over have higher levels of program literacy than teachers aged 20-29 and 40-49. This result coincides with the research results of Sarıca (2021). Because, in Sarıca's (2021) study, teachers' curriculum literacy differed significantly according to age, and teachers in the 51 and over age range had the highest average score.

9. It was revealed that there was no significant difference in the Reading Dimension and Scale-General, but there was a significant difference in the Writing Dimension, according to the branch status of the curriculum literacy of the teachers. Preschool teachers of these differences; Has a higher writing level than History, Guidance, Geography, Social Studies, Mathematics, English, Turkish and Visual Arts, Music, Physical Education Teachers. Class Teachers; He has a higher writing level than History, Guidance, Geography, Social Studies, Mathematics and Turkish Teachers. This result is similar to the research results of Sarıgöz and Bolat (2018) and Çetinkaya and Tabak (2019) conducted with pre-service teachers. In the said study, it was seen that the teacher candidates differ

according to the departments they study. On the other hand, this result does not coincide with the results of Kahramanoğlu (2019), Güneş Şinego and Çakmak (2021), and Aslan and Gürlen (2019). Because in these studies, there was no difference in the curriculum literacy of the teachers according to their branches.

10. Program literacy of teachers according to the educational institution they work in; It was concluded that there was a significant difference in the sub-dimensions of the scale and in the overall scale. These differences are; teachers working in primary school, teachers working in secondary school; Teachers working in preschool have a higher reading level than teachers working in primary school. In the writing dimension, teachers working in primary school are among the teachers working in secondary schools; Teachers working in preschool have a higher writing level than teachers working in primary and high schools. Teachers working in primary school throughout the scale; Among the teachers working in secondary school, teachers working in pre-school; have a higher program literacy level than teachers working in primary and high schools. This result is similar to the research results of Kahramanoğlu (2019) and Sarıca (2021).

11. Program literacy of teachers according to the satisfaction of the educational institution they work; It was found that there was no significant difference in the reading dimension, but there was a significant difference in the writing dimension and overall scale. Teachers who are satisfied with their position in the writing dimension and across the scale have a higher level of writing and program literacy than teachers who are partially satisfied.

12. There is a positive and moderate relationship between teachers' self-efficacy perceptions and their curriculum literacy. From this result, it can be said that as the teachers' self-efficacy perceptions increase, their curriculum literacy increases positively or as their curriculum literacy increases, their self-efficacy also increases positively.

5. Suggestions

It is possible to make some suggestions for both practitioners and researchers regarding the results of the research.

1. Program literacy of teachers according to the satisfaction of the educational institution they work; It was found that there was no significant difference in the reading dimension, but there was a significant difference in the writing dimension and overall scale. Teachers who are satisfied with their position in the writing dimension and across the scale have a higher level of writing and program literacy than teachers who are partially satisfied.

2. The characteristics of teachers are decisive in increasing the quality of education and training. For this reason, studies should be carried out to support teachers' self-efficacy perceptions and increase their curriculum literacy levels, taking into account the differences such as gender, age and seniority of teachers.

3. This research is limited to teachers working in a district. For this reason, it is necessary to conduct new studies with larger samples in order to generalize to a larger population.

4. In this study, teachers' self-efficacy perceptions and curriculum literacy scores in education were found to be high. In order to increase teachers' self-efficacy perceptions and curriculum literacy and make them sustainable, it is important to provide environments and opportunities where they can use their knowledge, skills and competencies effectively, as well as to remove obstacles that may reduce this. In addition, various measures should be taken to increase teachers' competencies, to enable them to develop themselves and to encourage their professional development.

5. Self-efficacy perceptions and curriculum literacy of teachers according to their branches; It was found that there was a significant difference in general scales and some sub-dimensions. This research was conducted with the survey model. Further research should be done with quantitative and qualitative methods.

6. It was concluded that teachers' self-efficacy perceptions differ according to the type of educational institution they work in. The reasons for this difference should be revealed by other studies and necessary precautions should be taken.

7. Teachers' self-efficacy perceptions differed according to their job satisfaction in the overall scale and in some sub-dimensions. It was revealed that those who are satisfied with the job position have higher self-efficacy. The causes of job dissatisfaction should be investigated and studies should be carried out to eliminate these dissatisfaction situations.

8. It has been revealed that the curriculum literacy of the teachers differs according to the educational institutions where they work. Teachers working in preschool education institutions have a higher program literacy level than teachers working in primary and high schools. The reasons for this difference should be investigated and the curriculum literacy status of teachers working in educational institutions at all levels should be increased.

5.1. Limitation of the Research

The most important limitation of the study is that the research sample was selected by convenient sampling. The relatively low number of teachers forming the sample also reduces the generalizability of the findings. In this study, it can be said that the data obtained may be subjective since the use of data collection tools, self-efficacy belief and curriculum literacy scales are directed towards teachers' reflection of their own feelings.

5.2. Conflict of Interest Statement

The authors declare no conflicts of interests.

5.3. About the Authors

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Engagement of Accounting Students in Learning Environment with the Implementation of Authentic-Based Multimedia in Nigerian Tertiary Institutions

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Abstract
The demand for university education to produce good graduate students for emerging nations to deal with global adjustments in the learning environment looks to be increasing as global technological advancements accelerate. Although, educational institutions could evolve technologically to increase students' potential to differentiate, particularly in mathematics and vocational education. As Accounting is concerned, it is one of the undergraduate courses that incorporate learning from other disciplines as well as vocational education. Nevertheless, student outcomes in accounting have remained inadequate, owing to high dropout rates and low engagement due to insufficient teaching techniques, resulting in weak sensory thinking skills needed for success. therefore, the purpose of this article is to bridge the gap by investigating an authentic-based multimedia learning environment to improve student engagement in the teaching of accounting education in Nigerian higher institutions. Constructivist learning methodologies are being investigated in conjunction with Mayer's cognitive theory of multimedia learning, cognitive engagement theories, and behavioral engagement theories in order to solve these challenges, which is critical for engaging students in many emerging nations. For this analysis, 90 respondents were chosen from a total population of 120 undergraduate accounting students. Data was collected through questionnaire surveys and semi-structured interviews with open-ended questions. The study's results are important for instructors and administrators who seek to increase student participation in multimedia learning environments in their classroom teaching. Future studies could emphasize on the difficulties of adopting authentic-based multimedia learning while keeping students engaged. To conclude, the federal government, higher education officials, curriculum designers, and accounting teachers are all working together to boost student engagement in Nigeria's multimedia learning environment, as shown in this article.

Keywords: Authentic-Based Multimedia, Engagement, Learning Environment, Skills, Accounting Education

1. Introduction

Technology as scientific knowledge is applied in practical ways to produce new things, as well as the distinct capacity to construct or build things. Also, nobody can doubt that technology is significant and plays an essential part in today's learning environment. Sawang et al. (2017) asserted that technology's progress is a standard in the learning process as many researchers are attempting to improve the learning process using technology as a means of improving students' attitude, involvement, and imaginative thinking. Students' engagement, confidence, and

pleasure are increased when technology is used in the teaching and learning process (Wang & Tseng, 2018). Multimedia activities have been incorporated into the engagement method of teaching, which will aid in the development of the students' intellectual thinking skills during the learning process. Therefore, in this regard, it is relevant to use technology in the classroom to improve students' learning environments. Whereby, learning is shown to be more successful when done using pictures and information rather than just words. Although technology has a significant influence on learning and some teachers are hesitant to include it into their curriculum (Chen, 2010). Multimedia learning is an effective technique of learning in today's world since it captures learners' attention and aids in the development of their comprehension of certain subjects. Which is one of the finest teaching strategies since it engages and arouses more than one sense at the same time, as it recognises the senses of vision and hearing while presenting varied stimuli (Bhutto et al., 2018). Although, there is no perfect way to improve student engagement in the learning environment, but technological teaching strategies have been shown to increase student engagement in a large class with the effectiveness of innovations to learning outcomes, transforming the traditional method of teaching into a very effective learning approach in the classroom (Martin & Bolliger, 2018). Effective learning, on the other hand, exists when the student is focused on the cognitive process of learning. Lock & Duggleby, (2017) asserted that the implementation and support of genuine learning in the world teaching is complicated, necessitating a degree of uncertainty in opening up educational techniques to solutions such as thinking about real challenges while engaging students with the potential to learn relevantly by connecting effectively with different peers. Whereas, students' usage of technology media inside the university setting to distribute knowledge through accessible means was linked to difficulties with learning engagement in this study. However, when the multimedia is misapplied and insufficiently given to students, learning can be hampered, contributing to a lack of comprehension of the students' interest and drive to study efficiently in the educational setting (Bond & Bedenlier, 2019). As a result, using an authentic-based learning environment will give significant support for students to be able to create the needed abilities in the actual world, free of distractions, dissatisfaction, and difficulties in classroom learning environment.

2. Literature review

2.1. Engagement through multimedia authentic-based learning

Various research findings have revealed that multimedia can convey knowledge and receive information, while also supporting students in creating visualizations of the genuine learning environment that are either untapped or underutilized (Made & Made, 2018). As a result, engaging multimedia learning fosters cooperation between students and learning media, as well as between students and their own information, enabling better learning goals. In terms of learning, most people absorb information based on what they hear and see (Bhutto et al., 2018). Multimedia learning outlines how people may learn more by combining words, pictures, books, and audio and video presentations. Darling-Hammond et al., (2020) observed that students engaged in the learning environment, on the other hand, will be required to be active in their own classroom activities in order to solve problems that are difficult to solve, as well as to work quickly and effectively in promoting the learning process in which they are exposed to diverse perspectives in order to solve their difficulties. Furthermore, the learning process is interactive with technology as a responsive reaction, allowing students to build both cognitive and behavioral abilities in order to connect with multimedia sensory information. Collectively, participants find multimedia resources, tools, interactive media, and learning materials, and they feel that multimedia can help them learn more effectively (Clark & Feldon, 2014).

2.2. Engagement through authentic learning

Students must be able to convey their views and ideas to others in order to remain interested in the connected themes being taught, and the more students are directly tied to what is being learnt and the utilization of real-world experiences suggests that if students identify classroom learning with the actual world, they would appreciate learning that contributes to engagement more. Herrington & Kervin, (2007) supported that authentic learning is important in the classroom because it allows students to encounter real-world situations and includes concepts of authentic learning principles to apply theoretical information in a real-world setting with the use of multimedia.

To posit the traditional technique, authentic-based learning was proposed (Kamariah et al., 2018) as the design materials utilized for students' accomplishment for a better understanding of learning in the classroom setting. As a result, using the multimedia interactive program me to engage the student cognitive abilities would respond to the authentic learning technique (Herrington & Kervin, 2007) on the student learning process inside the multimedia learning environment employing learning techniques shown in the figure below:

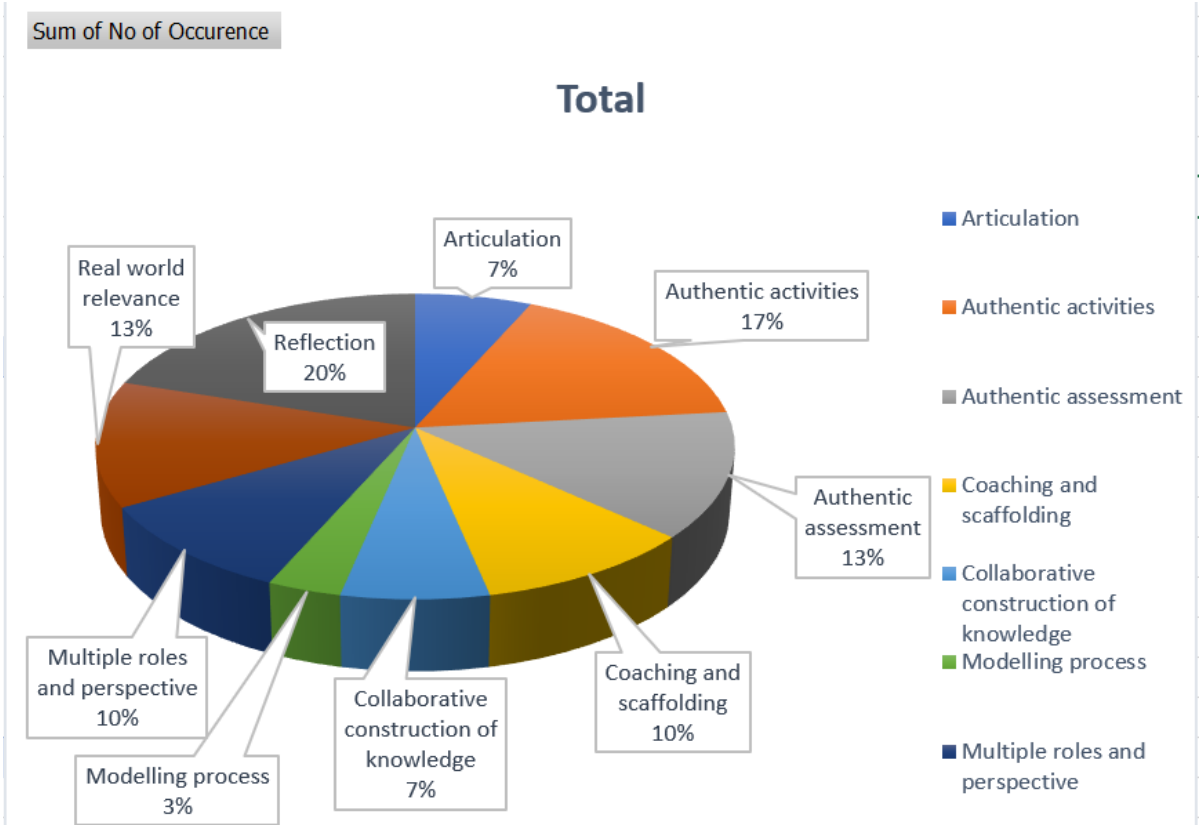

Figure 1: Elements of Authentic-based learning environment

Students will benefit even more from the incorporation of interactive multimedia since it stimulates authentic-based activities elements in assessing and organising their understanding in the actual world (Kola & Kehinde, 2019). Also, transfer of learning was boosted when learning materials incorporated significant aspects found in the application environment. Over time, tests of the idea yielded highly varied findings, owing primarily to the difficulty of defining which characteristics of a transfer environment were relevant (Perkins & Salomon, 2012). This implies that genuine learning settings investigates instructor feedback and realistic teaching approaches in the classroom to improve learning and help students attain academic success. Authentic learning context, according to Roach et al., (2018) is a means of reflecting on students' real-life situations in order to acquire new views and skills in detail rather than hearing and memorizing learning contents. Therefore, by having a strong similarity to real-world surroundings and using a range of audio-visual aids to bridge the gap between learning and the scope of the actual world, multimedia creates the sense of genuine learning. Hence, Ramlatchan, (2019) indicated that the theory of multimedia may be designed utilizing several contexts of learning where students learn through words, images, video, and graphics. This is in accordance with the use of multimedia to boost the students' cognitive abilities in addressing difficulties with the medium usage of graphics, text, video clips, and visual aids to strengthen their cognitive thinking, because multimedia may be used to replace traditional textual instructions, a wider range of stimuli, both verbal and visual, can be used to promote student engagement in an authentic learning environment.

3. Overview problem

Essential education is crucial for a person to have the skills and abilities to apply and execute information in a fast-changing world of comprehensive economy need, innovation, and modernization. The capacity to properly collect and use information is no longer a privilege, but rather a developmental imperative. However, when it comes to academic usage of multimedia materials, most underdeveloped nations, notably in Africa and Nigeria, are already on the wrong side of the digital technology. Except if Nigeria wants to be a key participant in the global market for ideas and prepare its people for the changing environment, the country should use multimedia resources to aid learning and teaching, as well as to encourage the growth of high-level technology in students' studies. The primary is that there is no ideal technique to increase student engagement in the classroom, however technology teaching tactics have been shown to increase student engagement in a big class with the efficacy of innovations to learning outcomes, transforming the traditional style of teaching into a highly successful learning strategy in the school environment. This is why lack of student involvement with the teaching style has been identified as a significant issue and the current research examines real learning multimedia to help students participate in cognitive and behavioral activities. This has also made students perform badly in accounting education in the past as a result of their attitudes toward the course, which is overly mathematical in structure. This issue has been related to the teaching methodology of the teachers.

4. Methodology

This quantitative study was carried out to better understand and examine the usage of multimedia in the teaching and learning environment. Accounting students of second year were taken randomly as samples for conducting Survey. Both sources of data were used, for the primary data a survey questionnaire was developed to get the findings. SPSS edition 21.0 was used for analysis and findings. Various statistical tests were utilized based on the study requirements. The reliability and validity of the obtained data were assessed using the Cronbach's Alpha reliability scale. The mean scores of the variable were determined using descriptive statistics.

5. Experiment/ Design

This study was conducted in the in the Higher institutions in South-West, Nigeria with 90 students from second year (200L). As a form of teaching, two different learning environments were provided, the first being traditional face-to-face lecturing on a white board and the second being multimedia learning. The authentic learning principles were used for the classes to engage the accounting students where multimedia animation was created in the entire process as shown in Figure 2.

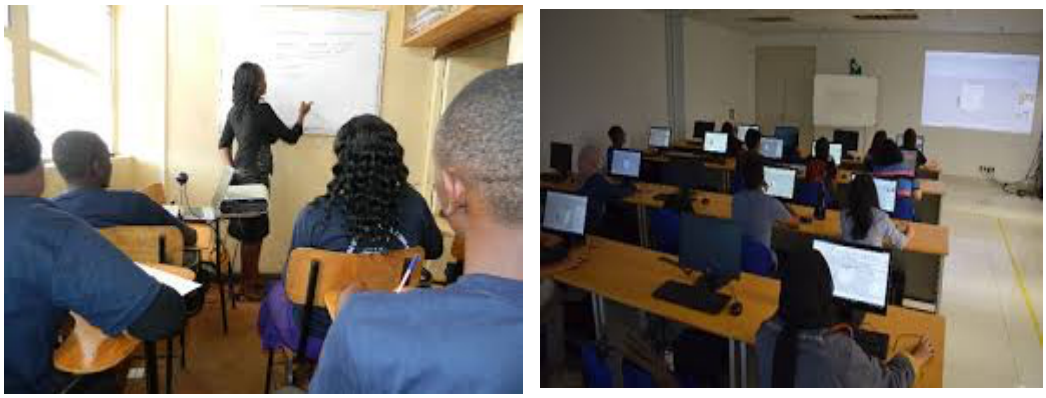

Figure 2: The snapshot of face-to-face lecturing class and multimedia learning class section

In the first module the lecture was given at white board on Multiple topics such as financial accounting concepts, Nature and purpose of Accounting, Bank reconciliation and accounting information with explanation and in second

module the same lectures were delivered on Multimedia projector with interactive interface and Multimedia activity-based.

Figure 3: Screenshots of Authentic-based multimedia learning environment interface.

6. Results

The results are divided into two sections: Face-to-face teaching mode and authentic-based multimedia teaching mode. The table 1 and table 2 show the reliability and mean scores statistics of the face-to-face teaching mode. There were 15 items in questionnaire related to mode of teaching. In table it can be seen the Mean Score and Reliability Statistics of face-to-face mode. Although, mean score calculated (4.273) along with the Reliability (.656) can be observed in tables respectively.

Table 1: Reliability Statistics

Cronbach's Alpha	No of Items
.656	15

Table 2: Mean Score

Mean Score	No of Items
4.273	15

(b) Authentic-based multimedia teaching mode

The table 3 involves of the statistical data about the mean score and reliability of authentic-based Multimedia teaching mode. In table, it can be seen that the Mean score is increased from (4.273) to (5.906) however, the Reliability also improved from the (.656) to (.842) correspondingly in table 3 and table 4.

Table 3: Reliability Statistics

Cronbach's Alpha	No of Items
.842	15

Table 4: Mean Score

Mean Score	No of Items
5.906	15

Table 5 summarises the results in a greater detail and the table displayed statistical information for both kinds of teaching, face-to-face teaching and multimedia teaching; based on the results, it can be stated that authentic-based multimedia learning aids students to learn more effectively in the learning environment.

Table 5: Summary of Statistics

Total sample size (90)	Face-to-face teaching mode	Authentic-based Multimedia teaching mode.
Mean Score	4.273	5.906
Reliability	.656	.842

7. Findings

Implementation of authentic-based multimedia learning environment among tertiary institutions students in Nigeria.

Table 6: Implementation of authentic-based multimedia learning environment among tertiary institutions students

Citation	Journal	Type of study	Findings
Aina Jacob Kola & Ajiboye Kehinde (2019)	Üniversitepark Bülten, Vol 8 Pg 7–18	Review	-Slow pace of technological development. -Absence of authentic learning in science and technical education.
Bature Iliya Joseph & Atweh Bill (2020)	International Journal of Educational Methodology Vol 6, Pg 319 - 335.	Qualitative Survey	-Challenges adopting the new pedagogy as a tool to achieving effective classroom practice -There is a lack of interest towards mathematics by students.
Lisa Bell, Jill Aldridge & Barry Fraser (2014)	Researchgate.net/publication/228886147	Mixed method	Using student feedback provides an authentic learning experience that gives teachers the opportunity to monitor, reflect and act to improve what they do in the classroom.
Heidi Tan Yeen-Ju & Neo Mai (2016)	International Journal of Social Science and Humanity, Vol. 6 Pg 536-540	Mixed method research	The learning environment was designed to be authentic, centering on a problem-based group project and incorporated web technologies
Albinus Silalahi, Wesly Hutabarat, Simson Tarigan & Yogi Chandra (2018)	Asian Journal of Social Science Studies Vol. 3, Pg	Empirical survey	lack teacher expertise and lack of technology facilities and infrastructure to enabling them to integrate the learning materials with the IT learning technology

Research carried out by (Kola & Kehinde, 2019) on the enhancement of technology in education through authentic learning in science and technical education in Nigeria shows that, this form of learning has a high retention rate and is retrievable in life, according to the principles of constructive argument theory which implies that authentic learning could be part of the solution to the national security challenges faced in Nigeria today. To ensure the achievement of real learning in science and technical education as a strong foundation for technology integration, a paradigm change in teaching methodologies to survey methods is required. Also in 2019, (Bature, 2020) conducted another research on, how academic instructors feel about the use of Productive Pedagogies as a strategy for changing the learning classroom environment practice in Nigerian schools. This revealed that in Nigerian learning classrooms, the conventional teacher-centered learning culture should make way to student-centered learning. Instead of the conventional role of teaching and providing instructions or knowledge to their students, instructors should display a readiness to give more of their duties to the students and take a passive role of supervision and assistance. It also showed that classroom debates and dialogues assist instructors in providing a

basis for guiding their students in developing and constructing their own ideas, skills, concepts, and/or procedures in order to enhance their performance in accord with (Bell et al., 2009). Therefore, the implication to this finding revealed that the approach of transforming from conventional classroom to a more reliable classroom environment assists accounting students engaging in a real collaborative learning classroom environment with authentic-based multimedia learning. This is an indicative of the fact that; conventional teacher-centered approach has previously dominated in Nigerian accounting classrooms which suggested that accounting instructors encountered early difficulties in embracing the new strategy as a tool for obtaining effective classroom learning environment.

8. Conclusions

Based on the fact that multimedia technologies are widely used by students and teachers, little is known regarding their influence on student involvement in the classroom. There are various reproaches for increasing student engagement. Interactive activities can be used to accomplish this because it will enable the students to retain more of the knowledge and abilities that are imparted to them as a result of it. The conclusions' statistical significance implies that multimedia has the potential to engage students in a real-world learning environment. Implementation of multimedia presentations like as videos, audio, and pictures have been found to be an appealing approach for students to study and enhance their cognitive performance. Hence, students at the higher-level benefit from the usage of multimedia because they gain a better knowledge of numerous ideas. As a result, future research should focus on creating a dynamic and interesting learning environment, and instructors should be educated how to efficiently use the tools available to them.

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The Influence of Grouping on the Quality of Collaboration in IPA-Physics SMP Instructional Using the E-Experiment Method in Sumatra Indonesia

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Abstract
The grouping model of collaborative learning in the scope of physics learning is less discussed in secondary schools. This study aims to determine the effect of gendered-grouping on the quality of collaboration in Physics Science instructional and its effect on learning outcomes. This study uses an experimental approach with a posttest-only group design model that involves two different characteristics of classes. The sampling of this study consisted of class VIII.1 consisting of 27 students (12 males and 15 females) as a homogeneous group, and class VIII.2 consisting of 31 students (14 male and 17 female) as a heterogeneous group taken by random cluster sampling. Data collection uses observation and tests to obtain quantitative data. Data analysis employed comparative statistics on collaboration level data and correlation statistics between collaboration level data and learning outcomes. The result shows that the quality of collaboration and student learning scores from homogeneous groups is better than heterogeneous groups. The correlation test results show that the level of collaboration of students from heterogeneous classes has a significant correlation with their learning outcomes. The correlation values the equation: $y = 1{,}242.x + 8.892$, which means it has a positive effect. It is concluded that homogeneous grouping has a positive effect on the quality of collaboration and the acquisition of student learning outcomes. Therefore, in improving the quality of learning collaboration using the SMP Science-Physics experimental technique, a strategy with gender homogeneous grouping worth application.

Keywords: Collaboration, Group, Homogeneous, Heterogeneous, Experimental Technique

1. Introduction

1.1 Identified Problems

The grouping model of collaborative learning in the scope of physics learning is less discussed in secondary schools. Many recent studies focused the other variables and attributes of the targeted participants (A. Afifah et al., 2019; Aqel, 2013; Erkens et al., 2016; Le et al., 2017; Muuro et al., 2016; Nurdiyanto et al., 2018; Wulannita,

2013). Realizing this opportunity, we intent to fill the gaps as contribution to the body of knowledge. Therefore, one of the identified problems is the effect of homogeneous and heterogeneous grouping on the quality of collaboration in Physics Science learning and its effect on learning outcomes.

Prior studies focused on different variables and thus yielded heterogeneous empirical evidence. Among them are the effect of interaction in different level (Aqel, 2013), hypothetical evidence in mixing collaborative and individual learning (Alterman & Harsch, 2015), the impact of different group orientation techniques (Muuro et al., 2016), collaborative learning in Geography course (Erkens et al., 2016), perception on obstacle in collaborative learning (Le et al., 2017), collaborative learning with computer supported technology and level of self confidence in heterogenic and homogeny classes (Afifah et al., 2019). What has not been done in the previous studies are problems in the current study. Henceforth, we found clear discrepancies upon these synthesized articles and thus we are convinced to undergo the current study.

The expected outcomes comprise evidence if homogenous and heterogeneous collaboration framed in experimental learning instructional can increase the learners 'collaboration and learning achievement. The researchers believe that collaboration between students in learning is vital. With collaboration, students can develop their respective potentials and abilities that determine the success of their learning. Wicaksono (2015) claims that collaborative learning has characteristics that include dividing different roles during group work. In the end, each group member will exchange information and complement each other (Wicaksono, 2015). This model is known as jigsaw technique. Suseno & Riswanto (2017) define collaboration as an attitude of mutual giving shown by the willingness to accept or listen to others and the willingness to give or help others (Suseno & Riswanto, 2017).

1.2 Previous Related Empirical Evidence

Many teachers often employ group learning techniques, and heterogeneous groups, where each group consists of men and women with some conditions adjusted (Pérez-Escoda & Rodríguez-Conde, 2015). The tacit is to promote better participation, understanding, and learning outcomes. However, the impact is not balanced. During the discussion process, male students depend on female students to do assignments and deliver discussion results. Therefore, the learning process tends to be dominated by female students. Other impacts include learning outcomes of cognitive aspects in physics subjects are also less than optimal. Students who have not reached the KKM (minimum standard grade) reach 60%. Because of this, it is necessary to make efforts to improve student physics learning outcomes by using technique that are more appropriate and have a positive impact on the cognitive achievement of students and students in a balanced way.

One of the efforts that the teacher has made is to use the discussion technique. Alma et al. (2012) and other researchers stated that the discussion technique is exchanging information, opinions, and experiences. Discussion regularly intends to get a more transparent and thorough mutual understanding of the problems or being discussed topics (Alma & Al, 2012; Pollock et al., 2011; Whatley & Bell, 2003). The results of the application of this technique indicate that small groups are reported to have more high levels of participation and are better and more comfortable for students in expressing opinions. Small group discussions were also more helpful in imparting understanding than large groups (Pollock et al., 2011). In addition, collaboration is believed to be very positive by students between different countries (Whatley & Bell, 2003).

Another strategy is the experimental technique or procedure. We believe that using this procedure can improve students' cognitive achievement. Dittrich et al. (2016) claim that laboratory experiments can improve intuitive understanding in the form of knowledge and experience (Dittrich et al., 2016). In line with the opinion above, Suseno (2012) also reveals that the experimental technique could develop learning outcomes in attitudinal, cognitive, and psychomotor aspects (Suseno, 2012). Furthermore, according to Gandhi, et al (2016) experimental activities can improve two aspects at once, namely the development of the experiment and the development of student's cognitive abilities (Gandhi et al., 2016). According to Jones, et al. (2016) laboratories can strengthen students' understanding through facts (Jones, J. A., D'Addario, A. J., Rojec, B. L., Milione, G., & Galvez, 2016). Riswanto and Noviayu's research (2017) reveals that laboratory-based learning can improve science process skills

and encourage the formation of the character of responsibility and cooperation (Riswanto & Noviayu, 2017; Suseno & Riswanto, 2017). Suseno & Harjati (2016) suggest that experimental techniques can develop metacognitive abilities (Suseno, N. & Harjati, 2016). Drawing on these empirical and hypothetical evidence, we believe that experimental procedures or technique can cause positive collaboration and learning outcomes.

By implementing the experimental technique, students are allowed to conduct experiments to prove a concept. However, the studies found bias. The previous researchers reported this condition where students did not have enough collaboration skills. Many students were found busy themselves, not wanting to help other friends or being less active. The interaction between students did not go well, so that learning outcomes were less than optimal (Le et al., 2017).

The purpose of grouping is to let students collaborate because the quality of students is different. The students have to collaborate so that they learn from each other (Muuro et al., 2016; Nurdiyanto et al., 2018). However; if the group consists of many students, the interaction process takes longer, and the learning outcomes are also less than optimal. Therefore the number of group members must be well designed (Xiang & Jing, 2020). It is clear that grouping model has potential possibilities and thus the current study addresses this issue in the physics education.

Scholars revealed some reasons why types of grouping are important. Djamarah (2010) states that in large groups, interpersonal contact is problematic. So it is better in learning to use small groups (Djamarah, 2010). Responding to this claim, another scholar defined it clearly. Sanjaya (2006) proposed that small group discussions consist of 3-5 students (Sanjaya, 2006). Nevertheless, this model is open to a modification of heterogenous or homogenous group models.

Other scholar claims that homogenous groups have drawbacks. The lack of homogeneous groups is that there are not many differences honing the process of thinking, negotiating, and arguing. Whereas the advantage of heterogeneous groups is that they provide opportunities for mutual learning and support among group members. While the weakness is that it can reduce the focus of student learning because it is disturbed by the opposite sex (Lie, 2010). It is clear that heterogenous groupings in this context are to mix males and females' students.

Similar scholars revealed some commonsense findings. They reported that the social maturity of students from heterogeneous schools is higher than homogeneous schools (Ramanda, P., & Khairat, 2017). Meanwhile, Afifah et al. (2019) revealed that homogeneous classes caused students have fairly good self-confidence so that the competition created was even tighter among the students. Along this positive effects are also drawbacks. The disadvantages of heterogeneous groups include: students are embarrassed to ask about lessons and are less accessible, so that students' focus in learning is lacking (Aprilia Afifah et al., 2019). The insightful benefits and drawbacks are schemed clearly from empirical evidence and thus we shift to clarify the thinking framework.

1.3 Theoretical Framework

The grouping of students in learning in Indonesia tends to use heterogeneous because theories claim that heterogeneous groups are better than homogeneous groups. However, some other scholars claim that homogeneous groups can be better than heterogeneous groups. A study reports that homogeneous grouping provides better performance than heterogeneous grouping. This study reveals that the symmetrical interaction pattern in heterogeneous group is higher than the homogeneous group, but the asymmetric interaction is lower than the heterogeneous group (Wulannita, 2013). Also,
the advantages of homogeneous groups are increasing activity, character building, and learning focus, which simultaneously impact student learning outcomes.

Learning is a process of interaction between various learning components: between students and learning resources, between students and the learning environment, between students and teachers, and between students themselves (Aqel, 2013). One of the essential factors is the interaction between students to strengthen collaborative learning and strengthen the interaction model in learning (Suh & Lee, 2006). The process of interaction between students in learning is certainly mutually beneficial. With this interaction process, students collaborate to

complement and accept each other to increase knowledge, attitudes, and skills. Scholars suggest that collaboration means a mutually beneficial relationship between two or more parties who work with various responsibilities and authorities to achieve goals (Aminah & Sastramihardja, 2007). In particular, the effect of learning outcomes based on the mixed-gender groups scored significantly higher on overall attitude and confidence than female students in computer-supported collaborative learning (Zhan et al., 2015, p. 593).

There are several advantages of individual and collaborative learning models. Individual learning has its advantages; greater autonomy, personal identity, ownership, work on own phase, work on own cognitive style. While collaborative learning has advantages; inter psychological or common understanding, work in the proximal zone, metacognitive style, multiple viewpoints, social cohesion (Alterman & Harsch, 2015, p. 412). The survey results in several schools captured information that school facilities were adequate with science laboratories, computer laboratories, libraries, and other supporting facilities. Teachers who teach follow education; the learning technique methods used are pretty varied: group discussion technique, experimental technique, and demonstration technique.

The selection of homogeneous and heterogeneous groups in learning need serious attention to the objectives or targets of learning. For particular target abilities, it is more suitable to use homogeneous groups, and for other purposes, it is more suitable to use heterogeneous groups (Erkens et al., 2016; R. Gillies, 2004; R. M. Gillies & Boyle, 2010). This consideration may be applicable in any context of instructional but it may harvest different results.

1.4 Research Question

To encourage collaboration in learning using experimental technique methods, it is also necessary to pay attention to choosing homogeneous or heterogeneous groups. Therefore, it is necessary to study comparing the quality of collaboration and student learning outcomes between homogeneous and heterogeneous groups in learning using experimental technique. In connection with the research objectives above, the formulation of this research is:

1. How is the level of collaboration of homogeneous groups of students using the experimental technique?
2. How is the level of collaboration between heterogeneous groups of students using the experimental technique?
3. What are the learning outcomes of homogeneous groups of students using the experimental technique?
4. What are the learning outcomes of heterogeneous groups of students using the experimental technique method?

2. Method

2.1 Design

This study employed experimental design using comparative procedures and resulting quantitative data (Creswell, 2014). Thus the initial abilities of students are the same, so the design of this study is a posttest-only control group design. The independent variable (X1 and X2) is homogenous grouping and heterogeneous grouping while the dependent variable (YI and Y2) is level of collaboration and learning outcomes.

The operational definition of homogeneous in this research is grouping based on gender, not based on IQ. In contrast, the operational definition of a heterogeneous group in question is grouping based on mixed-gender, not on different IQs. Thus, a homogeneous group is a mixture of only male or female students, while a heterogeneous is a mixture of male and female students with different IQ levels.

2.1 Population and Sampling

The research was carried out at SMP Negeri 1 *Gunung Agung Tulang Bawang*, West Lampung. The researchers assume that there is no superior class. In this study, two variables X1 versus Y1 and X2 versus Y2 are addressed.

The experimental learning technique with homogenous grouping is independent variable or X1 and the experimental learning technique with heterogeneous grouping or X2. The quality of collaborative learning in homogeneous grouping is dependent variable or Y1 and the quality of collaborative learning in heterogeneous grouping is dependent variable or Y2.

This study used 2 (two) classes as samples: Class VIII.1, the learning process uses homogeneous groups, and class VIII.2, the learning processes heterogeneous groups, with each group consisting of 3-5 students. There is an aspect observed in the study, i.e., the level of collaboration and students' learning outcomes. We took participants as cluster random sampling under the model of scholars (Hatch & Farhady, 1981).

2.3 Instrument

The research instrument uses participant observation, posttest, and documentation. The qualitative observation data contains interaction mobility during the experiment to measure the level of collaboration. Later, the observation data were analyzed and converted ordinal datasets for statistic purposes. In contrast, the posttest is in the form of quantitative data in the form of students' final grades after working in homogeneous and heterogeneous groups—likewise, document data in the form of data descriptions of the condition of students. All instruments are interconnected to the validity of the sough data.

2.4 *Data Collection and Analysis*

The data collection technique in this study uses observation, documentation, and tests. The researchers have tested all instruments for statistical validation and reliability. Data analysis used comparative test statistics, and the data met the requirements for normality and homogeneity (Creswell, 2014).

We treated the participants to do experimental learning three times with two scenarios; homogenous grouping and heterogeneous grouping. They were observed and the description of interaction and mobility of the group collaboration was administered. Further, we assigned the participants post-test for all groups. Then, we scored the test using interval scores for statistical purpose.

All types of data were analyzed simultaneously. The observation data were categorized using criteria content analysis (Miles et al., 2014).However; the results were then converted into ordinal data to meet statistical tests. As for observation, the document data were synchronized with the observation and post-test data. Finally, the post-test was the last data collecting stage. The result of this process was analyzed to yield interval data or scores of learning achievement.

3. Result

The current study seeks to answer the four research questions. The results are described in the following:

3.1 Students' collaboration level in homogenous group

The histogram shows the result data of the collaboration student homogeneous group observation (Figure 1).

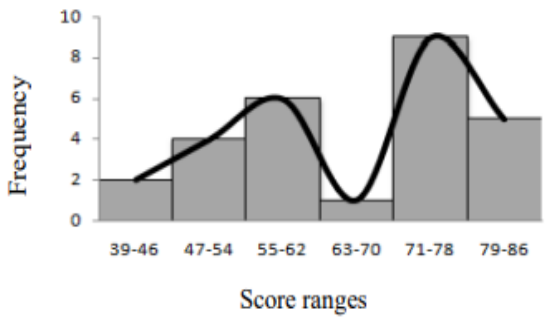

Figure 1: Data on the level of collaboration of homogeneous groups

The figure shows that the level of collaboration in homogenous group is respectively dominated by the score ranges of 71-78 and is followed by the score ranges of 55-62 and finally by the score ranges of 79-86. This result is higher than that of heterogeneous grouping as described in the next figure.

3.2 Students' collaboration level in heterogeneous group

In comparison to the histogram of collaboration level in homogeneous grouping is collaboration level in heterogeneous grouping. The result can be seen in figure 2.

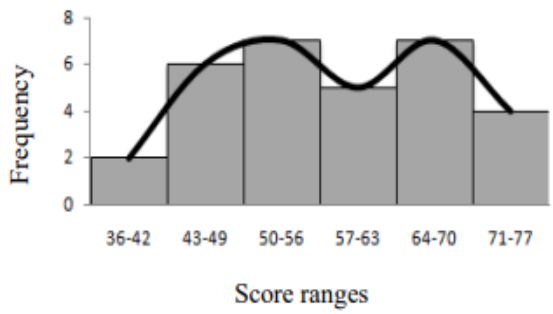

Figure 2: Data on the level of collaboration of heterogeneous groups

The figure shows that the level of collaboration is respectively dominated by the score ranges of 64-70, 50-56 and 43-49. This result is lower than the level of collaboration in homogeneous grouping as shown in figure 1 above.

Following homogenous and heterogeneous grouping is statistical test of them. The result of quantitative description of collaboration level data can be seen in the following table.

Table 1: Description of collaboration level data

	Homogeneous Group	Heterogeneous Group
Mean	66.6667	57.0000
N	27	31
Std. Deviation	13.13832	10.44988

The table shows that the mean of collaboration in homogenous group is 66.66 while the mean of collaboration in heterogeneous group is 57.00. In addition, the standard deviation (S.Dev.) in homogenous group is 13.13832 while in heterogeneous group is 10.44988.

This means that the average value of the collaboration level of a homogeneous group is higher than that of a homogeneous class.

The comparison test results using SPSS also obtained a significance value of 0.000, more diminutive than 0.05, which means that there is a significant difference. Thus, the researchers found that the collaboration quality of students in a homogenous group is better than in heterogeneous group.

3.3 *Students' learning outcomes of homogeneous groups*

In addition to level of collaboration, the students' learning outcomes are also addressed in the current study. The data on student learning outcomes with homogeneous groups is shown by a histogram as shown in Figure 3.

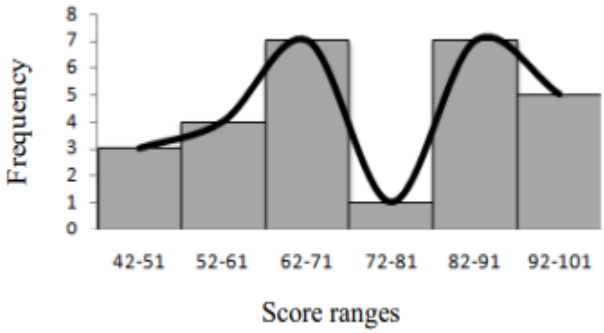

Figure 3: Result data of homogenous study group.

The figure shows that the students' learning outcomes in homogenous group are respectively dominated by score ranges of 82-91, 62-71 and 92-101. This result is higher than the counterpart grouping which means that homogenous grouping effect higher learning outcomes of the students. In comparison, the quantitative data of learning outcomes in heterogeneous grouping is described in the following part.

3.4 Students' learning outcomes of heterogeneous groups

The data on student learning outcomes with homogeneous groups is shown by a histogram as shown in Figure 4. This figure shows a histogram of the student learning outcomes data of heterogeneous groups.

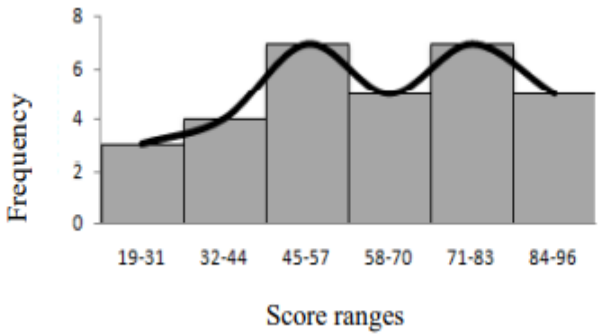

Figure 4: Data on learning outcomes of heterogeneous groups

The figure shows that the students' learning outcomes in heterogeneous group are respectively dominated by score ranges of 71-83, 45-57 and 84-94. This result is lower than the counterpart grouping which means that heterogeneous grouping effect less learning outcomes of the students. The result may be different in other subject than physics education.

The description of quantitative learning outcomes data is in Table 2.

Table 2: Comparative Description of Learning Outcomes

	Homogeneous Group	Heterogeneous Group
Mean	73.9259	61.0645
N	27	31
Std. Deviation	16.66393	20.20385

The table 2 shows that the mean of learning outcomes in homogenous group is 73.9259 while the mean of learning outcomes in heterogeneous group is 61.0645. In addition, the standard deviation in homogenous group is 16.66393 while in heterogeneous group is 20.20385.

This means that the average learning outcomes of a homogeneous group are higher than that of a homogeneous group.

The table 2 shows that the average value of learning outcomes for the homogeneous group is higher than the homogeneous group. The comparison test results using SPSS also obtained a significance value of 0.000, more diminutive than 0.05, which means there is a significant difference. Thus, in learning using the experimental method, student learning outcomes grouped homogeneously are better than student learning outcomes grouped heterogeneously.

Completing table 2 is the difference in the average level of collaboration on each indicator in more detail.

Table 3: Comparison of the Average Level of Collaboration between Homogeneous Groups and Heterogeneous Groups

No.	Indicators	Average	
		Homogeneous Group	Heterogeneous group
1	Students can build interaction.	68	61
2	Students exchange information.	59	54
3	Students work together to solve problems.	73	56

Table 3 shows the average score of collaboration. The homogenous group contributes higher level than that of heterogeneous in three indicators respectively 68.59, and 73 while that of heterogeneous is respectively 61, 54, and 56. This result indicates that student learning outcomes are also significantly affected by the quality of collaboration. The results of statistical tests show a correlation between the level of collaboration and learning outcomes, according to Table 4.

Table 4: Correlation test results between the level of collaboration and learning outcomes.

		Learning Outcomes	Quality of Collaboration
Pearson Correlation	Learning Outcomes	1.000	.979
	Level of Collaboration	.979	1.000
Sig. (1-tailed)	Learning Outcomes	.	.000
	Level of Collaboration	.000	.
N	Learning Outcomes	27	27

Based on Table 4, the correlation between the levels of collaboration and learning outcomes shows a significance value of 0.05, which means that there is a significant effect between the level of collaboration and learning outcomes. Based on The mathematical equation of the relationship between collaboration and learning outcomes is y = - 8,892 + 1,242.x.

Readers can see more details of the relationship between learning outcomes and the level of collaboration in the following graphics:

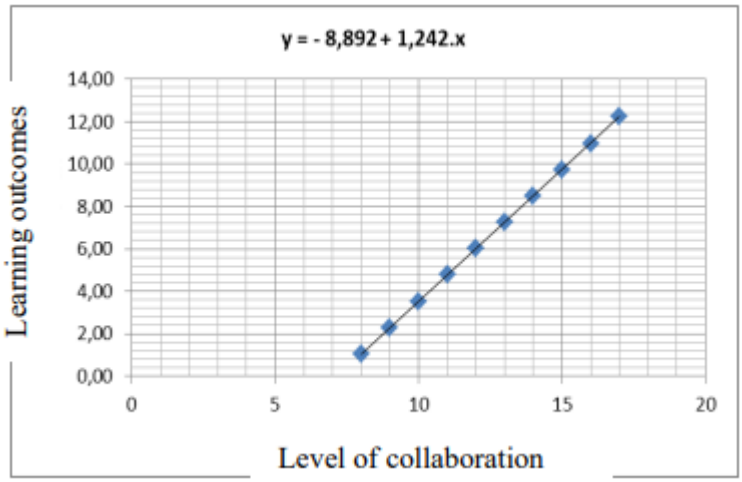

Figure 5: Graph of the relationship between the levels of collaboration with learning outcomes

The figure shows that level of collaboration influence the levels of learning outcomes significantly. Nevertheless, the current study reveals that collaboration in homogenous grouping contributes more than collaboration in heterogeneous grouping.

4. Discussion

The collaborative level data analysis results between homogeneous (male only or female only) and heterogeneous (mixed male and female) groupings showed significant differences. In general, the quality of class collaboration that uses homogeneous groups in the experimental method is better than classes that use heterogeneous groups. This finding confirms the previous finding where the experimental method was applied even though no gender grouping was reported (Dittrich et al., 2016). The heterogeneous grouping is confirmed to have bias (Lie, 2010) considering the statistical test as revealed in the previous study (Le et al., 2017). This finding also confirms previous studies where the experimental method can develop learning outcomes in attitudinal, cognitive, and psychomotor aspects (Suseno, 2012). The homogeneous grouping in the current study meets the condition of collaboration as proved by both empirical and hypothetical evidence. The students are hoped to collaborate well to harvest maximum learning outcomes (Muuro et al., 2016: Nurdiyanto et al., 2018). It is possible that the homogenous grouping makes students have good self-confidence so that they obtain higher learning outcomes (Arifah et al.,2019). Thus, the current findings confirm conditional contribution to the body of knowledge. Upon all, the laboratory experiment technique, in both homogeneous and heterogeneous group improve the students' cognitive, intuitive understanding, learning outcomes, and science proses skill (Dittrich et al., 2016; Suseno, 2012; Gandhi et al., 2016; Riswanto & Noviayu, 2017; Suseno & Harjati, 2016).

Table 3 shows the average level of collaboration for each indicator. Classes that use homogeneous gender groups are higher than heterogeneous groups, both aspects of building interaction, exchanging information, and working together to solve problems. This finding is in line with previous findings where small groups are reported to have higher levels of participation and are better and more comfortable for students in expressing opinions (Pollock et al., 2011). In addition, collaboration is believed to be very positive by students from different countries (Whatley & Bell, 2003). The discussion process that takes place in homogeneous groups tends to be more active than

heterogeneous groups. These results follow the findings of Affifah et al. (2019) that homogeneous groups lead to reasonably good self-confidence and research by Wulannita (2013) that the symmetrical interaction pattern of homogeneous groups is higher than classes with heterogeneous grouping. It means that the current study suggest homogenous grouping more than heterogeneous grouping in the context of physics education. This may not applicable in other courses and thus the finding is not absolute.

Following the level of collaboration is the result of learning outcomes. This study reveals that the student learning outcomes in homogeneous groups are also higher than the student learning outcomes in heterogeneous groups. The results of the statistical test also show a significant difference. These results follow Wulannita's (2013) research, which concluded that the homogeneous grouping performs better than the heterogeneous grouping with 57%. However, the context was in the course of biology. In addition, it is also in line with Lie's findings (2010) that the weakness of heterogeneous grouping is that it can reduce students' learning focus because they are disturbed by the opposite sex. The opposite gender distracts the process of collaboration due to feeling from being serious in doing analytical work in the current study.

The results of the linearity test also show that the mathematical equation model is linear. Where: y is the learning outcome, and x is the level of collaboration. Based on these equations, the researchers claim that if there is an increase in student collaboration, student learning outcomes will also increase according to the equation. This result is not confirmed by the prior studies statistically since the empirical evidence was mostly qualitative. Nevertheless, the findings are more or less confirmed by the prior studies(Dittrich et al., 2016; Suseno, 2012; Gandhi et al., 2016; Riswanto & Noviayu, 2017; Suseno & Harjati, 2016).

Wrapping research questions one to four, we are convinced that homogeneous grouping positively affects the quality of collaboration significantly and student learning outcomes in learning with the experimental technique.

5. Conclusion

Upon all findings and discussion we have come to conclusion. The level of collaboration of homogeneous groups is higher than that of heterogeneous groups in science-physics learning in junior high school using the experimental method. Homogeneous grouping in science-physics learning in junior high school using the experimental method has a better effect on the quality of collaboration than heterogeneous grouping. There is a significant relationship between the level of collaboration and the learning outcomes of Science-Physics in Junior High School using the experimental method. The learning outcomes of the homogeneous group are higher than the heterogeneous group in learning science-physics in junior high school using the experimental method.

This study was limited to few samplings in less developed areas. Pretest could have been done if the design were true experimental design. This study was experimental as method and laboratory experimental as treatment technique. The variable was merely contrasting homogenous and heterogeneous in gender and there were not any further attributes under gender variable such as low, medium, high attainment and low, medium and high learning motivation.

Provided the conclusions in the study, the authors put forward suggestions to improve the learning outcomes of Science-Physics Junior High School as follows. The strategy for selecting group forms in learning should pay attention to the goals or learning targets. Choosing a homogenous group strategy can improve the quality of collaboration in science-physics learning in junior high school using the experimental method in groups.

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The Impact of Using English Curriculum Design Based on Industry Needs in English Teaching on Vocational School to Improve Students English Skill for Industry Standard Working Communication

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Abstract
The output of vocational school (VS) still has lower competence in English communication for industrial working. It made Industry owners reject out of VS graduates to work on their companies. This research presents the result of implementing the English Curriculum Based on Industry Needs (ECBIN) in vocational schools. Following Nargers Rasidi (2016) this research uses questioners to find the perception of students and industry to ECBIN. Students and industry perception also is collected by interviews to 36 students and 5 managers of Industry who uses vocational output as workers. To find out the impact of implementing ECBIN on vocational school to the stents skill, this research conducted experimental activity. The result of research shows that the first is the competence of students after treatment ECBIN, students' competence increased by average of speaking score 75.58, listening 72.65, reading 80.34 and writing 78.56 for average. The score of students before treatment is 65.30 for speaking, 54.35 for listening, 70.12 for reading and 60.45 for writing skills. Secondly, it is found that students perception of ECBIN shows positive significantly 65,45 % agree and 11,57% students strongly agree. Thirdly, Industries stated 61,11% agree and 17,60 % strongly agree that ECBIN is very useful to support the output of vocational school for their career. So it can be concluded that English Curriculum based on industry or work field is more effective and useful for students and also companies. Vocational schools in Indonesia should change English curriculum from general English to English for Specific Purpose (ESP).

Keywords: English Curriculum-Based Industry Needs (ECBIN), English Students Skill, English for Industrial Standard, Vocational School

1. Introduction

Curriculum of English in vocational schools of Indonesia is still far from the expectation because it is held without need Analysis. Vocational school output is designed to be the candidate of workers who will be ready work directly in industries. They must be part of industries. Industry development is very fast. It is caused by Asians Nations

that makes agreement Economy ASEAN Community. This agreement cannot be thought as simple thing by vocational school. In it, the competition of working, business, capital dan power of country will be happened and it can be stopped. One of the most important is language for communication. It had been pointed that language for communication is English. So teaching English in vocational school must be different with senior high school. Vocational school has its own targets. But in many vocational schools in Indonesia, teaching English is still in general curriculum. They do not aware of the Economy ASEAN Community needs analysis. So it is important to investigate fit English teaching curriculum for Vocational schools.

2. Literature Review

Vocational school needs innovative curriculum to prepare the output in order to have competitive skill in English communication. Teaching English must accommodate skill for real conditions where the output of vocational school work. The English for specific needs is one of choice to motivate students in learning English to prepare their future in working. The ESP such as English for working or business is interesting to apply in learning and teaching English. Prachanant (2012), Pinelopi (2015), and Li (2016), Zahedpisheh N and Saffari N (2017), and Farrell, T. S. C., & Bennis, K. (2013) in their research about the use of English for Specific purposes shows that ESP is more effective to improve skill and motivation. They discuss that the research shows that it can explore students skill more. It shows that ESP is more effective for vocational school. Because of the condition of teaching and curriculum in vocational schools in Indonesia, it is important to design a curriculum for solving English skill students of vocational school problems. This is in line with Ahmed (2014), Alkhatib (2005), Baghban (2011) Basturkment (2010) Borgi & Anna (2005), Basthomi Y (2016) Fiorito L (2005), Hutchinson, T and Watter (1992), Kitkauskienne L (2006), Leong AM and Li J (2006), Liu. W and Huang Y (2013), Masaumpanah, Z and Tahririan M H (2013), Pham H L and Malvetti (2012), Dja'far, V. H., Cahyono, B. Y., & Bashtomi,Y. (2016). They discuss about teaching English for Specific Purpose (ESP). It can be understood that teaching English by using suitable curriculum related to the purpose give better result.

The innovation of learning and teaching English can be started by the designing of English Curriculum based on industry communication needs. As Ricards J.C (2001), Yin R.K (2009), Esteban, S. G., & Martínez, C. T. (2014) and Safnil (2019) discuss about the important of curriculum development in teaching English. Nasihin (2019) conducted research about teaching English for motorcycle technique students which results show that English material contained technical language is more effective to increase students motivation and skill. Suitable curriculum or model of learning is very important to make sure in reaching learning goal. As Nasihin. A, et.al. (2021) said that suitable method such as GBA in writing class can solve big problem of low skill in writing. So it is predicted that by suitable curriculum and learning design English skill of vocational school students can be improved.

This study was an attempt to answer research question: the firstly, how is competence of students in Vocational school after following learning activity by using curriculum designed based on industry communication needs; secondly how is the perception of students in Vocational school after following learning activity by using curriculum designed based on industry communication needs and thirdly, how is industry perception about learning and teaching English by using curriculum designed based on industry communication needs related to industry work.

3. Methods

Following Nargers Rasidi (2016) this study is used mix method. This research uses questioners to find the perception of students and the owners of industry to the design of English Curriculum based on industry communication needs on vocational school. Then, the impact of the curriculum is collected by pre-test and post-test. The participant of this research is 36 students of vocational school in business and management program of second year. From industry side, this research takes 6 industry owners to become the object of this study, they are Bank Rakyat Indonesia (BRI), astra honda Motor, Telkom Indonesia, Astra International Toyota, Astra International United Tractor and Sinetsu In Malaysia.

To find out the impact of implementing design of English Curriculum based on industry communication needs on vocational school to the students skill, this research conducted experimental activity. The students consist of 36 persons 31 female students and 5 male students. They followed English learning and teaching with materials such as; 1) Presenting proposal of the job in industry or company; 2) Presenting report of a job or project which has finished; 3) Presenting and responding manual book of operating tools; 3) Responding instruction of oral or sound based on the field study or work information; 4) Responding instruction of written form about work activities; 5) Writing Business letter and report of Job. At the end of semester, they followed test to know the improvement of skills in using English in communication.

The perception also is collected from interviews with 36 students of vocational school in second years. The perception of learning and teaching English by using curriculum designed based on industry communication takes from 6 managers of Industry who uses vocational output as workers at their company. According to Ary, D., Jacobs, Lucy, C., Sorensen, C., & Razavieh, A. (2010), the questionnaire must be scored, so the score as strongly agree (5), agree (4), not sure (3), disagree (2) and strongly disagree (1) according to Ary, D., Jacobs, Lucy, C., Sorensen, C., & Razavieh, A. (2010).

4. Finding and Discussion

4.1. Findings

The question in this study was how competence of students in Vocational school after following learning activity by using curriculum designed based on industry communication needs (ECBIN). Then the second question was to find out the perception of students in Vocational school after following learning activity by using ECBIN. The third objective is to find out the industry perception about learning and teaching English by using ECBIN related to industry work.

The result of research shows that the firstly the competence of students after treatment design of ECBIN on vocational school increase by an average of speaking score 75,58, listening 72,65, reading 80, 34 and writing 78,56 for average. The score of students before treatment is 65, 30 for speaking, 54,35 for listening, 70,12 for reading and 60,45 for writing skills. The better achievement of students skills such as in industrial communication necessary which consists of stating planning or presentation in speaking and writing skill, receiving instruction in reading and listening comprehension skill and reporting job in speaking and writing skill.

Table 1: The changes score of student skill test before and after implementing ECBIN on vocational school

Kind of skill in communication	**Score**		**Gap of score**	**Improvement percentage**
	Before	**After**		
Speaking (Presentation, stating report and giving instruction)	65, 30	75,58	10,28	15,74%
Listening to presentation, reporting and receiving instruction	54,35	72,65	18,30	33, 67 %
Reading paper or letter of business, factual report of work and manual book of working.	70,12	80, 34	10, 22	14,58%
Writing letter, report and instruction of work or SOP.	60,45	78,56	18,11	29,96%

Table 2: Responses of students to ECBIN on vocational school in learning.

Questions/items	**Frequency & Percent**	**Strongly disagree**	**Disagree**	**Not Sure**	**Agree**	**Strongly Agree**	**Total**
Q1. English curriculum consists of industry communication needs based on vocational school is interesting	Fre	2	7	2	20	5	36
	Per	5,56	19,44	5,56	55,56	13,89	100

Q.2. The class activity of speaking, listening, reading and writing by Curriculum based industry communication needs on vocational school is useful for my future.	Fre	0	3	2	24	7	36
	Per	0	8,33	5,56	66,67	19,44	100
Q.3. I can speak, listen, read and write English for working need after learning by Curriculum based industry communication needs on vocational school	Fre	1	2	7	23	3	36
	Per	2,78	5,56	19,44	63,89	8,33	100
Q.4. I have Confidence to speak, listen, read and write English about working in my field/ competence program	Fre	2	1	3	26	4	36
	Per	5,56	2,78	8,33	72,22	11,11	100
Q.5. I am sure I can pass selection of working test about English competence after I studied by Curriculum based Industry/ working communication needs on my school.	Fre	0	1	4	29	2	36
	Per	0	2,78	11,11	80,56	5,56	100
Q.6. Curriculum based Industry/ working communication needs in my school help me much to do my job.	Free	0	2	2	28	4	36
	Per	0	5,56	5,56	77,78	11,11	100

Secondly, it is found that students perception to the design of ECBIN in vocational school shows positive significantly 65,45 %. Students state that they agree that learning English by the design of ECBIN on vocational school is interesting and useful for their job. 11,57% students are strongly agree that this curriculum and learning development can give useful achievement for them. They also say that they think that the design has provoke their motivation to learn English to prepare their future

From interview, Tobing said : Learning English based on industry need is more interesting and it is easier than learning general English, I believed that this English is really benefit for getting work" (Interview: June 2018). Other student, Dery Ervian said: by following this class I believe that this English is helpful in my future, so this motivation supported me to be competent in speaking, listening, reading and writing English about working in my field/ competence program" (Interview: June 2018)

Table 3: The perception of industry toward curriculum and learning by using ECBIN

Questions	**Frequency & Percent**	**Strongly disagree**	**Disagree**	**Not Sure**	**Agree**	**Strongly Agree**	**Total**
Q1. English curriculum consist of industry communication needs based on vocational school is suitable for candidate of worker.	Fre	0	0	1	4	1	6
	Per	0	0	16,67	66,67	16,67	100
Q.2. The Materials of speaking, listening, reading and writing by Curriculum based industry communication needs on vocational school is useful for worker future in my company.	Fre	0	0	0	5	1	6
	Per	0	0	0	83,33	16,67	100
Q.3. Out Put from Vocational School can speak, listen, read and write English for working need after learning by Curriculum	Fre	0	0	0	4	2	6
	Per						100

based industry communication needs.		0	0	0	66,67	33,33	
Q.4. the graduating student From vocational School look confidence to speak, listen, read and write English in working activity on my company.	Fre	0	0	2	3	1	6
	Per	0	0	33,33	50, 00	16,67	100
Q.5. the graduated students of vocational school can pass selection of working test about English competence after following learning by curriculum based Industry/ working communication needs.	Fre	0	1	0	4	1	6
	Per	0	16,67	0	66,67	16,67	100
Q.6. Teaching English by using curriculum based Industry/ working communication needs can help worker to finish work at industry.	Fre	0	1	3	30	2	
	Per	0	11,11	8,33	83,33	5,56	

Thirdly, there are six big companies state that suitable English curriculum as ECBIN on vocational school help the student to increase their career in their company. They are Bank Rakyat Indonesia (BRI), astra honda Motor, Telkom Indonesia, Astra International Toyota, Astra International United Tractor and Sinetsu In Malaysia. They concluded that 61,11% industry owner agreed that the design of English Curriculum based on industry communication needs on vocational school is very useful to support the output of vocational school for their career in Industry or job field. 17,60 % industry are strongly agree that this curriculum and learning development is suitable, useful, helpful, and probably accepted by industry.

From interview to Muhyudi from Astra said: " English in Industry is very important, so if Vocational School prepare ESP for student based industry or their program needs, it will help them to get good job and good in career" (Interview: June 2018). Meky from Sinetsu said: By mastering English in working place or special English based their study program, the graduated of vocational school can get good position" (Interview: May 2018)

From the result above it can explained as follow the first as predicted, the design of English Curriculum based on industry communication needs in vocational school is effective to increase the English competence of vocational students in communication need in industry work. It can be seen from the average of students score in English test in communication as 76,78 compare with 62,56 from both scores the gap is 14, 23 with percentage average is 23,48%. Secondly, it is fit to the purpose of the developed curriculum of English teaching and learning based on the industry need communication that this curriculum can increase the positive motivation of students to master English before they come to the work situation. Thirdly, industry also shows positive perception to the curriculum. It is the purpose of curriculum development to make sure image of Industry to vocational output.

4.2. Discussion

The first, the improvement of students' skills by this implementation of design of English Curriculum based on industry communication needs in teaching and learning English on vocational school as discussed above add to previous finding of Prachanant (2012), Pinelopi (2015), dan Li (2016) they had found in their research that the using of English in tourism industry can explore students skill more. Nasihin (2019) also found that the using of learning media or material based vocational content had improved motivation and skill of motorcycle technics students in vocational school. Qin (2018) found in his research in vocational school English learning for speaking class that action research is a useful and practical way to propel the development of the oral English teaching in higher vocational education.

The skill of students were improved by ECBIN such as; the first, the presentation skill in speaking. Students were taught and trained to use every word, sentence pronunciation and speaking style in presenting a proposal of

industry activities. Secondly, understanding instruction in manual book or receipt in industry communication. The students were trained to do action in activity based on the standard operational procedures related to the activity in Industry. The instruction is in letter form, memos, announcements and manual book related to the industry need. Thirdly, the material is skill in taking information from oral source in work activity. In this setting, the students are invited to memorize vocabulary related to industry the student work then they are asked to present meeting communication. For this meeting some students are asked to be a leader or manager who gives information or instructions and the other becomes workers to give responds and do the instruction. This setting will show the skill of students in taking oral information.

Secondly, this curriculum can increase students motivation in learning English because is more interesting. It is in line with Xhaferi (2010) and Pham, H. L., & Malvetti, A. (2012) that ESP courses deal mostly with "language in context" rather than "language usage" (grammar rules or ways of structuring the language). English curriculum based on industry communication need is specifics construct based work situation communication. It is in line with the term ESP is defined as "goal oriented language learning" (Robinson, 1991). Hutchinson & Waters (1992) define ESP as an approach to language learning which is based on the learners' needs. So by this curriculum students believed that English is useful for their future and career.

Thirdly, Industry had positive image and trust in ECBIN implementation on Vocational School for students skill when they come to work in industry. This finding confirm previous research by Prachanant (2012), Pinelopi (2015), and Li (2016), Zahedpisheh N and Saffari N (2017), and Farrell, T. S. C., & Bennis, K. (2013) in their research about the using of English for Specific purpose shows that ESP is more effective to improve skill and motivation. They discuss that the research shows that it can explore students skill more. So industry can give trust of Students' English skill from Vocational school by implementation English for Specific purpose or ESP.

5. Conclusion and Suggestion

The research of using the ECBIN in teaching and learning English on vocational school can be concluded that firstly, more focused English curriculum to the program in vocational school and based on industry or work field can improve student skills in speaking, listening, reading and writing in communication of working in industry. Secondly, students has improvement in motivation to learn English due to the ECBIN implementation. Thirdly, industry gives appreciation for implementing the ECBIN on vocational school to prepare students before work.

This study demonstrates that teaching English by using ECBIN in teaching and learning English on vocational school shows positive impact. It can be suggested that the positive impact is from the increasing of students 'skill, students' motivation and industry trust to vocational school. So, this curriculum can be applied to all vocational school by revision based on skill program in certain vocational school.

Then, the research about relevant method and materials teaching for vocational school English is still important to conduct. More researches can make this findings become more guaranteed for industry trust to output of vocational school. In addition, if all vocational school agreed to use ESP design based Industry necessary, industry will accept the output of vocational school. Actually, the output of vocational school must be designed become competent in skill, smart in problem solving or adult personality and good in communication. There is no job can be held well without good communication.

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Explanators of Sports Commitment: Prosocial and Antisocial Behaviors

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Abstract
The aim of the study is to determine the effect of prosocial and antisocial behaviors on sports commitment. 294 (98 female+196 male) athlete students aged between 18 and 39 (Mean=20,69, SD=2,78) participated in the study by convenience sampling method for this purpose. "Personal Information Form," "Sports Engagement Scale (SES)" and "Prosocial and Antisocial Behavior in Sport Scale (PABSS)" are used as data collection tools in the research. Data collected online are coded and transferred to the SPSS program, and descriptive statistics, unrelated samples t-test, One Way ANOVA, Pearson correlation and multiple linear regression are used for statistical analysis. In the study, the level of significance is taken as $p<.05$. According to the results of the analysis, it is determined that there is a positive, low and significant correlation between Prosocial team-mate and Vigor, Dedication, Absorption and SES. It has been determined that there is a positive, low and significant correlation between absorption and Antisocial opponent and Prosocial opponent. While there is no significant effect in the prosocial opponent sub-dimension; It has been determined that Antisocial team-mate, Antisocial opponent and Prosocial team-mate have a significant effect on sports commitment. These variables explain 7.3% of the total variance on sports commitment.

Keywords: Sports Engagement, Prosocial and Antisocial Behavior, Sport

1. Introduction

As a social being, human exhibits many behaviors throughout his life. These behaviors affect people's social behaviors and characteristics in society. Prosocial and antisocial behavior emerges as the behavior patterns that people exhibit in social and sports environments throughout their lives. Prosocial behaviors are defined as behaviors that are beneficial to other people in society (Penner et al., 2005), a broad category of behavior that will benefit individuals other than oneself (Batson & Powell, 2003), a moral norm that expresses certain social expectations of helping other people in different social contexts (Bykov, 2017).

Researchers have shown that prosocial behavior is not only for a specific purpose, but also has an important role in the person providing the prosocial behavior (Eisenberg & Eggum, 2008). People who engage in prosocial behaviors exhibit certain behaviors primarily when they transfer their behaviors to other people for altruistic or social motives (Andreoni, Nikiforakis, & Stoop, 2017). In this context, people who engage in prosocial behavior have some positive personal results such as higher self-esteem, self-efficacy, and self-concept clarity (Fu et al., 2017; Zuffianò et al., 2016).

Since the second half of the 20th century, researchers have seen the positive results obtained from this behavior for people and relationships as a multidimensional construct that includes behaviors such as helping, volunteering and being kind to others, sharing, paying attention and caring, and making up for past mistakes. (Jebb et al., 2020; Grusec & Sherman, 2011). Relationships between people also benefit from these behaviors. Research shows that people help each other to achieve goals (Rusbult et al., 2009; Overall et al., 2010), respond to each other's needs (Reis, 2013), and support each other (Jakubiak et al., 2020).

Prosocial behaviors, which are evaluated positively by the society, are also a social skill and are separated from antisocial behaviors because they are completely voluntary behaviors (Gülay, 2010). Prosocial and antisocial behaviors have been the subject of much research in the last two decades (Kavussanu & Stanger, 2017). While prosocial behavior consists of behaviors aimed at helping or benefiting others, such as helping a player get off the field or congratulating another player after a good game (Eisenberg & Fabes, 1998); Antisocial behavior, on the other hand, is behavior that aims to harm or disadvantage others, such as verbally harassing or trying to injure another player (Sage et al., 2006). There are both prosocial and antisocial behaviors in sports (Kavussanu & Boardley, 2009).

People with antisocial behavior exhibit high levels of uncooperative behavior, low concern for the well-being of others, and are characterized by a lack of empathy, a reduced capacity to feel guilt and shame (Black, 2013; Simonoff et al., 2004).

Antisocial behavior is expressed as actions performed intentionally to harm another person (Cheon et al., 2018; Coyne et al., 2011). Commitment to sport represents people's determination and desire to pursue a particular activity or program, as well as belief, effort, energy and happiness in the sporting environment (Lonsdale et al., 2007). It is also defined as pleasure, participation opportunities, personal investments, attractive alternatives, social restrictions (Scanlan et al., 1993) and social supports (Scanlan et al., 2003).

In order to understand the commitment processes in sports, it is necessary to examine the Sports Commitment Model, which is a widely used theoretical framework model (Scanlan et al., 1993; Scanlan et al., 2016). SCM expresses sports commitment as a one-dimensional *"psychological structure that represents the desire and determination to continue sports participation"* (Scanlan et al., 1993). Apart from this, it explains why athletes continue to participate in sports (Scanlan et al., 2016).

While commitment research in the sports context has largely focused on the global commitment of athletes to sports, scientists have long recognized that there are numerous commitment goals and an individual is committed to one or more of these goals (O'Neil et al., 2021). It is thought that prosocial or antisocial behaviors performed in sports will enable the individual to internalize the values that are at the core of sports, and thus increase the commitment of individuals to sports. In this context, it is important to examine the effects of prosocial and antisocial behaviors on sports commitment and that the subject has not been studied in the literature.

2. Method

2.1 Research Model

In the research, correlational survey model is used to examine the correlation between sports commitment and prosocial and antisocial behaviors in sports. Correlational survey model is a research model that aims to determine the existence and/or degree of co-variance between two or more variables (Karasar, 2013).

2.2 Research Group

The research group consists of 294 (98 female+196 male) athlete students aged between 18 and 39 years (Mean=20,69, SD=2,78) using convenience sampling method. Information about the students is given in Table 1.

Table 1: Demographic Information

Variables	Subgroups	Frequency	%
Gender	Male	196	66,7
	Female	98	33,3
Sports Age	1-4 years	60	20,4
	5-8 years	103	35
	9-12 years	89	30,3
	13 years and over	42	14,3
Branch	Individual Sports	104	35,4
	Team Sports	190	64,6
Total		294	100

When the demographic information of the participants whose percentage values are higher than the other groups are examined, it is determined that 66,7% are female, 35% had been doing sports for 5-8 years, and 64,6% are students who took part in team sports.

2.3 Data Collection Tools

“Personal Information Form,” “Sports Engagement Scale” and “Prosocial and Antisocial Behavior in Sport Scale (PABSS)” are used as data collection tools. Detailed information about data collection tools is given below.

2.3.1 Personal Information Form

The "Personal Information Form" created by the researchers is used to determine demographic information. In this form, it is aimed to reach information such as gender, age and sports age of athlete students.

2.3.2 Sports Engagement Scale (SES)

The Spanish version of The Utrecht Work Engagement Scale (UWES) developed by Schaufeli, Bakker (2004) is adapted for athletes by Guillen and Martinez-Alvarado (2014). The scale, adapted to Turkish by Sırgancı, Ilgar, and Cihan (2019), is structured in a 5-category Likert type consisting of 15 items and three sub-dimensions. The sub-dimensions of the scale measure the vigor, dedication and absorption of the athletes. The Cronbach's alpha reliability of the scale is calculated in the vigor dimension (α=0.75), dedication dimension (α=0.75), absorption dimension (α=0.74) and the whole scale (α=0.90).
In this study, information about the scale is given in the table below.

Table 2: Distribution of SES Scale Scores

Dependent Variable	Item Number	$\overline{X}$	SD	Skewness	Kurtosis	Cronbach Alpha
Vigor	5	4.08	.60	-.440	-.024	.76
Dedication	5	4.32	.53	-.516	-.238	.78
Absorption	5	4.13	.58	-.414	.134	.77
SES	15	4.18	.52	-.437	-.103	.91

It is seen that the total mean score of the participants from the SES scale is 4.18. Cronbach Alpha reliability coefficient of the scale; .76 for vigor, .78 for dedication and .77 for absorption sub-dimension. The Cronbach

Alpha reliability coefficient for the overall scale is calculated as .91. The fact that the skewness and kurtosis values are in the range of ±1 provides the necessary prerequisite for the normal distribution.

2.3.3 Prosocial and Antisocial Behavior in Sport Scale (PABSS)

The Prosocial and Antisocial Behavior Scale in Sports, developed by Kavussanu and Boardley (2009) and adapted to Turkish by Balçıkanlı (2013), consists of four sub-dimensions (Prosocial behavior towards opponent, prosocial behavior towards team-mates, antisocial behavior towards opponent, antisocial behavior towards team-mates). Cronbach Alpha values in the original version of the scale; 0.74 for prosocial behavior towards opponent, 0.74 for prosocial behavior towards team-mates, 0.86 for antisocial behavior towards opponent, 0.83 for antisocial behavior towards team-mates. Cronbach Alpha values in the version adapted to Turkish by Balçıkanlı (2013); 0.72 for prosocial behavior towards opponent, 0.70 for prosocial behavior towards team-mates, 0.75 for antisocial behavior towards opponent, 0.70 for antisocial behavior towards team-mates.

In the analysis made within the scope of this research, information about the scale is given in Table 3.

Table 3: Distribution of PABSS Scale Scores

Dependent Variable	Item Number	$\overline{X}$	SD	Skewness	Kurtosis	Cronbach Alpha
Prosocial team-mate	4	4.12	.67	-.875	.884	.73
Prosocial opponent	3	3.58	1.01	-.755	.157	.83
Antisocial team-mate	5	2.07	.85	1.22	1.50	.83
Antisocial opponent	8	2.25	.88	.905	.60	.87

It is determined that the participants had an mean score of 4.12 in the Prosocial team-mate sub-dimension, 3.58 in the Prosocial opponent sub-dimension, 2.07 in the Antisocial team-mate sub-dimension, and 2.25 in the Antisocial opponent sub-dimension. The Cronbach Alpha reliability coefficient of the scale is calculated as .73 in the Prosocial team-mate sub-dimension, .83 in the Prosocial opponent sub-dimension, .83 in the Antisocial team-mate sub-dimension, and .87 in the Antisocial opponent sub-dimension. The fact that the skewness and kurtosis values are in the range of ±1.5 provides the necessary prerequisite for the normal distribution.

2.4 Data Collection

The questions in the research are made ready by transferring them to the online environment via Google forms. At the beginning of the form, detailed explanations about the purpose and importance of the research are given, and a voluntary participation consent button is added. Data are collected from teachers who read the information given and voluntarily agreed to participate in the research.

2.5 Data Analysis

The data collected in the online environment are coded and transferred to the SPSS program and the normality distribution is examined. In the analyzes made, the skewness and kurtosis values of the data are taken into account and it is determined that the values obtained are in the range of -1,5,…,+1,5. These values are accepted as suitable for normal distribution (Tabachnick & Fidell, 2013). Descriptive statistics, unrelated samples t-test, One Way ANOVA, Pearson correlation and multiple linear regression analysis are used in statistical analysis. In the study, the level of significance is taken as p<,05.

3. Results

In this part of the research; It is examined whether the variables of gender, sports branch and sports age differed significantly for Sports Engagement Scale (SES) and Prosocial and Antisocial Behavior in Sport Scale (PABSS) and it is tried to determine how much Sports Engagement Scale (SES) explained Prosocial and Antisocial Behavior in Sport Scale (PABSS).

In the table below, the gender variable total scores are compared in the sub-dimensions of the Sports Engagement Scale (SES) and the Prosocial and Antisocial Behavior in Sport Scale (PABSS).

Table 4: Unrelated samples t-test for gender

	Dependent Variable	Gender	$\overline{X}$	SD	t	df	p
SES	Vigor	Female	3.98	.61	-1.857	292	.064
		Male	4.11	.60			
	Dedication	Female	4.27	.58	-1.125	292	.261
		Male	4.34	.50			
	Absorption	Female	4.12	.63	-.112	292	.911
		Male	4.13	.56			
	SES	Female	4.12	.55	-1.141	292	.255
		Male	4.20	.50			
PABSS	Prosocial team-mate	Female	4.01	.74	-1.935	292	.054
		Male	4.17	.62			
	Prosocial opponent	Female	3.63	1.16	.765	292	.445
		Male	3.54	.91			
	Antisocial team-mate	Female	1.85	.75	-2.928	292	.004*
		Male	2.14	.81			
	Antisocial opponent	Female	1.92	.79	-4.383	292	.000*
		Male	2.37	.84			

*p<.05

According to the results of the analysis, while there is no significant difference between genders in SES and its sub-dimensions, and in the dimensions of Prosocial team-mate and Prosocial opponent, it is determined that there is a significant difference in the mean scores of Antisocial team-mate and Antisocial opponent.

In the antisocial team-mate dimension, male's mean scores ($\overline{X}$=2.14, SD=.81) are significantly higher than female's mean scores ($\overline{X}$=1.85, SD=.75). In antisocial opponent mean scores, the mean score of male ($\overline{X}$=2.37, SD=.84) is significantly higher than the mean score of female ($\overline{X}$=1.92, SD=.79).

In the table below, the total scores of the sports branch variable are compared in the sub-dimensions of the Sports Engagement Scale (SES) and the Prosocial and Antisocial Behavior in Sport Scale (PABSS).

Table 5: Unrelated samples t-test for Sports Branch

	Dependent Variables	Sports Branch	$\overline{X}$	SD	t	df	p
SES	Vigor	Individual Sport	4.08	.64	.210	292	.834
		Team Sport	4.06	.57			
	Dedication	Individual Sport	4.35	.56	.849	292	.397
		Team Sport	4.30	.51			
	Absorption	Individual Sport	4.22	.61	2.027	292	.044*
		Team Sport	4.07	.57			
	SES	Individual Sport	4.22	.56	1.136	292	.257
		Team Sport	4.15	.49			
PABSS	Prosocial team-mate	Individual Sport	3.98	.76	-2.428	174.446	.016*
		Team Sport	4.20	.60			
	Prosocial opponent	Individual Sport	3.47	1.16	-1.154	172.533	.250
		Team Sport	3.63	.91			
	Antisocial team-mate	Individual Sport	2.05	.82	.120	292	.905
		Team Sport	2.04	.79			
	Antisocial opponent	Individual Sport	2.23	.88	.110	292	.912
		Team Sport	2.22	.84			

*p<.05

According to the results of the analysis, while there is no significant difference between sports branches in vigor and dedication sub-dimensions and SES score averages, in the absorption sub-dimension, the score averages of those who participated in individual sports ($\overline{X}$=4.22, SD=.61) are compared to the mean scores of those who participated in team sports ($\overline{X}$=4.07, SD=.57).) are found to be significantly higher. While there is no significant difference in the sub-dimensions of Prosocial opponent, Antisocial team-mate and Antisocial opponent in terms of sports branch, the mean score of those who participated in team sports in the sub-dimension of Prosocial team-mate ($\overline{X}$ =4.20, SS =.60) is compared to the mean score of those who participated in individual sports branches ($\overline{X}$=3.98, SD= .76) are found to be significantly higher.

In the table below, sports age variable total scores are compared in the sub-dimensions of Sports Engagement Scale (SES) and Prosocial and Antisocial Behavior in Sport Scale (PABSS).

Table 6: Unrelated samples One way Anova for Sports Age

	Dependent Variables		Sum of Squares	Df	Mean Square	F	p
SES	Vigor	Between Groups	2,339	3	0,780	2,210	0,087
		Within Groups	102,303	290	0,353		
		Total	104,642	293			
	Dedication	Between Groups	1,636	3	0,545	1,975	0,118
		Within Groups	80,062	290	0,276		
		Total	81,698	293			
	Absorption	Between Groups	1,030	3	0,343	0,997	0,394
		Within Groups	99,841	290	0,344		
		Total	100,871	293			
	SES	Between Groups	1,459	3	0,486	1,842	0,140
		Within Groups	76,569	290	0,264		
		Total	78,028	293			
PABSS	Prosocial team-mate	Between Groups	4,427	3	1,476	3,376	0,019*
		Within Groups	126,770	290	0,437		
		Total	131,197	293			
	Prosocial opponent	Between Groups	1,594	3	0,531	0,522	0,667
		Within Groups	295,025	290	1,017		
		Total	296,619	293			
	Antisocial team-mate	Between Groups	2,112	3	0,704	1,097	0,351
		Within Groups	186,218	290	0,642		
		Total	188,331	293			
	Antisocial opponent	Between Groups	6,527	3	2,176	3,068	0,028*
		Within Groups	205,659	290	0,709		
		Total	212,187	293			

*p<.05

As a result of the analysis, it is determined that there is a significant difference between the groups in the dimensions of Prosocial team-mate ($F_{(3,290)}$= 3.376, p=.019) and Antisocial opponent ($F_{(3,290)}$=3.068, p=.028) In order to determine from which group the difference originated, the LSD test, one of the multiple comparison tests are performed.

Table 7: Multiple comparison test

Dependent Variable	Independent Variable	$\overline{X}$	SD	LSD
Prosocial team-mate	1-4 years (1)	3.89	.65	4,3,2>1
	5-8 years (2)	4.21	.63	
	9-12 years (3)	4.12	.67	

Antisocial opponent	13 years and over (4)	4.20	.74	4,3,2>1
	1-4 years (1)	1.94	.77	
	5-8 years (2)	2.26	.78	
	9-12 years (3)	2.31	.94	
	13 years and over (4)	2.36	.85	

As a result of the LSD test, 13 years and over ($\overline{X}$=4.20, SD=.74), 9-12 years ($\overline{X}$ =4.12, SD=.67), 5-8 years ($\overline{X}$ =4.21, SD=.63) in the Prosocial team-mate dimension, the mean scores of the students who do sports are found to be significantly higher than the mean scores of students who did sports for 1-4 years ($\overline{X}$ =3.89, SD =.65). In the antisocial opponent dimension, the mean score of the students who did sports for 13 years and over ($\overline{X}$=2.36, SD=.85), 9-12 years ($\overline{X}$=2.31, SD=.94), 5-8 years ($\overline{X}$=2.26, SD=.78), it is found to be significantly higher than the mean ($\overline{X}$ =1.94, SD=.77) of the students who did sports for 1-4 years.

Table 8: Correlation analysis results

	Vigor	Dedication	Absorption	SES	Prosocial team-mate	Prosocial opponent	Antisocial team-mate	Antisocial opponent
Vigor	1							
Dedication	,793**	1						
Absorption	,646**	,747**	1					
SES	,901**	,930**	,883**	1				
Prosocial team-mate	,168**	,250**	,225**	,235**	1			
Prosocial opponent	0,066	0,076	,148*	0,108	,476**	1		
Antisocial team-mate	-0,052	-0,082	0,008	-0,045	0,077	,128*	1	
Antisocial opponent	0,060	0,052	,131*	0,091	,122*	0,032	,736**	1

*p<,05, **p<.01

As a result of the correlation analysis, it is determined that there is a positive, low and significant correlation between Prosocial team-mate and Vigor, Dedication, Absorption and SES. It has been determined that there is a positive, low and significant correlation between Absorption and Antisocial opponent and Prosocial opponent.

Table 9: Results of regression analysis on sports commitment

Variable	B	Std. Error	β	t	P
Stable	3.44	.192	---	17.935	,000
Prosocial team-mate	.162	.050	.210	3.233	.001
Prosocial opponent	.016	.033	.031	.479	.633
Antisocial team-mate	-.158	.054	-.245	-2.897	.004
Antisocial opponent	.148	.051	.244	2.891	.004
R=,29 R^2_{adj}=,073					
$F_{(4,289)}$ = 6.779 p= ,000					

As a result of the multiple linear regression analysis in Table 8, it is seen that the regression model is statistically significant. According to the standardized regression coefficient (β), the relative importance of the predictor variables on sport commitment Antisocial team-mate, Antisocial opponent, Prosocial team-mate and Prosocial opponent. When the t-test results regarding the significance of the regression coefficients are examined; While no significant effect is found in the sub-dimension of Prosocial opponent (β= .031; t=.479; p=.663), Antisocial team-mate (β= -.245; t=-2.897; p=.004), Antisocial opponent (β =.244; t=2.891; p=.004) and Prosocial team-mate (β= .210; t=3.233; p=.001) are found to have significant effects on sports commitment. These variables explain 7.3% of the total variance in sports commitment.

4. Discussion

Prosocial behaviors are defined as behaviors that are made voluntarily without any expectation of reward, aiming to benefit another person or group (Çetin & Samur, 2018). In the study findings, while there is no significant difference between genders in SES and its sub-dimensions, and in the dimensions of Prosocial team-mate and Prosocial opponent, it is determined that there is a significant difference in the mean scores of Antisocial team-mate and Antisocial opponent. In the dimension of Antisocial team-mate and Antisocial opponent, the mean score of male is significantly higher than the mean score of females. It is seen that the most important reason why males engage in more antisocial behavior is the roles that society ascribes to genders. While the society can tolerate the male when he exhibits an antisocial behavior, similar behaviors of the female can be found strange. When the literature is reviewed, it is thought that males are more competitor (Gill, 2002), competitive (Sagar et al., 2011), ambitious and combative (Conway et al., 2005), thus causing antisocial behaviors. It has been determined that there are studies in the literature with similar findings (Micai et al., 2015; Stanger et al., 2013; Özdemir, 2019).

According to the results of the analysis, while there is no significant difference between sports branches in vigor and dedication sub-dimensions and SES score averages, the score averages of those who participated in individual sports in the absorption sub-dimension are found to be significantly higher than the mean scores of those who participated in team sports. Since the focus of the athletes in individual sports branches should always be on their opponent, it is thought that the concentration feature develops more than team athletes. Where the athlete lacks in team sports, his team-mate can make up for this deficiency. Therefore, it is possible to compensate for mistakes, but it is difficult to compensate for individual sports. For this reason, the athlete has to work very hard. It is thought that this situation affects the athlete's immersion in sports over time and increases the level of absorption. When the literature is searched, a study is found that is contrary to the study finding. In the study conducted by Siyahtaş and friends (2020), the vigor and dedication and SES score averages of the individuals participating in individual sports branches are found to be significantly higher than the team athletes, while the absorption score averages are not significant.

While there is no significant difference in the sub-dimensions of Prosocial opponent, Antisocial team-mate and Antisocial opponent in terms of sports branch, the score averages of those who participated in team sports in the Prosocial team-mate sub-dimension are found to be significantly higher than the mean scores of those who participated in individual sports branches. Athletes fighting for the same goal within the team; It is thought that it activates emotions such as cooperation, sharing, tolerance towards mistakes, and thus enables the display of prosocial behaviors within the team. When the literature is searched, it is seen that the findings for the variable used are few. Görgülü and friends (2018) found that the mean scores of individual athletes in the Antisocial opponent sub-dimension are significantly higher, but they did not detect a significant difference in other dimensions.

In the sports age variable, the mean score of the students who did sports for 13 years and over, 9-12 years, 5-8 years in the Prosocial team-mate and Antisocial opponent dimension are found to be significantly higher than the averages of the students who did sports for 1-4 years. It is thought that those who do sports for a long time internalize the values such as peace, love, respect, honesty, sharing and cooperation that are at the core of sports more and exhibit Prosocial team-mate more because they see sports as an action with its own purpose. It is thought that there is a significant difference in the Antisocial opponent dimension as a result of the individuals participating in the sport acting with the ambition of winning as they do the sport for a long time (Conway and friends, 2005). In the literature, it is seen that experienced athletes display more prosocial behaviors towards their team-mates than those with less experience (Turkay, 2019; Miller, Roberts, & Ommundsen, 2004; Kagan & Madsen, 1972).

When the t-test results regarding the significance of the regression coefficients are examined; While no significant effect is found in the Prosocial opponent sub-dimension, it is determined that Antisocial team-mate, Antisocial opponent and Prosocial team-mate had a significant effect on sports commitment. These variables explain 7.3% of the total variance on sports commitment. When the literature is searched, it is seen that there is no study similar to this study. Within the scope pf prosocial behaviors, people helping each other to achieve goals (Rusbult et al., 2009; Overall et al., 2010), and supporting each other (Jakubiak et al., 2020), are thought to affect sports

commitment. Helping and supporting behaviors can be expressed as a basic psychological need that positively affects individuals' relationship with the environment. It is stated that basic psychological needs may be related to the level of commitment to sports (Sırgancı et al., 2019). In the antisocial behavior dimension, it is thought that the individual's acting with the motivation to win affects his dedication to and attachment to sports more.

5. Conclusion

As a result, it can be said that prosocial and antisocial behaviors are effective in increasing commitment to sports. In addition, it can be stated that doing sports for a long time increases antisocial behaviors as well as prosocial behaviors. It is thought that measures should be taken to increase the frequency of prosocial behaviors and reduce the frequency of antisocial behaviors in order to preserve the essence of sports and to maintain the existence of sports.

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An Examination into Teaching Experiences of Contract Teachers Teaching Individuals with Special Needs

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Abstract
This study aimed to examine the experiences of contract teachers teaching students with special needs. To achieve this goal, this descriptive research was designed within the framework of the qualitative research paradigm. Semi-structured interviews were conducted with ten contract teachers. None of the participants had a bachelor's degree in special education. Besides, participants were graduates of departments such as sociology, sports management, and pre-school teaching. The students with special needs had an intellectual disability and an autism spectrum disorder. To determine the experiences of contract teachers, the data collected in the fall semester of the 2021-2022 academic year was analyzed via content analysis. Findings indicated that contract teachers were professionally inadequate. To eliminate these inadequacies, contract teachers tried to develop themselves by getting support from permanent teachers, reading books, and researching on the internet.

Keywords: Contract Teachers, Students with Special Needs, Experience

1. Introduction

Regarding the approaches to teacher education, mainly two main perspectives emerge throughout the world. The first one is pre-service education provided to individuals who are trained to become teachers, and the other is in-service education (Işık, Ciltaş, & Baş, 2010). Pre-service education refers to the training provided in undergraduate programs of faculties of education at universities. In-service education, on the other hand, aims to improve qualifications of in-service teachers in the process of gaining students the target behaviors. In both approaches, the aim is to provide more effective education to make teachers more qualified (Abazaoğlu, Yıldırım, & Yıldızhan, 2016; Abazaoğlu, 2014; Demirel & Budak, 2003). Teacher education in Turkey progresses in all branches, as it is in the rest of the world. In Turkey, since the 2000s, teacher training undergraduate programs have been progressing in line with the common program determined by the Council of Higher Education (YÖK), which is responsible for the operations of universities. In this context, the expectations of YÖK regarding the competencies that teachers should have are as follows: (a) teachers' dedication to their students and students' learning, (b) technological pedagogical content knowledge, (c) instructional planning and implementation, (d) evaluation and monitoring, (e) effective communication in the teaching-learning environment and managing student behavior, (f) planning and

realizing individual and professional development, (g) teamwork and cooperation, (i) knowing and understanding the legislation related to their professional duties and work (YÖK, 2011; TED, 2009).

The expectations and critiques regarding the competencies of today's teachers are gathered around the abilities such as problem solving, critical thinking, creative thinking, thinking in line with scientific processes, leadership skills, communication skills, and being an entrepreneur. Teacher education systems aim to train teachers equipped with these competencies (Akdemir, 2013; Ananiadoua & Claro, 2009; Oktik, 2007; Levin, 2001). In Turkey, the process is similar when training special education teachers. Although Special Education Teaching in Turkey dates back to the end of the 1800s, the first systematic teacher education initiatives started in the 1950s. The realization of the Gazi Education Institute special education can be considered as the beginning of systematic special education. In 1965, the Department of Special Education was established at Ankara University. With the establishment of YÖK in 1982, it was included in the Psychological Services in Education. Special Education Teaching, which was founded at the Anadolu University in 1983, had its first graduates in 1987. At first, those who graduated this program were identified as graduates of Special Education Teaching; however, in the 1990s, it started to graduate teachers in two different departments as the Mentally Disabled Teacher Education and Hearing-Impaired Education (Kargın, 2003; Şenel, 1998). Teacher training programs in the field of special education continued as an undergraduate program of teaching the mentally, hearing, and visually impaired until 2014. Teachers who graduated from these fields worked in the schools of the Ministry of National Education (MEB), where mentally, hearing, and visually impaired children receive education, in line with their branches. However, a new application was introduced with the amendment published in the Journal of Announcements of the Ministry of National Education numbered 2678: "*If the need for a teacher in the field of Special Education is not met by the graduates of the related undergraduate program, those who have a teaching degree are appointed if they have a master's or doctorate with/without a thesis in the field of special education (Visual, Hearing and Mentally Impaired).*" (MEB, 2014). Also, in some case (e.g., not having enough special education teachers; special reasons such as health, birth; insufficient teacher appointments), MEB has implemented other practices under the control of provincial directorates. Contract teachers are assigned to schools within these conditions. First of all, contract teachers are assigned considering the relevant branch. Then, teachers from different branches are also assigned as contract teachers if needed.

Based on Article 4 of the Civil Servants Law No. 657, teachers can be employed in different ways. Accordingly, teachers can work on a permanent or contract basis. However, according to article 89 of the same law, if there are not enough teachers with relevant qualifications in institutions, contract teachers are employed, who are paid for the hours they teach (Civil Servants Law No. 657, article 4 and article 89).

Studies on contract teachers have aimed to determine the problems experienced by contract teachers and to evaluate the contract teaching system. For example, Bayram (2009) argued that contract teachers had problems due to the lack of job guarantees and low salaries. In addition, contract teachers might experience problems in their relations with permanent teachers and parents. Bilgiç and Ekinci (2020) found that contract teachers had psychological, economic, managerial and social problems. Besides, the research reported that contract teachers had problems regarding unions, personal rights, and group membership (belonging). In a study conducted by Doğan, Demir, and Turan (2013), all contract teachers working at different levels opposed the contract teaching system, but they accepted contract teaching due to economic concerns. Şentürk (2017) found that the organizational commitment of contract teachers was at a low level, which might cause negative outcomes in terms of education. In addition, he suggested that activities should be carried out to increase the organizational commitment of contract teachers. Regarding the literature, it can be said that contract teachers have problems in terms of personal rights, they have inadequate teaching content knowledge, but they accepted contract teaching due to financial problems (Bayram, 2009; Bilgiç & Ekinci, 2020; Doğan, Demir & Turan, 2013; Senturk, 2017).
A study examining the views of contract teachers about students with special needs (Alaybay, 2021) acknowledged that contract teachers had deficiencies in the field of special education as well as in the context of practical experience. This study aimed to contribute to the literature by expanding the research findings. Accordingly, the aim was to shed light on the contract teaching status of contract teachers teaching students with special needs by determining their teaching experiences and to support these teachers.

The purpose of this research was to examine the teaching experiences of contract teachers teaching individuals with special needs. Accordingly, the following question was asked: "What are the experiences of contract teachers teaching students with special needs?" The answers are explained in the following section.

2. Method

This study aimed to examine the experiences of contract teachers who teach students with special needs. Therefore, the study was designed as descriptive research within the framework of the qualitative research paradigm. In qualitative research, data collection techniques include interviews, observations, and document analysis. The aim is to reveal the perceptions, thoughts, and existing events of the participants realistically and holistically. Besides, based on the data, the existing situation and phenomenon are evaluated according to the conditions they are in (Cresswell, 2016; Mills & Gay, 2016; Yıldırım & Şimşek, 2018). In this study, the data were collected from contract teachers working in a small-scale city located in the Central Anatolian Region of Turkey. Findings were handled within the framework of the qualitative paradigm due to the nature of the research.

2.1 Participants

Participants were contract teachers working in a small-scale city located in the Central Anatolian Region of Turkey. The participants' names were kept confidential. Table 1 presents information about participants' age, gender, the university and program, and the number of students with special needs in their classes as well as the types of special needs of these students.

Table 1: Demographic Information of Contract Teachers

Code Number	Code Name	Age/Gender	University Graduated	Program Graduated	Types of special needs	Number
1.	Adile	25/F	9 Eylül	Pre-school teaching	Autism spectrum disorder, intellectual disability, hearing impairment	5
2.	Derya	26/F	Hacettepe	Family and consumer sciences	Autism spectrum disorder	3
3.	Cemre	26/F	Erzincan	Psychological counseling and guidance	Intellectual disability	7
4.	Deniz	25/F	Afyon Kocatepe	Pre-school teaching	Autism spectrum disorder	3
5.	Cansu	29/F	Karamanoğlu Mehmetbey	Sports management	Intellectual disability	5
6.	Yasemin	28/F	Necmettin Erbakan	Psychological counseling and guidance	Intellectual disability	5
7.	Ece	29/F	Kırıkkale	Sociology	Autism spectrum disorder	2
8.	Emre	28/M	Niğde	Social studies teaching	Intellectual disability	4
9.	Asuman	29/F	Karamanoğlu Mehmetbey	Department of Physical education	Intellectual disability	4
10.	Gönül	24/F	Karamanoğlu Mehmetbey	Islamic sciences	Autism spectrum disorder	1

Note: *F=Female, M=Male*

2.2 Data Collection and Analysis

"Semi-structured Interview Questions" were prepared by both authors in the fall semester of the 2021-2022 academic year. The questions were sent to two experts (academicians) in the field of special education and qualitative research methods. Based on their feedback, the questions were finalized. Table 2 presents semi-structured interview questions.

Table 2: Semi-structured Interview Questions

1. What do special needs mean to you? What do you know about students with special needs?
2. What did you experience when you met your student with special needs for the first time?
3. When you met your student with special needs for the first time, what did you know about your student's needs?
4. What methods did you do to learn about the needs of your student with special needs?
5. What were the activities you did for your student with special needs during the education process? How would you rate these activities in terms of ease and difficulty?
6. In which subject(s) did you have difficulties regarding your student with special needs during the education process? Can you give examples?
7. What do you think about the situation of your student with special needs in the classroom? How did this student get along with other students? How was this student's participation in the classes?
8. How was a routine day for your student with special needs as you observed?
9. Do you want to be a teacher in a classroom having students with special needs in the future? Why/why not?
10. Is there any other opinion you would like to add on the subject?

Data were collected through the interview questions in Table 2. The data were collected from teachers working in a small-scale city in the Central Anatolian Region of Turkey during the fall semester of the 2021-2022 academic year. Demographic information of these teachers was presented in Table 1. Before the interviews, legal permission was obtained from the scientific research and publication ethics committee of the university where the first author works.

To determine the participants, the administrators of the special education schools in the province where the first author works were reached. School administrators were informed about the research, and they were requested to ask contract teachers whether they were willing to participate in the study. Accordingly, the volunteer contract teachers were recruited.

Participants were interviewed to determine the appropriate days and times. Then, semi-structured interviews were conducted between 30.12.2021 and 11.01.2022. All participants were interviewed in the teachers' room of the school where they work and in private. Before the interview, a consent form was read and signed by each participant. In addition, the participants were informed that the interviews would be recorded.

The interviews were transcribed by the second author. Then, the texts were checked by listening to the audio recordings again. The first author ensured the reliability of the transcripts. In other words, the first author checked the transcripts and listened to the audio recordings to correct the incorrect or missing spellings.

Interviews were listened to three times by the authors to manage the data. Content analysis was applied for analyzing the data. The data obtained from the content analysis are coded by the researcher/s. These codes contribute to the creation of sub-themes and themes in the later process. In addition, direct analyzes are included to reflect the views of the participants (Yıldırım & Şimşek, 2018). In this study, the authors read the interview transcripts and coded the data independently. They created sub-themes and themes independently based on codes. Then, they came together and discussed their codes, sub-themes, and themes. After this discussion, the authors reached a consensus on the themes, sub-themes and codes given in Table 3.

2.3 Research Ethics

The basic ethical rules in scientific research are voluntary basis, consent, respect for confidentiality, respect for privacy, beneficence/do not harm, and avoiding deception (Yıldırım & Şimsek, 2018). Accordingly, the following rules were considered during the research process: (a) The research process was presented clearly and understandably, and the necessary permissions were obtained from the relevant institutions and organizations, both written and verbally, (b) both written and verbal permissions were obtained from the relevant institutions and organizations, (c) a consent form was read and signed by each participant, (d) participants were told that they could withdraw from the research at any stage of the research, and (e) all individuals and institutions were given code names.

3. Results

The aim of this study was to examine the experiences of contract teachers who teach students with special needs. The data were collected in the fall semester of the 2021-2022 academic year, as explained in the title of "Data Collection and Analysis." Semi-structured interviews lasted 2 hours, 58 minutes, and 16 seconds in total. The longest interview was held with Emre (30 minutes and 9 seconds). The shortest meeting was recorded as 10 minutes with Yasemin. The average interview time was calculated as 17 minutes and 16 seconds. The transcripts of the interviews were determined as 44 pages in total.

The themes, sub-themes and codes are presented in Table 3. As seen in Table 3, there were themes: a) contract teachers' knowledge and views about individuals with special needs, b) contract teachers' experiences at school, and c) their views on contract teaching experience in the field of special education. These themes consisted of a total of nine sub-themes and 35 codes.

Table 3: Themes, sub-themes and codes

1. Contract teachers' knowledge and views about individuals with special needs
    - 1.1. Contract teachers' views about individuals with special needs
        - 1.1.1. Fall behind their peers
        - 1.2.1. Needing special support
    - 1.2. Contract teachers' feelings about when they meet a student with special needs for the first time
        - 1.2.1. Excitement
        - 1.2.2. Astonishment
        - 1.2.3. Fear
        - 1.2.4. Having difficulty
    - 1.3. Contract teachers' knowledge and views about individuals with special needs at the beginning of the implementation process
        - 1.3.1. Characteristics of individuals with special needs
        - 1.3.2. Lack of knowledge
    - 1.4. How contract teachers get information about individuals with special needs
        - 1.4.1. Getting information from academics
        - 1.4.2. Searching on the internet
        - 1.4.3. Getting information from permanent teachers
        - 1.4.4. Getting information from books
        - 1.4.5. Getting information from parents
        - 1.4.6. Attending seminars
    - 1. 5. Contract teachers' views on teaching individuals with special needs in the future
        - 1.5.1. Positive
        - 1.5.2. Indecisive

2. Contract teachers' experiences at school
    - 2.1. Issues that contract teachers have difficulties
        - 2.1.1. Communicating with families
        - 2.1.2. Teaching toilet skills
        - 2.1.3. Behavior management
        - 2.1.4. Planning the instruction
        - 2.1.5. Teaching academic skills

2.2. Activities easily performed by contract teachers
2.2.1. Material design
2.2.2. Teaching academic skills
2.2.3. Behavior management
2.2.4. Communicating with students

3. Contract teachers' views on contract teaching experience in the field of special education
3.1. Negative views
3.1.1. Teaching more severe students
3.1.2. Not being appreciated by managers
3.1.3. Mobbing by administrators
3.1.4. Being threatened by parents
3.1.5. Experiencing burnout
3.1.6. Working out of necessity
3.1.7. Having a low salary
3.2. Positive views
3.2.1. Loving his/her job
3.2.2. Working voluntarily

Contract teachers were asked to explain what comes to mind regarding the term 'individuals with special needs.' Adile, Deniz, Cansu, Ece and Asuman answered this question as individuals falling behind their peers. For example, Adile said, "*Students who fall behind their peers, fall behind in areas such as academic skills and daily life skills, and cannot adapt to them…*" According to Derya, Cemre, Yasemin, Emre and Gönül, individuals with special needs are those who need special support. For instance, Derya said, "*It refers to individuals who cannot follow the existing central program and need special plans and individual education plans Individuals with special needs are divided into autism spectrum disorder, down syndrome, and intellectual disability, and they all have different needs. I can define them as individuals who need to participate in daily life and make various academic adjustments."*

Contract teachers explained how they felt when meeting individuals with special needs for the first time. They experienced various emotions such as excitement, astonishment, fear, ignorance and having difficulty. Expressing his feeling of excitement, Emre said, "*Sir, I was excited at first. We entered a different environment and encountered a different cultural structure*." Adile, Asuman, and Gönül felt astonished. Asuman stated, "*Sir, for example, on the first day, students cursed me, so to speak. Since I had never known such children before, I stopped and looked. I felt out of place. I was astonished as there were students spitting and swearing in my face*." Some of the contract teachers teaching students with special needs for the first time said that they had experienced the feeling of fear. These teachers were Cemre, Ece and Emre. Cemre said, "*I remember. I will never forget the day I started school for the first time. I met students with special needs for the first time. There was no student with special needs I knew or was close to before. There was fear at first because I didn't quite know what to do.*" Deniz explained his sense of ignorance: "*I took a course on special education when I was at university. But this lesson was not detailed. When I started working with these students, I felt like a fish out of water. I learned a lot of things here. There is no special education in our university. At least the course taught at my university and the practice here are completely different things.*" Cansu and Yasemin also expressed similar feelings.

Regarding the knowledge of participants about individuals with special needs when they started their teaching experience, Adile, Cemre and Yasemin said that they had basic knowledge about the characteristics of individuals with special needs, while other teachers said that they did not know anything. Yasemin said, "*I took a course on special education when I was at university because I graduated from psychological counseling and guidance. I was aware of the characteristics of individuals with special needs.*". Expressing that she had no knowledge of individuals with special needs when she first started teaching, Cansu said: "*When I first started teaching, I didn't know anything about individuals with special needs*."

Regarding how contract teachers got information about individuals with special needs, many teachers (Derya, Cemre, Deniz, Cansu, Yasemin, Ece and Gönül) received information from permanent teachers. For example, Ece said, "*I got information from two teachers: school counselor and special education teacher… They helped a lot*

when I came to this school. Since I had never worked with students with severe disabilities before, I did not know about them. They supported me a lot in this regard." Some teachers (Derya, Deniz, Cansu, Asuman and Gönül) searched on the internet. For instance, Gönül expressed, "*There are web pages of institutions working on special education. I followed them. I examined how they make students do activities and how they make students behave. I generally searched on the internet, sir.*" Besides, Cansu, Ece and Asuman said that they attended seminars on special education in the city. At this point, Asuman said, "*Experts from an autism-related foundation came to our school to provide education. We attended their training. I follow them.*" Cemre and Emre benefited from the books, while Adile and Emre received information from academicians in the field of special education. Deniz got support from a knowledgeable parent: "*I don't know what to do with a severely autistic student without enough knowledge. I was asking a parent, Ms. Ayşe: what should I do? What do people do in the rehabilitation center? What did their previous teachers do? How did they work?… I always asked the parent about these issues.*"

Participants were asked whether they would like to teach individuals with special needs again in the future. Cemre, Deniz, Cansu, Emre, Asuman and Gönül were optimistic. For example, Cemre said, "*I would love to teach students with special needs, and to combine special education with the psychological counseling and guidance. It would be really nice for me*." However, some teachers (Adile, Derya, Yasemin and Ece) were indecisive. Yasemin said, "*I am not completely pessimist. When I work in special education… Although it is difficult, there is a challenge in every profession. We can overcome these difficulties by consulting and getting information. Each new day is different from the previous day. We are more open to innovation, so I can do it, I see this power in myself. But sometimes I say no. It requires a lot of patience. Your energy decreases. I guess I am indecisive.*"

For participants' experiences at school, they underlined the issues they had difficulty with and the activities they easily performed. Behavior management is one of the most common issues that contract teachers have difficulty in teaching individuals with special needs. Derya, Cemre, Cansu, Yasemin, Ece, Asuman and Gönül stated that they had difficulties in managing behaviors of individuals with special needs. Cansu said, "I *have serious difficulties in correcting the child's behavior*." Deniz and Ece had difficulties in planning the teaching. In this regard, Deniz drew attention to the problem he experienced in planning teaching: "*I have difficulty in finding out what the student needs to do and making a plan… What does the student need?… For example, a student has a problem behavior and I should sort it out, but how should I do it?… I have difficulty with such issues*." Cansu and Ece had problems in teaching academic skills. On this subject, Ece said, "*I was having difficulties in working on teaching academic skills and progressing*." On the other hand, some teachers (Adile and Emre) had problems regarding communicating with the families of students with special needs. For example, Adile said, "*I have difficulty with an issue: communicating with families… Parents in special education are very different. I have trouble communicating with them.*" Besides, Adile stated that she had problems in helping students with special needs to gain toilet skills.

Contract teachers explained the activities they easily performed while teaching students with special needs. Among the activities that contract teachers could easily perform were material design, teaching academic skills, behavior management, and communicating with students. Adile, Deniz and Cansu underlined that they easily realized the material design. For example, Adile explained, "*I did not have any problems regarding material design. When I was at university, we used to design materials in the teaching methods course and adapt them according to individuals with special needs. I can say that I improved myself in material design in that course*." Similarly, Adile and Yasemin stated that they did not have any difficulties in teaching academic skills and that they enabled students to easily acquire these skills. For instance, Yasemin said, "*Reading, writing, maths, or Turkish… If I am going to teach counting by 10, I can teach it by preparing activities in different ways. I can easily do this*." In addition, Cemre and Yasemin stated that they could easily communicate with students. In this regard, Yasemin said, "*Working with the current group is easier compared to the autism group I worked with before. That's why I can communicate with them and establish a dialogue*." Finally, Derya stated that she could easily manage behaviors when teaching individuals with special needs: "I can perform behavior management most easily. Because certain techniques really work for these students."

Participants expressed opinions about their experience of teaching as a contract teacher in the field of special education. They provided both positive and negative views. Adile discussed her views under two headings:

teaching more severe students and not being appreciated by the administrators. She said, "*Higher level students are given to permanent teachers, but students with more severe disabilities are given to contract teachers. I think this is a very wrong practice*." Besides, stated complained about not being appreciated by her administrators: "*It is clear what a teacher does. The teacher designs materials and teaches in the classroom. However, this situation is not noticed and appreciated by the managers*." Gönül voiced that she was mobbed by her managers: "*I had a lot of difficulties in this process for two reasons: I am not a graduate of the field, and I was mobbed by my administrators at school. This situation still exists.*" Deniz said that she was threatened by the parents: "*I never forget. A parent whose son couldn't speak came to class. Before the child was diagnosed with autism, he had a six-month hospital experience. The parent threatened: I had the chief physician and three doctors fired. If you don't take good care of my child, I will get you fired too. You are already a contract teacher…*" As an example of negative opinions was Yasemin teacher's feeling of burnout: "*I am experiencing burnout. Because I worked with children with autism for the first two years. Also, it is not easy to work in this school*." Ece said that she was working out of necessity: "*Sir, I have been here for five years, but this happened against my will. If I could, I would work in my own field*." Finally, Asuman underlined low salary by saying, "*We have a low salary, as you know. You know, too, the wage of contract teachers is really very low*."

Contract teachers expressed positive views regarding their experiences while teaching individuals with special needs. Derya and Asuman said that they were satisfied with their work. For example, Derya said, "*I am satisfied with the work I do. The special education group is more disadvantaged. I am satisfied with the feeling of being useful to them. I feel useful*." Cansu also stated that she worked voluntarily as a contract teacher, which was a positive situation for her. "*Working here is actually voluntarily. I don't do for financial concerns. After all, it is important for me to teach those kids to even hold a pencil*."

4. Discussion, Conclusion and Recommendation

The study aimed to examine the teaching experiences of contract teachers teaching individuals with special needs. Five teachers stated that those individuals fell behind their peers, while others (n=5) underlined the need for special support. If these findings were compared with Alaybay's (2021) research, contract teachers expressed both positive and negative aspects of students with special needs. A negative aspect was that students fell behind their peers in some areas such as attention span. In this study, the participants also stated that individuals with special needs fell behind their peers. In addition, teachers stated that individuals needed special support. This means that they had a broader perspective, considering that special needs do not only consist of individuals with developmental delays but also include gifted individuals who are above the norm.

Regarding the emotions of participants when teaching individuals with special needs for the first time, they experienced excitement, astonishment, fear, and having difficulty. It can be said that they experienced mostly negative emotions. It can be stated that this situation arises from the ignorance of the participants about special education and individuals with special needs. In this regard, what contract teachers know about individuals with special needs when teaching them for the first time should be considered. Accordingly, most of the participants (n=7) stated that they did not know anything. This means contract teaching practice is not based on field proficiency, contract teachers are ignorant about individuals with special needs, and when contract teachers start work, they are unaware of individuals with special needs and the training to be offered to these individuals. Table 3 indicates that the professional inadequacy is due to the contract teachers who are not graduated from the faculty of education. Similarly, Çınkır and Kurum (2015) found that contract teachers (who did not graduate from special education) had inadequacies in terms of various variables such as professional knowledge, belonging, job satisfaction, and motivation. At this point, it can be interpreted that contract teachers should be provided with theoretical and applied knowledge in cases where contract teaching practice is required. This suggestion confirms Alaybay (2021).

Bilgiç and Ekinci (2020) argued that contract teachers had problems with group belonging. However, most of the participants (n=7) of this study were found knowledgeable about special education thanks to their permanent colleagues. This is significant to highlight the cooperation of permanent teachers and contract teachers. Besides, contract teachers benefitted from academicians, books, and parents, and they also attended seminars on special

education. Although contract teachers were not given direct seminars about the field, they tried to get information about the subject on their own. Özyürek (2008) stated that seminars on special education were given to teachers who were later included in the field of special education and whose undergraduate degrees were from different branches. Teachers of different branches said that they benefited from the seminars they received on special education. At this point, as Özyürek (2008) mentioned, contract teachers individuals with special needs should be given theoretical and practical in-service seminars on special education.

Contract teachers expressed different views regarding whether they would teach individuals with special needs in the future. Six teachers were optimists, but four teachers were indecisive. The reasons for being indecisive were burnout and willingness to work in their own field. This confirms the findings of Çınkır and Kurum (2015). However, some teachers expressed their desire to work with those individuals in the future. This may be due to their moral motivation or the challenges of their previous jobs. At this point, one of the participants, Ece, stated that she was doing this job because she had to.

Regarding activities they did easily or with difficulty, most of the contract teachers (n=7) had difficulties in behavior management. In addition, they had difficulties in areas such as planning instruction (n=2), teaching academic skills (n=2), communicating with families (n=2), and teaching toilet skills. Therefore, it can be stated that contract teachers had professional inadequacies. This coincides with Özyürek (2008) and Çınkır and Kurum (2015). However, some teachers voiced that they worked easily on material design (n=3), teaching academic skills (n=2), communicating with students (n=2), and behavior management (2). This may be because those teachers took material design courses at the undergraduate level and developed themselves professionally as a result of their individual research after starting the profession.

Participants were asked for their opinions about contract teaching in the field of special education. They expressed both positive and negative opinions. Negative opinions were being forced to teach students with special needs at a severe level, not being appreciated by their administrators, being exposed to mobbing, being threatened by parents, burnout, working out of necessity, and getting low salaries. These findings confirm the literature (Bayram, 2009; Bilgiç & Ekinci, 2020; Doğan, Demir & Turan, 2013; Şentürk, 2017). Thus, it can be interpreted that the professional conditions of contract teachers should be improved, and they should be provided with theoretical and practical training. Also, some teachers (n=2) were satisfied with their job and performed their teaching voluntarily (n=1).

As a result, this research indicates that contract teachers are professionally inadequate. To overcome this problem, contract teachers get support from permanent teachers, read books, and search on the internet. Thus, it can be said that the government should support contract teachers teaching individuals with special needs through theoretical and practical in-service training on special education. In addition, contract teachers complain about being mistreated by school administrators and students' parents, burnout, doing this job out of necessity, and low salary. It can be suggested that legal arrangements are needed to overcome these negativities. Finally, contract teaching is due to the inadequacy in the number of teachers who are graduates of the field. The government implements this practice due to the lack of teachers who graduated from special education. Therefore, it is thought that paid teaching will continue until there are enough field teachers. However, efforts should be spent regarding how to improve the existing situation of these teachers.

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Nationalism in Secondary Schools: How Do Students Understand and Conceptualize It?

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Abstract
One of the aims of educational institutions in Turkey is to adopt an understanding of nationalism based on Atatürk's views by students. Atatürk's understanding of nationalism was founded on the unity of culture. It rejects racism. It emphasizes cultural unity rather than blood ties or religious unity. However, various forms of nationalism in Turkey can find supporters. For this reason, it is important to examine how secondary school students understand nationalism and with which concepts they explain it. Qualitative research method was used in this research, which aims to examine how students conceptualize and understand nationalism. Since it is important for the students to express themselves naturally, they were asked to write an essay on nationalism. Student writings were analyzed by content analysis. According to the results obtained within the scope of the study, the students mostly used the expressions "to love homeland and nation" and "to protect homeland and nation" when explaining the concept of nationalism. As the age and grade levels of the students increase, the number of concepts related to nationalism used by students increases. Nationalism is understood differently by male and female students. While female students emphasize the concepts of love and work, male students emphasize the concepts of protecting and independence. Considering the place where the students live, the meaning attributed to the concept of nationalism varies. While the students living in the city center used the concept of love more, the students living in the town focused on the concept of protecting. The most important finding obtained within the scope of the study is that the participants did not base their nationalism on blood ties or religious unity. Students did not use non-inclusive expressions while describing nationalism. For this reason, it was understood that the participants had thoughts compatible with Atatürk's understanding of nationalism.

Keywords: Nationalism, Religion, Secondary School Students

1. Introduction

The word of “millet (nation)” in Turkish is of Arabic origin. For a long time, this word corresponded to the concept of ummah (Sami, 1978). With Gökalp, the meanings of the words ummah and nation took their present form. According to Gökalp (1970), those who believe in the same religion are called ummah. Nation, on the other hand, is people with a common language and culture. It is a community consisting of individuals who have common language, religion, morality and sense of beauty, and who have received the same education in this sense. Atatürk, the founder of modern Turkey, has the same understanding of nation as Gökalp. Atatürk defined

the nation as “a community that has a rich common heritage, has the desire to live together and is willing to preserve its cultural heritage” (İnan, 1969). However, what these concepts mean is controversial even today. This situation causes many problems. Today, most of the people over the age of 50 in Turkey still understand the concept of nation as ummah. In this context, the understanding of nationalism in Turkey also differs according to various groups. While some individuals and groups base their understanding of nationalism on religion, other groups argue that religion is not important for nationalism.

The equivalent of nationalism in Turkish is closer to the concept of patriotism than nationalism in English. Nationalism is what people who consider themselves to be members of the same nation; together, within the same borders, to lead an independent life and to glorify the society they constitute (Eroğlu, 1997). Nationalism in the broadest sense; It is a sense of loyalty to the society to which the individual belongs with the feelings of love and respect. This commitment manifests itself in the form of having a deep interest in the language, morals, and all moral and material cultural values of the nation, enduring all kinds of sacrifices in order to develop the nation's existence, increase its power and protect the country (Kafesoğlu, 1970; Sarınay, 2004). The basis of the nationalist movement is national independence. This is the movement of nations living under the hegemony of other states to get rid of slavery and establish their own independent states. This movement takes its source from the French Revolution. Just as a human being has some fundamental rights and freedoms due to being human, a nation as a whole has the right to its freedom, that is, its independence (Armaoğlu, 1999).

Turkish nationalism was founded on the concepts of nation and nationality. The people who founded the republic, especially Atatürk, think that being away from national consciousness has great costs. Atatürk said, “Our nation has suffered the bitter punishment of ignoring the importance of nationality. The nations living in the Ottoman lands saved themselves by clinging to their national beliefs. The Turkish nation, on the other hand, realized that it was a foreign nation to them when they were expelled from them” (Karal, 1981). At this point, Atatürk points out that the understanding of the ummah cannot meet the national unity. Because most of the societies that declared their independence by leaving the Ottoman Empire were Muslims. The process leading to the Turkish War of Independence after the First World War shaped the understanding of nationalism. In this process, the Turkish nation believed that the only power they could rely on could only be their own national existence, and they saw this through experience. The National Struggle was won with the strength of this belief, and the foundations of the Republic of Turkey, whose political borders were determined with the Lausanne Peace Treaty, were laid on this belief. On the other hand, the years of the National Struggle, in which the Turkish nation saw that there was no power to rely on other than its own power, also contributed to the attachment of the Turks to their national pride and to the riveting of national consciousness.

With the establishment of the Republic, Turkey adopted an understanding of nationalism based on Atatürk's views. Atatürk bases nationalism not on blood ties, but on cultural unity. With the words "How happy is the one who says I am a Turk," Atatürk placed not having Turkish blood but adopting Turkish culture as the basis of nationalism. Turkish nationalism, defined based on these views, took the form of a social policy principle that directs state activities and entered the Constitution with the 1937 amendment in this form. In this way, Turkish nationalism aims to protect the integrity of the nation, to keep the needs and interests of the community above all personal needs and interests, to create a conscious solidarity and sincere brotherhood and unity between generations (Keskin, 1999). The main goal of Turkish nationalism is to bring the society to political independence and freedom. Over time, new elements were added to this and Turkish nationalism took the form of a movement that values freedom and human personality and whose goal is democracy (Eroğlu, 1997). As such, it was not based on race, and did not follow a aggressive, fanciful and adventurous policy (Feyzioğlu, 1988). Atatürk's nationalism aims to unite every individual who considers the Anatolian land as their homeland and says "I am a Turk," regardless of their race or ethnic origin, under one roof. In this sense, Nationalism, which is one of Atatürk's principles, basically aims to provide an atmosphere of unity and solidarity.

Nationalism, which is among Atatürk's principles, is based on Ziya Gökalp's concept of "cultural nationalism." Accordingly, these lands are the lands of the Turkish nation. The element that creates and keeps the Turkish nation alive is culture. Therefore, it is not necessary to be ethnically Turkish in order to be a part of the Turkish nation. Everyone who adopts Turkish culture and considers himself Turkish is a part of this nation. Ataturk's

nationalism is based on boasting of belonging to the Turkish nation, believing and trusting the Turkish nation. Atatürk summarized as "Turkish nationalism is to preserve the special character and independent identity of Turkish society, while existing in parallel and in harmony with all contemporary nations, on the path of progress and development and in international contacts and relations" (İnan, 1969). The main feature of the Kemalist understanding of nationalism is that it is realistic, acts from the reality of the nation, and evaluates the issues in a rational way (Eroğlu, 1992). Nationalism, which is one of the basic principles of the Kemalist thought system, is rational, modern, civilized, forward-looking, democratic, unifying, humanitarian and peaceful (Feyzioğlu, 1988). In this sense, it is not an aggressive, expansionist understanding of nationalism that demands territory from its neighbors, as in fascist and national socialist nationalism. This understanding of nationalism adopts only the borders of the Republic of Turkey as a political field (MEB, 1983). Another aspect of Atatürk's understanding of nationalism is that he values freedom and human personality and is based on the idea of equality. In addition, Atatürk's principle of nationalism is against class discrimination in society. It has characteristics such as being secular, humanitarian and peaceful. Kemalist understanding of nationalism rejects racism, class consciousness, ummatism, regionalism and separatism (Olcaytu, 1973). For this reason, it can be said that Atatürk's nationalism is based on contemporary views.

Nationalism is a concept that still causes controversy in society today. Although the Republic of Turkey officially adopts Atatürk's understanding of nationalism, various forms of nationalism are seen in society, including approaches based on blood ties or religious beliefs. Such outdated, conservative and reactionary interpretations of nationalism unfortunately still cause problems in Turkey. For this reason, it is important to examine the students' understanding of nationalism that will shape the society in the future. Therefore, in this study, it is aimed to understand the perceptions of nationalism of secondary school students.

2. Method

Qualitative research approach was used in this study. Qualitative research is a research approach in which data is produced without statistical processes (Altunışık, Coşkun, Bayraktaroğlu & Yıldırım, 2005). The important features of qualitative research techniques are that they provide sensitivity to the natural environment, the researcher has a participatory role, has a holistic approach, enables perceptions to be revealed, has flexibility in the research design and has an inductive analysis (Yıldırım & Şimşek, 2000).

2.1 Participants

Purposive sampling method was chosen in the study. In qualitative studies, the sample group was kept small in order to investigate the sample in depth. Therefore, purposive sampling is preferred instead of random sampling (Miles & Huberman, 1994). In this sampling, criteria that are considered important for selection are determined (Tavşancıl & Aslan, 2001). For this reason, 4th, 5th, 6th and 7th grade students who were able to express their thoughts well were determined by interviewing the teachers in the schools. These students were asked to write an essay stating their thoughts on the principle of nationalism. 183 students participated in the research. 95 of them live in the town and 88 live in the city center.

Table 1: Participants' genders

Grade	**Female**	**Male**	**Total**
4th Grade	22	19	41
5th Grade	20	22	42
6th Grade	22	27	49
7th Grade	26	25	51
Total	**90**	**93**	**183**

Table 2: The regions where the students participating in the study live

Grade	**Rural**	**Urban**	**Total**
4th Grade	23	18	41
5th Grade	20	22	42

6th Grade	26	23	49
7th Grade	26	25	51
Total	**95**	**88**	**183**

2.2 Data Collection

In the research, the data were collected with the compositions about nationalism written by the students. The compositions written by the students were analyzed by content analysis. Content analysis is defined as a systematic, repeatable technique in which a text is summarized with categories that are formed as a result of coding based on certain rules (Büyüköztürk et al., 2008). The raw data obtained from the interviews were coded by the researcher. The coding and categorization process of the compositions was also carried out by a sociologist and a Turkish scientist in addition to the researcher. The data obtained at the end of the three examinations were compared and given their final form. The data were classified under categories and made meaningful for the reader. As a result, tables were obtained in which each student's views on the subject can be seen separately.

3. Results

3.1 Students' conceptualization of nationalism

The table below shows how the participants conceptualized nationalism in general.

Table 3: Students' conceptualization of nationalism

Students' conceptualization of nationalism	**N**
Loving Homeland and Nation	103
Protecting Homeland and Nation	85
Working (For nation)	45
Independence	45
Equality (Everyone living within the borders of the Republic of Turkey is equal)	28
National Unity and Solidarity	19
Learning History and Using Turkish Language in the Best Manner	18
Being a Conscious Consumer	17
Protecting the Material and Moral Values Created Throughout Our History	11
Protecting Underground and Aboveground Natural Resources.	7
Being Cautious in Privatization of State Institutions	3
Being honest.	2
Total	**383**

It was understood that the students used a total of 383 sentences indicating nationalism. Student approaches are classified under a total of 12 categories. The understanding of nationalism that the students explained with their compositions seems to be compatible with Atatürk's understanding of nationalism. Participants mostly explained their understanding of nationalism as protecting and loving the homeland and nation. Afterwards, they used human and cultural elements such as equality, independence, awareness of history and language, and protecting material and spiritual values to explain nationalism. The students participating in the study did not mention concepts such as blood ties or religious union. On the contrary, the participants explained their approach to nationalism with a focus on belonging, culture, and self-sacrifice. These, on the other hand, are parallel to the understanding of nationalism that is built on Atatürk's principles and that Turkey wants to create. 183 students participating in the study used a total of 383 concepts coded in 12 categories to explain their understanding of nationalism. In the tables below, students' perceptions of nationalism on the basis of class, gender and place of residence are examined.

3.2 Conceptualization of nationalism by grade level

The table below shows the number of concepts used by students at each grade level.

Table 4: The number of concepts used by students at each grade level

Grade	1 Concept	2 Concept	3 Concept	4 Concept
4th Grade	32	8	1	---
5th Grade	4	33	4	1
6th Grade	3	33	8	5
7th Grade	--	29	13	9
Total	**39**	**103**	**26**	**15**

According to the table, no fourth grade student used four or more concepts to explain the principle of nationalism. 78% of fourth graders explained nationalism by focusing on a single concept. 78.5% of the fifth graders and 67% of the sixth graders explained the principle of nationalism with two concepts. In the seventh grade, each student used at least two concepts.

Considering the grade levels, the diversity of the concepts used to explain the principle of nationalism increases as the grade level increases. Seventh grade students were able to compose compositions using at least two concepts, while fourth grade students were able to explain nationalism with a maximum of two concepts. It can be said that as the grade level of the students increased, the meanings attributed to the principle of nationalism diversified in terms of quantity.

Table 5: Students' conceptualization of nationalism by grade

Categories	4th Grade	5th Grade	6th Grade	7th Grade
Loving Homeland and Nation	15	25	32	31
Protecting Homeland and Nation	19	22	20	24
Working (For nation)	8	10	13	14
Independence	7	13	16	9
National Unity and Solidarity	--	5	6	8
Equality (Everyone living within the borders of the Republic of Turkey is equal)	--	3	11	14
Protecting the Material and Moral Values Created Throughout Our History	1	--	7	3
Learning History and Using Turkish Language in the Best Manner	3	3	--	12
Being a Conscious Consumer		5	5	7
Being honest.	2			
Protecting Underground and Aboveground Natural Resources.	--	--	3	4
Being Cautious in Privatization of State Institutions	--	--	--	3
Total	**55**	**86**	**113**	**126**

To explain nationalism, the total number of concepts used is 55 in the fourth grade, 86 in the fifth grade, 113 in the sixth grade, and 126 in the seventh grade. However, the number of different concepts used to explain nationalism is 7 in the fourth grade, 8 in the fifth grade, 9 in the sixth grade, and 11 in the seventh grade. When the total number of concepts used and the number of concept diversity are examined, an increase is observed as the grade level rises. According to this result, it can be said that as the age and grade levels of the students increase, the way of defining the principle of nationalism also diversifies in terms of quality and the meanings they attribute to this principle diversify and develop.

3.3 Conceptualization of nationalism by gender

The table below shows the students' conceptualization of nationalism by their gender.

Table 5: Students' conceptualization of nationalism by gender

Categories	**Female**	**Male**
Loving Homeland and Nation	76	37
Protecting Homeland and Nation	15	60
Working (For nation)	26	9
Independence	19	36
National Unity and Solidarity	8	11
Equality (Everyone living within the borders of the Republic of Turkey is equal)	15	13
Protecting the Material and Moral Values Created Throughout Our History	4	7
Learning History and Using Turkish Language in the Best Manner	6	12
Being a Conscious Consumer	8	9
Being honest.	1	1
Protecting Underground and Aboveground Natural Resources.	2	5
Being Cautious in Privatization of State Institutions	1	2
Total	**181**	**202**

In Table 5, the concepts used by the students regarding the principle of nationalism were examined in terms of gender. The frequency of use of some concepts varies according to gender. While 76 female and 37 male students used the concept of “loving homeland and nation”; The concept of "protecting homeland and nation" was used by 15 female and 60 male students. It is important that female students explain nationalism as "loving the homeland" and male students explain nationalism as "protecting the homeland." On the other hand, while male students mentioned the concept of independence more, female students associated the concept of working with nationalism. From this point of view, it can be said that female students consider nationalism more culturally, while males approach nationalism with a focus on self-sacrifice. The fact that the concepts used by female students mostly focus on love and diligence, while male students focus on protection and independence may be related to gender roles gained at an early age. The reason for the concepts that females frequently use can be thought of as a result of their upbringing in accordance with the role of maternity from an early age. The fact that male students generally use the expressions of protection and independence may be due to the fact that they have been seen as "soldiers" by their families and society since childhood.

3.4 Conceptualization of nationalism by place of residence

The table below shows the students' conceptualization of nationalism by their place of residence.

Table 7: Conceptualization of nationalism by place of residence

Categories	**Rural**	**Urban**
Loving Homeland and Nation	39	64
Protecting Homeland and Nation	47	38
Working (For nation)	21	24
Independence	25	20
National Unity and Solidarity	11	8
Equality (Everyone living within the borders of the Republic of Turkey is equal)	10	18
Protecting the Material and Moral Values Created Throughout Our History	6	5
Learning History and Using Turkish Language in the Best Manner	6	12
Being a Conscious Consumer	4	13
Being honest.	2	0
Protecting Underground and Aboveground Natural Resources.	1	6

Being Cautious in Privatization of State Institutions	1	2
Total	**173**	**210**

In the table above, students' nationalism approaches are examined in terms of the variable of place of residence. According to these results, an important finding is that children living in rural areas understand nationalism more as protecting the homeland. On the other hand, children living in the city center explain nationalism mostly by loving their homeland. It is clear that children in rural areas live under more difficult conditions. These conditions may create a need for children to protect what they have.

4. Discussion

It is seen that the students explain nationalism well according to their age group. Statements about nationalism were coded under 12 themes as a result of data analysis. Fourth grade students explained nationalism with one concept at most. In addition, among the fourth grade students, no one explained nationalism with four concepts. In the fifth and sixth grades, nationalism was explained with two concepts at most. The fact that the fifth and sixth graders explain nationalism with two concepts at most is an indication that they are in the transition from the concrete operational stage to the formal operational stage. The high number of students explaining nationalism with four concepts in the sixth grade shows that some students pass the formal operational stage earlier than their peers. The number of students explaining nationalism with four or more concepts is higher in the seventh grade. This situation shows that seventh grade students are now leaving the concrete operational stage and moving to the formal operational stage.

Female and male students conceptualize nationalism in different ways. While the female students used the expressions "to love homeland and nation" and "to work" while explaining nationalism, the male students used the expressions "to protect homeland and nation" and "independence." The difference in the expressions of male and female students can be explained by their upbringing. In Turkish society, female students are trained in accordance with the mother figure, while male students are trained in accordance with the soldier figure. For this reason, it can be said that females used the expression to love and males used the expression to protect. Students' approaches to nationalism also vary according to the region they live in. While those living in the city center used the expression "to love homeland and nation," those living in the towns mostly explained nationalism with the expression "to protect homeland and nation." The way students explain nationalism varies according to their transition from the concrete operational stage to the formal operational stage, their gender and the place they live.

According to the results of the study, it is seen that the students' perceptions about nationalism developed from the fourth grade to the seventh grade, depending on the topics related to Nationalism in the Social Studies courses. Therefore, we can say that students have gained important achievements about Nationalism with the effect of social studies lessons. It is extremely important that nationalism, which is closely related to the survival of the society, is internalized by children, who are also the future of the nation. However, it is important for a healthy society that the understanding of nationalism adopted by the students is in the direction desired by the state. Because differences in the understanding of nationalism and religion lead to important differences in national identity, domestic and foreign policy (Huntington, 2004). According to Rousseau (2008), religion (Christianity) may have a structure that sabotages social unity. However, according to Rousseau, there is no state in which religion did not play a role in its establishment. Therefore, it is important to be careful in establishing the link between religion and nationalism. The relationship between religion and nationalism is multidimensional. Religion can strengthen nationalist sentiments. Even in situations where the state faces problems, the recipe for salvation may be the combination of religion and nationalism (Albayrak, 2005). Religion can also function in this direction in Turkey, where the majority of its population is Muslim. However, the definition of nationalism based on religion is not an inclusive approach. Such an understanding of nationalism can cause problems in secular nation states such as Turkey. For this reason, Turkey has adopted the understanding of nationalism based on Atatürk's views. The thoughts of the students participating in the study are also compatible with Atatürk's understanding of nationalism. The students showed that they do not have a religion-oriented understanding of nationalism.

According to modern approaches, nationalism is a product of modern society (Saygi & Aslan, 2020). Accordingly, nationalism is not a legacy, but an idea produced by society. The Republic of Turkey has been aiming to bring Atatürk's understanding of nationalism to the society since the day it was founded. In this understanding of nationalism, blood ties and religious union are not a necessity. However, Turkey's large conservative population raises some questions about the establishment of this understanding. 71% of people in Turkey state that religion is very important in their lives. 18% of the population state that religion is important in their lives (PEW, 2020). Despite these data, it is an important finding that children do not include religious elements in their compositions while explaining nationalism. The understanding of nationalism in Turkey rejects racism, fascism and nationalism based on religion. It is understood that the students participating in the study also have thoughts compatible with this understanding.

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Implementing Content-Based Instruction (CBI) on EFL Student's Writing through Technology-Enhanced Language Teaching

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Abstract
Several empirical studies of Content-Based Instruction (CBI) have concluded that this approach has positive impacts in improving language learning skills including writing in foreign language learning environments. However, many of them carried out this approach within the traditional setting; face-to-face interaction instead of the e-learning. This current study is aimed to examine the impact of CBI on EFL learner's writing through technology-enhanced language teaching. The approach was implemented in students who wrote e-brochure for the final project. It was a qualitative study where the data was obtained from assessing the writing documents using e-brochure scoring rubrics. The rubrics focused on functional adequacy containing of five dimensions: (1) organization of information, (2) content-accuracy and information validity, (3) spelling and mechanics, (4) attractiveness and organization, and (5) graphics/ pictures. Semi-structured interview was taken as the supporting data. The findings showed that CBI was beneficial on the EFL's writing in advancing the writing skill, increasing the creativity in designing the brochure, and enhancing the interaction with the lecturer through the use of technology. For further research, teachers are invited to engage the students with specific CBI activities in diversified contexts.

Keywords: Content-Based Instruction, E-brochure Writing, Language Learning Innovation, Technology-Enhanced Language Teaching

1. Introduction

In English language learning, writing as one of four skills in learning the language is intricate and more components to be acquired for the complex task (Harmer, 2007), and considered compulsory to be comprehended (Jaelani, 2017; Toquero et al., 2021). In writing, the students are required to be skillful and creative in expressing their ideas, analyzing and organizing, transferring and presenting them productively (Anwar & Ahmed, 2016; Harmer, 2007). It is a thoughtful activity where the focus is on the process and not the product. Within the activities, the students should have a sense of involvement in the target language by having relevant knowledge

on ideas and appropriate words in brainstorming, and communicating their ideas before presenting them into written form (Anwar & Ahmed, 2016; Heriyawati et al., 2014). In other words, precedently, the learners should have come up with the idea of what they are going to write, how they can deliver their ideas into written form, review the writing documents and make some needed adjustments (Baker, 2015).

Thereby, teachers are urged to conceptualize with compelling strategies in instruction which are not only to develop the students' writing capabilities, but also to assist them learning multiple strategies in resolving the problems occurred during the writing process (Anwar & Ahmed, 2016; Bailey, 2019; Dean, 2010; Toquero et al., 2021). By establishing appropriate strategies and creating supportive environment in learning can stimulate and motivate the students to be productive and proficient in writing (Jaelani, 2017). Writing strategies can facilitate the students to confront the challenges in achieving writing objectives by engaging them through deliberate practices. Hence, applying appropriate strategy can also decrease the anxiety level of the students, increase their engagement in the activity which leads to the enhancement of their own learning (Bailey, 2019). It is worth noting that teachers play a significant role in determining prolific teaching and learning strategies in writing concerning knowledge, and approaches taken to improve their students' writing skills. Purposeful and goal-directed activity should be carried out on how to make the students can produce meaningful contents in their writing comprising linkage between topics and the content, elucidations of materials, and retrieval of information (Dean, 2010).

Marashi & Zargari (2017, p.80) pointed out that "writing is a process of generating text as a communicative bridge between the reader and the writer", for this reason, content becomes a resource to actualize it, and concurrently develop the students' writing skills (Shibata, 2019). Learning the language through content is as designed in Content-Based Instruction (CBI) approach. Through CBI, the students are allowed to learn thematically organized material containing of meaningful information that can stimulate their interest to become actively engaged within the teaching-learning process (Iakovos et al., 2011; Jaelani, 2017). Due to number of compelling characteristics in language instruction that the approach has, it has become increasingly prominent in second language and foreign language teaching. Many of previous empirical researches (H. Brown & Bradford, 2016; Butler, 2005; Dupuy, 2000; Iakovos et al., 2011; Murphy & Stoller, 2001; Rohmah, 2015; Semmelroth, 2013; Shibata, 2019; Snow, 2014; Snow & Brinton, 2017) conceded that CBI was one of means in developing students' linguistic ability (Peachey, 2021) where the students were subjected to meaningful and comprehensive and coherent input as a principal feature of CBI. Undoubtedly, it could promote to deeper processing and understanding of students' language acquisition as it enhanced students' language and content knowledge through authentic, and meaningful contexts provided (Butler, 2005; Iakovos et al., 2011; Jaelani, 2017).

Since COVID-19 pandemic, March 2020, English Department, Politeknik Negeri Padang (PNP) has employed and integrated e-learning settings simultaneously into its teaching-learning method, including for writing skills. Both teachers and students have been carrying out language learning activities, and encouraging students being autonomous in their learning. Nevertheless, CBI as a new paradigm in language education has rarely been conducted in the process of language learning in this department, when in fact by employing this approach teachers can contextualize their learning embedding relevant discussion of specific subject matter when teaching useful language (Khonsari, 2005; Rohmah, 2015). Previous studies showed that integrating CBI and e-learning by making use of technology-enhanced learning can help the students to increase their target language skills focusing on content as a resource to accomplish it (Shibata, 2019). Likewise, by centralizing and encouraging cognitive and self-regulatory learning strategies through technology-enhanced learning (Ahmadi, 2018; Mohammadi et al., 2011; Roziewicz, 2015; Sariani et al., 2021) and implementing CBI within the language learning process, students were benefitted in terms of knowledge obtained and motivation built (H. Brown & Bradford, 2016; Heriyawati et al., 2014; Snow, 2014; Snow & Brinton, 2017).

Simply stated that teaching-learning process in writing skill concentrates on learning the linguistics aspects like graphic system of language, grammatical structures, and vocabulary related to the topic. Whereas the ultimate goal of the teaching-learning of writing skills is on how the students are able to convey the information or ideas one after another into the target language, as a result of thinking, drafting, and revising procedures. Accordingly, writing is a complex and very active process where the purpose is to focus on the "meaning" rather than the "format" of the language, and exploratory process based on the original ideas that have been generated throughout

the process (Anwar & Ahmed, 2016; D. H. Brown, 2001; Cole & Feng, 2015; Heriyawati et al., 2014; Toquero et al., 2021). At recent times, due to the impact of pandemic COVID-19, most of the learning has been carried out through online setting. However, the process of teaching-learning, especially in Indonesia as one of developing countries in the world has yet been effective since some of the teachers and students still encounter technical limitations by cause of less experience in using internet and computer (Heriyawati et al., 2014; Jaelani, 2017; Sariani et al., 2021).

1.1. Content-based instruction

Content-Based Instruction (CBI) in teaching second and foreign languages is attractive as this approach requires the instructors to be resourceful in integrating language teaching aims and content-instruction in class (Snow, 2014; Villalobos, 2013). Instructors should be sensitive to the particular needs of the students in their class (H. Brown & Bradford, 2016) by providing and assembling comprehensible, suitable, and interesting source material. Hence the students can re-evaluating and restructuring the obtained information to develop their thinking skills (Khonsari, 2005; Peachey, 2021). Brown & Bradford (2016, p. 332) stated that "CBI is an approach to language teaching in which content, texts, activities, and tasks drawn from subject-matter topics are used to provide learners with authentic language input and engage learners in authentic language use." Typically, a learning using CBI is emphasized on the development of students' language and their content language (Butler, 2005) applying the strategies in negotiating meaning, organizing information from sets of authentic reading materials on selected topics, acquiring content knowledge, interpreting, and evaluating the information contained in them with the help of the teachers (Butler, 2005; Khonsari, 2005; Rohmah, 2015), so that they can provide feedback either orally or in writing (Iakovos et al., 2011). In other words, "CBI focuses on communicating the content rather on how to communicate" (Mesureur, 2012, p. 72), and encourages the engagement and interest of the students to enhanced motivation (Iakovos et al., 2011).

CBI can broadly be divided into three models: sheltered-instructions, adjunct instruction, and theme-based instruction where the first two models are mostly carried out in ESL context, and the latest one in EFL context. Theme-based instruction is more adequate to be applied in EFL environments due to its focus concerning specific content which is relevant to the learner's needs (Mesureur, 2012; Shibata, 2019; Snow & Brinton, 2017). Rather than studying various topics throughout a semester, in theme-based instruction students will study one particular topic in certain period of time. By focusing on one topic, language teachers can provide the students with scaffolding techniques in teaching-learning process so that the students can focus on various aspects and explore diverse print and non-prints sources. Significantly, this learning process improves the student's critical/ analytical thinking skills by evaluating, and comparing and contrasting the reading materials based on an array of viewpoints leading to a discovery of their own views (Murphy & Stoller, 2001; Pally, 2001; Semmelroth, 2013).

Several studies have highlighted and justified the integration of language and content on both theoretical and programmatic outcomes (Donato, 2016; Dupuy, 2000; Heriyawati et al., 2014; Semmelroth, 2013; Shibata, 2019; Snow, 2014; Suzuki, 2021). There is significant role of CBI in developing the writing skills in EFL secondary educational contexts (Donato, 2016), as identified by Shibata (2019) and Suzuki (2021) on first year student's essays of Japanese secondary school in terms of their linguistics and functional aspects on their writing documents. In the overall survey data of the previous studies showed that there is an increase on the student's vocabulary acquisition and their critical thinking skills seen from the number of words, and examples and reasons used within their essay. When focusing on a single topic rather than incoherent topics, students can improve their familiarity with the topic by frequently breaking down and re-using various vocabulary and key concepts concerning to the topic. The essays written by the students showed significant and meaningful improvement for processing and communicating information containing of stronger argumentation, rhetoric and analyzing skills (Khonsari, 2005; Pally, 2001; Semmelroth, 2013) including language function, text type suitability, linguistic impact, vocabulary complexity, and comprehensibility (Shibata, 2019, p. 353) which indicates that the student's interest, motivation, and engagement are elevated. Indeed, those actively engaged students will be able to be more creative in producing brilliant ideas, and have great enthusiasm in learning (Heriyawati et al., 2014; Jaelani, 2017; Marashi & Mirghafari, 2019; Semmelroth, 2013).

Needless to say only a few experts came up with the shortcomings of this approach (Baecher et al., 2014; Lightbown, 2014; Shibata, 2019). Despite the beneficial of CBI onto the student's writing documents to deepen their understanding of the topic provided, widen their vocabulary acquisition, and developed the content quality of their essays, the students faced some challenges on their grammatical accuracy and complexity in writing (Lightbown, 2014; Shibata, 2019). Since CBI is centralized to learn a language within the context of the content, and organized around content or information, therefore teaching specific linguistic feature like grammar pattern receives considerably less attention (Baecher et al., 2014; Richards & Rodgers, 2001). These findings were similar to Heriyawati, Sulistiyo, & Sholeh (2014)'s study regardless the influence was unsubstantial due to the carelessness of the students' in using up the mechanics; punctuation; spelling; capitalization; and sentence structure in their writing.

1.2. Technology-enhanced language teaching

There has been a greater significance change in language learning in recent years due to the current situation; pandemic and Industrial Revolution 4.0 where the learning has shifted from the traditional system into digital by utilizing technology-enhanced learning. Incorporating technology into language classes has been implemented by many teachers to facilitate the process of change which can result into a positive outcome in the learning system (Gaballo, 2019). There is a positive effect stated by experts on the use of technology in promoting teaching-learning process (Conolle & Martin, 2007; Gaballo, 2019; Hill et al., 2004; Thouësny & Bradley, 2011) in terms of advancing to a more learner-centered approach, communicative English as a foreign language (EFL) classroom, when independent language learning taken place by giving the learners control over their learning process (Gaballo, 2019; Mehring, 2017).

There are two significant ways for learners and teachers in accessing technology in educational settings; "learning from" and "learning with" technology. Learning from technology concerns on the instrumental use of technology to complement the traditional learning where the learners relatively passive in the process of teaching-learning. Taken as the example using the applications for online dictionary in personal mobile phones (Sariani, Yaningsih, et al., 2020), even though the students can optimize their learning and set the outcome for their personal learning experiences, the learning is ultimately occurred when the students have a good time management, embrace the availability of advanced opportunities in the mobile applications, and comprehend deep learning. On the contrary, learning with technology acquires the learners to be actively engaged and participated during the process (Gaballo, 2019; Hill et al., 2004; Thouësny & Bradley, 2011). Highlighted by Hill et al. (2004, p. 443) that "learning with technology method is no longer solely taking the information [but also] contributing to the knowledge base," and the learners can thrive for improvement on their critical thinking, creativity, and explore their analysis skill which simultaneously encouraging social interaction and learning (Thouësny & Bradley, 2011).

Undoubtedly, the effect of technology in the process of teaching and learning is not merely defined to enable the students to have easier access to new learning, but also regarded to provide appropriate and adequate learning environments between the teachers and the students in terms of providing the students with information and what they are able to do with it (Mehring, 2017; Thouësny & Bradley, 2011). It is worth noting that the use of technology in the field of e-learning can reinforce teacher's productivity and student's accomplishments in accordance with the language learning (Thouësny & Bradley, 2011) besides facilitating social interactions among them in keeping the regularity of the teaching process (Lan, 2019; Patsia et al., 2021). Several recent studies (Deslauriers et al., 2011; Mehring, 2017; Thouësny & Bradley, 2011) indicated that with the explosion of technology it has become easier to integrate the need for greater instructor-student, student-student interaction. Due to the equitable access to technology, the students are able to empower and enhance their learning as they can have immediate access and more opportunities to be exposed to the feedback from their teachers and classmates (Deslauriers et al., 2011). The learning experience that students found empowers them to manage their learning, contribute and expand their ideas and perceptions actively which leads to higher levels of engagement (Mehring, 2017).

In view of this, it can be assumed that employing CBI into the writing skills by making the best of technology can increase the language learning process itself. Primarily for this study, it can develop the students' comprehension and critical thinking on the writing skill as CBI focused on fostering student's competence in language learning

while advancing the knowledge of a subject matter. Likewise, guide language instruction in technology can enhance the contexts, and highlights questions that are still to be answered as this digital environments promoting more self-regulated strategies in the process of learning (An, 2013; Chung, 2015; Zhou & Wei, 2018). In regards, the aim of this study is to examine the impact of CBI on writing skills by promoting technology-enhanced language learning into the teaching-learning process between teachers and students. The study considers closely on how the students taking the advantage of the available technologies to communicate and on how the instruction of CBI evolves in the e-learning setting. Additionally, this study is also conducted in order to accommodate an alternative method for teaching and learning of writing where teachers guide students to achieve their learning goals that underpin university teaching approaches to technology integration in self-regulated learning environment.

Therefore, the research question of this study is "What is the impact of Employing Content-Based Instruction (CBI) approach in student's writing skills by making the best use of technology-enhanced language learning?", and "How the integration of this CBI approach with technology-enhanced learning can develop the student's engagement within the learning process, and improve their writing skills?". The limitation of the problem is focused on the implementation of CBI onto the writing skills for e-brochure. Additionally, the discussion of this study is also limited to the writing skill of the student's final project as one of the compulsory requirements for them to graduate.

2. Method

The study in hand utilized qualitative approach as the research design in examining the impact of CBI implementation to the participant's writing skills (Huang & Han, 2017) by using a great deal of technology-enhanced language teaching. Prior to carrying out the study, the participant was informed on the procedure of the study, and received 'The Human Consent' letter, when they wanted to proceed to participate in the study and could withdraw their participation at any convenient time (Mackey & Gass, 2005).

2.1 Participants

The participant of this study was the final year student (sixth semester) majoring in English, at Politeknik Negeri Padang (PNP). Their language proficiency was at the Level A2-Basic User based on the Common European Framework of Reference (CEFR) standard which was considered could understand sentences and frequently used expressions, communicate in simple and routine tasks described in simple terms aspects in the areas needed. The students chose writing e-brochure as their topic for their Final Project and they were treated with Content-based Instruction (CBI) since the initial process of their writing.

2.2 Instruments

There were three instruments employed within this study; 1) The participants' writing documents, 2) The standard 'Analytical' scale for rating the e-brochure documents, and 3) Semi-structured interview for data triangulation. First instrument was the participants' writing documents. The documents were obtained from the first draft written by the participants, and the last draft; the final writing product of the participants after receiving the content-based instructions within the teaching-learning process. Second was the analytical scoring rubric in assessing the e-brochure documents containing of five measuring parameters. Third was semi-structured interview for data triangulation carried out to the participant right after they had completed the final documents where the results of the interview were transcribed, and the final script was taken after receiving the approval from the participant.

2.3 Data collection and data analysis techniques

Data were collected by means of the student's writing, for the duration of four months (June-September), and the semi-structured interview. There were three writing' documents were collected from the participant on particular time-based. During the implementation of CBI into the process of writing, the participant was urged to have active involvement in each stage of writing the document, so that she could do some revisions on the document after being assessed by the raters before submitting the next one. In other words, the process of collecting the data

provided the participant learning experiences in producing a well-written product by going through the four stages in the process of writing; planning, drafting (writing), revising (redrafting), and editing (Seow, 2002). *Whatssap*p chat was chosen as the media for the researchers and the participants in facilitating immediate and effective communication.

These documents were carefully measured by two raters for analysis adopting analytical scoring which was more appropriate and effective in writing assessment (Huang & Han, 2013) focusing on brochure. For the anonymity of the raters, they were coded by Rater 1 and Rater 2. The scoring rubrics contains of five measuring parameters: (1) organization of information, (2) content-accuracy and information validity, (3) spelling and mechanics, (4) attractiveness and organization, and (5) graphics/ pictures, therefore particular and rich information on participant's performance can be obtained from this varied aspects of writing (Huang & Han, 2017; Weigle, 2002) . Whereas, there are four levels for the scoring criteria which are used by two raters in examining the writing documents of the participants: Excellent (15-13 pts), Good (12-10 pts), Satisfactory (9-6 pts), Needs Improvement (5-0 pts) (*Tri-Fold Brochure Rubric*, n.d.).

Semi-structured interview was set in exploring further information from the questions and the participant's answers. Even though it consisted of five questions, the interviewers could direct the participant in answering the questions for valuable information needed as the control was on their hand (McDonough & McDonough, 2008). The interview was carried out in participant' L1; Bahasa Indonesia to increase the quality and the amount of the data provided (Mackey & Gass, 2005). All the observed interviews were then fully transcribed into English by the researchers for data analysis. Certain excerpts from the transcripts were selected and then examined thoroughly for the analysis in accordance to conform the research questions. Concerning technology-enhanced in language learning and teaching setting, likewise, the data for the interview session was collected through zoom meeting, and recorded. By employing appropriate digital environments which was compatible to the learners' needs and circumstances could develop learner engagement and active learning (Son et al., 2017; Son & Park, 2015).

3. Results

The final writing document shows that there has been a consequential progress made by the participant starting from the first draft she wrote before being facilitated with Content-Based Instruction (CBI), in the matter of measuring components taken in assessing her writings. The results demonstrate that the participant' writing performance increased from the criteria of "Satisfactory" in the range of 6-9 points to "Excellent" in the range of 13-15 points. Below are charts that record the quantitative data of each rater's scoring.

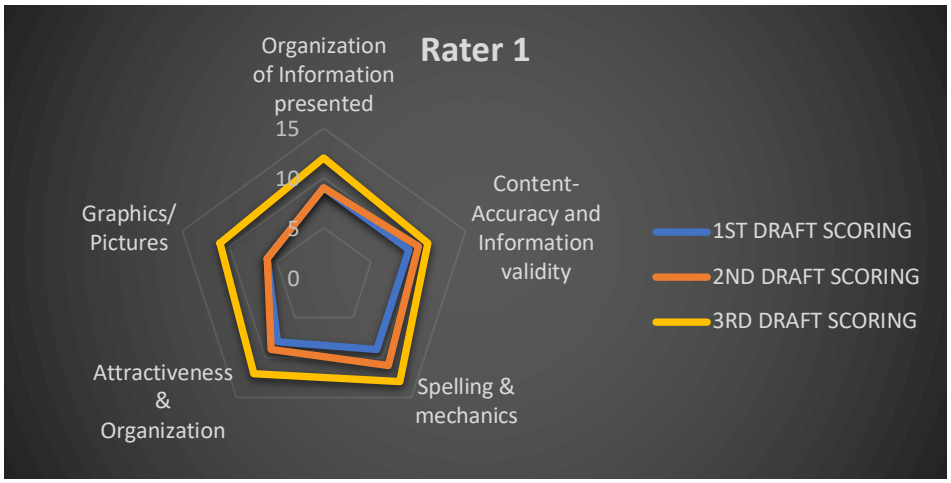

Figure 1: Scoring of Rater 1

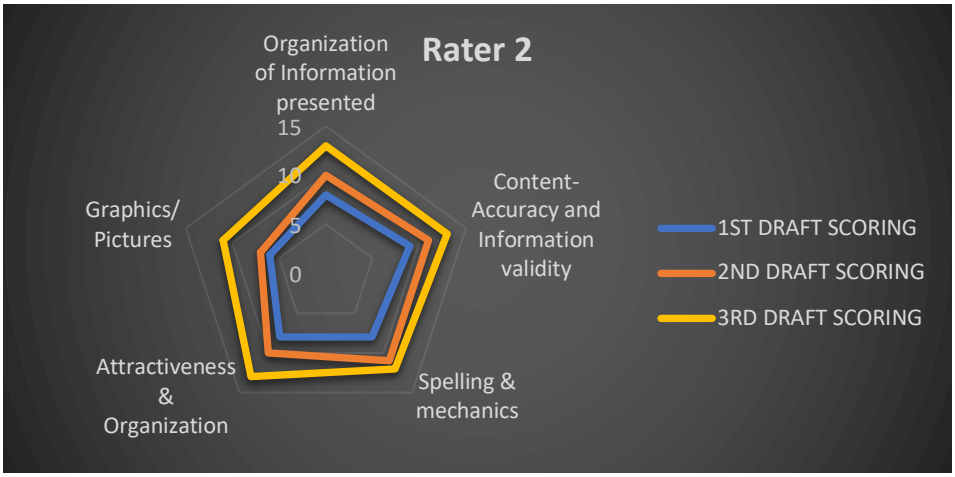

Figure 2: Scoring of Rater 2

As can be seen from Fig 1 and Fig 2 above, the score provided by the two raters points out that there is a positive effectiveness on the implementation of CBI into the participant' learning process. Taking into account for the 1st draft that for all five components of scoring rubrics in writing brochure: "The organization of information presented, Content-Accuracy and Information Validity, Spellings and Mechanics, Attractiveness and Organization, and Graphics/Pictures" are in the criteria of "Satisfactory" with various values but still within the range of 6-9 points. Similar scores (9 points) are given by the two raters for the criteria "Content-Accuracy and Information Validity," however there is a slight difference of score for 1 point which is between 8-9 points on the criteria "The organization of information presented" and "Spellings and Mechanics." The lowest one is on the criteria "Graphics/Pictures" where both Rater 1 and Rater 2 agree to give 6 points due to the lack of numbers and attractiveness on the photographs chosen for the brochure. The writing on this document do not provide specific and detailed information in order to raise people' curiosity concerning the product of the brochure. Additionally, even though this document has used general writing conventions, there are few errors found particularly in punctuation, and the use of capital and small letters. Despite the graphics/pictures in this document go well with the texts, it can be considered text-heavy since it has more segments on the texts compared to the graphics/ pictures used.

Concerning the scoring results of the 2nd draft, its marking criteria are in "Satisfactory" and "Good" levels with the values of "6-9 points" for the former and "10-12 points" for the latter. Out of five components in marking, there are two components develop to some degree. There are changes made in this writing document regarding "Content-Accuracy and Information Validity", and "Spelling and Mechanics". The criteria levels up from "Satisfactory" to "Good" with the score between 10 and 11 points. The composition for the e-brochure has contained more information and used persuasive vocabulary to captivate readers' attention for the product being offered. Nevertheless there are a few grammar errors discovered in the composition like the missing of the marker for singular and plural of both "noun" and "verb" in the sentences, the use of capital and small letters, and punctuation, they are negligible as the communication of the ideas is definite. Meanwhile for the other two components "The organization of information presented" and "Attractiveness and Organization," the two raters have different points of view. Rater 1 still puts the two components in "Satisfactory" criteria, whereas Rater 2 decides that these components have been in "Good" criteria even though the difference between the first rater and the latter is only for 1 point. In Rater 2 points of view, it is noticeable in the writing that there is an attempt made to enhance the information in the brochure by adding some specifications concerning to the promoted object seen from more new sentences and term-related vocabulary.

There is a striking difference in the value given by both raters on this 3rd draft. Raters 2 specifies "Excellent" criteria for four out of five components being assessed. The value is in between 12-13 points. Even though the value provided is in the lowest rank of "Excellent" criteria, it is obvious that the writing within this document has been escalating compared to the 1st draft. Nevertheless Rater 1 determines "Excellent" criteria for 1 component only, veritably the scores for "The organization of information presented, Content-Accuracy and Information Validity, and Attractiveness and Organization" have been improving from the scores obtained on the 1st and 2nd

draft. There is an increase by 1-3 points on these three components. Despite these components are still in "Good" criteria, the writing on this 3rd draft has shown that the participant is able to eliminate many unimportant words and sentences without reducing information, and make the sentences on the brochure becoming more effective, casual, persuasive, and informative. To some extent, there is a high increment on "Graphics/ Pictures" component given by both raters with 5 – 6 points raised compare to 1st and 2nd draft. It can be argued that teachers' frequent constructive feedback both spoken and written concerning the amount of pictures used, their quality and display on the e-brochure has a positive impact on the student' learning process (Baghbadorani & Roohani, 2014; El Khairat & Sariani, 2018).

Correspondingly, the results obtained from the interview support the analysis made by the raters. Taken from the final result of the participant's writing document, she agrees that through CBI she can outperform herself and achieve better results for her writing skills. She becomes motivated, and creative in implementing new strategies to develop her writing performance in terms of language function, text type suitability, vocabulary complexity, comprehensibility, and grammatical complexity (Jaelani, 2017; Shibata, 2019, p. 353; Snow, 2014). There is an engangement occurred within the process. The communication and collaboration performed with the lecturer in curating and managing the information in her writing documents on each stage of her writing process facilitate her in integrating the other three language skills in her writing activities (Jaelani, 2017; Renandya, 2021; Shibata, 2019). It can be seen from her excerpts, "*In the early stage of writing the 1st draft, I mostly use the words which have been in my memory. I don't know how to connect one word to another to make the sentences become longer. However, after experiencing the CBI into the learning, for the 2nd and 3rd draft, I have used e-dictionary to find the synonym of the words, and other words which are appropriate with the content that I want to express*". To strengthen her previous answers, she also highlights that she has understood the meaning of the words obtained from the e-dictionary, and how to use them properly in her writing. With enthusiasm, she ensures that she will use the new words she found in her next writing activities. It is arguably that the increase in her personal understanding of the task and the appropriate choices of words can enrich her writing and enhance her learning (Sariani, El Khairat, et al., 2020). She confirms that the activities conducted through CBI have been assisted her in expanding her perception and enhancing her creativity with the word's choice in her writing.

In her answers, she asserts the positive impact of the learning activities including the constructive feedback provided by the lecturer through the implementation of CBI within her writing process. She can have critical reflection on her own writing through the opportunities allocated in the process starting from the stage of compiling, synthesizing, interpreting and evaluating the information. She recognizes that upon the whole process of learning, she can deepen her comprehension of the content area thoroughly and explicitly can build up her language skill. As her writing concerns on the e-brochure, the learning strategies employed in CBI facilitate her to have deep understanding that the words and phrases needed in her writing are more into persuasive rather than descriptive and informative (Heriyawati et al., 2014; Jaelani, 2017; Shibata, 2019), as shown in the following excerpts, *"The words that I put in my 1st and 2nd draft of brochure are more descriptive and informative. I do put persuasive words in my draft, but the words are not straightforwardly persuading people"*. To put it simply, the sufficient attention provided through the learning process on the curricular integration starting from the contents, content's selection, organization, and sequence stimulate learner's high-order thinking skills to accelerate their learning process (Jacobs & Renandya, 2016; Renandya, 2013).

4. Discussion

Taken from the overall data obtained in this study, there are some significance can be drawn on the implementation of CBI in improving EFL learner's writing skills by utilizing technology-enhanced language teaching. Even though all the teaching-learning processes are performed in e-learning setting, the obtained outcomes are similar to the traditional one. It can be said that CBI facilitates the students emphasizing on mastering the content as reflected on the improvement on the writing documents on each stage of the process. There are developments in their composition, and an increase in the number of words used in their writing despite a few grammatical errors. The student has shown her ability in achieving the goal set by identifying aspects of her writing that she would like to improve.

Referring the integration of CBI approach with technology-enhanced learning, the opportunities provided in the learning process involve interactive learning between the teacher and student in terms of the constructive feedback given by the lecturer to each stage of the writing process. They have been established a well-managed communication and collaboration through the use of internet such as email corresponding, g-drive collaborating, whatssapp, and zoom meeting applications. The dialogue occurred between them develop and strengthen the student's understanding on her learning process by adapting and integrating other's ideas and opinions into one's thinking. This interaction provokes the student to be actively engaged in the learning, and influences their creativity in elaborating ideas and constructing them in line with the topic discussed.

In short, CBI can be an adequate technique in teaching writing to EFL learners to assist them in resolving problems they encounter during the writing process. It is because this technique is interesting, challenging, and stimulating the creativity of the learners. However, prior to employing CBI into the teaching-learning process, well-designed goals and objectives, language and content needs, and the interest of the students must be taken into consideration by the teacher.

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Meaningful Learning in English as a Foreign Language Classrooms: A culinary experience as Comprehensible Input

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Abstract
Foreign Language educators and researchers still refine meaningful instruction and engagement to motivate secondary education students. This research aims to enhance learning environments and analyze students' exposure to English vocabulary through a collection of culinary videos as Comprehensible Input in English as foreign language (EFL) classrooms. The participants were high school students from a public educational institution in Manta-Ecuador. This study is ascribed to the post-modern paradigm, using a hybrid approach and audio-visual technology research as a teaching resource. The instrument used is the students' motivation for learning of Acevedo, et al. (2022). The techniques for determining this research were non-random sampling and data collection with surveys, interviews, and class observations. The research results demonstrated that learners recognize foreign language vocabulary when creating a cooking recipe or when the teaching process is authentic, dynamic, and innovative. Moreover, exposing learners to an artistic experience increases participants' motivation to practice a foreign language. It is concluded that EFL learning environments can be more meaningful when instructors use videos as Comprehensible Input.

Keywords: Comprehensible Input, Multimedia, Cooking, Meaningful Learning, English as a Foreign Language

1. Introduction

Mastering a high level of English represents an added value within any professional profile (Yang, 2011). In this sense, one of the most significant challenges facing modern education is to maintain students' interest in learning. Hence, institutions such as Canadian College (2021) allow technological advances, combined with high doses of meaningful learning, to fortify their teaching processes, adjusting dynamic, entertaining, and effective learning. This success is due to computer tools and mobile equipment in conjunction with approaches and theories such as Comprehensible Input, Computer Assisted Language Learning, and Gamification.

This article presents the literature and theoretical review on Comprehensible Input in second language acquisition, learner motivation for foreign language learning, and the contribution of multimedia technology in Modern Education. Thus, the Comprehensible Input theory developed by linguist Stephen Krashen, is remarkably effective

in helping learners develop their English communicative skills permitting learners to acquire language intrinsically and non-consciously (Bilash, 2011). Similarly, Tina Hargaden states that Comprehensible Input is an essential ingredient, like the food in a meal. She expresses that Comprehensible Input is not a method but is the secret ingredient that allows educators to interact within every language classroom (cited in Gunning, 2021). Therefore, this research attempts to identify how Comprehensible Input theory enhances English acquisition through meaningful events such as cooking activities.

On the other hand, Motivation is an essential factor in Language Learning. According to Fernández (2002), it is the basis of second language learning because it allows educators to have an adequate context for teaching. There are four fundamental elements: extrinsic or instrumental Motivation, integrative or intrinsic Motivation, goals and expectations, and context (Alfaro & Alvarado, 2016).

In addition, learning a second language and using technological resources facilitates comprehension, autonomy, teamwork, flexibility, and critical thinking of learners. As a result, Researchers' Motivation is to create more meaningful learning environments involving the use of technology in Ecuadorian high school students, highlighting students' English language comprehension, reading, and listening skills.

This research contributes to Goal 4 of the United Nations Sustainable Development Goals (2021), promoting inclusive and equitable quality education for lifelong learning opportunities. Research questions answered in this paper are:

1. How can be used videos as Comprehensive Input in EFL classrooms?
2. What is the contribution of videos as comprehensive input at EFL classes?
3. Are students motivated when using videos to learn a foreign language?
4. Does using audio-visual technological resources improve the current EFL instruction?

In essence, this article aims to create more realistic and dynamic learning environments in EFL classes for high school learners through technology and culinary experiences as Comprehensible Input.

2. Literature review

2.1. Comprehensible Input in Second Language Acquisition

Although Comprehensible Input (CI) has become a buzzword in language education, educators would be mistaken to disregard CI as yet another education fad. Comprehensible Input theory is solidly constructed upon decades of hypotheses and their respective research. It is the basis of the current Second Language Acquisition (SLA) theory (Ash, 2017).

According to Tajudeen and Zakaria (2021) and Schütz (2019), Krashen proposed five theories to explain language acquisition; these theories are collectively referred to as the monitor model in Applied Linguistics Literature, they are: The Acquisition-Learning Distinction, Natural Order Hypothesis, The Natural Order Hypothesis, and The Input Hypothesis (Krashen et al., 2018). Krashen applied his theories to respond to Second Language Acquisition (SLA) questions. He argued that his hypotheses shed light on almost all the issues currently debated in second language practice. However, among these theories, the theory of Comprehensible Input is prominent in current Language Teaching (Lichtman & VanPatten, 2021).

This work is related to the process of language acquisition thus, the Comprehensible Input theory is related to students' second language acquisition process. In addition, Comprehensible Input supports learners to achieve a linguistic adduct (Input) containing language structures slightly more complex above the common proficiency level. This Input is comprehensible due to context, situation, extralinguistic factors, and knowledge. This hypothesis refers exclusively to the processes and outcomes of Acquisition (Centro Virtual Cervantes, 2022). Additionally, DiSabatino (2019) refutes the most crucial feature of Comprehensible Input: the flow must be understandable. There will be no acquisition if the pupil cannot understand the message. Regardless, Classroom

Teaching will be effective if the CI becomes "noise" and distracts scholars. The educator can adapt the Input to learners' level by following the "I + 1" rule, i.e., giving them slightly above their comprehension level.

Furthermore, Ash (2017) states that Compressible Input can condense into three fundamental pillars of CI: comprehensible, compelling, and attentive teaching, which have been repeatedly corroborated by research. Mason (2016) states, "there has never been a language acquisition approach has been validated to this extent, not only for its effectiveness but also for its efficiency." As language educators, incorporating Comprehensible Input into language teaching constructs programs based on research and scholarship.

On the other hand, Patrick's (2019) study argues that the United States has seen an inquisitive and probably unpredictable movement in how nearly extinct languages are taught. Comprehensible Input has become a vehicle for change affecting classrooms, teacher training programs, and standing worldwide language organizations.
On the other hand, Tajudeen and Zakaria (2021) explain that Krashen's theory of Comprehensible Input has been criticized for three main reasons: vagueness in his theory, loss of definitions of the constructs contained in the vision, and lack of consistency. However, Liu (2015) summarizes the CI's journey in three stages; first, he traced the boundary between comprehension and acquisition. Then, CI was criticized for the absence of empirical evidence and inability. Eventually, its overemphasis on comprehensibility was necessary for language acquisition. Finally, some linguists and pedagogues, such as Brown, Palmer, Gregg, and McLaughlin, have attempted to apply the i+1 input model to teaching different foreign languages such as German and Thai. Regardless, classroom applications have faced setbacks, blaming Krashen for vaguely postulating a model without considering its pedagogical applications (Payne, 2011).

However, a recent Krashen and Mason (2020) research argues that comprehensibility is insufficient, but other factors make up "optimal input." Krashen et al. (2018) present four crucial characteristics of Optimal Input: (1) It is comprehensible, which means total transparency, (2) Language Acquisition does not require understanding every word and every part of every word. It is exciting: it is "compelling," so interesting that you temporarily forget to listen or read in another language, (3) Optimal input is rich in language that contributes to the message and flow of the story or text, and (3) Language acquisition is a gradual process: each time we encounter a new element in an understandable context, we acquire a small amount of meaning and form (Krashen & Mason, 2020). In essence, the optimal input hypothesis assumes input, not output, and results in subconscious language acquisition.

2.2. Students' motivation for learning a foreign language

Motivation plays an essential role in learning English as a foreign language (EFL). Motivation is considered the key to English language learning and one of the most critical factors affecting language learners' success, defining it as one of the crucial factors limiting English language learning. According to Sinap et al. (2021) and Tashlanovna et al. (2020), results demonstrate that the more motivated learners are, the more successful they will be in language learning. In this context, Aalayina and Yulfi (2021) state that motivation encourages learners to achieve their learning goals. Therefore, scholars will be enthusiastic in the Teaching-Learning process to study English effectively. In addition, Uddiniyah and Silfia (2019), Aalayina and Yulfi (2021), and Nuraeni and Aisyah (2020) confirm that motivation is the process that gives encouragement, direction, and persistence to behavior; hence, motivation is energetic, focused, and enduring behavior. Moreover, they argue that certain behaviors must support success to achieve desired goals. They assert that motivation is a decision people make based on the experiences, effort, or dreams they propose to accomplish. Almost all work undertaken requires motivation as an activator and stimulus to complete the best action.

Nowell et al. (2017) and Subakthiasih and Putri (2020) present two types of motivation in Learning English: Integrative and Instrumental motivation. Integrative motivation denotes learning a language to communicate with people from another culture. In contrast, instrumental learning a language to fulfil specific positive goals, such as getting a job or taking an exam (cited in Aalayina & Yulfi, 2021, p. 442).

Uddiniyah and Silfia (2019) analyzed how intrinsic motivation tends to be higher than extrinsic motivation in English language learning. A Peña's (2019) study conducted at Escuela de Lenguas de la Pontificia Universidad Católica del Ecuador reveals that most scholars are intrinsically motivated due to their desire to study the language independently. The students comprehend the importance of learning a universal language such as English, which is present in the primary forms of communication, such as the Internet and books. However, Nuraeni and Aisyah (2020) indicate that most learners have extrinsic motivation, and only a few have intrinsic motivation. Purnama et al. (2019) conclude that English learners have high motivation to learn English; regardless of their reason, instructors must be more creative in using media, strategies, or material delivered in teaching activities to enhance students' motivation. "If there is no motivation, the teaching-learning process objectives will not be achieved."

Scholars' interest in learning English is because English allows them to communicate easily with people worldwide; presently, students use English via social networks, such as Facebook, Twitter, and WhatsApp, to contact others. In addition, English provides learners with information about world news and facts concerning native speakers' culture and permits learners to obtain a job (Aalayina & Yulfi, 2021).

2.3. Multimedia and educational Technology

The idea of teaching a language through videos is currently in vogue. They provide a solid context through which language teaching is about meaning and practice; giving "reality." Videos create a more engaging sensory experience than print materials alone. They provide a resource that can be viewed anywhere with an Internet connection, including laptops, tablets, and smartphones. Simultaneously, videos increase knowledge retention, as they can be paused and replayed as many times as needed. Therefore, they greatly aid learning incredibly complex and highly visual subjects, such as step-by-step procedures, problem-solving, or language learning. Finally, they increase digital literacy and communication mastery, which are essential 21st-century skills (Bevan, 2020).

According to González et al. (2017), educators use videos as a facilitator of autonomous learning, a tool to develop digital knowledge, and teaching-learning process. For instance, different educational videos made by instructors are currently circulating on platforms such as YouTube, Facebook, and even TikTok adapted to the subject's programming as videos of cultural and artistic dissemination. In addition, they aim to present cultural, creative, and scientific-technical forms to dispersed audiences, where contents associated with the advancement of science and technology are exposed (Posligua & Zambrano, 2020).

Thus, García (2015) declares that learners appreciate information better when accessing audio-visual content because they better identify the class content. Similarly, Rodríguez and Fernández (2017) state that online resources represent one of the most common learning tools among scholars since recent information is digitised. In line with Velasco et al. (2018), educational videos constitute a powerful instrument to support learning. For instance, YouTube has shown a growing influence in EFL classrooms, resulting in a higher rate of educators with skills related to the proliferation of technological implements (Sharma & Sharma, 2021).

In this sense, Gutiérrez et al. (2019) consider that audio-visual content in the educational process must have integrity and accuracy to avoid confusing students. Therefore, Senís (2019) assures that YouTube conducts this process to achieve its role. Furthermore, this platform is prominent because of the wide range of content hosted in this space and the possibilities it offers due to its attractive and easy-to-understand characteristics (López, 2018). Similarly, those who use this social medium are notable because it constitutes an essential phenomenon for disseminating knowledge in the educational field.

As Romero et al. (2017) claimed, videos came into use decades ago. Therefore, it is not the first-time video in Education studied phenomenon. However, its impact transcended after the emergence of the Internet and pandemic. Increasingly, society and scholars turn to YouTube or video platforms to learn everything from how a car works to acquiring a language just by watching videos they like. "Undoubtedly, when a person turns to this type of media, he or she uses processes based on the theories of free/creative or discovery learning" (p. 517).

In line with Pérez and Cuecuecha's (2019) and Kaltura's (2019) "The State of Video in Education" report, they showed that using videos and entertainment platforms as didactic material improves students' performance by becoming more interested in audio-visual content than traditional teaching processes.

Concerning Hudson (2020) and López and Gómez (2015), the digital platform goes hand in hand with incorporating ICT in the classroom because it has become a direct outlet to in-person and online Education, as it is a free resource that provides flexibility for autonomous learning. Martinez (2016) and Kosterelioglu (2016) argue that new technologies and the Internet have not only changed the way we communicate and relate to each other. It has also changed the way children, youth, and adults learn. Therefore, today's educators must be aware of and apply new methodologies to break the existing gap between students and the traditional textbook-based teaching method (Posligua & Zambrano, 2020).

On the other hand, the outbreak of the COVID-19 pandemic has proved to be a global health crisis that has threatened millions of people worldwide. This threat led to the total closure of schools, colleges, and later universities, which would have to adapt to distance education online, leaving aside in-person classes (Unger & Meiran, 2020). In Ecuador, the Ministry of Education (MinEdu) promoted a COVID-19 Educational Plan to provide pedagogical and methodological tools that encourage and strengthen an adaptable educational model (Ministerio de Educación, 2020).

Recent studies have demonstrated that the current generation of learners routinely uses these tools for educational purposes (Lone et al., 2018). Therefore, virtual Education was promoted by innovative learning tools and multimedia resources such as computer-assisted learning (CALL) and mobile applications (Vagg et al., 2020). Consequently, multimedia is effective for learning: animations effectively stimulate learner interest and thus enhance the learning experience and augmented reality improves learners' cognitive skills by providing a platform that combines digital and physical parameters (Akçayır & Akçayır, 2017). Thus, the appropriate use of multimedia in teaching transforms the learning environment from teacher-centred to learner-centred, transforming all aspects of human life (Guan et al., 2018).

For instance, Mofareh's investigation (2019) expressed dissatisfaction with the traditional language learning method in classroom environments, based on teacher-centred approaches without attending to learners' needs. As a result, Mofareh's investigation indirectly pointed out the importance of technology in language learning, focused on computer-assisted language learning (CALL).

Multimedia resources have modified perceptions about curricular innovation, mainly in recent decades. Studies, such as Meza (2015) and Senís (2019), argue that via media, teaching-learning processes have improved since students, regardless of their level, have a better disposition towards their academic training when audio-visual resources are incorporated in the classroom.

Multimedia-assisted English teaching has become an inevitable trend in Education, enabling new skills and new fun environments to enhance multimedia resources such as images and videos. It bases its etymology on specific learning theories such as constructivism, cognitive psychology, humanistic psychology (Guan et al., 2018). Then, (1) Constructivist learning theory assumes that the learning environment should be a location to learn together using various tools and information resources to solve problems, (2) Cognitive psychology emphasizes learners' internal psychological processes. Studying English is a lengthy process, so teachers must direct study activities. CALL can create good conditions and a learning environment for learners, and (3) Humanistic psychology explores language teaching from psychology. It emphasizes the dignity and value of the human being. These theories enable educators to have a good understanding of multimedia resources. In summary, CALL can help teachers find new teaching methods providing learners with good choices of time and content (Incedayi, 2018).

According to Marpa (2021), multimedia is considered the most interactive and powerful individual learning technology platform. It has penetrated education systems and created new approaches to school systems and learning processes. Guan et al. (2018) express that multimedia is widely used in English teaching with the development of science and technology. Besides, computer-assisted language learning (CALL) can inspire

students' enthusiasm for learning English and optimize the EFL classrooms environment. With the combination of CALL, EFL classrooms have ceased to be monotonous. It has become one of the highlights of English Language Teaching by enhancing its English learning process, distinctive teaching characteristics, and teaching environment.

3. Methodology

This research is subscripted to the post-modern paradigm, using a hybrid approach and audio-visual technology research as a teaching medium. This investigation used randomized experimental techniques, quasi-experimental techniques, survey techniques, interview techniques, observation techniques, and tests.

The experimental design of the research corresponds to the pre-test and post-test (Rodríguez & Fernández, 2017), giving one before and one after the observation of the videos. For the data analysis, three categories were established: the teaching-learning process of a second language, the vocabulary of cooking in English, and the use of the educational video.

3.1. The sample

The selected population was learners from a public school in Manta-Ecuador. The Project invited 42 students of the first BGU, but 14 accepted the research invitation. The average age was 15.2 years, 48% were boys, and 52% were girls. Six were taken as experimental groups, and the others were assigned as control groups.
This sample falls within the typology of non-random sampling, as a whole group of participants is taken, without it being voluntary or randomly selected.

3.2. The instruments

The instruments applied to carry out the research were:

Educational intervention. Educational intervention. It consists of three stages: (1) Creations of a dessert e-book to get a general idea of dessert preferences, (2) Demonstration class-diagnosis to introducing students to learning a language through culinary arts activities; and finally, (3) Videos as Comprehensible Input, which consists in the elaboration of six culinarian videos in which participants use EFL.
Interview guide. This instrument consists of five questions to determine interest in cooking videos and recipes. The research team developed the survey using the Google Form platform. In addition, the pilot video was attached to acquire feedback from pupils, get a general sample of their preferences, and modify or add to the e-book. A panel of specialists evaluated the instrument and recommended concentrating on the questions related to recipes in foreign language learning and reducing the number of questions. Once the corrections were made, the instrument was launched.
Attitude and motivation survey. This instrument was adjusted from the investigation of Acevedo, et al. (2022). It consists of 7 questions related to the attitudes and motivation of learners when learning a second language through culinary activities. The instrument was adjusted to the socio-cultural conditions and age of the participants. The instrument was evaluated by an expert panel that recommended improvements in the language used to ensure participants' understanding of the questions. The research team developed the survey form using the Google Form platform.
Observation form. This instrument aspired to determine how participants could learn English vocabulary using audio-visual material. The observation was executed during the undergraduate teachers' practice processes for three months in 2019. The instrument consists of 10 items indicating positive and negative expressions of the participants concerning learning a foreign language, reading practice, writing using English vocabulary related to preparing desserts.

3.3. Process

This research consists of the following nine stages:

Stage 1: Organization and selection of participants. The selection process of potential participants was organized, taking as a reference a public school in which 14 pupils participated.
Stage 2: Identification of participants' preferences. A survey was conducted to determine the dessert preferences of the participants. The survey was designed with the research group on the Google form platform.
Stage 3: Selection of recipes and development of the e-book. Stage 2 served as a reference for selecting the recipes and the design of the e-book. The e-book consisted of six recipes divided into three categories. For this purpose, materials were validated by a group of researchers.
Stage 4: Production of the pilot video. Once the selection had been made and the preferences identified, the first pilot video of 1 minute and 52 minutes was uploaded on the YouTube platform.
Stage 5: Validation of the pilot video. The validation consisted of two stages, validation by the research group and participants. It was noted that videos needed more production and a longer running time.
Stage 6: Elaboration of the collection of videos, recipes, and tests. Six videos of at least 10 minutes were produced and uploaded to the YouTube platform. In the same way, a multiple-choice test was designed on the Quiz platform to determine the comprehension of the vocabulary learnt in each video.
Stage 7: Elaboration of the research instruments. A survey related to the attitudes and motivation of learners when learning a second language through culinary activities was designed. On the other hand, an observation sheet was designed to determine how participants could learn English vocabulary used in cooking through videos. All instruments were designed and validated by the research group.
Stage 8: Analysis of the information obtained. During the collection of data and information obtained, it was found that 90% of the students understood the English vocabulary of the recipes, and 10% had difficulties. The video collection serves as a tool for future ESL teachers to introduce English through innovative, flexible, and dynamic videos.
Stage 9: Writing the document. Finally, an academic document was written where all the data obtained from the research is evidenced.

4. Results

The presentation of the results follows the order of the research questions presented in the introduction section.

4.1. Educational intervention

In answer to the question 1: How can be used videos as Comprehensive Input in EFL classrooms?

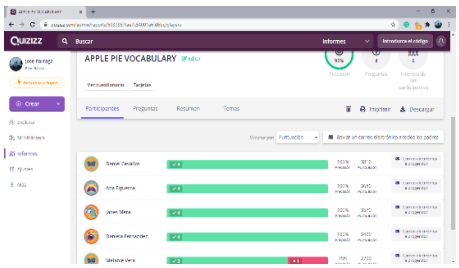
Creation of a dessert e-book. A template from Nestlé (2019) website was taken as a reference, following the basic patterns for creating an e-book. This e-book is divided into three sections, the first two "common desserts," the second two healthy desserts and finally, two desserts of my authorship. Moreover, a survey was conducted to determine students' dessert preferences and, depending on the results, to modify or add recipes.}

Demonstrative cooking class - diagnosis. - A demonstration class was created via the YouTube platform with the topic "How to Make a Peanut Butter and Jelly Sandwich" to introduce pupils to learning a language through culinary arts activities is possible.

Videos production as comprehensive input. - A collection of six videos were created, following the first demo class format, the videos are divided as follows: Apple pie, iced coffee, Chocolate Mug Cake, Butter Cookies, Red Velvet Cookies, and Chocolate Chips Cookies, then taking a test carried out on the Quizizz platform to evaluate the vocabulary learned in the videos. Finally, the videos will be uploaded to the YouTube platform to reach the community of scholars who desire to learn English and prepare desserts.

Table 1: Lesson plan using video as comprehensive input.

Script and Lesson Plan # 1	
Level: A2	
TOPIC: APPLE PIE	

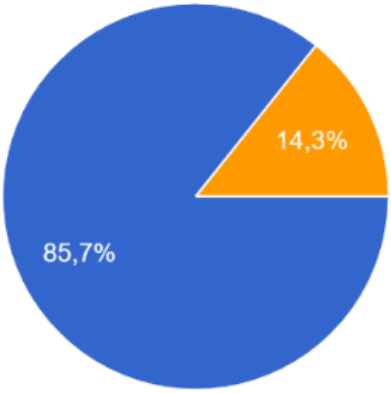
Time 6 min	Audio/ Text/ Content	Short Lesson plan
	Introduction Hey, guys. Welcome back to another video with "COME LEARN ENGLISH AND COOK WITH ANDRES." Today we are going to prepare an APPLE PIE. Yes, as you Heard, an apple pie, for lovers to apples, easy to prepare and easy to get the ingredients. So don't lose our time, and. Let's begin! **Body** For this recipe, we are going to use ingredients that most of you guys have at home. But… ANDRES! … what are the ingredients?! Ingredients - 310gr 2 ½ cups of all-purpose flour - 1 tbs sugar - 1tsp Salt - 200gr butter - 7tbs cold water) - 4 apples - ½ lemon - 1½tsp cinnamon - 1 tbs brown sugar) - 100gr butter - 3 tbs flour - 50ml milk - ½ cup sugar - ½ cup brown sugar - 6 tbsp of iced water **APPLE PIE'S DOUGH** 1. First, add the flour, 1 tbs sugar, 1tsp salt, and the butter in cubs (no with the hands. Use a fork or a spoon) but do not worry if there's still dry mix left. 2. Second, add 6 tbsp and mix all until you have a compact mass. 3. Third, put your apple pie's dough in a plastic paper or film, and 4. Finally, put it in the fridge for about an hour **APPLE PIE'S PASTE** 1. First, peel your apples, cut them into squares or whatever shapes you like, and put them into a bowl with ½ cup sugar, 1½tsp cinnamon, and ½ tsp corn-starch. 2. Put 100gr butter, 3tbs flour, and ¼ milk in a pan, mix until they thickened, and add 1 cup sugar. 3. Finally, add the apples and mix again, and let it cool.	**Objective** **SWBAT:** Prepare an APPLE PIE by the video and then practicing vocabulary on Quiz Platform. **When/How in the lesson will I check students' progress toward the above Learning Objective? What behaviors/activities will show me whether they have mastered the material?** - When the learners do the quiz on the platform. - Ss learn how to prepare an APPLE PIE. **Preliminary considerations:** **a. What vocabulary/grammar/information/skills do your students already know in relation to today's lesson?** This is a new recipe with a familiar vocabulary, so most of them probably know some vocabularies. **b. What aspects of the lesson do you anticipate your students might find challenging/difficult?** - Electronic devices - Pronunciation - Internet connection **Resources/ Materials** - E-book about the recipes - Laptop - Camera. **Quiz** 

	4. After an hour, we separate our dough for the bottom and the cover; we expand the dough for the bottom, put it in our mold add the apples and cover it with the dough that we leave for the cover, previously expanded. We beat an egg, and with a brush, we paint all over the Apple pie and sprinkle sugar. 5. We previously heat the oven to 180°. 6. After that, we put our apple pie in the oven and cook for about 45min. 7. Finally, when the top is golden, we take it out, cool it, and decorate it to our liking.	

In answer to question 2: What is the contribution of videos as comprehensive input at EFL classes?

4.2. Videos contribution as a Comprehensive Input

The data collected by the survey is presented following.



Graphic 1: Learners' perception about EFL learning when use videos as Comprehensive Input.

The graph shows that 85.7% of the students surveyed learned new vocabulary in English and have made a peanut butter and jelly sandwich. Similarly, 14.3% of the students did not understand or already know how to make a sandwich. On the other hand, ten students are curious about learning English through cooking activities, three perhaps, and only one pupil does not want to participate. A total of 13 students are dessert lovers, and one not so much. However, 10 participants eat desserts on special occasions and others on weekends.

Further, five students have not tried healthy desserts, three have tried them, and five may have. Finally, Chocolate Volcano and Mini Brownies are the favorite desserts of most of the participants. Nevertheless, only one student prefers the mini lemon tarts. Finally, many students prefer the oatmeal peanut cookies and the strawberry cheesecake, and only one prefers the red fruit smoothie.

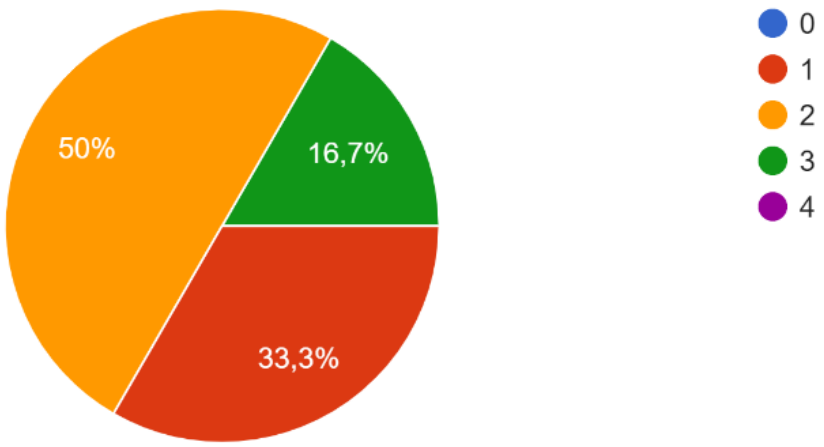
In answer to the question 3: Are students motivated when they use videos to learn a foreign language?

4.3. Attitude and Motivation for learning English as a Foreign Language

Graphic 2 shows that 85% of the participants have a positive attitude towards learning English with interactive videos, and 15% do not have a positive attitude. Furthermore, 90% of the learners feel motivated when learning with videos. Almost most scholars have no interest in learning grammar, and about 80% of the participants have

a positive attitude when learning with art activities, and 90% of the learners prefer interactive activities instead of books.

Finally, 70% of the students are interested in making desserts, and 30% are not. Almost all pupils surveyed are motivated to learn English, and the most common reasons are studying, working, and travelling abroad.



Graphic 2: Students' motivation and attitudes for learning EFL

4.3.1. Class observation

The instrument administered was a published form. Observations focused on students' reactions when confronted with new learning techniques, strategies, and culinary activities. In this case, the following statements were taken as a reference: (1) Participants show a positive attitude when confronted with the instructor's new activity. For instance, learners pay more attention when the educator performs a cooking activity than in traditional classes, (2) when the teacher presents activities related to art, the students are attentive, and (3) participants have a specific attachment to innovative activities because they are attentive to tasks in which their skills and interests are the basis for learning. Students do not pay much attention to repetitive activities.

In answer to the question 4: Does using audio-visual technological resources improve the current EFL instruction?

4.4. Students' improvement in EFL vocabulary acquisition

Table 2: Students score and accuracy – practice: Apple pie

Students	**Score**	**Accuracy**
Participant 1	3810	100%
Participant 2	3680	100%
Participant 2	3570	100%
Participant 4	3420	100%
Participant 5	2790	75%
Participant 6	2520	75%

Source: class observation (2019)

Table 2 shows the data obtained from the test taken after the participants watched the video. The data were collected by scores represented by response rate and percentages illustrated by accuracy. Four obtained 100%, and two students obtained 75%, i.e., 85% of participants comprehended new words. Furthermore, the apple pie video resonated with the students and the entire YouTube community and currently has over 100 views. Even pronunciation was improved, and a more structured script was used. However, the research group mentioned that the video's quality, production, pronunciation, and content should be improved.

Table 3: Students score and accuracy – practice: Chocolate Mug Cake

Students	**Score**	**Accuracy**
Participant 1	5900	100%
Participant 2	5600	100%
Participant 3	5530	100%
Participant 4	4750	83%
Participant 5	4440	83%
Participant	4300	83%

Source: class observation (2019)

Table 4 shows the participants' EFL improvement on vocabulary acquisition.

Table 4: Students' cooking vocabulary acquisition improvement

Student	Pre-test	Post-test	Improvement
1	19	30	11
2	17	25	8
3	13	21	8
4	11	17	6
5	9	13	4
6	7	11	4

Resource: Intervention plan evaluation (2020).

Table 4 indicates the data obtained in the test conducted after the participants watched the video. The data were collected using scores represented by response speed and percentages represented by accuracy. Six questions related to chocolate cake vocabulary were presented. Half of the participants scored 100% on this test, and the other half scored 83%. Although the results are not adequate, the scores are above 4000 and 5000, which means that the level of response speed compensates for the percentage obtained. The video was a success. The students learned the English vocabulary and prepared the Chocolate Mug Cake.

5. Discussion

This study collected recipe videos to corroborate whether the constant use of audio-visual resources generates effective learning. The aim was to investigate whether this educational intervention resulted in a significant acquisition of English language skills and test whether audio-visual technology was an effective teaching method. The results obtained in this research ratify the position of Krashen et al. (2018) concerning the language acquisition theory. Learners' constant exposition to vocabulary in the surrounding context helps them remember a higher number of new words. Similarly, the perspective of Purnama et al. (2019), Tashlanovna et al. (2020), and Sinap et al. (2021) regarding motivation reveal that the more motivated learners are, the more successful they will be in language learning. Therefore, the Educator's community is encouraged to use innovative and didactic resources to keep learners always motivated.

Comparing the research results with Vagg et al. (2020) and Marpa (2021), multimedia is the most interactive and powerful technological tool for scholar learning. Since they provide a solid context through which language teaching is about meaning and practice, giving "reality." Therefore, implementing Computer-Assisted Language Learning (CALL) in EFL classrooms could stimulate students' learning interests and optimize the EFL classroom environment.

The surveys' results show that 85% of the learners have a positive attitude towards learning English through interactive videos. 90% of the students feel motivated when understanding via the Internet, i.e., almost most students are not interested in traditionally learning English. On the other hand, 85% of the students have a positive attitude when they learn with artistic and interactive activities instead of books. The data reveals scholars are motivated to learn English; the most common reasons are studying, working, and traveling abroad.

Quantitative data from the post-test and pre-test suggest that videos are an effective input resource for teaching English. 85% of the participants demonstrate the learning of almost 95% of the English vocabulary, demonstrating that the collection of cooking videos as an Input Comprehensible used by the researcher had to some extent, advanced English language learning. On the other hand, the remaining percentage of learners who do not indicate English vocabulary learning is social and cognitive factors.

Analyzing the quantitative data obtained in the observation, educators are tired of working without technological material in large EFL classrooms. Scholars prefer to work with specialized resources that stimulate effective learning. This study reveals that audio-visual technology was perceived as effective for three reasons: it increases students' English vocabulary knowledge, is a medium for social and cognitive development, and allows educators to work on students' creativity and artistic aspects. Furthermore, it was evident that the collection of videos positively impacted the students and the entire YouTube community.

The need to work on students' motivation to learn EFL is ratified, creating activities that encourage creativity and instruments for more effective learning. On the other hand, educators should carry out projects that use audio-visual tools with compressible input to teach a language with daily life activities. Finally, it is recommended that the teaching-learning process of the vocabulary be done via a different activity that promotes creativity, such as arts and crafts, sports, and cooking.

In summary, this paper supports the idea that videos in the ELT classrooms play a fundamental role in helping students understand a foreign language. Besides, they can improve learners' performance by assessing specific vocabulary. In other words, cooking videos substantially influenced English comprehension and acquisition.

6. Conclusions

Based on the literature review and the results obtained in the empirical part of this study, the research team declares that the intended objectives have been fully achieved. Thus, 100% of the participants had a positive result in vocabulary acquisition and reading comprehension of the recipes in the English language. The main contribution of this study is the innovation, the creative contribution to teaching the English language and how the preparation of cooking recipes safely has been highlighted, contributing to the acquisition of the English language vocabulary of the participants and increasing the motivation to learn. The weakness of this work is that the corpus of the sample, being limited, does not allow generalizations to be made; however, it already proposes work routes that can be implemented in teaching foreign languages to students at the secondary school level. Therefore, the scientific community is invited to continue executing new studies that contribute to innovation and creativity in teaching and learning English as a foreign language.

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Conflict of Interest Statement

The authors declare no conflicts of interest.

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Multicultural Self-efficacy of Undergraduate Students Majoring in Guidance and Counseling

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Abstract
Knowing the level of multicultural self-efficacy would be helpful for undergraduate students pursuing degree in guidance and counseling and guidance and counseling study program as well. The objective of this study was to describe their multicultural self-efficacy in relation to learning context in college. 201 undergraduate students (150 females and 50 males) majoring in guidance and counseling of 7 public universities in Indonesia participated in the survey. A 42 item-questionnaire named Multicultural Self-Efficacy Scale for Student (MESS) was administered via Google Form. Analysis was done as appropriate on the analysis of variance level according to demographic data. Findings indicated that students have moderate to high multicultural self-efficacy. Female students had slightly higher scores than their male peers. In addition, students of western part of Indonesia has slightly higher multicultural self-efficacy compared to their peers of middle and eastern part.

Keywords: Multicultural Self-Efficacy, Guidance and Counseling, College Students

1. Introduction

Students who pursue bachelor degrees in guidance and counseling will be projected to become prospective school counselors. During their years of study, they gain exposure to widen their perspective, awareness, attitude, and skill to work with others. Specifically, they encounter diverse instructors and peers who come from various regions with cultures formed and firmly rooted in certain race, religious, age, gender, and cultural backgrounds, customs, and traditions. Students who have broad and positive multicultural perspective and high self-efficacy are assumed to be more likely *understanding how to relate with each other, knowing means appreciating others,* expressing cultural values, *be inspired to put culture to courses,* collaborating with peers. They in turn will get benefit from culturally experience during their academic years.

Although Indonesian has been recognized as a leading society in practicing their diversities (Kamil & Mukminin, 2017), current situation is mixed as seen from a number ethnic and religious conflicts, such as in West Kalimantan (Nakaya, 2018). A study of Mangundjaya (2013) showed cultural change among seven major ethnic in Indonesia (Javanese, Sundanese, Minang, Batak, Balines, Malay, and Ambonese) particularly in company level. She found

a shift in work values from collectivist to individualist, and feminine to masculine. Irawan's study (2017) of expatriates' perceptions toward Indonesian culture concluded that Indonesian has collectivism and low uncertainty avoidance culture. A research of the Center for Islamic and Community Studies (Muthahhari, 2017) showed that understanding multicultural and religious understanding is at an alarming level among high school students, students in higher education, teachers, and lectures. Study of Budirahayu et al. (2018) found unclear understanding of youth to multiculturalism impacting the way they perceived it as plurality or diversity. They identified a part of them was contributed by social media which tended to report more on conflicts and disputes among groups.

Considering such situation, in order to be successful in their pursuing degree, Robinson and Savitsky (2020) suggested students of guidance and counseling to have self-awareness in the tier of multicultural competence and the foundation that knowledge and skills are built upon. As following up, they have to have adequate multicultural self-efficacy---belief that would influence their thoughts, motivations, actions, affects, and the selection of her/his environment (Bandura, 1982). There are at least three reasons why they need to develop adequate multicultural self-efficacy not only during years of learning but also for shake of their future career. First, educational institutions are mini communities (Dewey, 1907) and individuals were representations of their social environment, where culture was part of such environment (Breakwell, 2014). In a small community, they need to build a multicultural academic atmosphere. In turn, it will increase self-awareness, critical thinking, knowledge and skills, awareness to think comprehensively, shared learning experiences, and produce better work. It had been proved by a longitudinal study of Villarpando (2002) where rich multicultural college experience had influence on positive satisfaction.

Second, as future school counselors, they will encounter and give various counseling services to students from different cultural backgrounds. Furthermore, in order for relationships with students to have a therapeutic impact, they need to learn how to develop multicultural perspective as soon as they enter college. Third, they will also have to interact with educators and parents from various cultural backgrounds. A harmonious relationship in the world of work will have an impact on the productivity of school counselors in providing services (Martin, 2014). This demand suggests students to have adequate multicultural self-efficacy since they are in college. Unfortunately, multicultural self-efficacy is not a legacy but has to be learned by students through cognitive processes, motivation, affection, and selection (Bandura, 1994).

Studies of multicultural understanding or cultural diversity have been published in various professional literatures. The findings are mixed and difficult to generalize. Among them are student perceptions of the responsibility of educators in multicultural education (Yılmaz, 2016), teachers' perceptions of their multicultural competence in teaching students with diverse cultural backgrounds (Lehman, 2017), and multicultural collaboration in public school (Donoso et al., 2020)The results of these studies indicate that not all respondents have positive multicultural perception.

Meanwhile, studies on multicultural efficacy have been carried out by a number of researchers addressed to students majoring in education and various teachers. For example, multicultural attitudes and efficacy of teacher education students (Nadelson et al., 2012), multicultural efficacy of secondary school teachers in Korea (Roh, 2015), multicultural efficacy of educational study program students (Mansuri, 2017), factors related to multicultural efficacy and the multicultural attitudes of early childhood-high school teachers (Strickland, 2018). The results of these studies indicate the importance of adequate multicultural efficacy of students, teachers, and school counselors in educational settings in schools and colleges.

Concept of self-efficacy has connected to various human functioning, including multicultural self-efficacy. Research on measuring multicultural self-efficacy has been carried out by a number of researchers, for example a multicultural teacher efficacy measurement instrument (Guyton & Wesche, 2005), a measure of teacher attitudes, beliefs, and self-efficacy regarding multicultural education in Kosovo, a multi-ethnic European country (Yildirim & Tezci, 2016). The results of these studies had proved possibility of measuring multicultural efficacy comprehensively and profiling the subjects based on chosen indicators accurately.

Having strong multicultural self-efficacy needs handful of efforts. Reflecting from Gallavan's (2007) finding of novice teachers tending to teach the ways they were taught, teach students who cooperate and behave in ways that

are similar to ways the teacher behaves, and do not want to teach topics and issues associated with multicultural education, it is possible for students to do the same ways in term of urging their own culture. It had been underlined that the more multicultural training and experiences that counselors have, the higher they rate their capabilities to work on multicultural tasks in schools (Holcomb-McCoy et al., 2008), having the ability to adapt skills to meet both individual and multicultural uniqueness and to bring about positive change through counseling (Ivey et al., 2018; Pedersen, 2002). Guidance and counseling students should assume that becoming a professional multicultural school counselor has to be started at college level. At the level of professional development, multicultural self-efficacy will develop through a process of exploration, examination, integration, and personalization (Muro & Kottman, 2005). For this reason, not all students have adequate multicultural efficacy which may limit the quality of peer relationships in current academic situations and in the future world of work. Students who fail to understand and accept peers with different cultural backgrounds will find it difficult to provide empathy for peer conditions. If it continues, there is a concern that the student will become school counselors who are unable to provide services based on sincere acceptance, empathy, and authenticity as emphasized by Rogers (1980).

Culture is not a simple matter. In multicultural community, it may come into conflict. It may trigger hostile particularly at macro level when it becomes reflected in society wider needs and politics. Undergraduate students of guidance and counseling major should be able to convince themselves to develop adequate multicultural efficacy. In the midst of cultural change, it is under question whether those students are prepared well to challenge it and guidance and counseling study programs or department have had information pertaining multicultural self-efficacy level of their students in relation to challenging cultural situation in Indonesia recently. In order to ensure that such information is available, a research has to carry out.

2. Method

Referring to Borg et al. (2003), this survey method is aiming to determine the existence of multicultural self-efficacy of undergraduate student majoring in guidance and counseling. Demographically, the respondents of this study were composed of students between 17-23 years old (mean=20, SD=6.3). Among them 150 females and 51 males. They attended 7 public universities of Indonesia consisting of State University of Medan, Sriwijaya University, Indonesia University of Education (western zone), Mulawarwan University, Public University of Makassar, Cendana University (central zone), and Pattimura University (eastern zone). The Head of Guidance and Counseling Study Program of each public university was gotten contacted with in accordance with the permission obtained from Deans of Faculty of Education Science and Faculty of Teacher Training and Education Science. Prior to administering the instrument, respondent filled out informed consent.

To measure students' multicultural efficacy, researchers administered a 42 item-questionnaire named Multicultural Efficacy Scale for Student (MESS). The scale was a self-assessment reflecting students' belief toward their multicultural capabilities which was composed of 5 subscales namely respect any culture (9 items), communication (9 items), cultural values (6 items), cultural awareness (9 items), and flexibility (9 items). In line with Bandura (2006), the MESS asked students to score on the scale between 1-10. High scores indicated high belief of their multicultural capabilities and low scores were vice versa. In addition to peer review of the MESS's items, its validity was analyzed by using Pearson correlation formula. It was .59. The reliability was measured by referring to Cronbach's alpha (Gall et al., 2003). Its reliability was .953. The MESS was formatted into Google Form and its link was sent to the Head of Guidance and Counseling Study Program of each public universities upon obtaining the Deans' approval. It was forwarded finally to their students. Administering the MESS was completed by two weeks.

Once the data collection time was completed, the data were downloaded from the Google Site in Excel form. The demographic data for the sample were categorized into institution, gender, and age. Lastly, they are transferred to SPSS for analysis. Data analysis were addressed to describe students' multicultural self-efficacy as a whole by using graphic showing percentage of low to high multicultural self-efficacy of the students, reported the difference of mean score and standard deviation students' score according demographic categories by using analysis of variance.

3. Results and Discussion

Chart 1 presents means and standards deviations of scores on the five subscales of multicultural self-efficacy: respect any culture, communication, cultural values, cultural awareness, and flexibility. Tables 2 and 3 present the analysis of variance for gender and institution.

Chart 1: Students' Multicultural Efficacy

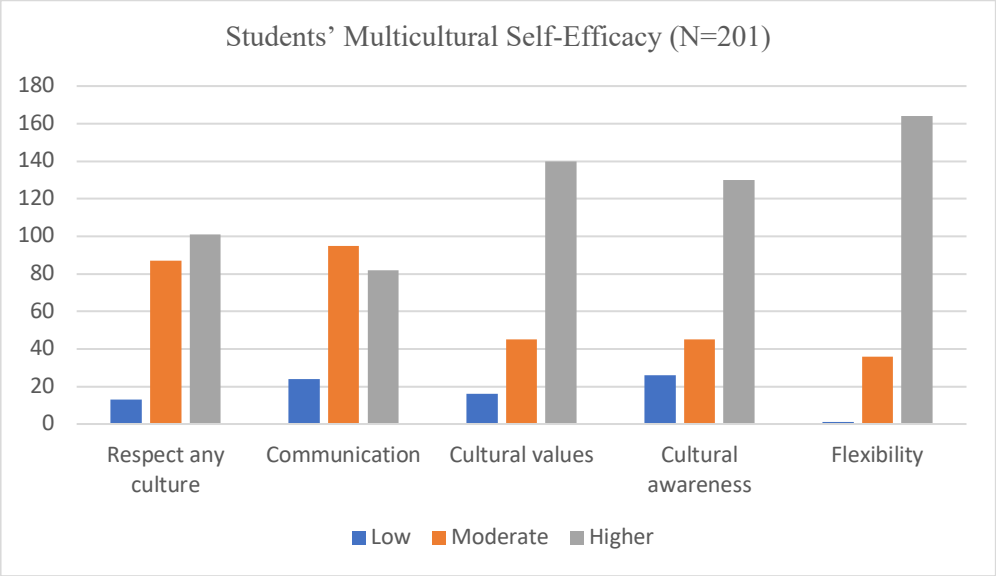

Table 1: Students' Multicultural Self-Efficacy by Gender

Subscales	Female (N=186)		Male (N=15)		*t*	*p*
	Mean	SD	Mean	SD		
Respect any culture	70.39	10.891	70.13	10.405	0.87	1.9719
Communication	67.2	11.481	67.87	11.747	0.216	1.9719
Cultural values	52.83	6.413	50.33	8.068	1.42	1.9719
Cultural awareness	77.53	10.73	77.93	10.416	0.14	1.9719
Flexibility	77.49	10.004	78.87	9.054	0.514	1.9719

Table 2: Students' Multicultural self-efficacy by Region of Institutions

Subscales	Western Indonesia (N=89)		Central Indonesia (N=58)		Eastern Indonesia (N=54)		F	*P*
	Mean	SD	Mean	SD	Mean	SD		
Respect any culture	71.36	9.825	70.76	11.336	68.31	11.75	0.384	0.05
Communication	68.44	10.735	67.31	12.363	65.22	11.596	0.338	0.05
Cultural values	53.33	5.692	52.09	7.742	52.11	6.535	0.660	0.05
Cultural awareness	78.52	8.851	77.47	12.763	76.09	11.027	0.415	0.05
Flexibility	78.29	8.618	77.5	10.09	76.56	11.694	0.877	0.05

Multicultural self-efficacy can be considered as a powerful instrument to understand culturally diverse student relationship regardless what related skills they have. As Bandura (2006) pointed out, efficacy was concerned with people's beliefs in their perceived capabilities to execute given types of performances. In this study context, such

performances are related to students' capabilities to multicultural matter as the object of interest. Finding of this study revealed that 61.4% of students have high level of multicultural self-efficacy, 30.6% are at moderate level, and 8% are at low level. These suggest that majority students are more likely to relate with others who are culturally different from themselves. Further analysis shows that communication and respect any culture subscales are lower than other subscales. Meanwhile, students' scores in flexibility subscale places the highest indicating their belief to be able to adjust their behavior when they interact with students of other cultures.

Concerns about culture are frequently exposed in relation to initiatives for gender equality since it is considered with reference to social constructs rather than biological ones (West & Zimmerman, 1991). In relation to multicultural, both males and females of one culture are expected to have similar self-efficacy regardless their roles in their culture. Present study shows that both groups are not different significantly in all subscales of multicultural self-efficacy. However, there is mean variation among the subscales, in which mean score of cultural value subscale was the lowest both for males and females. The highest mean score was in cultural awareness and flexibility subscales meaning the students tend to believe in their capabilities to gain adequate knowledge of their own culture as well as others' culture and to adjust their behavior to other culture context. Cultural values are conceptions of the desirable that guide the way social actors select actions, evaluate people and events, and explain their actions and evaluation (Schwartz, 1999). Since they operationally define ways of thinking, feeling, and behaving, it seems the mean score of cultural awareness and flexibility subscales and cultural value subscale of both groups are not consistent.

Such findings are different from some previous researches in the context of perceived various efficacy which tends to consider females to have different levels of self-efficacy compared to males (Schoen & Winocur, 1988). Another example, study of Fallan and Opstad (2016) indicated female students to have significantly lower self-efficacy strength than their male peers despite some exception due to gender-personality interaction. In addition, study of Burger at al. (2010)revealed similar conclusion that women had lower academic self-efficacy than men at the point of entry in their undergraduate engineering education. Meanwhile, a meta-analysis of Huang (2013) found females displayed higher language arts self-efficacy than males. On the other hand, males exhibited higher mathematics, computer, and social sciences self-efficacy than females.

Not all studies indicating male student self-efficacy are higher than female. Study of Busch (1995) proved mixed-result of gender differences in self-efficacy related to academic performance. The female students had significantly lower self-efficacy in computing and marketing and higher self-efficacy in statistics than the male students. Moreover, Whitcomb et al. (2019) found inconsistent gender differences in self-efficacy among students majoring in engineering by various disciplines. It is obvious that in some societies, males have more access for longer education than females and in turn they will have more opportunities to dominate society resources including constructing culture in the future.

Present study has involved undergraduate students majoring in guidance and counseling across seven universities in western, middle, and eastern regions of Indonesia. Their ethnicity and culture may be different but the most important is how their belief of being capable to encounter peers coming from other cultures during their academic years. Data of the current study displayed in Table 2 indicate that students' multicultural self-efficacy strength of the seven universities are different statistically. The order of multicultural efficacy mean scores seems placing students of Cendana University at the first place and followed by students of Public University of Medan, Sriwijaya University, Pattimura University, Indonesia University of Education, Public University of Makassar, and lastly Mulawarman University. This study does not analyze culture origin of students specifically since each university basically attended by students coming from surrounding regions of the universities. In other words, majority students enrolled at each university represent main culture nearby. For instance, students of Pattimura University mostly are Ambonese and those of Indonesia University of Indonesia majority are Sundane. Considering such data, it is surprising that students of Cendana University reach the first order since communal conflicts have taken place in Kupang City, home of this university (Tule, 2000). The conflict probably has driven community to live harmoniously by appreciating one and each other culture. Meanwhile, a communal conflict also occurs in Province of Maluku, where Ambon, the capital city, is the home of Pattimura University (Goss, 2000; Safi, 2017). Compared to Kupang incidence, conflict in Maluku is very bloody and betraying "Pela Gandong" cultural legacy (Malatuny

& Ritiauw, 2018). The last case, however, cannot explain directly the influence of such campus location on the level of students' multicultural self-efficacy.

Similar to data category by gender, student data according to their institution region, among five subscales, the cultural values subscale places the lowest mean score. Since the items of cultural values are addressed to discover student belief of being able to understand their own culture as well as other cultures, it is interesting to explain some possibilities. Cultural values as part of culture itself are constructed by society and may consist of aesthetic spiritual, social, historical, symbolic, and authenticity value (Throsby, 2003). They give a shape to the culture and the society. These are relatively stable and difficult to change because they are rooted in social institutions and the social norms. They are considered as the references to practice culture in terms of how people routinely think, feel, and behave accordingly. The lowness students' mean scores of culture value subscales compared to others subscales may be associated with the nature of items asking the students to acknowledge with full awareness the advantages and disadvantages of their own culture as well as others. Since the items touch very sensitive part of culture the student may consider their culture full of advantages and the others are vice versa.

The dominance of moderate to high levels of students' multicultural self-efficacy identified in this study is a good sign for guidance and counseling study program that their students will have harmonious campus live. Their multicultural self-efficacy can still enhance by numerous strategies. According to Bandura (2001) there are four sources that influence self-efficacy. They are enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states. In light of enactive mastery experiences as the most influential source of efficacy, those respondents who place high level probably have satisfying experience in which they have preconception of capability to relate culturally diverse people. They also may be able to overcome challenging friendship with different people, try hard and win under pressure conditions, or have amount of external support, and meet suitable conditions under which they perform well. The finding of Kim (2005) should be considered since prior experience in is not always related to addressed self-efficacy.

The study has explored the multicultural self-efficacy of students who majoring in counseling. Findings should take into account some limitations. Firstly, participants may not be representative of all Indonesian students since their population is so many, spreading from Province of Aceh to of Papua. Further study is needed to convince more accurate data. The study has to involve students majoring in guidance and counseling from private universities since they are out of numbers compared to public universities. Second, this study has not considered their culture origin in its analysis so that the data only cover such efficacy according to their campus domicile. Next research will include such consideration.

4. Conclusion

The multiculturalism has been a great attention of those who work in guidance and counseling field. As a multicultural nation, Indonesia needs school counselors who are able to provide essential services to culturally diverse students. All have to be started by prospective school counselors when they are pursuing bachelor degree in college. Universities behave as a community, receiving various students with different backgrounds, while integrating culturally diverse students remains a challenge. Measuring student multicultural efficacy is a fair way to predict their multicultural behavior in the future as well as for variety academic purposes. This study has added new information in guidance and counseling literature. Finding of the research shows that students majoring in guidance and counseling have moderate to high multicultural self-efficacy. Specifically, female students indicate higher efficacy than their male peers. Another indication found in this study is students of western Indonesia has slightly higher multicultural self-efficacy compared to their peers in the middle and eastern part of Indonesia.

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An Investigation into Lecturers' Perceptions and Experiences Regarding Students with Special Needs

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Abstract
This study aimed to examine lecturers' perceptions and experiences regarding their students with special needs. The research was designed within the framework of the qualitative research paradigm. The participants of this descriptive study were nine lecturers of two different universities in Turkey who had experience in teaching students with special needs. They were working in different departments/programs such as midwifery, foreign languages, and interior architecture. The students with special needs had different disabilities such as physical disability, hearing impairment, and visual impairment. Data were collected through semi-structured interviews in the fall semester of the 2021-2022 academic year. The data were analyzed via content analysis.

Keywords: Lecturers, Students with Special Needs, Experience

1. Introduction

In Turkey, Regulation for Special Education Services (ÖEHY) is one of the regulations that define individuals with special needs and inform how the educational arrangements related to these students should be. This regulation defines the services to be provided to individuals with special needs as "training programs developed to meet the educational and social needs of individuals who have significant differences from their typical peers in terms of their individual and developmental characteristics and educational qualifications, and training services provided by specially trained personnel in appropriate environments" (Special Education Services Regulation [ÖEHY], 2021). Based on these statements, individuals with special needs develop differently from their typical peers in terms of some characteristics. When these differences are above a certain limit, it may be difficult for them to benefit from standard education programs. That is, these individuals have special needs in line with their special differences. Those with such needs are called individuals with special needs (Akçamete, 2016; Ataman, 2013; Baykoç Dönmez, 2010; Cavkaytar & Diken, 2012; Cavkaytar, 2017; Diken & Batu, 2013).

Individuals with special needs include individuals with mental, hearing, visual as well as physical disabilities. Also, gifted individuals can be considered as individuals with special needs due to their mental differences.

Education offered to individuals with special needs is carried out in two different educational environments. While some individuals with special needs receive separate education in special education schools, some of them are trained together with their typical peers (Kavale, 1979; ÖEHY, 2021). Thus, for individuals with special needs to benefit from general education services together with their typically developing peers, adaptations must be made in education programs and these individuals should be supported (Akçamete, 2016; Diken & Batu, 2013; Ataman, 2013; Baykoç Dönmez, 2010; Cavkaytar & Diken, 2012; Hallahan et al., 2020; ÖEHY, 2021).

Regarding the support to be provided to individuals with special needs, Article 15 of Law No. 5378 on the Disabled states that integrative practices will be included in the general education system so that individuals with special needs can access education at every education level. The same article indicates that "Disabled People Counseling and Coordination Centers" will be established within the universities to ensure the effective participation of university students with special needs in education. The duties of these centers are to provide appropriate equipment and course materials, suitable education, research and accommodation opportunities for individuals with special needs, and to ensure that studies are carried out to solve the problems experienced by these individuals in terms of education (Law No. 5378 on the Disabled).

In Turkey, there are 51,647 university students with special needs according to the data of the Council of Higher Education. While 27,782 of these students are studying an associate degree, 23,581 of them continue to undergraduate programs. Besides, there are 236 students with special needs continuing their graduate programs, and 48 students with special needs are Ph.D. candidates (http1). Meeting the special needs of these individuals and making them benefit from educational services is both a legal obligation and a requirement (Law on the Disabled No. 5378; Ataman, 2013; Kargın, 2004; Kavale, 1979; ÖEHY, 2021).

In Turkey, there is a limited number of studies examining the state of individuals with special needs who continue their associate degree, bachelor's degree, and/or doctoral degree and determining the experiences and needs of the academicians who teach these students. Güray (2014) aimed to identify the experiences of a graduate student with visual impairment during the education process and thus to offer suggestions to the lecturers. Some of the suggestions were that the lecturers make presentations more slowly, provide psychological and technical support to students with special needs, ensure that students sit at the front of the class, prepare easily accessible and simple course materials, and give students with special needs more time to prepare homework. Yalçın and Aslan (2021) examined the difficulties experienced by academicians teaching university students with visual impairment. They reported that academicians had problems in preparing and adapting content for students with special needs. The available research has mostly focused on students with visual impairment and the lecturers teaching these students. However, as stated in the relevant statistics of the Council of Higher Education, around 50,000 individuals with special needs are university students. These individuals have different special needs such as hearing impairment, visual impairment, physical disability (http1). Therefore, it is important to conduct similar studies in a wider scope and cover different special needs groups. In this sense, examining the perceptions and experiences of lecturers regarding individuals with special needs is necessary to close this gap in the literature. This study aimed to examine lecturers' perceptions and experiences regarding their students with special needs in their classes and to reveal the difficulties and deficiencies the lecturers experienced. To achieve this goal, the following research questions were asked:

a) What are the perceptions of lecturers teaching individuals with special needs about these individuals?
b) What are the experiences of lecturers when teaching individuals with special needs?

2. Method

This research aimed to investigate the perceptions and experiences of the lecturers who teach individuals with special needs. The study was designed as descriptive research within the framework of the qualitative research paradigm. Adopting data collection techniques such as interviews, observations and document analysis, qualitative research aims to present the current situation and the phenomenon realistically and holistically. Qualitative research is not concerned with generalization. The qualitative data should be examined according to the conditions they are in (Cresswell, 2016; Mills & Gay, 2016; Yıldırım & Şimşek, 2018). In this research, qualitative data were

collected from lecturers working in three universities in two different cities in the Central Anatolian Region of Turkey.

2.1 Participants

Data were collected from lecturers working in three universities in the Central Anatolian Region of Turkey. To ensure participant confidentiality, code names were used.

Table 1: Demographic Information of Lecturers

Code Number	Code Name	Age/Gender	Department/ program	Professional Experience (years)	Special Needs Type of Student(s)	Number of Students with Special Needs
1.	Melek	50/F	Psychological counseling and guidance	24	Visual impairment	1
2.	Kadir	32/M	Basic Islamic sciences	7	Visual impairment, physical disability	3
3.	Özgür	37/F	Turkish language and literature	12	Visual impairment, physical disability	5
4.	Halil	45/M	Translation and interpreting	12	Visual impairment	1
5.	Adil	35/M	Education management	9	Visual impairment	2
6.	Kerem	43/M	Midwifery	20	Hearing impairment, physical disability	2
7.	Meryem	48/F	Philosophy	24	Autism spectrum disorder, Visual impairment	3
8.	Berke	32/M	Interior architecture	9	Physical disability	1
9.	Burak	52/M	Measurement and evaluation	17	Visual impairment	1

Not: *K=Kadın, E=Erkek*

2.2 Data Collection and Analysis

Semi-structured interview questions were created by the authors. These questions were sent to four experts on special education and qualitative research methods. Then, the authors came together and discussed expert opinions. Based on the expert opinions, questions were finalized (see Table 2).

Table 2: Semi-Structured Interview Questions

1. What do special needs mean to you? What do you know about students with special needs?
2. What did you experience when you met your student with special needs for the first time?
3. When you met your student with special needs for the first time, what did you know about your student's needs?
4. What methods did you do to learn about the needs of your student with special needs?
5. Did you make any change(s) in the teaching and evaluation processes for students with special needs? What is(are) the changes(s)? What changes did you make during face-to-face and/or online education?

6. What were the activities that you easily did for your students with special needs during the teaching and evaluation process?
7. In which subject(s) did you have difficulties with your students with special needs during the teaching and evaluation process? Can you give examples?
8. What kind of gains do you think a student with special needs has provided for you? Do you have anything negative to say about it? (For example, caring is tiring, it is time-consuming)
9. Do you want to be a teacher in a classroom having students with special needs in the future? Why/why not?
10. What are your suggestions for the arrangements to be made while students with special needs are studying with their typical peers at university?
11. Is there any other opinion you would like to add on the subject?

Data were collected through the interview questions. Semi-structured interviews were conducted between 11.01.2022 and 21.01.2022 by both authors at three different universities in the Central Anatolian Region of Turkey. Demographic information of participants was given in Table 1. Before the interviews were conducted, legal permission was obtained from the scientific research and publication ethics committee of the university where the first author was working.

To recruit the participants, students with special needs studying at the university were reached through the Disabled Student Units of the universities where the authors were working. Then, the students were asked about the courses they took as well as their lecturers. The accessible lecturers were informed about the research. The volunteers were included in the study. Interviews were held on the agreed days and times. Before the interviews, the instructors were informed about the research, data collection processes, and confidentiality. Finally, written and verbal permissions were obtained.

Semi-structured interviews were audio-recorded. Next, the authors transcribed the audio recordings. Then, the transcripts of both authors were checked for accuracy. Thus, the reliability of the interview transcripts was ensured.

During the data analysis, both authors independently read the transcripts three times to ensure that the authors dominate the interview transcripts. The authors adopted content analysis to analyze the data. In the content analysis approach, the data is read and coded by the researcher/s. Then, sub-themes and themes were created through the codes. Besides, direct quotations were included in the content analysis to reflect the views of the participants in the analysis (Yıldırım & Şimşek, 2018). Both authors created themes, sub-themes, and codes independently. The authors created a list of codes, sub-themes and themes. Finally, the authors discussed their analyzes and agreed on the themes, sub-themes, and codes (see Table 3).

3. Results

This study aimed to examine the perceptions and experiences of the lecturers regarding their students with special needs. The data were collected through semi-structured interviews in the fall semester of the 2021-2022 academic year, as explained in the title of "Data Collection and Analysis." The interviews lasted a total of 3 hours, 36 minutes, and 34 seconds. The longest interview was with Adil (35 minutes and 43 seconds). The shortest interview was with Melek (16 minutes and 6 seconds). The average interview time was calculated as 24 minutes, 6 seconds. The transcripts were determined as 87 pages in total.

The themes, sub-themes and codes are given in Table 3. As can be seen in Table 3, two themes were reached: a) lecturers' knowledge and thoughts about individuals with special needs, and b) lecturers' experiences with their students with special needs. Also, 10 sub-themes and 46 codes were reached. The themes, sub-themes and codes were as presented in Table 3.

Table 3: Themes, sub-themes and codes

1. Lecturers' knowledge and thoughts about individuals with special needs
1.1. Lecturers' current knowledge about individuals with special needs
    1.1.1. Individuals outside the norm

1.1.2. Individuals who need others' support
1.1.3. Individuals with disabilities
1.1.4. Individuals who need special support
1.2. Lecturers' knowledge of students with special needs regarding their first interaction
1.2.1. Lack of knowledge
1.2.2. Knowing the type of disability of the student with special needs
1.2.3. Adaptations for students with special needs
1.3. Lecturers' obtaining information about individuals with special needs
1.3.1. Not getting information
1.3.2. Searching on the internet
1.3.3. Following scientific articles
1.3.4. Asking the student
1.3.5. Getting information from academics
1.4. Benefits of teaching students with special needs
1.4.1. Changing their perspectives towards students with special needs
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1.7.5. Integrating students with special needs with their peers
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1.7.7. Improving transportation
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2. Lecturers' experiences with their students with special needs
2.1. Lecturers' adaptations for students with special needs in their courses
2.1.1. Allowing audio recording
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2.1. 3. Visualizing the topic
2.1.4. Not adapting
2.1.5. Providing exam/training in a separate environment
2.1.6. Exemption from certain courses
2.1.7. Changing the font size
2.1.8. Changing a student's place in the classroom
2.1.9. Conducting individual lessons online
2.2. Issues that lecturers have difficulty with
2.2.1. Describing the topic verbally
2.2.2. increased workload
2.2.3. Not adapting
2.3. Issues that lecturers find easy

2.3.1. Active participation of the student in the lesson
2.3.2. Contacting the student's family

The lecturers were asked to explain the meaning of "special needs and students with special needs." Melek, Adil and Kerem defined people with special needs as individuals outside the norm. For example, Melek said, "*For me, these expressions refer to students who are not within the norm. Of course, gifted people are also people who fall outside the norm. But with these concepts, I perceive not the gifted but rather those who are different from the average individuals. For example, students with visual, hearing, and physical disabilities are the first examples that come to mind… Of course, we can add those with chronic health problems to a certain extent*." Kadir, Özgür, Meryem and Berke stated that individuals with special needs were those needing someone else. For instance, Kadir said, "*Obviously, I think individuals with special needs are people who cannot come here by their own means and cannot normally come like their other friends.*" Halil and Berke also stated that individuals with special needs were those with disabilities. For example, Halil voiced, "*In my opinion, people with special needs are individuals with disabilities such as physical inadequacy and visual impairment*." Moreover, according to Burak, individuals with special needs were those needing special support: "*Students with special needs remind me that we need to prepare a special effort for them. Special pedagogical approaches and special education programs should be prepared for them. Because these individuals are the ones who need special support*."

Regarding lecturers' knowledge about individuals with special needs when they met them for the first time, Melek, Kadir, Adil and Meryem had no information. Adil expressed, "*I didn't know anything. It could not receive training on that subject*." Özgür and Kerem only knew the disability types. Özgür said: "*So I had at least some prior knowledge. For example, in that class, this student has this disability… At least I knew something about the types of students' disabilities*." On the other hand, some lecturers (e.g., Halil and Kerem) said that they knew adaptations for students with special needs. Kerem said, "*I was quite relaxed as I could present the lesson visually for the hearing impaired*."

Participants were asked to explain how they could get information about individuals with special needs. Melek, Kadir, Adil, Kerem, Meryem and Berke did not obtain information during this process. For example, Melek said, "*I did not do anything to gain information for this student.*" Özgür and Halil searched on the internet to be informed about individuals with special needs. For instance, Halil said, "*I followed websites for information a bit*." Besides, Halil followed scientific articles. Meryem was asking questions to students to get information. she stated, "*I asked them how they study. I tried to understand them so that I could learn something about them…*". Burak got information thanks to academicians in the field of special education: "*I was thinking about how I could prepare a better educational environment for them. I talked to one of my university professors about this issue. I asked questions about how to decide for the visually impaired. Thankfully, with his help, I managed*."

Lecturers were asked whether teaching individuals with special needs had positive effects on them. According to Melek, Kadir and Berke, this experience changed their perspectives on these individuals. For example, Berke said, "*It had positive effects. When I saw that they could adapt to life and get used to any environment, my perspective towards them changed positively*." Kadir and Özgür said that a sense of gratitude is the positive effect of working with individuals with special needs. For example, Kadir voiced, "*When a person sees someone weaker than himself, he is grateful for himself*." Kerem said that working with individuals with special needs motivated him to work: "*I think the person develops himself/herself. To be able to teach a student with disabilities and to feel competent about that subject, the person feels motivated to work*." Meryem said that teaching individuals with special needs gave her experience in this regard.

For the negative effects of teaching students with special needs, Kadir said that teaching students with special needs made him pessimistic: "*Sometimes, when you see these friends, you become pessimistic…*" Kerem also stated that he had a loss of motivation towards teaching because of students being late to classes. In addition, Kerem expressed that he felt inadequate due to teaching these students. On the other hand, students with special needs distract Meryem who said, "*From my point of view, I would say that because I am a social scientist, it is a distraction for students*." Finally, Özgür stated that although he accepted the lesson being recorded, he felt under control because of the voice recording

Regarding whether they would like to teach individuals with special needs in the future, Melek, Meryem, Berke and Burak were optimists. For example, Berke said, "*First of all, I would like to teach them in the future, professionally*." However, Özgür and Kerem stated that they do not want to teach students with special needs again in the future. For instance, Özgür voiced, "*My field is Turkish Folk Literature. As the name speaks, we must be with people. We must have talks. We need to get records. We should do oral culture and oral history studies. In my field, it is difficult to work with someone who has any disabilities. If we have a student with a disability in graduate education, what can we work with? Frankly, I do not prefer it, especially in folk literature, because it would not be productive*." Kadir also said that the subject of teaching those individuals changes depending on the types of special needs of the students: "*Some of the individuals with special needs can be more advantageous than others. For example, we cannot explain some concepts to a deaf student because our course is philosophical or intellectual. As far as I know, their conceptual framework is narrower than that of the visually impaired. In addition, I think a visually impaired person can be more advantageous in learning some things than a person with a hearing impairment. For example, we can teach someone visually impaired, but it would probably be difficult for us to teach someone who is hearing impaired. Because it is necessary to learn sign language*."

The lecturers were asked to mention their suggestions regarding the arrangements for students with special needs studying at the university with their typical peers. According to Melek, Özgür, Adil, Kerem and Burak, lecturers should be informed about individuals with special needs and the education to be given to them. Kerem said, "*Obviously, I don't know anything. However, if you lead the way, I would like to participate in the training you will give. I think all lecturers should be informed about this issue*." Melek, Adil, Kerem and Berke suggested peer or counselor coaching. Berke said, "*I think it is very important to have a staff member who will help them not only in the rectorate but also in the faculties. This person may also be academic staff*." Lecturers (Kadir, Özgür and Halil) also advocated that appropriate teaching materials should be prepared for students with special needs. For example, Özgür stated, "*We need smart boards. That's why the teacher has to use his voice all the time. He uses slides, and he says, look, as you can see on the slide, but this has no value for students, so we are very lacking in the use of smart boards and similar technical infrastructures*." Melek and Burak argued that students with special needs should be integrated with their peers. For example, Melek voiced, "*If I have the file of the student with special needs, I will do my best to integrate them with their peers. Individuals with special needs should already be integrated with their peers.*" Similarly, Meryem stated that places that could serve students with special needs to socialize with their peers should be established. According to Kadir, technology should be used more while teaching students with special needs. Halil suggested that the transportation of individuals with special needs should be improved, and Berke stated that places should be designed in line with universal design principles.

Another theme was lecturers' experiences with their students with special needs. Lecturers explained the adaptations they made in their lessons for their students. Özgür, Adil, Kerem, Meryem and Burak taught their students with special needs in or taking the exam, in a separate environment. For example, Burak said, "*Under normal circumstances, it is not right for a student to support another student in the exam. However, a friend of our students with special needs read the questions in another environment and supported him in the exam.*" Some lecturers (Melek, Adil and Meryem) stated that they allowed audio recordings in the course so that students with special needs could follow the lessons. Adil reported this situation by saying, "*I allowed the audio recording, for example, in my class*." Melek and Kerem used narration in their classes. Halil and Burak increased the font size in the exams. However, Kadir, Meryem and Burak did not make any adaptations in their lessons. For example, Kadir said, "*I didn't think of making any adaptations, frankly*." Kerem explained the topics with visuals, and Özgür exempted students with special needs from some courses. Burak also taught some online lessons individually with students with special needs and placed these students in the front row in the lessons he was teaching face to face.

Regarding the issues the lecturers had difficulty in teaching students with special needs, Kadir and Özgür thought that teaching students with special needs increased their workload. For example, Özgür said, "*We are preparing special notes for them. You also spend more time preparing for classes. This increases our workload*." Melek said that she had difficulty in explaining the subject aloud to them. Adil also had difficulties in designing the lessons for students with special needs.

For the issues they found easier when teaching individuals with special needs, they said that these students could participate actively in lessons, which made things easier for them. For example, Adil said, "*The student works hard. He tries to get as high grades as possible. This is very positive for me*." Finally, Meryem stated that contacting the student's family was easy for her.

4. Discussion

This study aimed to examine lecturers' perceptions and experiences regarding their students with special needs in their classes. Face-to-face interviews were conducted with the lecturers working in different faculties in two different state universities in Turkey. Based on the interview data, themes were created. It is expected that the research will guide the lecturers who will teach students with special needs at universities, higher education administrators who can make legal arrangements, and researchers.

Regarding lecturers' knowledge of their students with special needs when they met them for the first time, most of the lecturers did not know anything about these students. Two lecturers stated that they knew the types of disabilities of these individuals. Lecturers learned from their students whether there were students with special needs in their classrooms. At this point, it can be said that lecturers are not informed about students with special needs. This situation may affect the quality of education to be given to these students. Therefore, after students with special needs choose their courses, it would be appropriate to inform the lecturers the students with special needs in their classes, the types of disabilities, and what needs to be done.

Lecturers were asked to mention how they got information about students with special needs. Most of them were lack of information. However, some lecturers were found to search on the internet, read scientific publications, get information from academicians who are experts in the field, and get information from the students. There is no doubt that the students with special needs receive a good education thanks to the lecturers who know the characteristics of these individuals well. However, it can be said that some of the lecturers had a lack of knowledge on this subject and they did not have any attempts to make up for this deficiency.

Lecturers were asked about the benefits of teaching students with special needs. Most of the lecturers stated that teaching these students changed their perspectives about students with special needs. However, some lecturers expressed their gratitude for themselves. These findings indicate that students with special needs can be successful at universities when they are given opportunities. Also, findings eliminate the prejudice that students with special needs cannot do anything.

Regarding lecturers' opinions regarding teaching a student with special needs in the future, most of them had positive opinions. Although the lecturers did not have enough knowledge about how to teach a student with special needs, they were optimists about teaching them. Considering the contributions of students with special needs to lecturers, the answers were being grateful for themselves, motivating themselves to work, and gaining experience. Although the lecturers may need to make some adjustments (such as making some adjustments, preparing separate exam questions, and conducting exams in a different environment) while teaching students with special needs, it is pleasing that they have positive attitudes towards teaching students with special needs. Besides, it is common for lecturers to have difficulties or problems in providing education and making arrangements in education, as they have little or no encounter with individuals with disabilities before (Yalçın & Aslan, 2021).

Lecturers stated that they did not have any difficulties in taking exams and preparing questions for these individuals. However, according to Yalçın and Aslan (2021), lecturers teaching visually impaired individuals had difficulties in preparing exams, making exam papers suitable, making exams, and getting reader-writer support in the exam. In a study conducted by Kamış and Demir (2018), the fact that individuals with visual impairments asked for help in exams was considered a problem.

At the end of the research, lecturers were observed to have various difficulties while teaching individuals with special needs, such as the increase in the workload, making adaptations, and teaching the subject verbally.

Similarly, Yalçın and Aslan (2021) argued that instructors had difficulties in making adaptations for their visually impaired students and in using narration for visual content.

Regarding their suggestions for students with special needs, most of the lecturers wanted to be informed about students with special needs. Because many academics naturally did not know anything about students with special needs, their characteristics, education, and possible adaptations. This might be because they were experts in different fields and lack of training in the field of special education. Similarly, Yalçın and Aslan (2021) suggested training for lecturers teaching individuals with visual impairment. In today's education system, students with different academic, social and physical characteristics receive education in separate classes, but the learning needs of all students with these different learning characteristics must be met (Güray, 2014).

Lecturers did not have information about students with special needs. However, the lecturers stated that they should be given training on students with special needs as a suggestion. Similarly, Güray (2014) recommended training for lecturers regarding students with special needs. Similarly, Kamış and Demir (2018) argued that lecturers teaching individuals with visual impairment did not have information about these students.

Sucuoğlu and Kargın (2006) underlined the importance of socialization of students with special needs and typically developing individuals when they were studying together. According to the findings of this research, lecturers also emphasized the importance of the socialization of these students with their typically developing peers while studying together.

Lecturers insisted on the necessity of using technology, especially when teaching students with special needs. Besides, they believed that the use of technology would facilitate both teaching and learning. Similarly, Güray (2014) recommended the use of technology in education for students with visual impairments and special needs. Güray (2014) suggested that institutions should be aware of their students with visual impairment and that institutions should keep records for these individuals. Also, it is recommended that institutions give information to educators about the visually impaired individual in advance. According to the findings of this research, the lecturers wanted the institutions to inform them about the students with special needs, their inadequacies, and what needs to be done.

Today, some universities offer “Disabled Student Unit” for students with special needs. However, some of the lecturers teaching students with special needs are not aware of these units. Thus, it can be suggested that the activities of such units for students with special needs and the awareness of such units should be increased, and they should cooperate more with the instructors. Future studies may examine the views of university students with special needs studying at different faculties.

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Tool for Measuring Readiness Level of Children Who Will Start Primary School: Attainment Test for Primary School Admission (ATPA)

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Abstract
This research aims to develop a tool to measure the school readiness of children who will start primary school. Changes have occurred in the primary school starting age following the developments that took part in the Turkish Education System. This change has caused parents to have intense hesitations about enrolling their children in school. As a result of changing the age of starting education, it aims to develop a test that aims to eliminate the question mark in the parents and teachers of children in critical months as the age of starting primary school. This study was conducted with the quantitative research method. The obtained data were subjected to EFA and CFA analyzes by the Amos program. As a result of the research findings, the Attainment Test for Primary School Admission (ATPA-C), which was prepared considering the preschool and primary education aims, took its final form as a 17-item measurement tool gathered together in five factors. As a result of the analyses of the research made with the data of 1285 students, it was detected that the scale had the necessary validity and reliability findings for practice and research.

Keywords: Preschool Student, Primary School Readiness, School Maturity Level, Scale Development

1. Introduction

In the world where globalization is accelerating in the first decade of the 21st century, we are witnessing that the education sector, which has gained importance over the years, has undergone a rapid change in our country. The radical changes, particularly since 2010, especially the changes made in the school starting age, have led to intense debates about the starting time of children's compulsory primary school education. Depending on the parent's request, children could start the first grade of primary school between the years 2012-2014, in a range ranging from 60 months to 68 months. With the changes made afterward, the registration age is defined by the article: "Children who have completed 66 months as of the end of September of the year in which the registration is made are registered in the first class of primary schools. Children aged between 60-66 months, who are considered ready for a primary school in terms of development, are registered in the first grade of primary school with a written

request from their parents. However, the statement "... by the petition to be submitted by the parents of the children 66, 67 and 68 months old who have the right to register and by the health report of those who are 69, 70 and 71 months old documenting that they are not ready to start primary school can be directed to a preschool education or postpone their registration for one year "with the same regulation is explained in the Ministry of National Education (MoNE) Pre-School Education and Primary Education Institutions Regulation (MoNE, 2014).

Even though some of the children who will start primary school have preschool education, a significant part of them is devoid of this opportunity. While the rate of preschool schooling is 39.54% in the 2015-2016 academic year, the schooling rate of children in the last year of preschool education, who will start the 1st grade of primary school a year later, reaches 67.17%. The schooling rate of the primary school-age population of the same year is 99.81% (MoNE, 2016). With the 2023 vision document, since one of the most critical tasks of preschool education institutions in terms of readiness for primary school is to ensure that children reach these readiness levels, it is aimed to achieve 100% of the 5-year-old schooling rate in preschool education (MoNE 2023 Education Vision, 2019a). It is supported by different research results that students with sufficient readiness levels in primary school are more successful in different subjects and adapt to school better. It was determined that receiving preschool education positively affects children's school readiness to complete the study examining the school readiness of children who received preschool education and those who did not receive preschool education (Erkan & Kırca, 2010). One of the most critical factors in preschool education is the academic knowledge and skills that children will acquire in preschool education institutions, where they step into a formal education environment. The child's academic achievements during the preschool education at an early age Sanol and Pianta (2012) determine the socio-emotional and success levels of 5th-grade students at school readiness level. Students' mathematics readiness differences are considered a readiness dimension that should be considered for not making the difference in mathematics learning of students at the primary school level more significant (Polat Unutkan, 2007).

School readiness has been used under different names. School maturity is expressed as being ready to school; school readiness. In this study, the expression "School Readiness" was preferred. In addition to the various concepts used, different school entry level definitions have also been made. *Even though the level of school readiness is defined in various ways and dimensions, the definition that children have the essential competencies to perform learning activities in primary school may be more general.* Even though there are different definitions, school readiness is generally accepted to include cognitive, emotional, and social qualities that reflect the child's ability to function successfully in school contexts (Lemelin et al., 2007). The fact that students start primary school at different levels of readiness causes the levels of students to differ even more over the years. Besides causing various difficulties for students, it also results in that teachers become unhappy because they see it as an obstacle in the education process (Arı, 2015).

The fact that students receive preschool education affects their level of readiness for primary school. The results of research show, students are more successful in reading tests in international exams after taking preschool education. The results of the reading skills test in the International Student Assessment Program (Programme for International Student Assessment- PISA) conducted by the Organization for Economic Cooperation and Development (Organization for Economic Co-operation and Development- OECD) show that students who have taken preschool education for one year or more are more successful (Arıcı & Altıntaş, 2018). In the research of Lemelin et al., it was determined that genetic and environmental factors affect preschool students' school readiness, and the level of school readiness has an effect on academic success in the first years of primary school (2007). In the study conducted by Arı and Özcan, it was determined that the cognitive maturity of the students is at an adequate level, and the development of literacy skills occurs positively when children start the first grade (2016).

Even though the school readiness studies are a work that should be done at all levels of education, the level of readiness in preschool education is also fundamental (Harman & Çelikler, 2012). It was determined that receiving preschool education positively affects children's school readiness to complete the study examining the school readiness of children who received preschool education and those who did not receive preschool education (Erkan & Kırca, 2010).

Regarding age level and school readiness of students who will start primary school, it has been determined that having pre-primary education before primary school is a higher level in the adjustment level of children starting primary school than not having preschool education. According to the research findings, the adjustment level of children who started primary school at the age of five was lower than those who started primary school at 7 (Yoleri & Tanış, 2014). In the studies of Gündüz and Çalışkan, it was determined that the school maturity level of the age group varies depending on age (2013). Children aged 66 months and younger have a below-average school maturity level, whereas children aged 66-84 months have an above-average school maturity level.

In the research conducted by Erkan, it was determined that preschool education and mother's education level made a significant difference in children's school readiness, but gender and father's education level did not significantly differ on school readiness (2011). In the research of Erkan and Kırca, it was determined that primary school students received preschool education and parents' education levels made a significant difference in terms of students' school readiness levels. Nevertheless, it was determined that gender did not make a significant difference in terms of readiness levels (2010). Yeşil Dağlı (2012) sets forth that parents give importance to their children's school readiness and find it essential for their children to succeed in primary school. However, she considers students' readiness for primary school more important in terms of self-care skills rather than the cognitive domain. Receiving supportive education in the preschool period positively affects the students' readiness for primary school. While a support program is needed for this development, it is necessary to determine the students' readiness levels before and after the education with appropriate measurement tools (Kutluca Canbulat, & Tuncel, 2012).

A study about writing skills of preschool students, it was determined that preschool students' level of gaining writing skills was adequate . As gaining writing skills in preschool education will contribute to students' success in the writing processes as they start primary school, studies should be conducted on this subject. Determining the level of writing skills of children starting the first grade of primary school is necessary. The development of the students should be supported by creating different groups for the writing training of the students whose readiness is determined. Writing skills should be supported with activities designed per their development level (Yangın, 2007).

In a study by Polat Unutkan, it was determined that young children are not ready enough in terms of mathematics skills when they start primary school (2007). Differences in students' mathematics readiness are considered a readiness dimension that should be considered for not making the difference in mathematics learning of students at the primary school level more significant (Polat Unutkan, 2007). Evaluating the success of children who start primary school knowingly about reading and writing, Başar determined that this situation creates negative results (2013). Research results data reveal that children who have learned to read and start primary school have problems with writing. Besides, low motivation causes various problems in primary school education (Başar, 2013).

Curriculum applied in the preschool education process is one of the most important factors affecting students' readiness for primary school. The Montessori program can make students ready for primary school more effectively than the MoNE program (Kayılı & Arı, 2011).It was determined, in a study examining the views of parents and teachers about the readiness of preschool children for a primary school, that parents had different views about their children's school readiness (Ayten, & Sönmez Ektem, 2014). One of the essential factors in preschool education is the academic knowledge and skills that children will acquire in preschool education institutions, where they step into a formal education environment. The child's academic achievements during preschool education at an early age are the most important equipment for the child's future education life (Uyanık & Kandır, 2010).

In a study conducted with preschool teachers, it is recommended to develop new scales measuring various skills to determine the readiness level of students who will start primary school. One of the findings of the same study is the effective use of these scales by guidance services (Çakıcı, 2015). In the study conducted by Çakmak, Elibol and Akıncı Demirbaş, it was determined that school maturity levels could change even with monthly differences in the student's age (2014). As they live in a highly variable developmental process that accelerates from time to time and slows down from time to time, preschool children can differ in many aspects from their peers of the same age and the same sex, who experience ups and downs in this period (Erkan, 2011).

Çakıcı, in his research with teachers regarding the readiness status of primary school first-grade students, determined that the students were not found at a sufficient level by the teachers in the five developmental areas of cognitive, linguistic, socio-emotional, motor, and self-care. Determining the findings obtained in this study, not in the first grade, but the last year of preschool education, in the year before starting primary school will enable teachers to create a more conscious and effective program to implement the first grade curriculum. Further to that, there is a need for teacher opinions and an assessment-evaluation process with broader participation (2015). One of the suggestions made by Çakıcı in this study is to develop tests that can measure students' readiness who will start primary school and ensure that such tools are applied in preschool education institutions and primary schools (2015). When the MoNE preschool program is examined, it is a program that includes the acquisitions of the preschool program that will ensure readiness for a primary school in five different areas, Cognitive Development, Language Development, Social-Emotional Development, Motor Development, Self-Care Skills Development sub-areas in order to prepare children for primary school (2013). By achieving the gains in these five areas stated, it is to ensure that children are as ready as possible for primary school life to learn literacy and basic arithmetic. School readiness and school readiness tests used in our country developed abroad and adapted to Turkish, and developed in our country. One of the tests developed and widely used abroad is the Metropolitan Readiness Test (Öner, 1997) and another is called the Brainline School Readiness Test (Bağçeli Kahraman ve Başal, 2013).

The test is usually applied to children who start the first grade of primary school in preschool institutions and primary schools in the Metropolitan School Readiness Test. The Metropolitan School Readiness Test, developed by Hildreth, Griffits, and Mc Gauvran to measure school readiness and primary school readiness, was adapted into Turkish by Ayla Oktay in our country (Güneri, 2016, pp. 95-118). The Metropolitan test, as a test that aims to measure school readiness, expects the student to understand the motions and apply them after understanding them. The Metropolitan test applied individually consists of 6 subtests and a total of 100 items. The distribution of the items to the subtests are as follows: Word comprehension (19 items), Sentences (14 items), General knowledge (14 items), Criticism (19 items), Numbers (24 items), Copying (10 items). With the application time of each subtest being different, the total response time for the test is 24 minutes. In the test where 1 point is given for each line, the sum of the scores gives the overall test result. No special training is required for the tester to administer the test. (Öner, 1997, pp. 207-209). The test, which was prepared by the African Brainline Distance Education Center in 2003 with the name "Brainline School Readiness Test," consists of 25 lt tests and 281 items. In addition to family and teacher opinions, student practices are also included in the test. The Turkish adaptation of the Brainline School Readiness Test was carried out by Bağçeli Kahraman and Başal (2013).

Marmara School Readiness Scale is one of the tests developed to measure school readiness in our country, and the Primary School Readiness Scale is the other. It is the Marmara Primary Education Readiness Scale developed and standardized by Unutkan in 2003. This scale has 5 sub-dimensions: mathematics, science, sound, line, and labyrinth studies. The scale includes a total of 74 questions. The researcher applies the scale to the children individually (Polat Unutkan, 2007). Experts apply the scale to the children one-on-one. The second scale developed in our country, called the Primary School Readiness Scale, was developed by Canbulat and Kırıktaş to determine the school readiness levels of primary school first-grade students (Canbulat & Kırıktaş, 2016). Teachers about their students organize it.

The fact that there is a wide range of primary school starting ages increases the need to determine whether the children are ready for this situation or not. Enrolling children in the first grade of primary school by only considering their age and without any evaluation may cause more frequent problems that students may encounter in the first grade. Uyanık and Kandır state that despite the student's holistic development, there is a lack of sufficient information about whether the children are ready for school and whether they have the maturity to start school when the structuring of preschool education in our country and the implementation of the programs are examined. These findings point to the need for comprehensive and up-to-date readiness tools (2010).
Depending on the changing circumstances during the development process of the current research, studies to develop more up-to-date and inclusive readiness tests continue. New tests aiming to measure students' school readiness with different approaches are further being developed. In addition to the HighScope approach, Sak and Yorgun created a measurement tool that measures students' readiness for primary school, considering different cultural and educational characteristics (2020). In the study conducted by Cassidy (2005), it is stated that sharing

the report cards and reports prepared about the children during the start of primary school with primary school teachers is very important for the success of the students in primary school. Sharing the reports prepared on the preschool development status of the students with primary school teachers and their parents is one of the crucial issues in terms of making the necessary arrangements in the education of children at the primary school level should be taken into account.

The innovations and changes introduced by the 2023 Education vision document, both adaptation, and development, are considered to require a measurement tool that is more compatible with the changing new structure. In addition to a test applied only to students, a need for tests in which the opinions of teachers and parents of students will be evaluated exists. The Primary School Gain Test, which is planned as a holistic measurement tool, consists of three different forms. In the first stage of the study, the Attainment Test for Primary School Admission (ATPA-C) was developed, which allows students to apply under the supervision of an expert. The first study is presented here as the study conducted for ATPA-C. The other two forms were prepared as the Attainment Test for Primary School Admission Teacher form (ATPA-T), which includes the evaluations of the students' preschool teachers about the student, and the Attainment Test for Primary School Admission form (ATPA-P), in which the readiness level of the children is determined in line with the opinions of their parents. ATPA-T and ATPA-P studies continue. By these three separate forms, it is aimed that the student can make a holistic readiness level assessment. The first study is presented here as the study conducted for ATPA-C. During the development of the ATPA-C form, the primary purpose of this study is to develop a readiness test, which can be returned in a short time without boring students, can be easily applied by guidance and psychological counseling experts, and which can provide written reports about the student's readiness level to all stakeholders who contribute to the student's primary school education.

This research aims to develop a tool to measure the school readiness level of children who will start primary school. A new school readiness tool was needed because the current school readiness or school readiness tools are not up-to-date, not easily accessible, and have similar reasons. The designed measurement tool measures the child who is thought to be ready to start primary school from three different parties (child, parent, and teacher). By scoring these three measurements separately and together, it is aimed to conclude the school readiness level of the child. It is aimed to provide convenience in terms of cost, time, accessibility, and applicability of the designed measurement tool. In this study, the validity and reliability study of the Child Form of the Attainment Test for Primary School Admission (ATPA-C) was conducted.

2. Method

The research is a quantitative study conducted in the scanning model. In the research, the validity and reliability study of the measurement tool applied with the data collected from children who have reached the age of starting primary school was conducted.

2.1. Study Group

The study group consists of students between 60-72 months old, residing in Istanbul and considered at the school starting age according to the Ministry of National Education Pre-School Education and Primary Education Institutions Regulation (MoNE, 2019b). Data were collected from 1285 students attending 6 different preschool institutions in Ümraniye and Maltepe districts. Schools and students participated in the study voluntarily. The data collection process was carried out between 2014 and 2018. All parents and schools which participated in the study gave the consent for the research voluntarily.

2.2. Preparation of the Data Collection Tool

The preparations for the test started with a request to the researcher working as an administrator in a private school from advisory teachers working in the same primary school, teachers working in kindergarten and primary school, and school founders who are educators. Firstly, a study group was formed to prepare for the test and included a

preschool teacher, an advisor, a classroom teacher, and an academician. The study group first created an item pool. In the beginning, an evaluation pool of 40 items was created. Close ones were eliminated, and the number of items was reduced to 20. Expert opinion was obtained from two academicians working in primary education and preschool for 20 items, and 3 out of 20 items were removed from the measurement tool in line with expert opinion. The remaining 17 items were administered to 1285 children accompanied by a specialist teacher. The answers given by the child in the scale items are scored with a 3-point Likert-type success score as 0, 1, and 2.

2.3. Collection of Data

The data were collected by the experts working in the guidance services of the schools in the research group by reading questions to the students and asking them to answer them. Answers of the students were marked on the form and then entered into the SPSS package program.

2.4. Analysis of Data

The SPSS package program and the AMOS package program were used in the analysis of the data. The following analyzes were respectively carried out in the research: Independent Groups t-test for item discrimination, Pearson Correlation test for item sum, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) for construct validity, Cronbach's Alpha test, an internal consistency indicator for scale reliability, Pearson Correlation test for correlations between scale items and independent groups t-test to test the gender and age sensitivity of the scale in a different sample, Pearson Correlation analyzes to test the relationship of the ANOVA test and the scale with age and time used were conducted.

3. Results

The validity and reliability study findings were conducted using 1285 students for the scale development study areas below. Validity and reliability studies were started by testing item discrimination.

3.1. Item Discrimination

For testing the item discrimination power of the scale items, the 27% group with the highest score and the 27% group with the lowest score were compared with the independent group's t-test.

Table 1: Independent groups t-test for item discrimination

Item No.	Group	N	X	SD	t	df	p
item01	Lower 27%	347	1.464	.8839	-8.592	479.464	.000
	Upper 27%	347	1.911	.3959			
item02	Lower 27%	347	1.683	.7275	-6.307	453.135	.000
	Upper 27%	347	1.948	.2898			
item03	Lower 27%	347	1.499	.8648	-6.230	576.891	.000
	Upper 27%	347	1.839	.5348			
item04	Lower 27%	347	1.248	.9687	-8.509	593.184	.000
	Upper 27%	347	1.775	.6280			
item05	Lower 27%	347	1.265	.9641	-11.893	447.135	.000
	Upper 27%	347	1.925	.3727			
item06	Lower 27%	347	1.323	.9463	-11.530	427.145	.000
	Upper 27%	347	1.942	.3263			
item07	Lower 27%	347	1.202	.9764	-11.814	489.056	.000
	Upper 27%	347	1.885	.4542			

item08	Lower 27%	347	0.447	.8290	-21.731	672.889	.000
	Upper 27%	347	1.712	.6993			
item09	Lower 27%	347	1.274	.9602	-7.548	614.371	.000
	Upper 27%	347	1.746	.6621			
item010	Lower 27%	347	1.055	.9970	-10.960	595.100	.000
	Upper 27%	347	1.755	.6500			
item011	Lower 27%	347	1.533	.8438	-8.931	422.116	.000
	Upper 27%	347	1.960	.2816			
item012	Lower 27%	347	.971	.7287	-20.095	513.723	.000
	Upper 27%	347	1.853	.3705			
item013	Lower 27%	347	.758	.7206	-19.706	628.903	.000
	Upper 27%	347	1.697	.5191			
item014	Lower 27%	347	1.187	.8308	-14.892	446.557	.000
	Upper 27%	347	1.899	.3202			
item015	Lower 27%	347	.156	.4287	-18.401	524.682	.000
	Upper 27%	347	1.063	.8128			
item016	Lower 27%	347	.127	.4381	-14.628	530.794	.000
	Upper 27%	347	.853	.8144			
item017	Lower 27%	347	1.585	.8050	-7.560	464.871	.000
	Upper 27%	347	1.939	.3389			
Total	Lower 27%	347	1.104	.3236	-33.842	476.532	.000
	Upper 27%	347	1.747	.1432			

As seen in Table 1, the difference between the arithmetic means of the upper 27% group and the lower 27% group in all 17 items and the total score of the scale was found to be statistically significant at the p<.001 level, and it was observed that the scale met the item discrimination criterion.

3.2. Item Total Correlation

Item-total correlation is a type of test that examines the relationship between scale items and scale total score.

Table 2. Pearson correlation test for item-total correlation

Item Total			Item Total		
Item No.	r	*p*	Item No.	r	*p*
item01	.497**	.000	item010	.532**	.000
item02	.437**	.000	item011	.492**	.000
item03	.403**	.000	item012	.452**	.000
item04	.398**	.000	item013	.453**	.000
item05	.472**	.000	item014	.423**	.000
item06	.491**	.000	item015	.461**	.000
item07	.474**	.000	item016	.402**	.000
item08	.478**	.000	item017	.423**	.000
item09	.392**	.000			

As seen in Table 2. as a result of the Pearson Correlation analysis which was conducted to test the correlation of 17 items with the total score to test the item-total correlation of the scale. The relationship between all items and the total scale score was found to be significant at the p<0.001 level and it was determined that the scale met the item total criterion.

Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) was used to test the scale's construct validity.

3.3. EFA

For the EFA for the construct validity of the scale, the Eigen lower cut-off value was 1.00, the varimax 25 vertical rotation and the eigenvalue cut-off point was .40 (Altunışık et al.. 2004; Kalaycı, 2010).

In order to test the construct validity of the scale. as a result of the EFA performed with the data collected from 1285 students. the sample adequacy was found to be appropriate with the value of KMO=.759. and as a result of the Bartlett test (p<.001). it was determined that the items were suitable for performing EFA (chi square=3816.237; SD=136).

Table 3: FA Factor Variances

Factor	*Initial Eigenvalues*			*Total Factor Loads*			*Rotated Sums of Factor Loads*		
	Total	*Variance %*	*Cum. %*	*Total*	*Variance %*	*Cum. %*	*Total*	*Variance %*	*Cum. %*
1	3.54	20.85	20.85	3.54	20.85	20.85	2.46	14.45	14.45
2	1.73	10.16	31.01	1.73	10.16	31.01	1.91	11.22	25.66
3	1.46	8.60	39.61	1.46	8.60	39.61	1.71	10.06	35.72
4	1.19	7.02	46.63	1.19	7.02	46.63	1.46	8.61	44.33
5	1.06	6.26	52.89	1.06	6.26	52.89	1.45	8.56	52.89

As can be seen in Table 3. it was seen that 17 items were collected in 5 factors as a result of EFA. It was detected that 17 items of the scale explained the 52.89% of the variance under five factors. which of them is. according to the rotated factor loads. 1st Factor that explained 14.45% of its variance with a factor load of 2.46. 2snd Factor that explained 11.22% of its variance with a factor load of 1.91. 3rd Factor that explained 10.06% of the variance with a factor load of 1.71. 4th factor that explained 8.61% of its variance with a factor load of 1.46. 5th factor that explained 8.56% of its variance with a factor load of 1.45.

Table 4: Rotated Components Matrix

Item	*Factor load of items*				
	1	*2*	*3*	*4*	*5*
item01	.699				
item02	.685				
item06	.564				
item011	.558				
item010	.492				
item05	.458				
item017	.445				
item013		.853			
item012		.853			

item014	.603			
item016		.900		
item015		.892		
item08			.760	
item07			.731	
item04				.710
item09				.660
item03				.599

Table 4 shows the distribution of 17 items of the scale to 5 factors and the factor loads in each factor. Since there were no items with a factor load of >.100 in two or more of the items. The structure revealed by EFA was considered to be appropriate and Pearson Correlation analysis was performed to examine the correlations between the factors.

Table 5: Correlation values between factors

		Total	*F1*	*F2*	*F3*	*F4*	*F5*
Total	*r*	1	.810**	.560**	.470**	.582**	.576**
	p		.000	.000	.000	.000	.000
F1	*r*	.810**	1	.274**	.169**	.375**	.300**
	p	.000		.000	.000	.000	.000
F2	*r*	.560**	.274**	1	.218**	.150**	.150**
	p	.000	.000		.000	.000	.000
F3	*r*	.470**	.169**	.218**	1	.143**	.171**
	p	.000	.000	.000		.000	.000
F4	*r*	.582**	.375**	.150**	.143**	1	.188**
	p	.000	.000	.000	.000		.000
F5	*r*	.576**	.300**	.150**	.171**	.188**	1
	p	.000	.000	.000	.000	.000	

As seen in Table 5 the relationship between the 5 factors and the relationship between the factors and the total score is significant at the p<.001 level.

3.4. CFA

It was preferred to test the structure revealed by EFA with CFA as well. In the multiple normality test for CFA. as it was seen that the scale multivariate value was greater than 10.00 and the kurtosis and skewness values of the items were greater than 1.5. it was determined that the distribution was not normal (Bayram, 2013; Büyüköztürk et al., 2012; Çokluk et al., 2012; Kline, 2011; Mardia, 1974) and the Asymptotically Distribution Free Method ADF which is used for non-normal distributions in CFA and developed by Browne (1984) is preferred.

In the first level CFA test. it was determined that the tested model showed perfect fit with $\chi 2$=270.27; p =.000; df = 109.00; $\chi 2/df$ =2.48; *RMSEA* =.03; *SRMR* =.03; *CFI* =. 88; *GFI*=.99 and AGFI=.99 values (excluding CFA) (Çokluk et al., 2012; Gürbüz, 2019 ;Kline, 2011; Meydan ve Şeşen, 2011; Olya, 2017; Şimşek, 2007). When the method which is independent of distribution is preferred. although it is considered sufficient to have only $\chi 2/df$ value less than 0 (Gürbüz, 2019; Olya, 2017). the fact that other values are high confirms the harmony of the scale structure. The relationship between scale items and factors is shown in the table below.

Table 6: Standardized Regression Weights

Regression Weights			Estimate	S.E.	Critical Ratio (c.r.)	p	Standardized β
item017	<-	Fa1	1.00				.36
item011	<-	Fa1	1.47	.20	7.36	***	.57
item010	<--	Fa1	2.07	.27	7.60	***	.51
item06	<--	Fa1	1.72	.24	7.29	***	.53
item05	<--	Fa1	1.59	.22	7.33	***	.48
item02	<--	Fa1	.96	.16	6.19	***	.47
item01	<--	Fa1	1.55	.21	7.45	***	.53
item014	<--	Fa2	1.00				.44
item013	<--	Fa2	2.14	.18	11.69	***	.81
item012	<--	Fa2	1.88	.15	12.76	***	.79
item016	<--	Fa3	1.00				.77
item015	<--	Fa3	1.29	.11	11.50	***	.92
item08	<--	Fa4	1.00				.50
item07	<--	Fa4	1.08	.10	10.73	***	.68
item09	<--	Fa5	1.00				.40
item04	<--	Fa5	1.42	.18	8.04	***	.54
item03	<--	Fa5	.89	.13	6.96	***	.44

As seen in Table 6. loads of the items on the factors are significant at the p<.001 level. Although the relationship between some items and the factor is below β<0.50. it was unnecessary to remove the items as the same items were found to have sufficient load on the factors as a result of EFA. Further. as a result of CFA. it was determined that the variances of all items were significant at the p<.001 level. Following these findings. the second level CFA test of the scale was conducted.

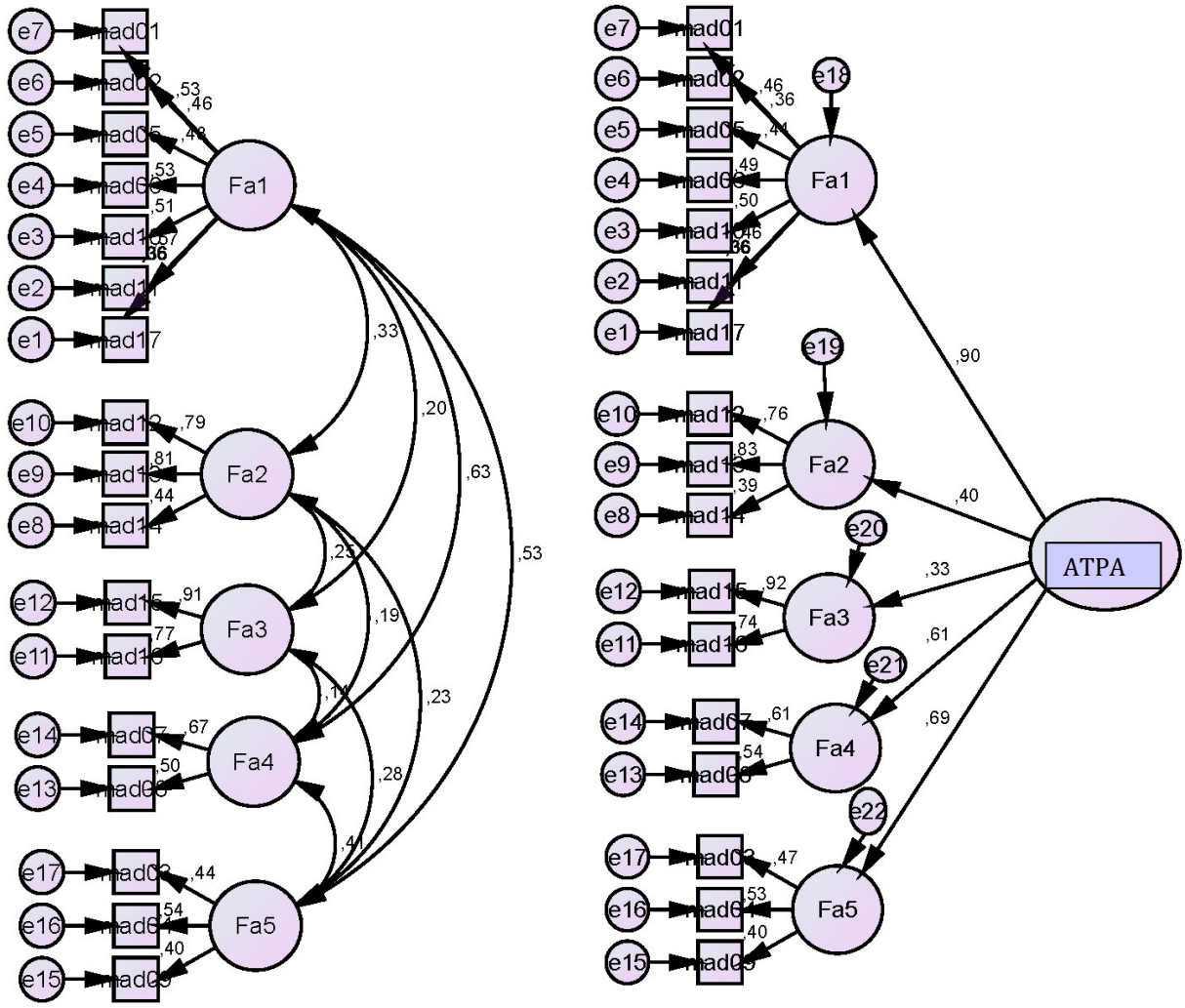

Figure 1: First and Second Level CFA Path Diagrams

As a result of the second level CFA. $\chi 2$=307.77; *p*=.000; *df* =114.00; $\chi 2/df$ =2.70; *RMSEA*=0.04; *SRMR*=.04; *CFI* =.86; *GFI* =.99 and *AGFI* =.99 from the fit indicators of the model tested were determined and it was determined that the fit indicators of the model (excluding CFA) are perfect (Çokluk, Şekerçioğlu & Büyüköztürk, 2012; Gürbüz, 2019 ; Kline, 2011; Meydan & Şeşen, 2011; Olya, 2017; Şimşek, 2007;). The following variance values were obtained as a result of the second level CFA.

Table 7: Second level CFA regression weights

Regression Weights			Estimate	S.E.	Critical Ratio	p	Standardized
Fa1	<---	atpa	1.00				**.90**
Fa2	<---	atpa	.51	.10	5.30	***	**.40**
Fa3	<---	atpa	.89	.17	5.10	***	**.33**
Fa4	<---	atpa	1.80	.31	5.87	***	**.61**
Fa5	<---	atpa	1.24	.22	5.55	***	**.69**
item017	<---	Fa1	1.00				.36
item011	<---	Fa1	1.16	.18	6.50	***	.46
mad10	<---	Fa1	2.08	.29	7.26	***	.50
mad06	<---	Fa1	1.61	.23	6.88	***	.49

mad05	<---	Fa1	1.46	.21	6.96	***	.44
mad02	<---	Fa1	.68	.13	5.13	***	.36
mad01	<---	Fa1	1.35	.20	6.90	***	.46
mad14	<---	Fa2	1.00				.39
mad13	<---	Fa2	2.57	.26	9.79	***	.83
mad12	<---	Fa2	2.10	.19	11.23	***	.76
mad16	<---	Fa3	1.00				.74
mad15	<---	Fa3	1.36	.13	10.33	***	.92
mad08	<---	Fa4	1.00				.54
mad07	<---	Fa4	.88	.10	8.73	***	.61
mad09	<---	Fa5	1.00				.41
mad04	<---	Fa5	1.37	.17	8.15	***	.53
mad03	<---	Fa5	.94	.13	7.12	***	.47

As seen in Table 7 as a result of the second level CFA with variance load of F1=.90. F2=.40. F3=.33. F4=.61 and F5=.69 the total scale was found to be significantly correlated at the p<.001 level.

3.5. Reliability

Table 8: ATPA-C factor structure and reliability

Item No.	Item	Number of items	Cronbach Alpha	Factor Name Suggestion
item01	Which of the following is different from the others in	7	.68	F1. Cognitive Development
item02	Which of the following is used when painting			
item05	Which of the following is a pet			
item06	Which of the following is a wild animal			
item010	Which shape has no corners?			
item011	Underline the most in number			
item017	Cross out the blue triangle			
item012	Draw over the figure below	3	.72	F2.Motor Skills Development
item013	Draw the same shape as the following next to it			
item014	Draw the same shape as the following next to it			
item015	Draw the same shape as below next to it	2	.82	F3. Spatial-Motor Competence Development
item016	Draw the same shape as below next to it			
item07	Which of the following is a fruit	2	.69	F4. Cultural Development
item08	Which of the following is a vegetable			
item03	Which of the following is a wind instrument	3	.58	F5. Discrimination Skill Development
item04	With which of the following can we put soup on our			
item09	Which of the following must be cooked in order to be			
	Scale total	17	.75	

The scale's internal consistency which successfully passed item discrimination item-total. EFA and CFA tests were tested, and the Cronbach Alpha coefficient of 17 items was found to be .75. It was determined that the internal

consistency of the first factor consisting of 7 items was .68; the internal consistency of the second factor consisting of 3 items was .72; the internal consistency of the third factor consisting of 2 items was 0.82; the internal consistency of the fourth factor consisting of 2 items was .69 and the internal consistency of the fifth factor consisting of 3 items was .58. The scale which emerged as a result of the validity and reliability tests was named Attainment Test for Primary School Admission Child Form (ATPA-C) and the following names were given to the factors.

3.6. Sensitivity of the Scale to Duration, Age and Gender

After the validity and reliability studies were completed to test the Attainment Test for Primary School Admission (ATPA-C) sensitivity to gender, age, and duration. Data were collected and analyzed by applying it to 158 students. Of the 158 students included in the study. 66 (41.8%) were female. and 92 (58.2%) were male. The age groups of the students are as follows: 5 of them (3.2%) are 45-51 months old. 8 (5.1%) of them are 52-57 months old. 38 (24.1%) of them are 58-63 months old. 49 (31.0%) of them are 64-69 months old. 45 (28.5%) of them are 70-75 months old. and 13 (8.2%) of them are 76 months and older.

Table 9: Descriptive findings

Sub Factor	N	Min.	Max.	X	SD	Skewness		Kurtosis	
						s	SE	s	SE
F1. Cognitive Development	158	.00	2.00	1.54	.52	-.95	.19	.95	.38
F2.Motor Skills Development	158	.00	2.00	1.32	.55	-.84	.19	.28	.38
F3. Spatial-Motor Competence	158	.00	2.00	.65	.67	.76	.19	-.46	.38
F4. Cultural Development	158	.00	2.00	1.55	.72	-.88	.19	.10	.38
F5. Discrimination Skill	158	.00	2.00	1.74	.49	-.98	.19	.87	.38
ATPA-C Total	158	.24	2.00	1.43	.37	-.81	.19	.07	.38

As seen in the table, while the total mean of ATPA-C is *X*=1.43 (SD=.37), the scores of the scale factors are at the levels as follows: from highest to lowest: F5: Discrimination skill development *X*=1.74 (SD=.49). F4: Cultural development *X*=1.55 (SD=.72). F1: Cognitive development *X*=1.54 (SD=.52). F2: Motor skills development *X*=1.32 (SD=.55) and F3: Spatial-motor competence development *X*=0.65 (SD=.67). The distortion and flatness of all factors and the sum of the scale are less than 1.00. Accordingly, it can be said that the distribution of the data is normal.

Table 10: Independent groups' t-test for the differentiation of ATPA-C scores by gender

Sub Factor	Gender	N	X	SD	t	df	p
F1. Cognitive Development	Female	66	1.54	.53	.03	156	.972
	Male	92	1.54	.50			
F2.Motor Skills Development	Female	66	1.42	.47	2.09	154	.038
	Male	92	1.25	.59			
F3. Spatial-Motor Competence Development	Female	66	.61	.64	-.68	156	.497
	Male	92	.68	.69			
F4. Cultural Development	Female	66	1.67	.64	1.89	153	.060
	Male	92	1.46	.77			
F5. Discrimination Skill Development	Female	66	1.76	.40	.39	156	.698
	Male	92	1.73	.55			
Total	Female	66	1.47	.36	.90	156	.370
	Male	92	1.41	.38			

By F1: Cognitive development F3: Spatial-motor competence development F4: Cultural development F5: Discrimination skill development from the sub-dimensions of the scale. The differences between male and female students in ATPA total scores were not statistically significant (p>.05). At the F2: motor skills development sub-dimension, the difference in favor of females between males and females was significant at the p<0.05 level. Even though the differentiation is significant in F2 when the overall scale is evaluated, the assessment of ATPA-C towards students is gender-neutral (objective).

Table 11: ANOVA test performed to test the differentiation of ATPA-C scores according to age groups

Sub Factor	*Age(Months)*	*N*	*X*	*SD*	*Groups*	*SS*	*df*	*MS*	*F*	*p*
F1.Cognitive Development	1(45-51)	5	.97	.56	Intergroup	2.23	5	.45	1.72	.133
	2(52-57)	8	1.54	.43	Intragroup	39.44	152	.26		
	3(58-63)	38	1.54	.38	Total	41.68	157			
	4(64-69	49	1.60	.47						
	5(70-75	45	1.50	.66						
	6 (76 and	13	1.70	.39						
	Total	158	1.54	.52						
F2.Motor Skills Development	1(45-51	5	.00	.00	Intergroups	13.24	5	2.65	11.67	.000
	2(52-57	8	.67	.50	Intragroups	34.51	152	.23		
	3(58-63	38	1.38	.41	Total	47.75	157			
	4(64-69	49	1.39	.48						
	5(70-75	45	1.41	.48						
	6 (76 and	13	1.49	.66						
	Total	158	1.32	.55						
F3. Spatial-Motor Competence Development	1(45-51	5	.20	.45	Intergroups	3.60	5	.72	1.65	.149
	2(52-57	8	.13	.23	Intragroups	66.16	152	.44		
	3(58-63	38	.70	.72	Total	69.75	157			
	4(64-69	49	.72	.62						
	5(70-75	45	.66	.66						
	6 (76 and	13	.69	.83						
	Total	158	.65	.67						
F4.Cultural Development	1(45-51	5	.40	.55	Intergroups	7.42	5	1.48	3.02	.013
	2(52-57	8	1.63	.74	Intragroups	74.68	152	.49		
	3(58-63	38	1.57	.74	Total	82.09	157			
	4(64-69	49	1.66	.60						
	5(70-75	45	1.51	.79						
	6 (76 and	13	1.62	.65						
	Total	158	1.55	.72						
F5. Discrimination Skill Development	1(45-51	5	1.47	.87	Intergroups	1.68	5	.34	1.42	.220
	2(52-57	8	1.42	.66	Intragroups	35.91	152	.24		
	3(58-63	38	1.73	.49	Total	37.59	157			
	4(64-69	49	1.80	.47						
	5(70-75	45	1.81	.42						
	6 (76 and	13	1.67	.47						
	Total	158	1.74	.49						
Total	1(45-51	5	.73	.23	Intergroups	3.26	5	.65	5.27	.000
	2(52-57	8	1.21	.31	Intragroups	18.79	152	.12		

3(58-63	38	1.45	.32	Total	22.05	157
4(64-69	49	1.50	.28			
5(70-75	45	1.44	.44			
6 (76 and	13	1.53	.39			
Total	158	1.43	.37			

As seen in the table, as a result of the ANOVA test which was conducted to test the differentiation of ATPA-C scores according to age group the following findings were obtained: At the ATPA-C sub-dimensions F1: Cognitive development. F3: Spatial-motor competence development and F5: Discrimination skill development scores it was determined that the scores of the students increased as the age (month) groups of the students got older but the differentiation was not statistically significant (p>0.05).

At the ATPA-C sub-dimensions F2: Motor skills development. F4: Cultural development. and at the ATPA total scores. it was determined that as the age (months) groups grew. the student scores also increased. and the difference was significant at least at the p<.05 level.

Accordingly, when the overall scale is evaluated, it can be said that the scale score is sensitive to age. The Pearson Correlation test was also performed without grouping the student ages, and the findings are presented below.

Table 12: Pearson correlation test for the relationship of ATPA-C scores with age and time used

Sub Factor	Age		Time	
	r	p	r	p
F1. Cognitive Development	.129	-.151	-.151	.106
F2.Motor Skills Development	.324**	-.220**	-.220**	.000
F3. Spatial-Motor Competence	.147	-.029	-.029	.065
F4. Cultural Development	.134	-.012	-.012	.093
F5. Discrimination Skill Development	.096	-.059	-.059	.232
ATPA Total	.241**	-.165*	-.165*	.002

As seen in the table the following findings were obtained in the Pearson Correlation test conducted to test the relationship between ATPA-C scores and age and time used.

The sub dimensions of F1: Cognitive development (r=.129; p=.106). F3: Spatial-motor competence development (r=.147; p=.065). F4: Cultural development (r=.134; p=.093) and F5: Discrimination skill development (r=.096; p=.232) among ATPA-C sub dimensions are not statistically significant with age. F2: The positive correlations of motor skills development sub-dimension (r=.324; p=.000) and ATPA Total scores (r=.241; p=.002) with age were statistically significant at the p<0.01 level.

F1 from ATPA-C sub-dimensions: Cognitive development (r=-.151; p=.058). F3: Spatial-motor competence development (r=-.029; p=.721). F4: Cultural Development (r=-.012; p=.884) and F5: The negative correlations of the sub-dimensions of discriminating skill development (r=-.059. p=.459) with the time used in completing the test were not found statistically significant. F2: Motor skills development (r=-.220; p=.006) sub-dimension and ATPA Total score (r=-.165; p=.038) were determined that the negative relationship with the time used to fill the test was significant at least at the p<0.05 level.

5. Discussion

In this study conducted to develop the Attainment Test for Primary School Admission Child Form (ATPA-C). The validity and reliability study of the 5-factor scale consisting of 17 items of 3-point Likert type was first conducted with 1285 students and then the sensitivity of the scale to age and gender was tested with 158 students.

It was determined that the scale items provided item discrimination and item-total correlations at p<.001 significance level, and the 17-item scale collected in 5 factors as a result of EFA explained 52.89% of the variance. As a result of the first and second level CFA. It was seen that it had excellent fit indicators ($\chi 2/df$ =2.70; RMSEA=.04; SRMR=.04; CFI =.86; GFI =.99 and AGFI =.99) and the standardized variances of the scale items and factors were significant at the p<.001 level. Cronbach Alpha coefficient of 17 items was found to be .75. It has been determined that the scale is sensitive to the age, gender, and duration of use of the student.

According to these results, it can be concluded that ATPA-C is a valid and reliable scale for those who want to examine and do research on the school readiness of children who will start primary school. A holistic school readiness tool will be developed upon completion of the validity and reliability study of the ATPA-T and ATPA-P forms. Future studies will be available for different school types and student groups when the development of all three forms is completed. In addition to the assessment that expert teachers will obtain with ATPA-C obtaining the assessments of the parents with the ATPA-P form and the preschool classroom teachers with the ATPA-T about the readiness of the children and sharing these with the relevant stakeholders as written reports will allow the education and training processes in primary school to be arranged according to the development and needs of the students.

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The Effect of Using Google Classroom and Whatsapp Applications on Learning Activities

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Abstract
This study aims to describe the effect of using google classroom and WhatsApp applications on learning activities. The method in this research is a quantitative approach. The sample in this study were students of class X clinical pharmacy expertise program totaling 31 respondent persons. Data collection instruments: using a questionnaire in the form of a google form with a Likert scale, namely use of google classroom, WhatsApp application, and learning activities. The data analysis technique used multiple linear regression. The results of data analysis show that the use of google classroom has a positive and significant effect on learning activities with a significance of 0.000; The WhatsApp application has no positive and significant effect on learning activities with a significance of 0.472, and Simultaneous use of Google Classroom and WhatsApp applications has no significant effect on learning activities as much as 54.5% with a significance of 0.000. This research can be used as consideration for policy makers in using the Google Classroom and WhatsApp applications. The use of google classroom has an effect on learning activities. While the use of the WhatsApp application does not have an effect on learning activities. Novelty in research: researchers want to see the effect of google classroom and WhatsApp application on learning activities at the vocational high school level. By knowing whether or not the influence of Google Classroom and the WhatsApp application on learning activities in vocational high schools can be taken into consideration for state vocational high schools 3, Rejang Lebong Regency, Bengkulu Province. In order to advance this research, it is necessary to carry out further research activities.

Keywords: Google Classroom, WhatsApp Application, Study Activities

1. Introduction

Bengkulu Province has decided to postpone the opening of face-to-face schools in the even semester of the 2020/2021 Academic Year. Given the surge in Covid-19 cases that are still happening. The decision was issued through the Bengkulu Governor's Circular Number: 420/825/Dikbud/2020 dated December 30, 2020 regarding the Postponement of Face-to-Face Teaching and Learning Activities for the Even Semester 2020/2021 in Bengkulu Province. (Http: Merdeka.com).

Head of the Education and Culture Office of Rejang Lebong Regency Khirdes Lapendo Pasju in his statement in Rejang Lebong, Saturday said the plan to implement face-to-face learning is contained in a permit issued by the Rejang Lebong Regency Government and signed by Regent Ahmad Hijazi on December 30, 2020. He explained based on the second adjustment. Joint ministerial decree of 4 ministers, namely the Minister of Education and Culture, the Minister of Health, the Minister of Religion and the Minister of Home Affairs, regarding learning guidelines in the even semester of the 2020/2021 academic year and the 2020/2021 academic year that the granting of face-to-face learning permits is no longer based on the risk zoning map from the Handling Task Force National COVID-19. For this reason, the Rejang Lebong Regency Government gave permission to schools to carry out face-to-face learning at the kindergarten, primary school, Junior high school, and Vocational High School (https://benngkulu.antaranews.com/).

This also applies to the State Vocational High School 3 Rejang Lebong, Bengkulu Province, to conduct online learning. Online learning is learning that is carried out with the help of the internet (Syarifudin 2020). According to the head of the Rejang Lebong District Health Office, Syamsir said that of the 585 residents who were confirmed positive for Covid 19, 522 were declared cured, 11 died and 52 were still under surveillance (https: //www.antaranews.com).

Based on the results of the virtual meeting, on January 3, 2021, online, teaching was carried out using Google Classroom and WhatsApp Group for State Vocational High School 3, Rejang Lebong Regency, Bengkulu Province. The choice of Google Classroom is because the assignment can be done in the Google Classroom and then it can be discussed together between the students and the teacher (Wicaksono 2020), Google Classroom can be used to create and manage classes, assignments, grades and provide live feedback (Ratnawati 2020); (Darmawan 2021); (Longa 2021), The Google Classroom application is very easy to use in learning activities (Maharani and Kartini 2019), as a learning media that is easy to operate, creates a discussion space between educators and students, and does not waste quotas (Wulandari 2021), the advantages that teachers feel when using the google classroom portal, namely the google classroom portal, can be used to support the learning process (Diantari, Wisudariani, and Artika 2021), The advantages of google classroom are effectiveness and efficiency in well-structured learning (Utomo 2020). In addition to the advantages there are also disadvantages in using Google Classroom.

The disadvantages of google classroom are 1). The first shortcoming is due to internet network problems around campus (Rozak and Albantani 2018), 2). lack of features to write formulas and include pictures when making questions, both multiple choice questions and essay questions (Hammi 2017), 3). Google Classroom has no automated quizzes or tests (Ramadhan, Susilaningsih, and Husna 2021). In addition to using google classroom based on the results of the meeting, the help of the WhatsApp group application was also used.

WhatsApp is a messaging application for smartphones with a basic similar to BlackBerry Messenger (Indaryani and Suliworo 2018). WhatsApp social media which is often abbreviated as WA is one of the communication media that can be installed on a Smartphone (Suryadi, Ginanjar, and Priyatna 2018). The advantages of WhatsApp are; 1) Easy to use (Hidayawati 2020), 2). Automatic Contact Sync (FAUZI 2021), 3). Can Contact People Around the World (Rachmawaty 2021), 4). Chat Back Up Features(ILMA 2020), 5). Have Stories Feature (SARI 2020). In addition to the advantages of WhatsApp, it also has disadvantages, namely 1).Account Hacking Risk (SALIM, Arfan, and Jamilah 2021), 2). Unable to send large files (Bhagaskara, Afifah, and Putra 2021), 3). Troublesome WhatsApp Web (Saputri 2021), 4). Data Not Stored Safely (Hermawan, Hendrawan, and Ritzkal 2019).

Previous research only examined: Constraints of Online Learning Using Google Classroom (Susanto, Sasongko, and Kristiawan 2021), the use of the WhatsApp grouping application on the results of learning to write geigerite (Budiono 2021), Analysis of Google Scholar Services as a Reference Material on Student Satisfaction (Husain 2019), Google Scholar and Fulfillment of Information Research (Correlational Study of the Effect of Google Scholar on Fulfillment of Information Needs) (Manik 2018), The Influence of Google Scholar Usage Motives on Student Satisfaction (Latania n.d.), Google Classroom-Based E-Learning Media To Improve Vocational High School Student Learning Outcomes (Su'uga et al. 2020), The effect of using WhatsApp messenger as an integrated mobile learning group investigation method on critical thinking skills (Kartikawati and Pratama 2017), The effect

of the use of social media WhatsApp on student activity in business economics subjects class X Public Vocational Secondary Schools 2 (Umami and Suja 2019), The effect of using WhatsApp social media on the dissemination of learning information at public senior high school 5 Depok (Pangestika 2018). Because of the importance of this, it is necessary to do further research with the title "The effect of using google classroom and WhatsApp applications on learning activities."

The results of the study are expected to be able to contribute as a consideration for state vocational high schools 3 in Rejang Lebong Regency, Bengkulu Province regarding activities in student learning. As well as increasing knowledge for stakeholders in state vocational high schools 3, Rejang Lebong district, Bengkulu Province and for teachers both theory teachers and vocational teachers to continue to make improvements in terms of using appropriate and good applications in the teaching and learning process.

2. Methods

This research is quantitative descriptive research. The place of research is at the State Vocational High School 3, Rejang Lebong Regency, Bengkulu Province, Indonesia. The study was conducted for two months, from March to the end of May 2021. The population of this study was class X, XI, XII totaling 491 people. The sample of this research is class X expertise program: Clinical Pharmacy totaling 31 people.

Table 1: Student Data of State Vocational School 3 Rejang Lebong Bengkulu Province Academic Year 2020/2021

No	Expertise program	Class	The Number of Students		Total
			L	P	
1	Network Computer Engineering	X TKJ	15	11	26
2	Motorcycle Business Techniques	X TBSM	30	2	32
3	Agri Fishery Business	X PAT	14	15	29
4	Poultry Livestock Agri Business	X AU	10	13	23
5	Welding Technique	X TP	22	0	22
6	Clinical Pharmacy	X FAR	5	26	31
Number of Class X Students			**96**	**67**	**163**
1	Computer and Network Engineering	XI TKJ	17	13	30
2	Motorcycle Business Techniques	XI TBSM	26	0	26
3	Agri Fishery Business	XI PAT	18	12	30
4	Poultry Livestock Agri Business	XI ATU	9	8	17
5	Welding Technique	XI TP	14	0	14
6	Clinical Pharmacy	XI FAR	5	26	31
Number of Students of Class XI			**89**	**59**	**148**
1	Computer and Network Engineering	XII TKJ	19	15	34
2	Motorcycle Business Techniques	XII TBSM	27	1	28
3	Agri Fishery Business	XII APA	23	10	33
4	Poultry Livestock Agri Business	XII ATU	12	18	30
5	Welding Technique	XII TP	26	0	26
6	Clinical Pharmacy	XII FAR	4	25	29
Number of Class XII Students			**111**	**69**	**180**
Total number			**296**	**195**	**491**

Source: Student Data for State Vocational High School 3 Rejang Lebong, Bengkulu Province, January 2021

Sampling in this study is to determine the class of research using purposive sampling technique. Purposive Sampling is a sampling technique with certain considerations(Campbell et al. 2020). By selecting the class X

students of the Clinical Pharmacy Skills Program at the State Vocational High School 3, Rejang Lebong Regency, Bengkulu Province, Indonesia, there were 31 students, consisting of 5 male students and 26 female students.

3. Results and Discussion

a. Normality test

Tests of Normality

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Google Classroom	.137	31	.144	.955	31	.212
WhatsApp App	.150	31	.073	.967	31	.451
Student learning activities	.134	31	.168	.949	31	.142

a. Lilliefors Significance Correction

Based on the results of the output value of Sig. Google Classroom 0.212 > 0.05, Sig. The WhatsApp application is 0.451 > 0.05 and the value of learning activities is Sig. 0.42 > 0.05, it can be concluded that the data is normally distributed.

b. Linearity test

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Student learning activities * Google classroom	Between Groups	(Combined)	1917.043	6	319,507	8,320	.000
		linearity	1521,871	1	1521,871	39,629	.000
		Deviation from Linearity	395,172	5	79,034	2.058	.106
	Within Groups		921,667	24	38.403		
	Total		2838,710	30			

Based on the output value Deviation from Linearity Sig. 0.106 > 0.05. It was concluded that there was a significant linear relationship between learning activity variables and the WhatsApp application.

c. Multicollinearity test

Coefficientsa

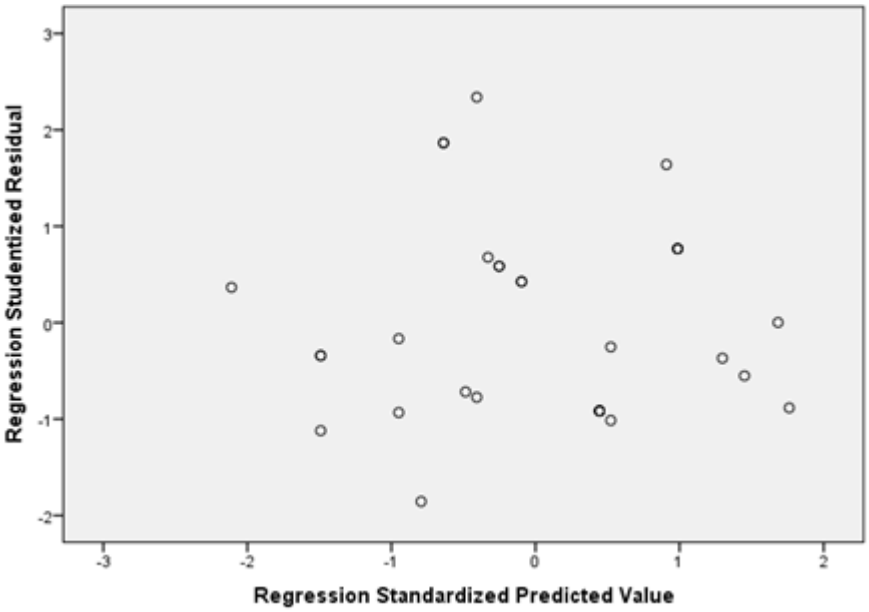
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	17,788	22,694		.784	.440		
	Google Classroom	.889	.158	.723	5.646	.000	.991	1.009
	WhatsApp App	-.112	.153	-.093	-.730	.472	.991	1.009

a. Dependent Variables: student learning activities

Based on the output results **Coefficientsa** in section Collinearity Statistics Tolerance value 0.991 > 0.10 and 1.009 < 10.00, it is concluded that there are no symptoms multicollinearity

d. Heteroscedasticity test

Scatterplot
Dependent Variable: Learning activity



Based on the scatterplot output it is known that
- Spread data points above and below or around the number 0
- The dots don't collect just above or below
- The spread of data points does not form a wavy pattern that widens then narrows and widens again
- The spread of data points is not patterned.

It was concluded that there was no heteroscedasticity problem.

e. Prerequisite test

Multiple regression test

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.738a	.545	.512	6.79357

a. Predictors: (Constant), Google Classroom, WhatsApp App

Based on output **Model Summary**: 1. Large relationship between Google Classroom and WhatsApp App (simultaneously) with Learning activity namely 0.738 which is strong, and 2). R Square, contribution or contribution simultaneously variable Google Classroom and WhatsApp App with Learning activity is 54.5% while 45.5% is determined by other variables

ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1546,437	2	773,218	16,754	.000b
	Residual	1292,273	28	46,153		
	Total	2838,710	30			

a. Dependent Variable: Learning activity
b. Predictors: (Constant), Google Classroom, WhatsApp App

1) Based on the significance value, it is known that the value of Sig. is 0.000 < 0.05, then according to the basis of decision making in the F test it can be concluded that: Ha is accepted, so Google Classroom and the WhatsApp application simultaneously have no effect on Learning activity and 2). Based on the comparison of the calculated F value with the F table, it is known that: F arithmetic 16.754 > F table 3.33, then Ha accepted, so Google Classroom and the WhatsApp application simultaneously have no effect on Learning activity.

Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17,788	22,694		.784	.440
	Google Classroom	.889	.158	.723	5.646	.000
	WhatsApp App	-.112	.153	-.093	-.730	.472

a. Dependent Variable: Learning Activities

a. Based on output **Coefficientsa**: 1) Based on the Significant value, Google Classroom Sig. 0.000 < 0.05, it is concluded that Ha is accepted so there is an effect Google Classroom against Learning activity, and 2). Based on the comparison of the value of t arithmetic with t table, namely t arithmetic Google Classroom 5,646 > t table 2.93then it is concluded that Ha is accepted so there is an effect google classroom against learning activity.
b. Based on output **Coefficientsa**: 1). Based on the significance value, the IQ score is Sig. 0.472 > 0.05, it is concluded that Ho is accepted so there is no influence on the WhatsApp application on learning activities and 2). based on the comparison of the value of t count with t table, namely t count WhatsApp application -0.730 < t table 2.93then it is concluded that Ho is accepted so there is no influence on the WhatsApp application to learning activities.

4. Conclusion

The use of google classroom and the WhatsApp application on learning activities simultaneously has no significant effect on learning activities of 54.5% with a significance of 0.00. the results of this study that the effect of using google classroom and the WhatsApp application cannot have an effect on learning activities. But there is an effect Google Classroom against Learning activities while WhatsApp App there is no effect on learning activities.

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The Relationship Between Vocal Development and Motor Development During Language Learning: A Review

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Abstract
This study attempted to search the nature of language development and the relationship between vocal development and motor development in infancy, and it relied on the descriptive and qualitative approach and the method of content analysis to review and compare three researches related to the relationship of language development and physical development during language learning in the infancy. The results of the three studies, despite some difference between them, indicates the relationship between sound, movement, and body signals before, during and after language learning in infancy.

Keywords: Vocal Development, Motor Development, Language Learning

1. Introduction

Aspects of language or sound—vocalization—development in infant children and the links between language and gestures. All of the sources discuss some aspects of the relationship between infant gesturing or hand movements and development factors of language. The The three articles we are considering for this paper all look at various research is being conducted for several reasons. This type of research can help investigators learn more about cognitive development as well as the earliest stages of language development. Some of the research might also give investigators insights into diagnosing early autism spectrum disorder and further identify if there are exact developmental stages of language that are common or universal to all children.

2. The relationship between language development and physical development according to the view of dynamic system theory

In the work "The Interplay Between Language, Gesture, and Affect During Communicative Transition: A Dynamic Systems Approach (Parlade´&Iverson,2011), the authors are looking at different groups of infants they define as "spurters" and "non spurters" in an effort to learn more about transition periods during the language development process. These investigators believe there is an important difference between infants who spurt or elicit increased vocalizations or word utterances and word learning rates. It appears from the research that children who are "spurterers" develop vocabularies differently than children who are not spurters. Moreover, there is

evidence that communicative expressions such as frowns or smiles occur both in isolation or when the infant is alone and also when they are with others such as parents or caregivers. This implies that cognitive developments are also taking place irrespective of this type of behavior employed for communication with others. The research also looks at relationships between such things as an infant's hand and arm movements and vocalizations.

These researchers, in their work, point to other scientific studies by (Yale, Messinger, Cobo-Lewis, & Delgado, 2003; Yale, Messinger, Cobo-Lewis, Oller, & Eilers, 1999). These studies have been used as evidence for the existence of multidimensional development in relational attitudes in the infant stage (breastfeeding period). For example, as young as three months old, children can use simple facial expressions (such as smiling or refusing) as well as some sound expressions. These studies have been used as evidence for the existence of multidimensional development in relational attitudes in the infant stage (breastfeeding period). For example, as young as three months old, children can use simple facial expressions (such as smiling or refusing) as well as some sound expressions. And some research speaks of the existence of links between the gestures of the arms and the pronunciation of the sounds, this at the age of six months. In this regard CF (Iverson & Fagan, 2004). Other works have been mentioned such as those (Adamson & Bakeman, 1985; Kasari, Sigman, Mundy, & Yirmiya, 1990; Messinger & Fogel, 1998; Mundy, Kasari, & Sigman, 1992). They proved that around the age of 12 months, facial expressions would be accompanied by meaningful gestures, such as finger-pointing and object demonstration in children. For these researchers, the aim of these studies was to analyze these changes in the adaptation of facial expression with arm gestures, sound pronunciation and words.

The connections between language and gesture at different stages such as before, during and after language learning are highlighted by the findings of this study. The research seems to suggest that children show a discernible transition in word learning and gesturing depending on how much they are learning. In other words, infants who are experiencing more utterances and more vocabulary development have more significant changes in their other communicative behaviors like hand movements and facial expressions. These discoveries may give researchers more insight into stages of both language and developmental transitions and any connections between the two phenomenons. These researchers theorize that by identifying early small differences in beginning stages of development they can more fully understand development stages at later periods in childrenhood and even adult development.

It can be seen that the background of this study is based on the theory of dynamical systems. The researchers point out that the basis of these studies is very useful for researching the system of human relations in the transformation phase, for two main reasons:

- Dynamic system theory relies on the connections between all the organs of the human body as a source of change.
- Because this theory refers to this new form of attitude that appears in the transitional phase, and is in itself an opening that allows us to understand the process of change (According to the researchers).

This research is based on the assumption that the transformation phase in development brings instability in which we can see changes, especially in dynamical system theory.

3. Collaboration between movement and sound styles during Canonical Babbling

Canonical Babbling, CB is a kind of repetition of sounds that appears at the age of six to seven months. These expressions are, in a way, the attachment of the letters and their repetition, like when a child says: mamamaa or daddy daddy, these expressions appear suddenly. Children who are just a few months old test the use of sounds and expressions, which is how children develop their language learning. When the child is testing sound expressions he is trying to express himself but he cannot. There are three kinds of Canonical Babbling:

- Marginal babbling: which appears between four and six months, the child mixes vowels and consonants, for example when he says: ma aaaaa, paaa paaaaa, uuuuumn.
- Reduplicated Babbilng: This is the stage where the child repeats the same expression or the same sound, for example: ma ma ma, ba ba ba ba ba ba, dad a da dad.

- Nonreduplicated Babbling: This comes between the ages of nine and 12 months the child is making sounds but cannot yet construct correct words.

This explains to us that the relationship between Canonical babbling and gestural actions in children begins even before they know the difficulty of words. This relationship will influence the development of the child's language. BC is not only the product of development, for the experience of hearing is also important, which is visible in the development of all languages in the world in general (Field, 2011; Oller, 2000; Goldstein & Schwade, 2008).

The study by Keiko Ejiri and Nobuo Masataka entitled, "Co-occurrence of preverbal vocal behavior and motor action in early infancy (Ejiri &Masataka, 2001) , the scholars look at the relationship between vocal behaviors and motor actions and pre linguistic development. The study is interested in understanding processes at work in this pre linguistic period that may affect later development processes such as acquiring the abilities to articulate auditory movements such as rapid glottal movements and other articulatory soundings

The findings of the study suggest that there is a relationship between an infant's rhythm actions and vocalizations. In this study they call these early vocalizations canonical babbling or CB. The research suggests that CB co-occur with motor action in a manner that can be recorded and studied. From this data they believe there is definitely a connection between the two that enables infants to gain the early abilities to begin to form sounds which will eventually become words and vocabularies. In other words, even before infants begin to form the rough outlines of words there is a connection between CB and motor actions that plays a major part in later language development.

4. The primitive relationship between speech and bodily movements before the onset of expressive behavior and verbal activity

The final study reviewed for this paper is entitled, "Multimodality in infancy: vocal-motor and speech-gesture coordinations in typical and atypical development." Author Jana M. Iverson (Iverson, 2010). The study looks at the earliest links between gestures and speech even before speech or vocal motor activity has begun. Iverson's research strongly suggests that there is a pre babbling or cooing or spurt stage where hand and pre vocal development is occurring. This has implications for later developments which clearly show strong connections between speech and gestures.

The researcher presented the primitive relationship between speaking and signals before the start of the speaking activity or the movement of the mouths, and confirms that the activation of the movement of the hands and the movement of the mouths has a role in the issue of raising the voice and this indicates the relationship between speech and the signal, and the researcher reveals here two things:

- Before the child can benefit from using the hand or the mouth for the required relationship, (sense and movement) are two main factors in memory connections.. Variations in coordinating methods exist since the beginning of life and with continued growth as well, and these coordinations grow and strengthen more when the child reaches the required stage.
- The research focuses mainly on coordination between vocal-motor, speech and movement, which gives an introduction in the field of growth of the next, and it is of great importance in the case of studying the various characteristics.

This research also refers to the development of signs before speaking, and most importantly, the understanding of these relationships, which is a source of assistance in diagnosing the onset of the stage (utism) in the child, meaning that this research is an indicator of the changes that occur in the pre- and expected movements when children grow, especially when they show Sources of motor and speech development when vocal-motor coordination, and vocal-motor growth can be useful for early diagnosis of utism, because utism appears when the growth process worsens, especially at the third year of life. One of the most important symptoms of (utism) is the delay in movement and speech with the continuation of incomprehensible echoes and imitating it with those around it of movement and speech without understanding their meanings and the problem in the expression of names.

The findings suggest that later word gesture coordination are processes preceded by infant hand mouth movements. Exactly what these findings mean will require even further research but the implications are considerable for scholars interested in the development of multi modal communication systems. The research described in this paper indicates that changes in gesture occur even before speech. Perhaps, the most important finding is that understanding these connections can help diagnosis the earliest stages of childhood autism.

5. Conclusion

These three studies deal with the link between gesture and sound in language learning, with an emphasis on language and sound development and expressive behaviors in newborns. The question of factors of language development in newborns at different stages before, during and after language learning is also raised.

- Before language learning, at the age of a newborn child, it is the stage of the explosion of sounds and gestures without precise meaning.
- The stage of language learning, at six months of age, is a stage in which there are connections between the movements of the hands and feet and the child's first facial signs.
- The post-learning stage occurs at over 12 months, a stage in which children move their heads with their hands and feet to express anything or idea. At this stage there is also a balance between facial expressions and hand and foot movements.

These articles are generally similar in their scope of investigation and contribute to the boarder data about gesture/movement and language/vocal motor development. They only differ significantly in their focus of the different theoretical stages of infant language development. The stages of these various processes are still regularly debated and researched by investigators. To date, there is no universal agreement about the development stages and processes which is accepted by all researchers. Moreover, there are still no universally agreed upon definitions for various speech and development terminology. At some point in the future it would be beneficial if agreement could be reached on some of these things so they could be organized within a broader framework for more investigation and study.

However, these studies are very important to the developing research on this topic. It seems very clear there are connections between infant gestures and the language development process. As a result, the research is exciting for many reasons. As scholars and investigators learn more about these connections they will be in a better position to understand and explain language development. If this can be achieved the ramifications for the future would be substantial. In the future investigators or even doctors could identify such things as learning deficits or worse things such as Autism. They could also learn how to make childhood learning more efficient and it could even have implications for curricula development in early childhood development stages. Finally, although largely unknown, understanding early language developmental and cognitive processes could affect the way adult cognition and development are understood.

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A Review of Arabic Teacher Candidates' Profiles

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Abstract
Although the history of training foreign language teachers in Turkey dates back to the Tanzimat period until the 19th century, in the first years, the French teacher was trained in the last years. Arabic, on the other hand, has been perceived as a religious language rather than a foreign language for a long time, and this perception has not changed completely even today. Perhaps because of this perception, the first program to train Arabic teachers within the higher education system was established in 1984. Sixteen years after the establishment of the first Department of Arabic Language Education established at Gazi University, departments to train Arabic teachers in both private/foundation and public universities began to open. In this study, the profiles of a total of eight hundred and forty-three teacher candidates who settled in the Arabic teaching program at eight universities between 2019, 2020 and 2021 were examined from various angles. At the end of the study, Arabic teaching was preferred by female students, teacher candidates came from different cities in state universities, they came from the same city in private/foundation universities, Arabic teacher candidates preferred the Marmara Region the most, about seven out of ten teacher candidates graduated from Imam-Hatip High School, almost none of the teacher high school graduates preferred Arabic teaching, and the teacher candidates did not prefer Arabic teaching. In the eighty-question foreign language test, it was concluded that they made an average of forty-five nets, and that Arabic teacher candidates preferred English-related departments the most after Arabic. As a result of the study, some recommendations were made to teacher training programs for innovations in the student selection system by associating them with the relevant literature findings.

Keywords: Teacher Training, Arabic, Teacher Candidate Profile

1. Introduction

1.1 Introducing the Problem

Throughout human history, the teaching profession has played a leading role as one of the cornerstones of education in transferring social values to future generations of society, being a bridge between those who demand knowledge and knowledge, and keeping up with both technological and social changes occurring around the individual (MEB, 2017:1).

Demirel (1991:25) states that foreign language teaching in Turkey was taught in children's schools and madrasahs during the Ottoman Empire, and that French was taught to army personnel during the Tanzimat period. Akyüz (2006:18) stated that the profession of teacher training and teaching in a contemporary sense in Turkey has emerged and started to take shape since 1848; Gömleksiz (1999:81) refers to the 1930s. Gömleksiz stated that he had a hundred and fifty-two French, seventy-one English and forty-one German teachers working in Turkey in 1935. However, there is no indication of the number of Arabic teachers at the time. The possible reason for this is that Arabic is considered more like an arm of theology than a foreign language. This is actually still largely true today. When we consider the training of Arabic teachers in the context of religious education, 1933-1949 is the gap years, and 1949-1971 is the year when higher religious education institutions are opened and graduates teach in their fields (Ev, 2011:15).

With the Higher Education Law No. 2547 issued in 1981, all higher education institutions in our country were gathered under the roof of the Higher Education Council (YÖK) and the Educational Institutes, which were the institutions that trained teachers at the time, were converted into Faculties of Education. The departments and programs of the faculties of education gathered under a center were diversified by taking into account the needs of the period.

When the history of training foreign language teachers in Turkey is examined, it is seen that the first examples date back to the Tanzimat period of the 19th century (Süzen, 2021:24). When we look at the first years of the foreign language teacher field, it is observed that the training of French teachers is given priority, and in recent years, the focus has been on training English teachers. For a long time, Arabic was seen as a tool language learned to understand the texts of Islam rather than a foreign language, and this view has not changed completely even today. Perhaps because of this view, the establishment of the first program to train Arabic teachers within the higher education system dates back to 1984. Gazi University, the continuation of the Gazi Education Institute, the first teacher training institution in the history of the Republic, hosted the first Department of Arabic Language Education. This department formed the basis of Arabic language education as a foreign language. At the same time, it was the first program to train teachers using modern methods and techniques used in the teaching of other foreign languages. With the success of the teachers graduating from this program in terms of training Arabic teachers and the change in the country's approach to Arabic as a foreign language, teachers who graduated from this program were needed more within the National Education system. Sixteen years after the establishment of this first program, programs to train similar Arabic teachers were started to be opened within the education faculties of both private/foundation and public universities. Departments of Arabic Language Education were opened at Adiyaman, Suleyman Demirel and Necmettin Erbakan Universities, which are public universities, and started to train Arabic teachers in these departments. Istanbul Aydın, Istanbul Sebahattin Zaim, Fatih Sultan Mehmet Foundation and Istanbul 29 Mayıs Universities, which are private and foundation universities, have started to establish this department and recruit students in the last six years (Dagbasi, 2021:226-228). Some other universities are known to be preparing to open the same program. Despite such a deep and long history of learning Arabic and the number of learners of almost one and a half million, the number of departments that train teachers to teach Arabic as a foreign language is now only eight.

The teaching of Arabic has always been included in our education system in some way, especially because it is the language of religious texts, from madrasahs to iptidais, ottoman junior high schools to daru'l-muallimin/muallimats, which we can accept as our oldest educational institutions. Arabic in Islamic Institutes in Imam-Hatip schools, which were first opened in 1924 and closed in 1931 and reopened in 1951; today, the basic course in Imam Hatip High Schools and Middle Schools is taught as an elective foreign language course in other elementary, middle and high schools. According to MEB statistics, approximately one million four hundred thousand students are in contact with Arabic. In addition, approximately twenty-five thousand students enroll in the Arabic Language Education, Arabic Language and Literature, Arabic Interpreting departments and Islamic Sciences/Theological Faculties of universities every year.

There have been significant developments in Arabic teaching as a foreign language in the last fifty years (Özdemir, Yaman, 2017:39). In parallel with the economic and strategic importance achieved by the Arab world, Arabic has gained great importance (Yıldız, Çilek, 2020: 159). In 1992, the decision of the Council of Ministers allowed the

teaching of Arabic in private education institutions. Thus, Arabic-taught courses were opened all over Turkey (Özcan, 2015: 154). Elective education and training in formal educational institutions; It was decided by the Council of Ministers on 8/4/2010, according to Article 2 of the Law no. 2923 dated 14/10/1983, on the article dated 24/3/2010 and numbered 1896 of the Ministry of National Education. Since then, aspiring students have been able to learn Arabic as a second foreign language. As is known, language learning/teaching is a long process (Doğru, 2018: 96). Choosing a promising program in this process would be a good investment for the future of students.

1.2 Purpose of the Research

The aim of this study is to reach conclusions about the profiles of teacher candidates who have settled in the Arabic Teaching program actively in eight universities, including four state and four private and foundation universities in Turkey in 2019-2020-2021, and to provide some data to the researches to be carried out on the subject.
The questions of the study are:
1- What are the types of high schools graduated from students who prefer the Arabic teaching program?
2- Where are the provinces and regions where the students who prefer the Arabic teaching program live?
3- What is the gender distribution of students who prefer the Arabic teaching program?
4- What is the number of students who prefer the Arabic teaching program with being a top student and which universities did they prefer?
5- What is the graduation status of the students who prefer the Arabic teaching program?
6- What are the most preferred programs of the students who prefer the Arabic teaching program after teaching Arabic?
7- What is the success status of the students who prefer the Arabic teaching program?
8- What is the success status between the first and last students who prefer the Arabic teaching program?

2. Method

Qualitative research method was used in this research. Within the scope of the research, the information of a total of eight hundred and forty-three candidates who settled in the Arabic Teaching Program, which actively recruits students in 2019, 2020 and 2021, was obtained by scanning the Higher Education Council Higher Education Program Atlas page. Of these candidates, one hundred and eighty-six settled at Gazi University, one hundred and eighty-six at Adıyaman University, one hundred and seventy-six at Suleyman Demirel University, eighty-two at Necmettin Erbakan University, sixty-nine at Istanbul 29 Mayıs University, sixty-three at Istanbul Sabahattin Zaim University, sixty-one at Fatih Sultan Mehmet Foundation University, and twenty at Istanbul Aydın University.

2.1 Analysis of Data

The data obtained on the profiles of Arabic teacher candidates were classified with the help of a statistical expert, the comments were made through this statistical data.

3. Findings and Comments

In this section, findings and comments about the research are given.

Table 1: Gender Distribution of Arabic Teacher Candidates

University	2021		2020		2019	
	Female	Male	Female	Male	Female	Male
Gazi University	34	28	32	30	46	16
Süleyman Demirel University	34	28	37	25	42	10
Necmettin Erbakan University	18	23	27	14	-	-
Adıyaman University	31	31	32	30	40	22
Fatih Sultan Mehmet Foundation University	12	3	21	9	14	2

İstanbul 29 Mayıs University	24	10	30	5	-	-
İstanbul Sabahattin Zaim University	24	4	24	3	6	2
İstanbul Aydın University	2	3	6	5	3	1
Females	179		209		151	
Males	130		121		53	
Total	309		330		204	

In 2019, 2020 and 2021, five hundred and thirty-nine of the eight hundred and forty-three students who preferred Arabic teaching were female; Three hundred and four were male. The proportion of females is 63.39%, while the proportion of males is 36.61%. These figures show that female students are much more willing to become Arabic teachers than males.

In the context of public universities, the proportion of female students is 59.20% and the proportion of male students is 40.80%. The proportion of female students who prefer private and foundation universities increases to 78.41%. The proportion of male students is 21.59%. In other words, three out of every four candidates who want to study at these universities and become Arabic teachers are female.

According to the years, the proportion of female candidates in every three years is higher than male candidates. In 2020, the proportion of female students peaked at 63.3%.

There is an increase in the proportion of male candidates from year to year in 2019: 26% - 2020: 36.7% - 2021: 42.1%.

The top three universities with the highest percentage of female candidates are Istanbul Sabahattin Zaim University (85.71%), Istanbul 29 Mayıs University (78.26%), Fatih Sultan Mehmet University (77.04%). The top three universities preferred by male candidates are Istanbul Aydın University with 45%, Adıyaman University with 44.63% and Gazi University with 39.8%.

Table 2: Cities where Arabic Teacher Candidates Come

University	2021		2020		2019	
	From Same City	From Different Cities	From Same City	From Different Cities	From Same City	From Different Cities
Gazi University	9	53	12	50	21	41
Süleyman Demirel University	4	58	8	54	9	43
Necmettin Erbakan University	9	32	17	24	-	-
Adıyaman University	7	55	14	48	14	48
Fatih Sultan Mehmet Foundation University	13	2	22	8	14	2
İstanbul 29 Mayıs University	25	9	25	10	-	-
İstanbul Sabahattin Zaim University	24	4	25	2	7	1
İstanbul Aydın University	3	2	10	1	4	0
Same City	94		133		69	
Different Cities	215		197		135	

35.11% of the candidates who want to become Arabic teachers prefer the Arabic teaching program in their city; 64.89% of them settled in an Arabic teaching program in a different city from the city where they lived.

Of the six hundred and thirty students who settled in public universities, five hundred and sixty-six (80.32%) came from a different city. The situation in private/foundation universities is the opposite. Of the two hundred and thirteen students who settled in these universities, one hundred and seventy-two (80.75%) were from Istanbul, where these universities are located.

It is thought that the majority of students who have settled in private and foundation universities are from the same city and are linked to economic conditions. These candidates may not have wanted to pay for both the university and living expenses in another city (rent, dormitories, food and drink, etc.).

Suleyman Demirel University is the university with the highest concentration of students from different cities. Adıyaman and Gazi Universities follow.

On a year-by-year basis, students settled in the Arabic teaching program in their home city with 40.30% in 2020. This rate was 33.42% in 2019 and 30.42% in 2021.

Table 3: Regions where Arabic Teacher Candidates Come

University	South East Anatolia			Eastern Anatolia			Marmara			Aegean			Mediterranean			Central Anatolia			Black Sea		
Year (20--)	21	20	19	21	20	19	21	20	19	21	20	19	21	20	19	21	20	19	21	20	19
Gazi U.	9	18	6	5	3	3	18	9	8	3	1	2	9	5	7	18	20	33	7	6	3
S. Demirel	8	12	3	8	5	0	11	7	9	11	9	4	15	16	17	4	7	14	5	6	5
N. Erbakan	3	6	-	9	4	0	4	6	-	5	1	-	3	3	-	13	20	-	5	1	-
Adıyaman	35	39	31	14	13	6	0	2	2	1	0	1	8	4	7	1	2	9	3	2	6
FSM U.	1	3	0	0	0	0	21	15	15	0	0	0	0	0	0	2	1	0	1	1	1
I. 29 M. U.	0	0	0	0	2	-	30	30	-	0	2	-	3	0	-	1	1	-	0	0	-
İ. S. Zaim	1	0	0	0	0	0	25	26	7	1	0	0	0	0	0	1	0	1	0	1	0
İ. Aydın U.	1	0	0	0	0	0	3	11	4	0	0	0	1	0	0	0	0	0	0	0	0
Total	176			72			263			41			98			140			53		

Students who settled in the Arabic teaching program preferred Marmara (31.19%), South East Anatolia (20.87%), Central Anatolia (16.60%), Mediterranean (11.62%), Eastern Anatolia (8.54%), Black Sea (6.28%) and Aegean (4.86%) regions, respectively. Students from Marmara and South East Anatolia regions account for more than half of all students. In particular, 105, or 56.45%, of the 186 students who prefer Adıyaman University come from the same geographical region. The rate of arrival from the same geographical region is 40.24% at Necmettin Erbakan University; 33.87% at Gazi University; Suleyman Demirel University is 27.27%.

87.33% of the students who settled in private and foundation universities are from the Marmara Region, where these universities are located.

Table 4: Learning Status of Arabic Teacher Candidates

University	Newly Graduate			Former Graduate			One University Graduate			One University Student		
Year (20--)	21	20	19	21	20	19	21	20	19	21	20	19
Gazi University	28	37	35	16	9	10	12	4	9	5	12	7
Süleyman Demirel University	29	33	23	19	16	20	5	6	3	8	7	6
Necmettin Erbakan University	18	27	-	9	11	-	5	2	-	9	0	-
Adıyaman University	17	26	26	15	19	13	15	11	13	14	4	8
Fatih Sultan Mehmet Foundation University	5	12	7	4	9	2	2	1	3	4	7	5
İstanbul 29 Mayıs University	16	21	-	9	3	-	3	4	-	6	6	-
İstanbul Sabahattin Zaim University	7	13	3	12	6	2	1	2	1	2	6	7
İstanbul Aydın University	2	4	2	0	0	0	6	8	3	0	2	2
Total	392			204			120			127		

Candidates who have just graduated from high school who have settled in Arabic teaching constitute 46.5% of the total. 24.19% graduated from high school 2 or more years ago but did not settle in another higher education program until they settled in the Arabic teaching program. 15.06% were those who took the exam again and became Arabic teachers when they were students at a university. 14.23% of students have previously graduated from a higher education program.

According to these results, it can be concluded that 29.29% -- which corresponds to 247 students -- are either satisfied with the program they have completed or are already studying.

Newly graduated students preferred Gazi University, former graduate students preferred Suleyman Demirel University, students with a university degree preferred Istanbul Aydın University, and those who were students at one university preferred Adıyaman University the most.

While there is no regular increase or decrease in the placement of new graduates in Arabic teaching; there is a steady increase in the proportion of former graduates, a university graduate or student, and those who take the exam again.

Table 5: Types of High Schools Where Arabic Teacher Candidates Graduate

	Imam-Hatip High School			Trade/Profession/ Technical High Schools			Anatolian High School with Foreign Language			Common High School			Social Sciences High School			Teacher High School			Science High School		
Year (20--)	21	20	19	21	20	19	21	20	19	21	20	19	21	20	19	21	20	19	21	20	19
Gazi U.	45	39	29	2	0	4	7	5	11	8	16	17	0	0	0	0	0	1	0	2	0
S. Demirel	39	37	24	1	5	3	9	11	22	12	7	3	3	0	0	0	0	0	1	1	0
N. Erbakan	31	35	-	0	2	-	0	2	-	10	2	-	0	0	-	0	0	-	0	0	-
Adıyaman	49	45	32	2	2	1	4	7	17	6	8	8	1	0	0	0	0	4	0	0	0
FSM U.	14	22	14	0	0	0	0	5	3	1	3	2	0	0	0	0	0		0		
İ. 29 M. U.	26	28	-	0	1	-	1	1	-	7	5	-	0	0	-	0	0	-	0	0	-
İ. S. Zaim	21	17	5	0	1	1	0	3	1	7	6	1	0	0	0	0	0	0	0	0	0
İ. Aydın U.	3	7	2	0	0	0	0	1	2	2	3	0	0	0	0	0	0	0	0	0	0
Total	564			25			112			129			4			5			4		

The vast majority of students (564 people- 66.9%) who settled in Arabic teaching are graduates of Imam-Hatip and Anatolian Imam-Hatip High School. In all of 2019, 2020, 2021, Imam-Hatip graduates have a high level of interest in the Arabic teaching program. The main reason for this interest can be the students' interest or familiarity with Arabic in secondary education.

The number of candidates for Arabic teachers of general high school graduates is 15.30%; The number of Anatolian high school graduates studying in a foreign language is one hundred and twelve and the rate is 13.28%. The number of graduates of vocational, commercial and health high schools who have settled in the Arabic teaching program is twenty-five, more than the total number of graduates of social sciences, teacher high school and science high school.

A striking data is that the number of candidates who have settled in the Arabic teaching program for three years is only five. This result amounts to 0.59% of the eight hundred and forty-three who have settled in the program for three years. So Arabic teaching is almost unpopular among the graduates of the teaching high schools.

Table 6: Arabic Teacher Candidates' Preference Status as Top Students

University	2021	2020	2019
Gazi University	2	2	2
Süleyman Demirel University	0	0	2
Necmettin Erbakan University	-	1	0
Adıyaman University	0	0	0
Fatih Sultan Mehmet Foundation University	0	0	0
İstanbul 29 Mayıs University	0	0	0
İstanbul Sabahattin Zaim University	0	0	0
İstanbul Aydın University	0	0	0
Total	2	3	4

In 2019, 2020 and 2021, a total of nine students were enrolled in the Arabic teaching program as top students in their school. Six of these nine winners, 66.6%, settled at Gazi University, two, or 22.22%, at Suleyman Demirel University and one, 11.11%, at Necmettin Erbakan University.

Gazi University is regularly preferred by top students every year; Adıyaman University and private/foundation universities were never preferred.

As of 2019, the preference of school winners to teach Arabic has also decreased from four students to three and then to two students.

Table 7: Success Ranking of Arabic Teacher Candidates

University	2021	2020	2019
Gazi University	26.353	23.798	32.754
Süleyman Demirel University	44.984	40.128	48.116
Necmettin Erbakan University	34.570	36.245	-
Adıyaman University	45.531	33.595	49.866
Fatih Sultan Mehmet Foundation University	69.159	77.264	-
İstanbul 29 Mayıs University	56,976	51.830	-
İstanbul Sabahattin Zaim University	70,425	77.888	-
İstanbul Aydın University	49.420	63.159	-

The above rankings are the rankings of the last candidate to settle at the relevant university. Since the ranking is considered to be more meaningful than score-based evaluations, the evaluations were made through the rankings. Gazi University has been preferred by the highest students in all three years. The second and third are variable. Gazi, Suleyman Demirel, Adiyaman Universities in the top three places among all universities in 2019; Gazi, Adiyaman, Necmettin Erbakan Universities in 2020; Gazi, Necmettin Erbakan and Suleyman Demirel Universities took part in 2021.

Istanbul Aydın and Istanbul 29 Mayıs Universities stand out when private/foundation universities are evaluated within themselves.

In 2019, the difference in the ranking of the students who settled in Arabic teaching was 17112 people; 54090 people in 2020; in 2021, there were 44072 people. This difference was 17112 people, 16330 people and 19178 people in public universities.

Table 8: Foreign Language Test Averages of Arabic Teacher Candidates

University	2021	2020	2019
Gazi University	64,7	69,1	51,5
Süleyman Demirel University	45,2	53,7	39,8
Necmettin Erbakan University	59,4	59,1	-
Adıyaman University	50,1	57,1	37,1
Fatih Sultan Mehmet Foundation University	30,8	26,6	29,2
İstanbul 29 Mayıs University	50,6	55,6	-
İstanbul Sabahattin Zaim University	33,8	43,4	27,1
İstanbul Aydın University	40,8	43,8	-
Average	46,92	51,05	36,94

The net average of 36.94 for 2019 in the 80-question foreign language test was 51.05 in 2020 and 46.92 in 2021. Candidates with the highest language test average preferred Gazi, Suleyman Demirel and Adıyaman Universities in the top three places in 2019. In 2020, Gazi, Necmettin Erbakan and Adıyaman Universities preferred. In 2021, Gazi, Necmettin Erbakan and Istanbul 29 Mayıs Universities.

The three-year Average in Turkey is 44.97 in eighty questions. From this point of view, Gazi University is above the Turkish average with a net of 61.76, Necmettin Erbakan University 59.25, Istanbul 29 May University 53.1, Adıyaman University 48.1, Suleyman Demirel University 46.2 Istanbul Aydın University 42.3, Istanbul Sabahattin Zaim University 42.3 and Fatih Sultan Mehmet Foundation University are below the Turkish average with a net of 28.86.

Table 9: Rates of Placement of Arabic Teacher Candidates in Arabic Teaching Program as First Choice

University	2021 (in %)	2020 (in %)	2019 (in %)
Gazi University	71	64	52
Süleyman Demirel University	31	23	12
Necmettin Erbakan University	39	34	-
Adıyaman University	51	55	38
Fatih Sultan Mehmet Foundation University	50	16	55
İstanbul 29 Mayıs University	32	7	-
İstanbul Sabahattin Zaim University	61	36	0
İstanbul Aydın University	100	50	-

In 2019, 55% of the candidates who settled at Fatih Sultan Mehmet Foundation University used their first preferences in favor of teaching Arabic. Gazi University (52%) and Adıyaman University (38%) followed.
In 2020, 6.4 out of every 10 candidates who settled in Gazi University Arabic teaching program preferred this program in the first place. The universities that are preferred in the first place are Adıyaman and Istanbul Aydın Universities. One of the two candidates who settled in the Arabic teaching program at these two universities made their first choice in favor of this program.

In 2021, all the candidates who settled in the Arabic teacher program at Istanbul Aydın University preferred this program in the first place. Gazi and Istanbul Sabahattin Zaim Universities are the other universities in the top three.

According to the years, Gazi, Suleyman Demirel, Necmettin Erbakan, Istanbul 29 Mayıs, Istanbul Sabahattin Zaim, Istanbul Aydın Universities as the 1st choice has increased regularly.

Table 10: Arabic Teacher Candidates' Most Preferred Programs after Arabic Teaching

University	1st Choice	2nd Choice	3rd Choice
Gazi University	English Teaching	Arabic Language and Literature	Arabic Translation And Interpreting
Süleyman Demirel University	English Teaching	English Language and Literature	Arabic Language and Literature
Necmettin Erbakan University	English Teaching	Arabic Language and Literature	English Language and Literature
Adıyaman University	Arabic Language and Literature	English Teaching	English Language and Literature
Fatih Sultan Mehmet Foundation University	Theology/Islamic Sciences	Arabic Language and Literature	Arabic Translation And Interpreting
İstanbul 29 Mayıs University	Arabic Translation And Interpreting	Arabic Language and Literature	English Teaching
İstanbul Sabahattin Zaim University	Arabic Translation And Interpreting	Arabic Language and Literature	English Translation And Interpreting
İstanbul Aydın University	English Translation And Interpreting	English Teaching	Arabic Language and Literature

Students who settled in Arabic teaching preferred the most English teaching programs other than the program they settled in. Afterwards, Arabic Interpreting, Arabic Language and Literature, Islamic Sciences/Theology and English Language and Literature programs were preferred.

Only students who settled at Fatih Sultan Mehmet Foundation University preferred programs that were very close to their other three preferences in Arabic. Arabic teacher candidates who settled in all other universities included English-related programs in their preferences. Looking at this data, it shows that Arabic teacher candidates do not include Eastern Languages such as Persian, Chinese, Japanese or any of the Western Languages such as French, German and Spanish in their top four preferences. The reason for this choice is most likely due to economic concerns. The fact that English is a universal world language and that the number of English teacher appointments and the likelihood of finding a job knowing English has been influential in the preferences of the candidates.

4. Discussion and Recommendations

Although there is a long history of educating teachers in our country, the history of training foreign language teachers, especially Arabic teachers, is considered very new. The first program, which was opened in 1984 within Gazi University, trained Arabic teachers alone for years, and candidates who wanted to become Arabic teachers had no choice but to come to Ankara and study in this department. After 2010, the number of Arabic teaching programs increased to eight, with seven more programs opened, including three states and four foundations/private universities. This has allowed different university options to be offered to Arabic teacher candidates.

A total of eight hundred and forty-three teacher candidates have been placed in Arabic teaching programs, two hundred and four in 2019, three hundred and thirty in 2020 and three hundred and forty-nine in 2021. Six hundred and thirty of these teacher candidates are state; two hundred and thirteen private/foundation universities. According to the three-year data, 63.39% of Arabic teacher candidates are female and 36.61% are male. This suggests that the vast majority of future Arabic teachers will be women. In addition, the proportion of female teacher candidates at private universities is higher than in public universities. The proportion of male teacher candidates is high in public universities.

Almost seven out of ten Arabic teacher candidates have settled into the Arabic teaching program in a different city from the city where they live. However, in the case of private/foundation universities, the situation is the opposite. Eight out of ten candidates who have settled in private/foundation universities are from the city where the university is located. When looking at the subject on the basis of geographical regions, a little more than half of

Arabic teacher candidates chose Central Anatolia and South East Anatolia Region. These regions are followed by Central Anatolia, Mediterranean, Eastern Anatolia, Black Sea and Aegean regions respectively.

46.5% of Arabic teacher candidates have just graduated from secondary school and have taken the university placement exam for the first time. 24.19% are students who have graduated from secondary school but have not previously settled in any program. The proportion of candidates who have graduated from a university and settled to teach Arabic is 14.23%, while the proportion of students at a university is 15.06%. From here, it can be concluded that three out of ten Arabic teacher candidates are not satisfied with the program they have studied or graduated from.

66.9% of Arabic teacher candidates are graduates of Imam-Hatip or Anatolian Imam-Hatip High School. This ratio is quite high. Factors such as the familiarity of students in this high school type in Arabic, positive thoughts about past learning, want to learn a language in detail, and Arabic teacher assignment scores are quite low compared to language branch teachers may be among the reasons for the intense interest of Imam-Hatip High School students in Arabic teaching. General high school graduates ranked second with 15.30%, while Anatolian high schools with foreign language education ranked third with 13.28%. A surprising result is that the proportion of students who graduate from teacher high school and settle in the Arabic teaching program is 0.59%. Only five of the eight hundred and forty-three candidates are graduates of teacher high school over a three-year period. Arabic may still be perceived as a language of religion rather than a foreign language among teacher high school graduates.

The number of candidates who want to be first in school and an Arabic teacher is reduced year after year. There is a big difference between programs in the success ranking of Arabic teacher candidates. In 2021, the last candidate to Gazi University, which received students with the highest success ranking, settled in 26353rd place; the last candidate for Istanbul Sabahattin Zaim University, which received students with the lowest success ranking, is 70425. There was a difference of 44072 people between the two programs placed in the order. The same difference between public universities was 19178.

Arabic teacher candidates averaged 46.92 in 2021 in the Foreign Language Test; 51.05 in 2020; in 2019, it was 36.94. After 2019, there was a noticeable increase in language averages. This may be due to the facilitation of exam questions or the better preparation of the candidates who take the exam in other years. In addition, the rates of candidates who settled in the Arabic teaching program as the first choice in university placement exams increased year after year.

The most preferred programs of Arabic teacher candidates after the Arabic teaching program are English Teaching, Arabic Interpreting, Arabic Language and Literature, English Language and Literature, English Interpreting and Islamic Theology, respectively. In other researches to be carried out after this research; it can be determined how many of the teacher candidates who started to study in the mentioned years graduated. A study can be done on where these graduate teacher candidates are employed. It can be investigated how many of the graduate teacher candidates choose the teaching profession and how many turn to other professions.

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The Relationship Between Mobbing Behaviors Experienced by Teachers and Their Feeling of Relative Deprivation

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Abstract
Mobbing is generally a situation where victims are directly and indirectly affected, and has an increasingly negative impact on victims, harming their psychosocial and physical health and causing power imbalance. Relative deprivation is defined not only as a perception but also as a sense of deprivation felt meaning anger. Relative deprivation has two dimensions as cognitive and emotional. This study aimed to determine the relationship between the level of mobbing perceived or experienced by teachers and their feeling of relative deprivation. The data were collected from 319 public school teachers in Turkey through online environments. The research data were collected using the Relative Deprivation Scale for Teachers and Mobbing Scale. According to the results of the research, there are significant differences in both scales according to gender, seniority and school level. A positive relationship was found between Relative Deprivation Scale and the Mobbing Scale. In addition, mobbing behaviors experienced by teachers are a significant predictor of Administrative Deprivation and Personal Deprivation dimensions.

Keywords: Mobbing, Relative Deprivation, Teachers

1. Introduction

From past to present, it seems that organizations have subjected their employees to many positive and negative attitudes and behaviors. Along with the rapid modernization, reasons such as increased competition in working life, intense work pressure, and personal benefits are causing negativities among employees. These negative attitudes and behaviors turn into a problem in working environments, harming the development and continuity of organizations. In this respect, the concept of mobbing emerges in work environments (Gökçe, 2008).

The concept of mobbing first appeared in human relations when Peter-Paul Heinemann defined the aggressive behaviors of children towards their weak and lonely peers as mobbing (Tınaz, Bayram & Ergin, 2008). Heinz Leymann, who enabled the utilization of this concept in terms of organizations and formed the basis for research on mobbing, stated that the concept of mobbing includes psychological violence and intimidation rather than

physical attack (Yaman, 2009). Mooyed et al. (2006) considered mobbing as a concept perpetrated by at least one person on one or more than one person and by individuals who resolve existing conflicts in a hostile way, causing health problems in individuals exposed to, and negatively affecting their motivation. Browne and Smith (2008) defined the concept of mobbing as a situation that has systematic and direct effects on employees, causing them to experience physiological and psychological problems. In this context, mobbing is generally a situation where victims are directly and indirectly affected, and has an increasingly negative impact on victims, harming their psychosocial and physical health and causing power imbalance (Güldalı, 2012).

Mobbing is a complex concept, which may not occur in work environments for only one single reason and may not have a specific reason. Tutar (2004) argues that organizational conflicts such as differences between the personal goals of employees and the organization goals, conflicts between different groups in the organization, disagreements between managers and employees, and disagreements among employees are the primary causes of mobbing. Davenport, Elliott, and Schwartz (2014) divided the causes of mobbing into organizational causes such as organizational culture and structure, stressful work environments, unethical behaviors, downsizing, restructuring, and personal causes such as seeking pleasure to discharge boredom, prejudice, sense of egocentrism, and narcissistic personality traits. However, Zapf argues that when the situations causing mobbing are viewed from a different perspective, those situations may be the consequence of mobbing (As cited in Dinçer, 2017).

Generally, in the relevant literature, the consequences of mobbing have been addressed under one single heading (Atmaca, 2014; Karakoç, 2016), individual and organizational (Bayraktar, 2016; Daşçı, 2014), or individual, organizational, and social consequences (Dinçer, 2017). Mobbing causes many harms to the individual, society, and organization. Tınaz (2011) notes that physical illnesses such as depression, inability to focus, sweating and trembling hands, headache and back pain, loss of appetite, and skin diseases may occur. From an organizational perspective, deceleration in productivity in organizations, conflicts between employees and managers, increased absenteeism, reduced organizational commitment, and deterioration of peace in work environments are the main consequences (General Directorate of Labor of the Ministry of Labor and Social Security, 2013). The increased expenditures in the health sector, insurance costs, tax losses, disability retirement, and so forth are considered the social consequences that have an economic cost to the society (Cemaloğlu & Daşçı, 2017; Davenport et al., 2014). In general, when we take into account the concept of mobbing, variables emerging within or outside an organization seem to affect individuals. As such, with the reflection of similar processes in educational organizations, teachers may experience deprivation induced by situations such as believing that there is intimidation and injustice, which prevents the formation of a positive organizational culture. Teachers' sense of deprivation in their organizations will also cause other organization stakeholders to get negatively affected. In this respect, the concept of relative deprivation needs to be explained.

The conceptualization of the relative deprivation theory, developed concerning emotions triggered in humans by awareness and reactions to perceived social inequality through subjective comparisons and interpretations, has been carried out in a three-volume work called "The American Soldier: Adjustment during Army Life (1949)" (Stark & Yitzhaki, 1988). However, the theoretical dimension of the concept was formulated by a research group consisting of Stouffer, Suchman, DeVinney, Star, and Williams (1949) in their famous study on American soldiers (Aydın, 2014). The study showed that even though soldiers serving in the air forces had the opportunity to promote faster compared to soldiers serving in the ground forces, they were unsatisfied with the promotions, and the reason for their dissatisfaction with this situation stemmed from the group they compared their status to. In other words, air force soldiers did not compare themselves to ground force soldiers but to other employees in their group. The promoted soldiers compared themselves to unpromoted soldiers and were relatively satisfied with the situation, but the unpromoted soldiers experienced relative deprivation when they compared themselves with the promoted soldiers. The research findings showed that the deprivation experiences of soldiers emerged as a consequence of subjective evaluations rather than objective comparisons (Tougas & Beaton, 2008). According to the relative deprivation theory, lower-level employees compare themselves with those at higher levels and feel injustice because of this inter-class situation (Cowherd & Levine, 1992; Karademir & Çoban, 2010). In addition, Runciman (1966, as cited in Tripathi & Srivastava, 1981) describes the relative deprivation as follows:

> *"If A wants something they have not, A will feel relative deprivation when they compare themselves with B, who has this thing. Similarly, A will also feel relative deprivation if their expectations are*

higher than B's or if A had a better status than B in the past and now they are in the same circumstances."

The first formal theory of relative deprivation was developed by Davis (1959) based on Stouffer and colleagues' (1949) study on soldiers. This theory was built on the logic that individuals deprived of a desirable good or opportunity (X) experience a sense of injustice when they perceive that their peers have X. From this perspective, according to Davis (1959), there are three determinants required for an individual not having X to feel deprivation: perceiving that their peers have X, wanting X, and feeling deserved to get X. Following Davis, Runciman (1966) expressed the distinction between relative deprivation resulting from individual comparisons of outcomes and relative deprivation resulting from group-level social comparisons of outcomes. Accordingly, personal/egoistic deprivation refers to deprivation that occurs when individuals compare themselves with their own group, while group/collective relative deprivation refers to deprivation that occurs when individuals compare their group with other groups. Following Runciman, Crosby (1979) introduced the relative deprivation model as 'Egoistic Relative Deprivation' and defined the concept of relative deprivation not only as a perception but also as a sense of deprivation felt meaning anger, which is synonymous with a kind of exasperation and complaint. In this model of Crosby (1976), which focuses on personal relative deprivation, determinants and preconditions precede the deprivation felt, while mediator variables and resulting behaviors follow deprivation. More specifically, Crosby's model indicated that a person deprived of some objects or opportunities (X): 1) perceives that someone has X, 2) wants X; 3) feels deserved to get X, 4) thinks that attaining X is possible, and 5) denies personal responsibilities for existing failure in having X, and these are the prerequisites for relative deprivation.

Relative deprivation has two dimensions as cognitive and emotional. Although there are different conceptualizations of relative deprivation based on various theoretical frameworks (e.g., Crosby, 1976; Davies, 1962; Gurr, 1970; Runchiman, 1966), according to all, feeling relative deprivation reflects an emotion as good as it reflects cognition. Crosby (1976) defines the concept of relative deprivation not only as a perception but also as an emotion (p.88). Likewise, Runchiman (1966) defines relative deprivation as a sense of jealousy and perception of injustice. In a similar vein, Smith and Ortiz (2002) conceptualize affectivity as an integral part of relative deprivation.

This study aimed to determine the relationship between the level of mobbing perceived or experienced by teachers and their feeling of relative deprivation. Therefore, responses were sought to the following questions.

1. What is the level of mobbing behaviors experienced by teachers and their level of feeling relative deprivation?
2. Are there significant differences between mobbing behaviors experienced by teachers and their level of feeling relative deprivation per gender, seniority, and school levels they work?
3. Are there significant relationships between mobbing behaviors experienced by teachers and their level of feeling relative deprivation?
4. Do the mobbing behaviors experienced by teachers predict their level of feeling relative deprivation?

2. Method

2.1. Research Model

The research was carried out using a correlational survey model of quantitative research methods to determine the relationship between the level of mobbing experienced by teachers and their feeling of relative deprivation. In the correlational survey model, the aim is to determine the relationship between two or more variables and their levels (Fraenkel & Wallen, 2009).

2.2. Study Group

The data were collected from public school teachers in one of the provinces in Turkey in 2021 through online environments. This way, 319 teachers who were reached out and responded to the scales were included in the study. The demographic distribution of teachers participating in the study is illustrated in Table 1.

Table 1: Demographic Variables

Variable	N	%
Female	201	63
Male	118	37
0-5 Years	48	15.0
6-10 Years	78	24.5
11-15 Years	70	21.9
16-20 Years	52	16.3
21 Years and more	71	22.3
Preschool	30	9.4
Primary School	75	23.5
Secondary School	113	35.4
High School	101	31.7

2.3. Data Collection Tools

The research data were collected using the Relative Deprivation Scale for Teachers and Mobbing Scale.

2.3.1. The Relative Deprivation Scale for Teachers

This scale was developed by Altınlı, Uzun, and İnandı (2021) to determine teachers' perception of relative deprivation. It consisted of 20 5-point Likert type items and three sub-dimensions. The sub-dimensions were Administrative, Personal, and Developmental Deprivation. The internal consistency coefficient computed for the Relative Deprivation was 0.78. However, in this study, the internal consistency coefficient was 0.905.

2.3.2. Mobbing Scale

This scale was developed by Laleoğlu and Özmete (2013) to assess the mobbing status of individuals working in human service organizations. The scale consisted of 38 5-point Likert type items and five sub-dimensions. The sub-dimensions were Relations with Co-workers, Threat and Harassment, Work and Carrier-Related Barriers, Interference with Private Life, and Commitment to Work. The general internal consistency coefficient of the scale was reported 0.948. However, in this study, the internal consistency coefficient was 0.937.

2.4. Data Analysis

As a result of the normality tests, the data from the Relative Deprivation Scale for Teachers showed normal distribution, but the data from Mobbing Scale did not. Therefore, of difference tests, t-test and ANOVA were applied to the Relative Deprivation Scale for Teachers, whereas Mann-Whitney U and Kruskal-Wallis tests were applied to the Mobbing Scale. In addition, correlation and regression analyses were performed to determine the relationship between the scales.

3. Results

This section presents findings relating to the scores teachers obtained from the Relative Deprivation and Mobbing scales and their sub-dimensions, the presence or absence of significant differences between these scores per gender, seniority, and school level, relationships between sub-dimensions, and the prediction of relative deprivation perceptions by mobbing experiences.

Table 2: Descriptive statistics of scores obtained from the scales

Variable	*N*	$\bar{X}$	*SD*
Administrative Deprivation	319	2.45	.87
Personal Deprivation	319	3.20	.96
Developmental Deprivation	319	4.32	.74
Relations with Co-Workers	319	1.45	.53
Threat and Harassment	319	1.05	.23
Work and Career-Related Barriers	319	1.45	.59
Interference with Private Life	319	1.26	.48
Commitment to Work	319	2.50	1.15
Relative Deprivation Scale - General	319	3.32	.63
Mobbing Scale - General	319	1.54	.41

As shown in Table 2, teachers obtained a moderate score ($\bar{x}$ = 3.32) from the Relative Deprivation Scale. Considering the sub-dimensions, the Administrative Deprivation was low ($\bar{x}$ = 2.45), Personal Deprivation moderate ($\bar{x}$ = 3.20), and Developmental Deprivation high ($\bar{x}$ = 4.32). Contrarily, the scores obtained from the Mobbing Scale were quite low ($\bar{x}$ = 1.54). As such, the scale's sub-dimensions were also similar, where the mean score was $\bar{x}$ =1.05 for Relations with Co-Workers, $\bar{x}$ = 1.05 for Threat and Harassment, $\bar{x}$ = 1.45 for Work and Career-Related Barriers, $\bar{x}$ = 1.26 for Interference with Private Life, and $\bar{x}$ = 2.50 for Commitment to Work.

Table 3: Results of t-test Applied to the Relative Deprivation Scale per Gender Variable

Dimension	Gender	*N*	$\bar{X}$	*SD*	*t*	*df*	*p*
Administrative Deprivation	Female	201	2.54	.86	2.511	317	.013
	Male	118	2.29	.86			
Personal Deprivation	Female	201	3.37	.91	4.185	317	.000
	Male	118	2.91	.98			
Developmental Deprivation	Female	201	4.42	.60	3.437	317	.001
	Male	118	4.13	.90			
Relative Deprivation General	Female	201	3.44	.58	4.637	317	.000
	Male	118	3.11	.67			

*$p < 0.05$

According to Table 3, female teachers had higher scores ($\bar{x}$ = 2.54) in the Administrative Deprivation dimension than male teachers ($\bar{x}$ = 2.29). Female teachers had higher scores ($\bar{x}$ = 3.37) in the Personal Deprivation dimension than male teachers ($\bar{x}$ = 2.91). Female teachers' scores ($\bar{x}$ = 4.42) were higher in the Developmental Deprivation dimension than male teachers ($\bar{x}$ = 4.13). In general, female teachers scored higher ($\bar{x}$ = 3.44) on the Relative Deprivation Scale than their male counterparts ($\bar{x}$ = 3.11). As such, the differences were statistically significant. There were significant gender differences in relative deprivation scores, favoring female teachers. Female teachers experienced more relative deprivation compared to male teachers.

Table 4: Results of Mann Whitney U Test Applied to the Mobbing Scale per Gender Variable

Dimension	Group	*n*	Mean of Ranks	U	*p*
Relations with Co-Workers	Female	201	147.44	10337	.062
	Male	118	167.37		
Threat and Harassment	Female	201	157.54	11568	.516
	Male	118	161.45		
Work and Career-Related Barriers	Female	201	162.69	12176	.683
	Male	118	158.42		
Interference with Private Life	Female	201	160.94	11969	.872
	Male	118	159.45		
Commitment to Work	Female	201	155.29	11303	.478
	Male	118	162.77		
Mobbing - General	Female	201	156.06	11393	.558
	Male	118	162.32		

According to the Mann-Whitney U test performed to examine whether teachers' scores from the Mobbing Scale significantly differed per gender variable, there were no significant gender differences in the mobbing scale and its sub-dimensions.

Table 5: Results ANOVA Applied to the Relative Deprivation Scale per Seniority Variable

	Age	*N*	$\bar{X}$	*df*	*F*	*P*	Significant Difference
Administrative Deprivation	0-5 Years	48	2.50	4-314	.864	.486	
	6-10 Years	78	2.51				
	11-15 Years	70	2.47				
	16-20 Years	52	2.50				
	21 Years and more	71	2.28				
Personal Deprivation	0-5 Years	48	3.45		7.960	.000	Between 21 years and more and all other groups
	6-10 Years	78	3.39				
	11-15 Years	70	3.35				
	16-20 Years	52	3.21				
	21 Years and more	71	2.67				
Developmental Deprivation	0-5 Years	48	4.33		1.037	.388	
	6-10 Years	78	4.43				
	11-15 Years	70	4.27				
	16-20 Years	52	4.36				
	21 Years and more	71	4.20				
Relative Deprivation Scale - General	0-5 Years	48	3.43		4.579	.001	Between 21 years and more and all other groups
	6-10 Years	78	3.44				
	11-15 Years	70	3.36				
	16-20 Years	52	3.36				
	21 Years and more	71	3.05				

*$p < .05$

A Kruskal Wallis H test was conducted to measure whether the mobbing behaviors experienced by teachers differed per seniority variable. According to the resultant findings, a significant difference was found only in the Commitment to Work dimension, favoring the group with 21 years or more. Teachers with seniority of 21 years or more had a significantly higher mean rank commitment to work score (190.27) than that of teachers in other groups. By contrast, there were no significant differences in other dimensions and the whole scale per seniority.

Table 7: Results of ANOVA Applied to the Relative Deprivation Scale per School Level Served

	Age	*N*	$\bar{X}$	*df*	*F*	*P*	Significant Difference
Administrative Deprivation	Preschool	30	2.69	3-315	1.541	.204	
	Primary School	75	2.38				
	Secondary School	113	2.51				
	High School	101	2.35				
Personal Deprivation	Preschool	30	3.44		2.489	.060	
	Primary School	75	3.21				
	Secondary School	113	3.30				
	High School	101	3.00				
Developmental Deprivation	Preschool	30	4.72		4.117	.007	Preschool and all other levels
	Primary School	75	4.38				
	Secondary School	113	4.27				
	High School	101	4.20				
Relative Deprivation Scale - General	Preschool	30	3.62		3.877	.010	Preschool and all other levels
	Primary School	75	3.32				
	Secondary School	113	3.36				
	High School	101	3.19				

*$p < .05$

According to the results of ANOVA conducted to measure whether school levels that teachers worked at yielded significant differences in their relative deprivation scores, the school level yielded no significant difference in the Administrative and Developmental Deprivation sub-dimensions. Teachers working at preschool levels had higher scores ($\bar{x}$ = 4.72) in the Developmental Deprivation dimension than those working at other levels, with the difference being statistically significant. Similarly, teachers working at preschool levels had higher scores ($\bar{x}$ = 3.62) throughout the scale than other teachers working at other levels. And the difference was statistically significant. The school level they worked yielded significant differences in the Developmental Deprivation dimension and Relative Deprivation Scale in general.

Table 8: Results of Kurskal Wallis H Applied to the Mobbing Scale per School Level Served

Dimension	Group	*n*	Mean of Ranks	*df*	X^2	*p*	Significant Difference
Relations with Co-workers	Preschool	30	189.68	3	4.27	.233	
	Primary School	75	155.45				
	Secondary School	113	162.76				
	High School	101	151.48				
Threat and Harassment	Preschool	30	157.08	3	.562	.905	
	Primary School	75	162.49				
	Secondary School	113	157.77				
	High School	101	161.51				
Work and Career-Related Barriers	Preschool	30	159.63	3	6.19	.103	
	Primary School	75	160.89				
	Secondary School	113	174.23				
	High School	101	143.52				
Interference with Private Life	Preschool	30	157.65	3	.315	.957	
	Primary School	75	159.42				
	Secondary School	113	157.83				
	High School	101	163.55				
Commitment to Work	Preschool	30	152.72	3	10.29	.016	Between high school and all other levels
	Primary School	75	149.82				

	Secondary School	113	147.36			
	High School	101	183.86			
Mobbing Scale - General	Preschool	30	159.27	3	3.15	.369
	Primary School	75	151.99			
	Secondary School	113	153.73			
	High School	101	173.18			

Kruskal Wallis H test was performed to measure whether the mobbing behaviors teachers exposed to significantly differ per school levels they work. According to the resultant findings, there was a significant difference in the Commitment to Work dimension, favoring high school teachers. The rank scores (183.86) of high school teachers were significantly higher than those of teachers working at other school levels. However, other sub-dimensions and the general scale yielded no significant differences per school level variable.

Table 9: The Relationship between the Level of Mobbing Experienced by Teachers and Their Relative Deprivation

	1	2	3	4	5	6	7	8	9	10	$\bar{X}$	*SD*
1. Relations with co-workers	1										1.45	.53
2. Threat and harassment	.52**	1									1.05	.23
3. Work and career-related barriers	.62**	.48**	1								1.45	.59
4. Interference with private life	.55**	.48**	.55**	1							1.26	.48
5. Commitment to work	.14**	.07	.11	.17**	1						2.50	1.15
6. Administrative deprivation	.51**	.23**	.46**	.33**	.05	1					2.45	.87
7. Personal deprivation	.34**	.12	.30**	.25**	-.03	.60**	1				3.20	.96
8. Developmental deprivation	.06	-.07	.03	.03	.13	.04	.25**	1			4.32	.74
9. Mobbing Scale – General	.71**	.55**	.70**	.69**	.68**	.40**	.23**	.10	1		1.54	.41
10. Relative Deprivation Scale – General	.42**	.14	.37**	.28**	.06	.77**	.87**	.53**	.33**	1	3.32	.63

A correlation test was conducted to determine the relationship between the mobbing behaviors experienced by teachers and their perceived relative deprivation. According to the results, there were positive relationships between the administrative deprivation and relations with co-workers (r = .51), threat and harassment (r = .23), work and carrier-related barriers (r = .46), and interference with private life (r = .33). Similarly, there were positive relationships between the personal deprivation and relations with co-workers (r = .34), work and career-related barriers (r = .30), and interference with private life (r = .25). Contrarily, no relationship existed between developmental deprivation and mobbing. However, there was a positive relationship between the Relative Deprivation and Mobbing scales (r = .33).

Table 10: Predicting the Administrative and Personal Deprivation by Mobbing Behaviors Experienced by Teachers

	Administrative Deprivation					Personal Deprivation				
Variable	B	SH	B	T	p	B	SH	B	T	p
Constant	1.377	.202		6.807	.000	2.636	.248		10.609	.000
Relations with co-workers	.654	.107	.401	6.104	.000	.499	.132	.275	3.787	.000
Threat and harassment	-.418	.215	-.114	-1.945	.053	-.528	.264	-.129	-1.996	.047
Work and career-related barriers	.380	.095	.257	3.988	.000	.254	.117	.155	2.172	.031
Interference with private life	.051	.111	.028	.456	.649	.184	.137	.092	1.348	.179
Commitment to work	-.021	.036	-.028	-.576	.565	-.081	.044	-.096	-1.817	.070
	R = .554 R^2 = .307 F = 27.699 *p* < .05 *(.000)*					R = .388 R^2 = .151 F = 11.107 *p* < .05 *(.000)*				

A regression analysis was conducted to measure whether the mobbing behaviors experienced by teachers predicted their perceptions of relative deprivation. According to the resultant findings, the mobbing behaviors significantly predicted administrative deprivation. Further, 30% of the variance of teachers' administrative deprivation perceptions could be explained by the mobbing they experience (R^2 = .307). In a similar vein, 15% of the variance of teachers' personal deprivation could be explained by the mobbing they experience (R^2 = .151). According to these findings, exposure to mobbing was a significant predictor of Administrative and Personal Deprivation.

4. Discussion

The study found that female teachers have a higher level of relative deprivation than male teachers. Teachers who have worked for many years felt relatively deprived. In addition, there was a significant positive relationship between mobbing and relative deprivation. Mobbing explained 30% of the administrative deprivation of teachers and 15% of their personal deprivation.

The study found no statistically significant gender difference per mobbing experience. Bayraktar (2016), Öntürk (2015), and Çivilidağ (2011) also found no relationship in their studies. However, some studies in the literature have shown that men are exposed to mobbing more than women (Serin, 2018; Nanto, 2015; Bölükbaşı, 2015; Koçak, 2015; Zorgül, 2014; Eken, 2014; Çam, 2013; Erdoğan, 2012; Ekinci, 2012). However, Gezer (2015), Özçelik (2015), Akın and Aşır (2014), and Yumuşak (2013) found that female teachers were exposed to mobbing more.

Significant differences were observed in the level of mobbing and commitment to work as the years of seniority increased. Studies show differences regarding the years of seniority. According to some studies in the literature, the level of mobbing increases as the seniority year decreases (Bölükbaşı, 2015; Nanto, 2015; Yılmaz, 2017). However, Özçelik (2015) found that teachers with 11-20 years of seniority were exposed to mobbing more. Similarly, Canbaz (2014) found that teachers with 16-20 years of seniority were exposed to mobbing more.

As a result of the research, one could state that teachers experiencing relative deprivation are exposed to mobbing. Although no study has directly examined the concepts of mobbing and relative deprivation in the literature, some studies report that situations such as job satisfaction (Lee & Martin, 1991), organizational citizenship (Feldman & Turnley, 2004), and ineffective work behaviors are affected by the concept of relative deprivation. Teachers exposed to psychological violence, humiliation, and maltreatment in institutions where they work may experience decreased job satisfaction and feel more deprived. Pettigrew and Bialosiewicz (2012) addressed stress, depression, and intimidation as personal deprivation behaviors in their meta-analysis study. Teachers exposed to mobbing in their workplaces may experience more stress and depression and thereby have a higher level of personal

deprivation. Research shows that individuals with high subjective wellbeing (Schmitt et al., 2010), life satisfaction (Osborne & Sibley, 2013), and self-esteem (Walker, 1999) have a low level of relative deprivation. Teachers who feel happy in institutions where they work and have a high job satisfaction may not feel personal deprivation.

The study found that teachers with more seniority years felt more deprived than teachers with low seniority years. In general, the literature suggests that relative deprivation occurs when individuals are deprived of an outcome/opportunity and when they want, feel deserved, and find out that other applicants have received it (Feldman & Turnley, 2004; Folger & Martin, 1986). These studies support the study findings. As the seniority year increases, they may withness others get many opportunities, and when they are over-exposed to such situations, they may feel relatively more deprived over time.

As a result of the research, we could contend that teachers exposed to mobbing may eventually think that they do not get what they deserve and therefore feel deprived. As time passes, not getting what is deserved during the working period and opportunities missed by institution managers using intimidation strategies may cause teachers to feel deprived. As studies on the concept of relative deprivation are very limited in the literature, the concepts in this study could be investigated with their different dimensions. Different studies could be conducted using many other related variables.

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Examination of the Relationship Between Social Appearance Anxiety and Communication Skills of Faculty of Sport Sciences Students

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Abstract
Concerns about social appearance, which are common especially among young people, and their preferences in communication based on these concerns have come to a remarkable level. From this point of view, the study aimed determined to examine the relationship between social appearance anxiety and communication skills levels on the students in the faculties of sports sciences. Following the aim, the research was performed on 220 students in total, and male and female students were selected randomly. The sample of the study, in which the relational screening model, which is one of the quantitative research methods, was used as a method. Besides, the "Social Appearance Anxiety Scale" (SAAS) and the " Communication Skills Assessment Scale (CSAS) was used, and ANOVA and t-tests were used in the statistical evaluation of the data. In the evaluation of the data, it was determined that there was a statistically significant difference between the groups in the sub-dimensions of communication skills in terms of communication skills depending on gender ($p<0.05$). Moreover, it was understood that there was no statistically significant difference between the groups in terms of social appearance anxiety related to the gender variable ($p>0.05$).

Keywords: Social Appearance Anxiety, Communication Skills, Faculty of Sport Sciences Students

1. Introduction

To be accepted in society, people focus on their images where they can reveal themselves. Body image has a priority in this regard. Body image does not imply a static or merely internal quality of a person. To understand body image, it is necessary to understand how these changes feel as well as the inevitable physical changes that people go through throughout their lives. At the same time, the longitudinal and simultaneous consequences of body image are important, as well as the numerous factors that contribute to body image (Markey, 2010). Body image has an important place in the formation of people's self-esteem, and it is an important component of self-esteem, which can be briefly defined as self-satisfaction. There are two-dimensional aspects of body image, these

are positive body image and negative body image. High self-esteem is associated with positive body image, while low self-esteem is associated with negative body image (Jung & Lee, 2006). Besides, positive or negative body image makes people's self-esteem an impressive factor in terms of social phobia levels, social relations, eating behaviours, sexual behaviours and emotional life (Cash & Fleming, 2002). Positive body image is mentioned when people respect their bodies and find themselves acceptable as they are. It also means being able to accept even if the person has things that he/she will be dissatisfied with (Levine & Smolak, 2016).

Negative body image, as well as positive body image, finds a place in people's lives. It is known that any person can experience body dissatisfaction at any stage of his/her life. There are factors that make some people more likely than others to develop a negative body image. These factors include age, gender, dieting, friends and family expressing body image concerns, body size, low self-esteem and/or depression, teasing and bullying, and personality traits (Griffiths et al., 2016; Becker et al., 2016; Van de Grift et al., 2016; Rodgers et al., 2021; Nichols et al., 2018). If these factors explain: Age; Body image is often formed in late childhood and adolescence, but body dissatisfaction can occur in people of all ages. Gender: Women are more likely to experience body dissatisfaction than men, but people of any gender can experience negative body image. Friends and family who express body image concerns and dieting: Role models that express body image concerns and model weight-loss behaviours can increase a person's likelihood of developing body dissatisfaction, regardless of actual body type. Body size: people with a higher weight are at an increased risk of body dissatisfaction due to society's focus on weight. Low self-esteem and/or depression; People with low self-esteem or depression have an increased risk of body dissatisfaction. Teasing and bullying; Regardless of their actual body type, people who are bullied about their appearance and/or weight have a higher risk of developing body dissatisfaction. Personality characteristics: Successful people with perfectionist tendencies, strict "black and white" thinking, internalizing beauty ideals, and frequently comparing themselves to others are at higher risk of developing body dissatisfaction (National Eating Disorders Collaboration, 2021).

The symbol of being oneself, especially in adolescence, is explained with concepts such as body image and body perception (Orsel et al., 2004). Adolescence provides a particularly striking example of the developmental importance of body image and the current importance of body image research (Markey, 2010). There are many reasons why it is important to understand adolescent body image. It is sufficient to look at a newspaper, television, magazines, and especially recently social media channels to remind us of cultural obsessions about the appearance of bodies. It is possible to find information and guidance on many other topics such as how to change the physical image, surgical operations, medicine and cosmetic products in these services. For this reason, it is understandable that today's young people are more interested in these issues compared to those in the past and have anxiety about body image (Markey & Gillen, 2011). Anxiety about body image is more common among people in industrialized countries and this can cause serious health problems such as eating disorders, depression, and obesity (Gillen & Markey, 2015).

One of the most important factors in the formation of social appearance concerns of individuals is the impression they want to leave on the people they are in contact with or want to be in contact with. In essence, there is a desire to build relationships, and all relationships are sustainable through communication. Dökmen (2004) has defined communication as “the process of producing, transferring and making sense of information.” Although everyone is in constant communication in some way, they may have difficulties in establishing healthy and effective communication. As Korkut and Bugay (2014) have stated, “effective and healthy communication is possible when the communicating individuals understand each other correctly and convey this to each other, treat each other with respect, and feel understood.” Since there are goals such as learning, influencing, sharing, existing, being happy and directing in the realization of communication (Bıçakçı, 1998).

Messages are very important in effective and healthy communication, and they reflect the other party in writing, verbal or body language. Written or non-verbal messages reflect as facial expression, body language, tone of voice, clothes chosen, yawning, etc. These elements are of great importance for healthy and effective communication. Moreover, the phenomenon of gender has an important place in communication. Although there are contradictory results, it is stated in most of the studies that women and men have different communication skills and that women even show better communication skills (Korkut & Bugay, 2014).

The existence of an effective communication process depends on defining the items in a similar way, using the language in a clear, simple and understandable way, using various channels, and providing feedback systems (Araz, 2014). There are also constraints to effective communication. These are (Gordon, 2011; Ceyhun & Malkoç 2015): Guiding, giving orders, intimidating, warning, moralizing, suggesting sensible thoughts to the individual, giving lectures, teaching, suggesting solutions and giving advice, judging, criticizing, blaming, not having an opinion, giving nicknames, making fun of, making a diagnosis, making comments etc. From this point of view, effective communication and constraints in front of effective communication, when combined with the social appearance concerns of people, can lead to irreparable results, especially on young people. This study aimed to examine the relationship between social appearance anxiety and communication skills levels in students in the faculties of sports sciences. For this purpose, the research was performed on 220 students in total, where male and female students were selected as mixed.

The Social Appearance Anxiety Scale (SAAS) was developed by Hart et al. in 2008 to measure the social appearance anxiety of individuals. Researchers have defined the concept of social appearance anxiety in a broad sense that includes features such as facial shape and skin colour of the individual, beyond general physical appearances such as muscle structure, weight, and height (Hart & Others, 2008). So much so that it has a more comprehensive and holistic content beyond the physical appearance (Doğan, 2010). Since one of the most distinctive features of the adolescence period is the excessive emphasis on appearance, the demand for the perfection of the youth in this period also plays a major role in shaping the research on the subject. At this point, SAAS, which was developed for university students, is frequently used to conduct related research on various subjects. In this study, it was used together with the Communication Skills Assessment Scale. The related scale was developed by Korkut in 1996, targeting the adolescence period, to measure how people are generally in their relationships. It was applied first on high school students, then on university students and 61 adults. The Developed Communication Skills Assessment Scale consists of a 5-point Likert-type and 25 items. While developing this scale, firstly high school students were determined as the target group and then it was applied to university students and 61 adults (Korkut, 1996).

Based on these scales used in the study, the setup of the study was determined as giving information about the method, presentation of the results, discussion and conclusion. Following the aim of the study, the relationship between social appearance anxiety and the communication skills of the participants with different variables was examined.

2. Method

2.1 Research Design

The methodological preference of the study was determined as the relational screening model, which is one of the general screening models. When the screening model mentioned, it can be understood all the processes that defined a situation that existed in the past or the current period as it was, and that applied for the realization of learning and the development of the desired behaviours in the person. The relational screening model, which is one of the screening models, is defined as a screening approach that aims to determine the existence of covariance between two or more variables (Karasar, 2006). This research was a relational survey-based study to determine whether there were statistically significant differences between students' social appearance anxiety and communication skills levels.

2.2 Sample and Data Collection

220 students, 95 female (43.2), 125 male (56.8) studying at the Faculty of Sports Sciences, participated in the research. Students participating in the study were selected by non-probabilistic convenience sampling (Altun et al., 2004). The process of filling out the questionnaire on a voluntary basis took a mean of 20 minutes and incomplete or incorrectly filled questionnaires were determined and excluded without being included in the total number given above.

2.3 Social Appearance Anxiety Scale (SAAS)

This scale defined as a self-report scale developed by Hart et al. (2008) to measure the cognitive, emotional and behavioural concerns of people about their appearance (Doğan, 2010). The related scale, which was developed to measure the anxiety of people about their social appearance, was one-dimensional and consisted of 16 items. On a 5-point Likert-type scale, options from 1 to 5 were determined and the options range from 1 'Not appropriate at all' to 5 'Completely appropriate.' The Turkish adaptation of this scale was made by Doğan in 2010 and the test-retest reliability coefficient of the scale was calculated as .85. Choosing high-score preferences indicated high social appearance anxiety, and low scores indicated low anxiety. The internal consistency coefficient of the scale was found to be .94 on average.

2.4 Communication Skills Assessment Scale

The Communication Skills Assessment Scale, developed by Korkut in 1996, consisted of a 5-point Likert type and 25 items. While developing this scale, firstly high school students were determined as the target audience and then it was applied to university students and 61 adults. While creating the items of the scale, the aim was for individuals to be able to respond by thinking about how they were in their relationships in general. When responding to each item in the scale, individuals were asked to choose one of the options (4) always, (3) often, (2) sometimes, (1) rarely, and (0) never. The high score obtained from the scale without reverse items meant that individuals evaluate their communication skills positively. (Korkut, 1996).

2.5 Analysis of Data

In this study, arithmetic mean and standard deviation values were calculated for the data of the research group. When the Skewness and Kurtosis values were examined, it was seen that the data were normally distributed. Independent sample t-test was used for the gender variable and One-way ANOVA test was used for the grade variable. Pearson correlation analysis was applied to examine the relationship between social appearance anxiety and communication skills. SPSS 25 statistical program was used for the analysis of the data and the level of significance was determined as $p<0.05$.

Table 1: Statistical Information Describing the Research Group

Variables		F	%
Gender	Female	95	43,2
	Male	125	56,8
Grade	Grade	68	30,9
	Grade	74	33,6
	Grade	37	16,8
	Grade	31	18,6
Sports Branch	Individual	99	45,0
	Team	121	55,0

According to Table 1, "gender," "class" and "sports branch" were determined as variables in the descriptive statistics of the participants. The gender distribution was 43.2% to 56.8%, and most of the participants were male. Looking at the class distribution of the participants, it was seen that the highest attendance was from the 2nd grade (33.6%) and the least participation was from the 3rd grade (16.8%). Finally, looking at the distribution by sports branches, it was observed that those who were interested in team sports were more than those who were interested in individual sports.

3. Results

In the study, the relationships between the variables were examined with the t-test and the ANOVA test. The results related to gender-related social appearance anxiety and communication skills of sports science students were presented in Table 2.

Table 2: T-Test Results of Sports Science Students According to Social Appearance Anxiety and Communication Skills Scores Related to Gender Variable

	N Female/Male	A.M.	S.D.	df	t	P
Social Appearance Anxiety (SAAS)	95 125	182 1,95	,68 ,70	218	-1387	0,167
Communication Principles and Basic Skills (CSBS)	95 125	1,77 1,88	,52 ,67	218	1,302	0,194
Self-Expression (SE)	95 125	1,66 1,84	,53 ,70	218	-2,139	0,034*
Active Listening and Non-Verbal Communication (ALNC)	95 125	1,66 1,83	,56 ,69	218	-1,946	0,053
Willingness to Communicate (WTC)	95 125	1,64 1,76	,51 ,70	218	-1,445	0,150
Communication Skills Overall Mean (CSOM)	95 125	1,72 1,85	,48 ,64	218	-1,672	0,96

p<0.05

In Table 2, the t-test results according to the gender variable of the students were given. According to the gender variable, there was a statistically significant difference between the groups in the sub-dimensions of communication skills and self-expression (p<0.05). It was determined that males had higher self-expression skills than female students. It was determined that there was no statistically significant difference between the groups according to the general mean of communication skills and the sub-dimensions of Communication Principles and Basic Skills, Active Listening and Non-Verbal Communication, Willingness to Communicate, and social appearance anxiety (p>0.05).

Table 3: ANOVA Test Results of Sports Science Students' Communication Skill Scores Depending on the Grade Category Variable

Communication Skills	Intergroup In-group Total	Sum of Squares	df	Mean of Squares	F	P	Tukey
Social Appearance Anxiety	Intergroup In-group Total	.122 105.393 105.514	3 216 219	.041 .488	.083	.969	
Communication Principles and Basic Skills	Intergroup In-group Total	4.392 77.816 82.208	3 216 219	1.464 .360	4.064	.008*	4<1,2,3
Self-Expression	Intergroup In-group Total	5.572 82.818 88.389	3 216 219	1.857 .383	4.844	.003*	4<1,2,3
Active Listening and Non-Verbal Communication	Intergroup In-group Total	1.624 87.842 89.465	3 216 219	.541 .407	1.331	.265	
Willingness to Communicate	Intergroup In-group Total	4.522 81.816 86.338	3 216 219	1.507 .379	3.979	.009*	4<1,2,3
Communication Skills Overall Mean	Intergroup In-group Total	3.070 69.076 72.146	3 216 219	1.023 .320	3.200	.024*	4<1,2,3

1- 1.Grade 2- 2. Grade 3- 3. Grade 4- 4. Grade

Table 3 presented the ANOVA test results of the communication skill levels of the sports science students according to the grade variable. According to the grade variable, there was a statistically significant difference between the groups in the sub-dimensions of communication principles and basic skills, self-expression, willingness to communicate, and the general mean of communication skills ($p<0.05$). As a result of the Tukey test, which was conducted to determine between which groups the difference was, it was determined that 4th-grade students had higher communication skills than students from other classes. There was no statistically significant difference between the groups in terms of active listening and nonverbal communication sub-dimensions and social appearance anxiety scores ($p>0.05$).

Table 4: Correlation Table between Social Appearance Anxiety and Communication Skills

		CSBS	SE	ALNC	WTC	CSOM
SAAS	r	.344**	.356**	.368**	.277**	.368**
	p	.000	.000	.000	.000	.000
	n	220	220	220	220	220

p<0.001**
p<0.05*

Table 4 showed the correlation table between the communication skills of sports science students and their social appearance anxiety. Accordingly, it was seen that there was a statistically significant difference in the general mean of communication principles and basic skills, self-expression, active listening and non-verbal communication, willingness to communicate and communication skills. It was determined that the level of communication skills of the students increased as the social appearance anxiety increased.

4. Discussion

Different studies were performed to examine communication skills in the field of sports sciences. However, it can be said that there were few studies that deal with communication skills together with social appearance anxiety (Dumangöz, 2021). In this study, the relationship between social appearance anxiety and communication skills levels of Faculty of Sport Sciences students was examined.

When the results of the study were examined, it was determined that there was a statistically significant difference between the groups in terms of communication skills related to gender variable and self-expression sub-dimensions of communication skills ($p<0.05$). Accordingly, it was determined that males had higher self-expression skills than female students. However, there was no statistically significant difference between the groups according to the general mean of communication skills and the sub-dimensions of Communication Principles and Basic Skills, Active Listening and Non-Verbal Communication, and Willingness to Communicate ($p>0.05$). In the study of Gülbahar and Sıvacı (2018), no significant difference was found in the levels of self-expression and communication skills. However, the mean rank of the total score of the scale was higher for women than for men. Similarly, in the studies Akan and Mehrdad (2019) conducted on school principals and Kayışoğlu, Doğan and Çetin (2014) youth camp leader candidates, no significant difference was found in the levels of communication skills and all sub-dimensions depending on gender. Contrary to the results of the study, Akgün and Çetin (2018) university students and Akyol (2019) found a significant difference depending on the gender variable in their studies on the communication skills of different faculty students.

In the study, it was found that there was no statistically significant difference between the groups in terms of social appearance anxiety related to gender ($p>0.05$). Similarly, in the study of Göksel et al. (2018) on individuals receiving sports services, Türker et al. (2018) on individuals doing sports, and Toprak and Saraç (2018) on athletes, no significant difference was found depending on the gender variable. Contrary to the study, Soylu, Atik, and Öçalan (2017) found that males had higher social appearance anxiety compared to females in their study on adolescents. Çetinkaya, Gülaçtı, and Çiftçi (2019) also found a significant difference depending on the gender variable in their studies on high school students.

According to the class variable, there was a statistically significant difference between the groups in the sub-dimensions of communication principles and basic skills, self-expression, willingness to communicate, and the general mean of communication skills ($p<0.05$). As a result of the Tukey test, it was understood that the 4th-grade students had higher communication skills than the students studying in other classes. There was no statistically significant difference between the groups in the sub-dimensions of active listening and nonverbal communication ($p>0.05$). In the study of Akçam, Kanbay, and Işık (2019) on nursing students, it was determined that although the mean score of first-year students was higher than that of fourth-year students, and no statistically significant difference was found. Similarly, in the study conducted by Bingöl and Demir (2011), it was not found statistically significant although the mean scores of communication skills of the first and third-grade nursing students were higher than the second and fourth grades.

When the relationship between the communication skills of sports science students and social appearance anxiety was examined, it was seen that there was a statistically significant difference in the general mean of communication principles and basic skills, self-expression, active listening and non-verbal communication, willingness to communicate and communication skills. It was determined that the level of communication skills of the students increased as the social appearance anxiety increased. Contrary to the results obtained in the study, Gökçe and Keçeci (2020) stated that there was a negative relationship between communication skills and all sub-dimensions and social appearance anxiety in their study on individuals participating in physical activity, and it was determined that as social appearance anxiety increased, communication skills decreased.

5. Conclusion

As a result of the research, there was a significant difference in the sub-dimension of self-expression in communication skills in terms of gender, while no significant difference was found in the other sub-dimensions. In terms of grade category, a significant difference was found in communication skills. It has been determined that fourth-grade students had higher communication skills than those studying in other grades. Moreover, it was understood that there were significant differences between social appearance anxiety and communication skills.

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Mindfulness, Resilience, Perceived Social Support, and Emotional Well-being for Santri During the Covid-19 Pandemic

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Abstract
The purpose of this study was to determine whether there is a relationship between mindfulness, resilience, and perceived social support with emotional well-being in santri during the COVID-19 pandemic. This study is quantitative. Data collection tools in this study used a mindfulness scale, resilience scale, perceived social support scale and emotional well-being scale. Subjects in this study amounted to 363 of the total population of 965 santri through the purposive accidental sampling technique. The method used in this study is a quantitative method with Structural Equation Modeling (SEM) techniques. The results of this study show the R Square value of 0,166 which means that the variables of mindfulness, resilience, and perceived social support have an effect of 16,6% on emotional well-being, while 83.4% is influenced by other variables. So that the proposed hypothesis is accepted, meaning that the higher the mindfulness, resilience, and perceived social support, the higher the perceived emotional well-being.

Keywords: Emotional Well-Being, Mindfulness, Perceived Social Support, Resilience

1. Introduction

One of the educational institutions that have carried out face-to-face learning during the current pandemic is Islamic boarding schools (Pranata & Nur, 2021). The organization of a boarding school educational institution in the form of a dormitory which is a separate community under the leadership of a kyai or ulama assisted by one or several ulama, and or ustadz who live together in the santri and education that runs for twenty-four hours is a typical characteristic of the pesantren. Islamic boarding school education (Hayati & Hayati, 2011;Mar'ati, 2014). Living in Islamic boarding schools poses a high risk of Covid-19 transmission because of the intensive interaction between students and teachers in the same isolated environment when doing joint activities (Syaiful, 2020). In addition, the large number of visitors such as parents, family, or relatives will increase the risk of Covid-19 transmission (Pranata et al., 2021). There is no guarantee that they will not be infected with Covid-19 because not everyone is following current health protocols correctly. In addition, supporting facilities and infrastructure for

Islamic boarding schools that have implemented face-to-face learning are still inadequate (Pranata et al., 2021). Some pesantren only provide handwashing facilities in special places, near the bathroom, but some do not. In addition, adequate medical equipment for students who may feel symptoms of infectious diseases is also not yet available in the cottage environment. Completing health facilities or equipment at the inn such as thermometers, sphygmomanometers, oxygen, masks and first aid kits is very necessary (Syaiful, 2020).

On the other hand, the impact of this pandemic shows an increase in anxiety, depression and a much higher decline in well-being (Ahmed et al., 2020). This higher rate of mental health problems may be due to the ambiguity and little information about Covid-19 (Ahmed et al., 2020). This condition supports a decreased quality of life and causes some difficulty in doing daily work or getting along with other people (Salman et al., 2020).

Maintaining emotional well-being in students is very important because individuals with positive emotional well-being will have an active, alert, calm nature and experience feelings of peace in carrying out daily activities, while individuals with negative emotional well-being involve feelings of sadness and lethargy, easily causing emotional distress. hostility due to feelings of anger and fear (Hollander & Mckenley, 2002). Positive emotions can expand individual plans of action and thoughts, build long-lasting social resources, and individuals who produce positive emotions are more likely to be sociable and friendly and lead to the development of a full and healthy life (Fredrickson & Cohn, 2008). Feeling positive emotions can expand interactions among group members through the development of other people's ideas and communication that encourage and build lasting group social resources, such as friendship, a sense of membership, feelings of closeness, social support, and social bonds (Peñalver et al., 2019).

Emmons & Diener (1985) explain that emotional well-being as a construct is related to two effective indicators, both positive and negative indicators of mental health. According to Diener & Lucas (1999), emotional well-being refers to general life satisfaction and positive feelings such as happiness, interest in life and enjoyment in life. The group of emotional well-being symptoms reflects the presence and absence of positive feelings about life which is operationalized as an evaluation of happiness and satisfaction with life and the balance of experiences of positive to negative influences over a certain period (Keyes, 2007).

Mindfulness has become a widespread approach to dealing with psychological problems and maintaining emotional well-being (Geiger et al., 2016). Langer (1989) defines mindfulness as a mindset of openness to novelty in which individuals actively construct new categories and distinctions. The socio-cognitive process in mindfulness is an active thought pattern characterized by the novelty that makes individuals in the present, sensitive to context and perspective, and directed (but not regulated) by rules and routines (Langer et al., 2014). Individuals with good mindfulness will experience low emotional reactivity and lability and have high emotional awareness (Hill & Updegraff, 2012).

Another factor that becomes a psychological strength that can improve individual welfare is resilience (Zubair et al., 2018). Resilience is most often defined as positive adaptation despite adversity (Kirmani Sharma et al., 2015). Wagnild & Young (1990) describe resilience as connotes emotional stamina and has been used to describe people who show courage and adaptability after experiencing life's adversities. Resilience is a conscious effort to move forward in a positive and integrated manner as a result of lessons learned from adverse experiences and takes place dynamically to successfully adapt to disruptions that threaten survival and processes to utilize resources to maintain well-being (Southwick et al., 2014).

The next factor that can affect emotional well-being is social support. Social support refers to the support received (e.g. informative, emotional, or instrumental) from a support source (e.g. family or friends) that increases the recipient's self-esteem or provides stress-related interpersonal assistance (Kim et al., 2010). Shumaker & Brownell (1984) define social support as an exchange of resources between at least two individuals that are perceived by the provider or recipient as intended to enhance the well-being of the recipient. On the other hand, Lin et al. (2013) define social support as perceived or actual instrumental and/or expressive support provided by communities and social networks. A significant interaction effect was found that Perceived Social Support from family and friends can protect individuals from stress which then leads to increased well-being (N. Glozah, 2013). Perceived Social

Support leads to better well-being by encouraging increased regulation of emotions and positive affect, increased self-efficacy and self-esteem, and the assessment of events as positive and meaningful (Wilson et al., 2020).

Under the description of the problem above, the purpose of this study is to find out whether there is a relationship between mindfulness, resilience, and perceived social support with emotional well-being in students during the COVID-19 pandemic and the past evidence, gives the reader a firm sense of What was done and why (Beck & Sales 2001).

2. Method

This study is a research with a quantitative approach to examine the relationship between mindfulness, resilience, and perceived social support with emotional well-being in students during the covid-19 pandemic. The population in this study were students who studied at the Bustanul Muta'allimat Islamic Boarding School and the Bustanul Mutallimin Islamic Boarding School in Blitar City, amounting to 443 and 522 people, respectively. In this study, researchers used a purposive accidental sampling technique. This sampling technique was chosen due to the limitations of the researcher being unable to perform randomization. The sample criteria in this study were students who studied at the Bustanulmuta'allimat Islamic Boarding School and the Bustanul Muta'allimin Islamic Boarding School from grade seven to grade twelve. The samples used in this study were 177 students from the Bustanul Muta'allimat Islamic Boarding School and 186 students from the Bustanul Muta'allimin Islamic Boarding School. So that the total sample in this research is 363 students. The analysis in this study uses the Structural Equation Modeling (SEM) technique with the help of the SmartPLS v 3.3.3 application.

The instrument used in this study was to measure the relationship between mindfulness, resilience and Perceived Social Support with well-being using a Likert-type scale. The instrument used to measure the variable of emotional well-being is a scale prepared by the researcher regarding the theory of Diener & Emmons (1984) with a total of 16 items with reliability (α. 829). The instrument used to measure the variable of mindfulness is a scale compiled by researchers referring to the theory of mindfulness by Langer (1989) with a total of 13 items with reliability (α. 702). Furthermore, the resilience instrument is a scale based on the theory of Wagnild & Young (1993) with a total of 21 items with reliability (α. 904). Perceived Social Support instrument is a modification of the scale of perceived social support from Procidano & Heller (1983) with 11 items with reliability (α. 876).

3. Results

Based on the SEM analysis, the results of the measurement model and structural model are as follows:

3.1 Measurement Model Evaluation

The evaluation stage of the measurement model (outer model) in PLS-SEM aims to determine the validity and reliability of the constructed variable under study. Evaluation of the measurement model includes convergent validity, discriminant validity and internal consistency reliability.

Table 1: Table of Convergent Validity Test Results

Construct	Aspect	Loading Factor
Emotional Wellbeing	Positive Affect (A1)	0,931
	Negative Affect (A2)	0,928
Mindfulness	Novelty Seeking Behaviors (B1)	0,861
	Novelty Producing Behaviors (B2)	0,748
	Engagement (B3)	0,609
Resilience	Tranquillity (C1)	0,779
	Perseverance (C2)	0,852
	Independence (C3)	0,788
	Significance (C4)	0,776
	Existential Loneliness (C5)	0,673

Perceived Social Support	Informational support (D1)	0,906
	Emotional Support (D2)	0,852
	Esteem Support (D3)	0,880

From table 1 above, it can be seen that aspects of the emotional well-being construct have a value of more than 0.7 so that it can be said that all aspects of these two constructs are reliable. While the constructs of mindfulness and resilience each get one aspect with a loading factor value below 0.7, which means this aspect is less reliable.

Table 2: Table of Discriminant Validity Test Results

CCode	Emotional Wellbeing	Mindfulness	Percieved Social Support	Resilience
A1	0,931	0,296	0,297	0,341
A2	0,928	0,291	0,263	0,349
B1	0,283	0,861	0,404	0,596
B2	0,200	0,748	0,299	0,451
B3	0,212	0,609	0,179	0,172
C1	0,205	0,429	0,452	0,779
C2	0,358	0,558	0,468	0,852
C3	0,281	0,472	0,335	0,788
C4	0,349	0,361	0,410	0,776
C5	0,125	0,339	0,309	0,673
D1	0,295	0,361	0,906	0,463
D2	0,251	0,337	0,852	0,442
D3	0,245	0,374	0,880	0,454

From table 2 above, it can be seen that by looking at the row, it can be seen that each aspect has a higher load on each construction than on the other constructs. So it can be concluded that each aspect is categorized as valid.

Table 3: Internal Consistency Reliability Test Results

Construct	Composite Reliability	Average Variance Extracted
Emotional Wellbeing	0,927	0,863
Mindfulness	0,787	0,557
Resilience	0,911	0,773
Perceived Social Support	0,883	0,602

From the table above, it can be seen that all variables have an AVE value above 0.5, this shows that each of the constructs can explain at least more than 50% of the variance. So it can be concluded that all four constructs above are categorized as valid. Then from the table above, it can be seen that all constructs have a composite reliability value above 0.7, so all constructs can be said to be reliable.

3.2 Structural Model Evaluation

The structural model includes the relationship between constructs and hypotheses. Several components become criteria in the assessment of the structural model (inner model), namely the R-Square value and Significance.

Table 4: R-Square

Variable	R Square	R Square Adjusted
Emotional Wellbeing	0,166	0,159

The table above shows the R-Square of 0.166, this value means that the variables of mindfulness, resilience and perceived social support influence the emotional welfare variable of 16.6%. And the remaining 83.4% is influenced by other variables outside of the exogenous variables mentioned in this study.

Table 5: Significance Table

Construct	Original Sample (O)	Sampel Average (M)	Standart Devitiation (STDEV)	T Statistik (O/STDEV)	P Values
Mindfulness ->Emotional Well-being	0,134	0,137	0,066	2,017	0,044
Percieved Social Support -> Emotional Well-being	0,129	0,133	0,058	2,233	0,026
Resiliensi -> Emotional Well-being	0,229	0,232	0,055	4,146	0,000

From the table above, it can be seen that the variables of mindfulness, perceived social support and resilience have a statistical T value of more than 1.96 and a significance value of less than 0.05. So it can be interpreted that the three variables are positively and significantly correlated with emotional well-being

4. Discussion

The research subjects were Islamic boarding school students. The research was during the Covid-19 pandemic. The psychological conditions of the students were different from before the pandemic. The feeling of worry and anxiety felt by the students was higher.

Based on the results of statistical testing, it shows that this study proves that mindfulness, resilience and perceived social support are significant variables on emotional well-being. This research partially shows that there is a significant positive relationship between the three variables on emotional well-being. Simultaneously, the results of this study indicate that there is a significant positive relationship between mindfulness, resilience, and perceived social support with emotional well-being. This means that the more positive mindfulness, resilience and perceived social support the students have, the higher the emotional well-being felt by the students.

The results of this study are in line with the study by Nyklíček et al. (2014) who concluded that mindfulness can encourage increased emotional well-being. Furthermore, Nyklíček et al. (2014) explained that mindfulness can reduce stress and anxiety felt by individuals so that it leads to positive emotional well-being. This is similar to the statement by Bluth & Eisenlohr-Moul (2017) where mindfulness emphasizes an empty mind and returns one's awareness and attention to the present moment by diverting attention to physical sensations. When the mind is focused on worries about the future, then by returning one's attention to the present by paying attention to the current state, it can release feelings of worry and result in a decrease in stress and anxiety. Through this process, increased awareness will be associated with decreased perceptions of stress, anxiety, and depression.

Another study from Galla (2016) showed that mindfulness is beneficial for emotional well-being in adolescents. Changes in individuals associated with mindfulness independently predict a decrease in ruminative thought patterns. Mindfulness can also be a predictor of decreasing perceived stress and increasing positive affect. Individuals with good mindfulness can exercise control over their choices, encourage them to see and respond to situations more clearly, and can bring up new, more positive perspectives in seeing alternative problem solving (Savitri & Listiyandini, 2017). The individual's ability to know what he is feeling right now is an important contribution to making individuals comfortable in making their own choices.

Supporting the results of this study Sabir et al. (2018), showed that resilience is a factor that is positively related to positive affect on emotional well-being and negatively related to the negative effect of emotional well-being. As a psychological factor, resilience can play a role in an individual's ability to maintain a positive sense of well-being even during times of stress. Individuals with good resilience tend to give positive meaning to the situation at hand so that they can increase their self-assessment (Septiani et al., 2021). This positive assessment is a form of individual evaluation that can support emotional well-being.

Individuals with resilience have a habitual tendency to effectively overcome adversity in a way that provides them with a buffer against negative influences (Yildirim & Belen, 2019). Resilience can help individuals control and regulate emotions even in stressful conditions (Septiani et al., 2021). Emotional control can be an individual's strength that can support his or her well-being. In addition, resilience skills help individuals manage negative effects thereby leading to positive well-being outcomes (Eldeleklioğlu & Yıldız, 2020). This result is important in Yildirim & Belen (2019) research showing that the inability to "bounce back" from stressful situations may explain the relationship between happiness and well-being. Therefore, belief in happiness can be considered as an important psychological factor in stimulating dysfunctional beliefs that happiness is shaped by external factors, which in turn leads to an inability to cope with stress, resulting in poor well-being.

Research by Kim et al. (2010) stated that individuals' perceptions of how much social support they receive from others can influence their choice of specific coping strategies between active (i.e. positive reframing) and passive (i.e. self-blame) coping, which in turn can affect emotional well-being. they. Further Kim et al. (2010) explained that when individuals do not feel a high level of social support from others, individuals can blame themselves, this plays an important role in reducing the individual's emotional well-being. The quality of social support can be a predictor of emotional well-being, considering two possibilities where individuals with satisfying relationships can get support when they need it, while individuals who do not have satisfying relationships cannot, and the other is the expectation of being able to rely on someone when needed is something comforting, and thus make a good contribution to emotional well-being (Brajša-Žganec et al., 2018).

In addition, the results of Li et al. (2021) show that social support is indirectly associated with well-being through prosocial behaviour. When individuals perceive high levels of social support, they may pay more attention to the needs of others, thereby encouraging helpful behaviour. This will make individuals feel the more positive influence and happiness so that they experience higher well-being (Yang et al., 2017). In addition, when experiencing negative emotions, individuals who use cognitive reassessment strategies to regulate their emotions can quickly change their negative emotional state to adapt to the environment. This change in emotional state encourages concern for the needs or distress of others, facilitating helpful or caring behaviour (Li et al., 2021). In this way, social support can be indirectly linked to well-being through a variety of pathways from cognitive reassessment to prosocial behaviour.

High and positive mindfulness, resilience and perceived social support are needed by students during the COVID-19 pandemic to feel emotional well-being during the learning process at Islamic boarding schools. This needs to be given great attention because it has high self-regulated learning, self-esteem, and social support for students who live in Islamic boarding schools during the COVID-19 pandemic, experiencing various pressures, learning burdens, boarding school activities, and different workloads from children who live in Islamic boarding schools. Don't live in a cottage environment. The existence of various pressures that are owned by students if they do not have good and maximum mindfulness, resilience and perceived social support, these students will have difficulty feeling emotional well-being in the learning process because students are required to be able to study for a much longer duration than school students in general. To reduce negative feelings in learning and activities to create feelings of comfort, pleasure, and joy in the learning process for students, it is necessary to have positive mindfulness, resilience and perceived social support.

This study has limitations where the researcher does not conduct a trial scale test first to determine the validity of each item before the data collection process and the distribution of questionnaires to the subject. A tryout test needs to be carried out to determine the number of items that fall and are eligible to be used. Furthermore, there is a limitation in data collection where the researcher is not able to perform randomization in determining the research sample. This is because field conditions are not conducive for researchers to be able to meet directly with research subjects, so researchers must ask for cooperation from relevant agencies for the process of distributing questionnaires to subjects. Another limitation in collecting data for students, initially the researcher will conduct this research at four Islamic boarding schools, but, due to the COVID-19 pandemic which has plagued all regions of Indonesia, researchers cannot reach and obtain larger and varied samples according to the objectives. At the beginning of the study, the researcher finally decided to research two Islamic boarding schools, namely the

Bustanul Muta'allimin Islamic Boarding School and the Bustanul Muta'allimat Islamic Boarding School to be the subject of this study.

5. Conclusion

Based on the explanation above, it can be concluded that there is a positive relationship between mindfulness, resilience and perceived social support with emotional well-being in Islamic boarding school students. Thus, it can be suggested to several parties, such as the boarding school, caregivers, and further researchers.

Caregivers should always motivate and provide support for students to always be able to improve mindfulness, resilience and perceived social support so that students can feel good emotional well-being during the COVID-19 pandemic.

Islamic boarding schools are expected to continue to develop and motivate students to increase mindfulness, resilience and perceived social support, to be able to maintain the emotional well-being of students in Islamic boarding schools and to pay more attention to aspects of the basic needs of each student. The results of this study are expected to be input for preventive and evaluation programs in improving the quality of the emotional well-being of students living in Islamic boarding schools during the COVID-19 pandemic. This research still needs better development, so that the results of this research can be developed even better.

Future researchers are expected to be able to develop wider and varied variables related to emotional well-being. It is recommended to test the research instrument by trying out the instrument to have the opportunity to revise the instrument for the items that are declared invalid. It is recommended for further researchers to develop research techniques extensively so that they can obtain a larger number of subject populations and data.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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Investigation of the Relationships between Self-Confidence Levels and Job Finding Anxiety of Faculty of Sports Sciences Students

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Abstract
In this study, it was aimed to investigate the relationship between the self-confidence levels and job finding anxiety of the students of the faculty of sports sciences within the framework of Bayburt University. In this context, the relational survey model, which is consistent with the main purpose, was used in this quantitative study. The sample of the study consists of a total of 311 students, 113 females and 198 males, at the Faculty of Sports Sciences of Bayburt University. Convenience sampling method, one of the non-probabilistic sampling approaches, was used in the selection of the sample. Questionnaire form was used as data collection tool and this form consists of three parts. In the first part of the questionnaire form includes "Personal Information Form," in the second part includes "Self-Confidence Scale" and in the third part includes "Sports Sciences Students' Job Finding Anxiety Scale." First of all, descriptive statistics were calculated by considering the data type of the raw data obtained through this form. Then, the reliability of the dimensions of the scales related to the data obtained were investigated, and difference and correlation tests were used in statistical evaluations. In this direction, significant differences were determined in terms of the variables of gender, department, grade and place of residence. In addition, it was observed that there were significant correlations within the scope of the age and monthly average family income level of the participants regarding the scales. On the other hand, no significant correlation was found between the monthly average personal income level and the dimensions of the scales. As a result, it was found that there was a negative and significant correlation between the external self-confidence mean scores and job finding anxiety mean scores of the participants. However, no significant correlation was found between the participants' inner self-confidence mean scores and their job finding anxiety mean scores.

Keywords: Student, Self-Confidence, Job Finding Anxiety

1. Introduction

It is claimed that self-confidence is one of the important psychological constructs that has been the subject of many studies recently and affects the academic performance of students (Akın, 2007). Also self-confidence; conceptualized as perceived efficacy (Harter, 1982; Nicholls, 1984) and self-efficacy (Bandura, 1977; 1997). In this context, the concept of self-confidence is the belief that the individual will successfully perform a certain

activity rather than being a general feature, and the individual's confidence in her/his own judgment, ability, power and decisions (Feltz, 1988). In addition, it is stated that the concepts of self-confidence and self-efficacy are used interchangeably in the literature (Akın, 2007). However, some researchers have argued that although self-confidence and self-efficacy are different concepts, they are conceptually close to each other and self-efficacy is domain-specific, while self-confidence can be domain-specific or general (Bandura, 1997; Grundy, 1993; Shrauger & Schohn, 1995). It has been stated that self-confidence can be another aspect of personal efficacy and may emerge as a result of products, unlike self-efficacy (Akın, 2007). However, Feltz (1988) defined self-confidence as similar to the concept of self-efficacy put forward by Bandura (1977). The theory of self-efficacy, which was developed in the social-cognitive context, has been used as a theoretical basis in self-confidence researches generally carried out in various fields (Akın, 2007). According to Bandura's (1982) social cognitive theory, it is claimed to help with recurrence that an individual's self-efficacy and self-confidence stems from his ability to demonstrate a particular ability or behavior, from observing the behavior of others, from verbal feedback, and from being aware of emotions, and such self-confidence results from one's related behavior. In addition, the defining characteristics of self-confidence include belief in positive achievements, perseverance and self-awareness (White, 2009). On the other hand, there is a negative relationship between self-confidence and anxiety (White, 2014).

It has been shown in the literature that low health as a result of mental disorder may be associated with high unemployment (Leino-Arjas et al., 1999; Claussen, 1999; Goldberg et al., 2001; Thomas, Benzeval, & Stansfeld, 2005; Chatterji et al., 2007; Heponiemi et al., 2007; Zhang, Zhao, & Harris, 2009). Especially in periods when the economy is problematic, people with mental illness may be the most disadvantaged in terms of unemployment and financial insecurity (Viinamaki et al., 2000; Evans-Lacko et al., 2013; Knapp & Wong, 2020). Within this framework, unemployment among university graduates is a worldwide problem (Mandyoli, Iwu, & Nxopo, 2017). In this context, the sports sector, which has a very important place in the general economy in terms of its economic volume and wide job opportunities in Turkey and in the world, is also affected by the negative conditions in the labor market (Aslan & Uğraş, 2021). It is stated that it has an direct relationship with sectors such as media, tourism, education, textile, entertainment, health and wellness; It has an indirect relationship with sectors such as electronics, automotive, construction trade, yachting and landscaping and creates employment on a large scale of the sports sector (Mumcu, Karakullukçu, & Karakuş, 2019). In addition, it is claimed that sport helps physical development only on an individual basis and is a concept that is associated with many sectors such as participation, lifelong learning, employment and education (Eruzun, Kınalı, & Erturan Öğüt, 2017). However, it is stated that the employment problems of individuals who graduated from the field of sports sciences will cause anxiety for the future in these individuals (Araç Ilgar & Cihan, 2019). Therefore, unemployment, beyond its harmful economic dimensions, can create a painful and harmful experience, a threat to psychological well-being, and a traumatic situation (Carroll, 2007; Spera, Buhrfeind, & Pennebaker, 1994; Waters & Moore, 2002a).

When the explanations are evaluated from a holistic perspective, unemployment; it is seen as an important source of risk for individuals and families (Clark & Oswald, 1994; Fryer & Fagan, 2003; Hanisch, 1999; Komarovsky, 2004). In this direction, it is considered important to have information about the job finding anxieties and self-confidence of the students of the faculty of sports sciences by considering various variables. In this context, when the relevant literature is examined, it has been seen that there is no study to examine the job finding anxiety of sports science students in terms of various variables. Although, it is seen that there are many studies investigating the self-confidence levels of university students (see Sarıçam & Güven, 2012; Uçar & Duy, 2013; Ödemiş, 2014; Yalnızoğlu Çaka et al., 2017; Doğru, 2017; Süzer, 2020), no study has been found that deals with self-confidence and job finding anxiety together within the framework of sports sciences students. Therefore, it is thought that the results of the research will contribute to the relevant literature, and it is aimed to investigate of the relationships between self-confidence levels and job finding anxiety of faculty of sports sciences students.

2. Method

In this part of the study, the research model, population and sample, data collection tools and data analysis are explained under separate headings.

2.1 Research Model

Survey studies generally aim to describe the current situation related to the subject of the research by photographing (Büyüköztürk et al., 2020). In addition, those who conduct survey research are generally interested in how the characteristics and opinions are distributed within the scope of the participants in the sample, rather than why they originate (Fraenkel & Wallen, 2006). In this context, the relational survey model, which is consistent with the main purpose, was used in this quantitative study.

2.2 Population and Sample

The population of the research consists of 781 students at Bayburt University Faculty of Sports Sciences in the Fall Semester of the 2021-2022 Academic Year. In this framework, a total of 311 students (113 females and 198 males) constitute the sample of the research. Convenience sampling method, which is one of the non-probabilistic sampling approaches, was used in the creation of the sample. In this context, it is understood that the acceptable sample size for the research population has been reached (Sekaran & Bougie, 2016).

2.3 Data Collection Tools

The questionnaire form, which was prepared in accordance with the aims of the research, was applied to the participants in the population, on a voluntary basis, for about two weeks in the Fall Semester of the 2021-2022 Academic Year. During the implementation of the data collection tools, necessary explanations were given to the participants and it was ensured that they answered the questionnaire correctly. In the first part of the questionnaire form includes “Personal Information Form,” in the second part includes “Self-Confidence Scale” and in the third part includes “Sports Sciences Students' Job Finding Anxiety Scale.”

2.3.1 Personal Information Form

In the Personal Information Form, there are statements about obtaining the participants' gender, age, department, grade, place of residence, monthly average personal income level and monthly average family income level (including personal income).

2.3.2 Self-Confidence Scale

“Self-Confidence Scale” was developed by Akın (2007) to determine students' self-confidence levels. Data regarding the development process of the scale were obtained from 796 high school students from various high schools. The scale consists of 33 items and is in five-point Likert type. In addition, this scale; It consists of two sub-dimensions, inner self-confidence and external self-confidence. The construct and concurrent validity of the scale were examined as validity studies. In order to determine the factor structure and subscales of the scale, exploratory and confirmatory factor analyzes were performed. The short form of the Coopersmith Self-Esteem Inventory, developed by Coopersmith (1967) and adapted into Turkish by Pişkin (1997), and the Self-Confidence Scale were applied to the participants simultaneously in order to examine the concurrent validity of the scale. Internal consistency and test-retest reliability coefficients were examined for reliability studies, and corrected item-total correlations were examined for item analysis. The internal consistency coefficients of the Self-Confidence Scale were found to be 0.83 and 0.85 for the inner self-confidence and external self-confidence subscales, respectively. The test-retest reliability coefficients of the scale were found to be 0.97 for the inner self-confidence and 0.87 for the external self-confidence. It was observed that the item-total correlations of the scale ranged from 0.30 to 0.72. In this context, it was concluded that the Self-Confidence Scale is a valid and reliable measurement tool that can be used in the fields of education and psychology (Akın, 2007). Although the scale was developed on high school students, it was concluded that the scale items could also be applied to university students after the examinations of five academicians who are experts in the relevant field. In addition, there are many studies in the relevant literature in which the scale was applied to university students (see Sarıçam & Güven, 2012; Uçar & Duy, 2013; Ödemiş, 2014; Yalnızoğlu Çaka et al., 2017; Doğru, 2017; Süzer, 2020).

2.3.3 Sports Sciences Students' Job Finding Anxiety Scale

"Sports Sciences Students' Job Finding Anxiety Scale" was developed by Aslan and Uğraş (2021) in order to determine the job finding anxiety of sports sciences students. Data on the development process of the scale were obtained from a total of 525 university students studying in sports sciences. The scale consists of eight items and is in five-point Likert type. In addition, this scale consists of one dimension. In the scale development study, exploratory sequential design, one of the mixed research methods, was applied. Thematic analysis method was used for the analysis of qualitative data. Exploratory factor was used for the compatibility of the items obtained as a result of this analysis to the scale, and confirmatory factor analysis was applied to test this structure. In addition, the internal consistency coefficient (Cronbach's Alpha) of the scale was calculated as 0.958. As a result, it has been determined that the scale is a valid and reliable measurement tool (Aslan & Uğraş, 2021).

2.4 Analysis of Data

IBM SPSS version 23.0 was used in the analysis of the data. First of all, descriptive statistics were calculated by considering the data type of the raw data in the scale form obtained and transferred to the program. Then, t-Test and One-Way ANOVA were used for difference tests, Pearson's Correlation and Spearman's Rank-Order Correlation analyzes were used for correlation tests in statistical evaluations according to whether the data obtained showed normal distribution or not. In this context, Hochberg's GT2 and Games-Howell post-hoc tests were applied for One-Way ANOVA, considering the homogeneity assumption and the distribution of the participants between groups. In calculating the reliability of the scales, Cronbach's Alpha coefficient was taken into account within the framework of internal consistency. In addition, the level of significance was determined as 0.05 in statistical evaluations.

3. Results

In this part of the study, the findings obtained as a result of the analysis of the relevant data were presented and interpreted in the form of tables.

Table 1: Frequency and Percentages of Variables

Variable	Group	f	%
Gender	Female	113	36,3
	Male	198	63,7
Department	Coaching Education	122	39,2
	Physical Education and Sports Teaching	94	30,2
	Sports Management	95	30,5
Grade	1st Grade	97	31,2
	2nd Grade	72	23,2
	3rd Grade	88	28,3
	4th Grade	54	17,4
Place of Residence	Village + Town + Community	56	18,0
	County Seat	146	46,9
	City Center	109	35,0
	Total	311	100,0

When Table 1 is examined, it is seen that the number of male regarding the participants is approximately 1.75 times the number of females, and the department with the highest number of participants is coaching education. In addition, it is understood that the first grade has the highest number of participants and the fourth grade has the lowest number of participants. In addition, it is seen that the majority of the participants reside in the county seat.

Table 2: Descriptive Statistics of Age, Average Monthly Personal Income Level, and Average Monthly Family Income Level Variables

Variable	n	Mean	Median	Std. Deviation	Minimum	Maximum	Skewness	Kurtosis
Age	310	20,81	21,00	2,207	17	36	1,930	8,611
Average Monthly Personal Income Level	310	799,5968	650,0000	1047,41642	,00	7500,00	2,730	9,639
Average Monthly Family Income Level (Including Personal Income)	291	3643.55	3000.00	2753.456	500	25000	2.960	14.900

When Table 2 is examined, the mean of age variable of the participants is 20.81 and the standard deviation is 2.207; Average monthly personal income level variable in Turkish Lira type is 799,5968 and standard deviation is 1047,41642; It is seen that the average monthly family income level (including personal income) variable in Turkish Lira type is 3643.55 and its standard deviation is 2753.456. In addition, when the skewness and kurtosis values of the variables were examined, it was concluded that these variables did not exhibit normal distribution (see George & Mallery, 2010; Tabachnick & Fidell, 2013).

Table 3: Reliability Analysis Results of Scales

Dimensions	Cronbach's Alpha	Number of Items
Inner Self-confidence	,873	17
External Self-confidence	,860	16
Job Finding Anxiety	,925	8

When Table 3 is examined, it is seen that the internal consistency coefficients (Cronbach's Alpha) calculated within the scope of the research and the sub-dimensions of the job finding anxiety scale (α=0.925) and the inner self-confidence (α=0.873) and external self-confidence (α=0.860) subscales in the context of the self-confidence scale are examined. appear to be highly reliable.

Table 4: Descriptive Statistics of Scales

Dimensions	n	Mean	Median	Std. Deviation	Minimum	Maximum	Skewness	Kurtosis
Inner Self-confidence	311	4,1874	4,2941	,53550	1,59	5,00	-1,072	1,572
External Self-confidence	311	4,0870	4,1875	,56176	1,69	5,00	-,977	1,306
Job Finding Anxiety	311	3,4136	3,5000	1,07037	1,00	5,00	-,405	-,587

When Table 4 is examined, the mean score of the inner self-confidence subscale is 4.1874 and the standard deviation is 0.53550, and the mean score of the external self-confidence subscale is 4.0870 and the standard deviation is 0.56176. In addition, it was found that the mean score of the job finding anxiety scale was 3.4136 and the standard deviation was 1.07037. In this context, within the framework of self-confidence, it can be said that the inner self-confidence and external self-confidence levels of the participants are at a high level, and their job finding anxiety is at a moderate level. In addition, it was accepted that these variables exhibited normal distribution within the framework of skewness and kurtosis values (see George & Mallery, 2010; Tabachnick & Fidell, 2013).

Table 5: Results of Spearman's Rank-Order Correlation Analysis Between Scales and Age, Personal Income Level and Family Income Level Variables

Variables		Inner Self-confidence	External Self-confidence	Job Finding Anxiety
Age	**r**	,201*	,140*	,067
	p	,000	,014	,241
	n	310	310	310
Average Monthly Personal Income Level	**r**	,009	,061	,056
	p	,878	,286	,328

	n	310	310	310
Average Monthly Family Income Level (Including Personal Income)	**r**	-,032	,013	-,188*
	p	,592	,830	,001
	n	291	291	291

*p<0.05

According to Table 5, it was found that there were positive and low level statistically significant correlations between the age variable and the mean scores of the subscales of inner self-confidence (r=0.201; p<0.05) and and external self-confidence (r=0.140; p<0.05). In addition, it was found that there was a negative and low level statistically significant correlation between the mean score of the job finding anxiety scale and the average monthly family income variable (r=-0.188; p<0.05). However, no statistically significant correlation was found for other conditions related to the variables (p>0.05).

Table 6: Results of t-Test by Gender Variable

Dimensions	Gender	n	Mean	Std. Deviation	df	t	p
Inner Self-confidence	Female	113	4,1255	,54932	309	-1,546	,123
	Male	198	4,2228	,52558			
External Self-confidence	Female	113	4,0669	,56570	309	-,476	,634
	Male	198	4,0985	,56062			
Job Finding Anxiety	Female	113	3,6383	1,07741	309	2,828*	,005
	Male	198	3,2854	1,04757			

*p<0.05

When Table 6 is examined, it is seen that there is a statistically significant difference between the mean scores of the participants' job finding anxiety in the context of the gender variable ($t_{(309)}$=2.828; p<0.05). In addition, this significant difference was found to be in favor of females. However, no statistically significant difference was found for other conditions related to the gender variable (p>0.05).

Table 7: Results of ANOVA by Department Variable

Dimensions	Group	Mean	Std. Deviation	df	F	p	Significant Difference
Inner Self-confidence	Coaching Education (1)	4,1958	,58205	310	,061	,941	---
	Physical Education and Sports Teaching (2)	4,1927	,49916				
	Sports Management (3)	4,1715	,51257				
External Self-confidence	Coaching Education (1)	4,1009	,59366	310	,106	,899	---
	Physical Education and Sports Teaching (2)	4,0904	,52376				
	Sports Management (3)	4,0658	,56120				
Job Finding Anxiety	Coaching Education (1)	3,6363	1,00746	310	7,610*	,001	1>3 2>3
	Physical Education and Sports Teaching (2)	3,4601	1,01637				
	Sports Management (3)	3,0816	1,12777				

*p<0.05

When Table 7 is examined, it is seen that there is a statistically significant difference between the mean scores of the participants' job finding anxiety in the context of the department variable ($F_{(2-308)}$= 7.610; p<0.05). In addition, this significant difference between coaching education and sports management departments; between the physical education and sports teaching and sports management departments, and it was seen that both differences were against the sports management department. However, no statistically significant difference was found for other conditions related to the department variable (p>0.05).

Table 8: Results of ANOVA by Grade Variable

Dimensions	Group	Mean	Std. Deviation	df	F	p	Significant Difference
Inner Self-confidence	1st Grade	4,1771	,51516	310	3,104*	,027	4th Grade>2nd Grade
	2nd Grade	4,0572	,48134				
	3rd Grade	4,2086	,61675				
	4th Grade	4,3453	,46092				
	1st Grade	4,1521	,48822	310	2,369	,071	---

External Self-confidence	2nd Grade	3,9635	,57030				
	3rd Grade	4,0518	,63535				
	4th Grade	4,1921	,52346				
Job Finding Anxiety	1st Grade	3,2745	,98733	310	7,468*	,000	4th Grade>1st Grade 4th Grade>2nd Grade 3rd Grade>2nd Grade
	2nd Grade	3,0781	1,11180				
	3rd Grade	3,5440	1,08676				
	4th Grade	3,8981	,94078				

*p<0.05

When Table 8 is examined, it is seen that there is a statistically significant difference between the inner self-confidence mean scores of the participants in the context of the grade variable ($F_{(3-307)}$=3.104; p<0.05). This significant difference was between the second grade and fourth grade groups, and it was seen that the difference was in favor of the fourth grade group. In addition, it was determined that there was a statistically significant difference between the mean scores of job finding anxiety ($F_{(3-307)}$=7,468; p<0.05). This significant difference is between first grade and fourth grade, second grade and fourth grade groups, and both of the differences are in favor of the fourth grade group; It was found that the difference was in favor of the third grade group, between the second grade and third grade groups. However, no statistically significant difference was found for other conditions related to the grade variable (p>0.05).

Table 9: Results of ANOVA by Place of Residence Variable

Dimensions	Group	Mean	Std. Deviation	df	F	p	Significant Difference
Inner Self-confidence	Village + Town + Community (1)	3,9926	,68655	310	4,768*	,009	2>1
	County Seat (2)	4,2454	,49309				
	City Center (3)	4,2099	,48158				
External Self-confidence	Village + Town + Community (1)	3,8125	,69157	310	8,561*	,000	3>1 2>1
	County Seat (2)	4,1511	,50401				
	City Center (3)	4,1422	,52297				
Job Finding Anxiety	Village + Town + Community (1)	3,4375	1,08972	310	,883	,415	---
	County Seat (2)	3,4846	1,06146				
	City Center (3)	3,3062	1,07347				

*p<0.05

When Table 9 is examined, it is seen that there is a statistically significant difference between the inner self-confidence mean scores of the participants in the context of the place of residence variable ($F_{(2-308)}$=4.768; p<0.05). This significant difference is between the village+town+community and county seat groups, and it was seen that the difference was in favor of the county seat group. In addition, it was determined that there was a statistically significant difference between the mean scores of external self-confidence ($F_{(2-308)}$=8.561; p<0.05). This significant difference was between village+town+community and county seat and village+town+community and city center groups, and the differences were found to be in favor of county seat and city center groups. However, no statistically significant difference was found between the mean scores of job finding anxiety in the context of the place of residence variable (p>0.05).

Table 10: Results of Pearson's Correlation Analysis Between Self-Confidence and Job Finding Anxiety

Variables		Inner Self-confidence	External Self-confidence
Job Finding Anxiety	**r**	-,050	-,116*
	p	,377	,041
	n	311	311

*p<0.05

When Table 10 is examined, it is seen that there is a negative and low level statistically significant correlation between the external self-confidence mean scores of the participants and their job finding anxiety mean scores (r=-0.116; p<0.05). Therefore, it can be concluded that as the external self-confidence levels of the participants increase, their job finding anxiety levels will decrease. On the other hand, there was no statistically significant correlation between the participants' inner self-confidence mean scores and their job finding anxiety mean scores (p>0.05).

4. Discussion and Conclusion

In this study, it was aimed to investigate the relationship between the self-confidence levels and job finding anxiety of the students of the faculty of sports sciences within the framework of Bayburt University. In this context, a questionnaire form was prepared in accordance with the purpose of the research, and the raw data obtained as a result of the application of this form to the research group were converted into findings using various statistical analysis techniques. In this context, the results obtained based on the findings were discussed within the framework of the relevant literature and the research was detailed. In this direction, it can be said that the inner self-confidence and external self-confidence of the participants within the framework of self-confidence are at a high level, and their job finding anxiety is at a moderate level.

Considering the gender variable, it has been determined that females have a higher level of job finding anxiety than males. In the study conducted by Tekin Tayfun and Korkmaz (2016), it was found that the general unemployment anxiety scores of female university students were higher than the general unemployment anxiety scores of male university students. On the other hand, in the study conducted by Karslı (2021) on the anxiety of finding a job in theology faculty students, it was determined that the unemployment anxiety of males was significantly higher than that of females. In the study conducted by Yasar and Turgut (2020), it was determined that although there was no statistically significant difference in the total mean score of unemployment anxiety of female and male participants, the unemployment anxiety of male participants was higher than that of female participants. Yumuşaker (2020) found that there was no significant difference between the gender of accounting students at the associate degree level and their anxiety about finding a job. However, it is stated that gender is an important factor in the response to unemployment (Waters & Moore, 2002b). In this context, it can be thought that the fact that females have different thoughts than males in the face of a situation is effective in increasing the future anxiety of female university students (Karagün & Çolak, 2009). Therefore, it is thought that the result reached within the scope of the gender variable for this study is probable.

Considering the age variable, it was found that as the age of the participants increased, both inner self-confidence and external self-confidence levels increased. This result is partially consistent with some studies in the literature (Öztürk Karataş, 2017; Albayrak et al., 2020). Depending on age, individuals can express their emotions in a more controlled and appropriate way. It also occurs in behavioral maturation with age. Therefore, it can be argued that these situations are effective variables at the level of self-confidence. In this context, it is thought that the results obtained within the scope of the age variable are probable.

Considering the department variable, it has been determined that the level of job finding anxiety of the students of coaching education and physical education and sports teaching departments is higher than that of sports management students. When the opinions of the students of the sports management department about the future anxieties related to the study conducted by Araç Ilgar and Cihan (2019), were examined, it was determined that half of the participants in the study had professional future anxiety. On the other hand, it can be said that the students of the sports management department have the opportunity to become a teacher and a coach, which enables them to look to the future with more hope than the students of the coaching education and physical education and sports teaching departments, and in this context, the scores of job finding anxiety are lower.

Considering the grade variable, it is seen that the third grade students have higher job finding anxiety than the second grade students and the fourth grade students have higher job finding anxiety than students in the first and second grades. In addition, it was determined that the fourth grade students had higher inner self-confidence levels than the second grade students. However, in the study conducted by Öztürk Karataş (2017) on students of physical education and sports school, it was determined that the self-confidence scores of the participants did not differ according to the grade level. However, in the study conducted by Karslı (2021), it was determined that the unemployment anxiety levels of those studying in the upper grades (such as the 3rd and 4th grades) were significantly higher than those of the lower grades. In the study conducted by Ersoy Kart and Erdost (2008), it was determined that the anxiety levels of the students increase as the graduation stage approaches. Turgut, Gökyürek and Yenel (2004) in the study of physical education and sports school students; It was concluded that 72.3% of them expressed "Yes" in post-graduation unemployment anxiety and they were very worried about unemployment.

Also, Demir and Taşkıran (2018) determined in their study that senior students had lower hopes of finding a job than students from other grades. Although there is a widespread belief that an increase in the level of education will bring a job guarantee (Kıcır, 2017), the educated workforce is also heavily and directly affected by unemployment, and these social realities cause students to worry about being unemployed while they continue their education (Kıcır, 2010). In line with this information, it can be said that the situation of not being able to find a job in the post-graduation period with the increase in the grade level affects the individuals negatively and causes them to experience unemployment anxiety.

Considering the variable of place of residence, it was determined that the participants living in the county seat had higher inner and external self-confidence levels compared to those living in the village+town+community, and the external self-confidence levels of the participants living in the city center were higher than those living in the village+town+community. Karademir (2015) determined that the participants living in the province and county have more self-confidence. In the study conducted by Yağan (2019), it was determined that the participants living in the metropolitan city had a higher self-confidence than the participants living in the village/town. On the other hand, in the study conducted by Musa (2020), no difference was found between self-confidence and place of residence. However, it can be said that individuals living in areas with high population may have higher self-confidence than those living in areas with low population. It can be said that self-confidence is quite effective for individuals living in densely populated areas to make themselves visible in crowds.

Considering the family income variable, it was determined that as the family income increased, the job finding anxiety decreased. In this context, some characteristics of students (gender, socio-economic level of the family, personality, parental profession, school success, place of residence and friend circle) are the factors that cause anxiety (Çakmak & Hevedanlı, 2004). The city where the students study in university life, their socio-economic levels, relations in the school environment, etc. many factors affect their anxiety (Dursun & Aytaç, 2009). It is also stated that as the income level of the family increases, the hope of finding a job suitable for the qualifications of the individuals increases (Mütevellioğlu et al., 2010). Based on this information, it can be said that the increase in the income level of the households has positive effects on the anxiety of finding a job and reduces the anxiety levels of the individuals.

When the research is considered in the context of the relationship between self-confidence and job finding anxiety, it was found that as external self-confidence increases, job finding anxiety decreases. Anxiety; It is known that it means fear and worry (Köknel, 1987) and anxiety causes worry, tension and fear (Karageorghis & Terry, 2010). Bandura (1997) self-confidence; It is defined as the individual's confidence in his own abilities, judgment, power and decisions, and the belief that he can achieve a certain activity. In addition, the concept of self-confidence is divided into inner and external self-confidence. While inner self-confidence is related to individuals' self-confidence, external self-confidence is a situation related to individuals' self-confidence regarding their lives in the external environment and social environment (Akın, 2007). In this context, external self-confidence; easy communication, expressing oneself in a healthy way, controlling emotions and taking risks (Akın, 2007). In this respect, communication skill is expressed as "the ability to convey one's feelings, thoughts, beliefs and attitudes in an understandable and purposeful way" (Tiryaki Şen et al., 2013). Being able to control one's emotions can be defined as managing these emotions instead of being under the control of one's own desires and requests. In this context, it is thought that individuals who have high communication skills and can control their emotions can express themselves effectively. In line with this information, it is thought that individuals with high external self-confidence express themselves effectively and keep their emotions under control. Therefore, it can be said that these situations reduce their anxiety about finding a job and keep individuals away from negative thoughts about the future.

As a result, making plans to increase the external self-confidence levels of students in sports sciences may reduce their job finding anxiety. Accordingly, it is thought that the negativities arising from the job finding anxiety can be reduced. In addition, new information that will contribute to the literature has been obtained with the research findings. However, the results of the analysis include limited number of participant data considering the research group. For this reason, similar studies can be conducted with a large data set to cover all age groups. In addition, research results can be diversified by conducting qualitative, mixed and/or experimental studies on a research

group with similar characteristics. In this context, different results can be reached that will contribute to the literature.

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The Concepts of Deictic Shift Theory and Discourse Theory of Silencing

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Abstract
This paper aims to analyze the concepts of the deictic shift theory and discourse theory of silencing. It has been written on the basis of synchronic descriptive method in the study of the English language. For this purpose we wish to introduce a theoretical framework for the study and then we hope to present the deictic shift theory and discourse theory of silencing, to show the development of a set of questions that any reader may use to evaluate a work of fiction. It is noted in the article that while using the language in the narrative, these questions help to guide the reader to determine the context of the narrative. These questions also help the reader to determine the narrator's point of view, his strategy for silencing characters, and discover which characters in the narrative have been silenced. It is stated in the article that deixis depends on context, situation, and relationship within a narrative and Deictic Shift Theory is a set of premises about readers and stories that grew out of research on the function of deixis in fictional narratives. The article also covers discussion of linguistic views of scientists in this field.

Keywords: Deixis, Narrative, Deictic Words Anaphora, Cataphora, Narrator, Social Deixis

1. Introduction

As human speech is realized in a certain situation, condition and environment, human beings use the language in order to establish intercourse with one-another. The initial and the first function of a language is to transfer a certain piece of information. This is called a transactional function in linguistics. Languages help human beings to give information by order, request and instructions to one-another. The whole scope of actions, carried out as a result of these processes in the language, is called context. It becomes clear from the context, who is pointing to somebody or something by special words which are called deixis: *here, there, I, you, he, this, that, down, up etc.* Deictic words just carry out deictic function. In modern linguistics the word "*deixis"* has derived from the Greek word *deixnumi.* It gives the meaning of *"to indicate," "to show," "to point to."*

By deixis is meant the location and identification of persons, objects, events, processes and activities being talked about, or referred to, in relation to the spatiotemporal context created and sustained by the act of utterance and the participation in it, typically , of a single speaker and at least one address. The word "*deixis*" traditionally is as to the semantics nearer to the "*indexial expression*" in linguistics. The analysis of recent studies in this field provides us with argument that deixis is a means, uniting semantics with pragmatics, because, language expressions are set up by means of pragmatic substitutions.

1.1. Objective of the study

The purpose of the article is to study the concepts of Deictic Shift Theory and Discourse Theory of Silencing in modern English, their means of expression, the analysis of Deictic Shift Theory being a set of premises about readers and stories that grew out of research on the function of deixis in fictional narratives.

1.2. Methodology

Research methods include direct contextual analysis, cognitive-linguistic, or linguistic description. With the help of these methods, the onomasiological typology of deixis (whether it is universal or special) is clarified. It is noteworthy to mention the fact that in the investigation of the problem may be considered completely for it is not possible to cover all the study by using one method. That is why the study of these concepts is needed to investigate deeply.

The following has been chosen during the investigation:

1. The method of tenacity within the pragmatic model:
2. To follow the systematization of the theory and practice the method of dedication is used as well
3. A qualitative analysis of the most frequently used deixis in English

1.3. Presentation and discussion

Deixis is a linguistic term for some units of language. These units of language indicate a self-world orientation. In this orientation the elements of language have the meaning when the reader knows who, when, and where the speaker or character can be in the narrative.

The reader needs a "reference to a NOW, a HERE, and an I" for full comprehension. He considers the deixis not to be limited to a few words, such as I/you, here/there, now/then. Deixis functions in all discourse as the "prerequisite for all reference," and, most importantly, it functions as the indicator of the subjective perspective in language.

Deixis depends on context, situation, and relationship within a narrative. Every language contains words like I/you, here/there, now/then, this/that, yesterday/today/tomorrow which is recognized as deictic words. When these words are used in any narrative, they refer to as previously stated, or, less frequently, a yet-to-be stated, person, time, or location. While looking through the deictic words in discourse we see that they are the WHO, the WHERE, and the WHEN words or phrases. The simplest deictic sentence is the most difficult one to interpret: "*I am here now*." Interpreting the meaning of this sentence requires knowing who speaks as "I," what "here." As we see, without context, this sentence has lexical meaning but no semantic content.

Context refers to information about place and time, circumstances, social roles, demographic variables, and so on. The term "deictic window" is used by deictic researchers rather than the less specific word context, but it is referred to the same element of story with this more specific term: "spatial, temporal and psychological coordinates establishing a deictic perspective in the narrated world.

Within narratives the situation that gives rise to any statement within that narrative is its context, its basis for interpretation and understanding by the reader. The simple sentence "I am here now" spoken by a girl to her parents who have been looking for her has a more different meaning than does the same sentence spoken by a co-worker entering a meeting ten minutes late. Van Dijk (2004) states that context opens the properties of the text. What is said and how it is said depends on which character in the narrative is speaking to whom, when, where, and for what purpose. We cannot tell stories without a context, so the context supports them. In order to tell stories we must refer to a speaker, a place or a time, that which deictically identifies the narrator, locates the narrator or character in the story, ascertains the time span of the narrative moment. That's why, context is considered to be a constituent element of deixis.

Lot's of deictic words and phrases refer to a word or phrase within a narrative's context which were previously introduced, or, less frequently, to a phrase to be introduced; these are anaphora and cataphora.

Example: *A sound in the kitchen below worried him. Was Edyth coming up to have her bath before he had prepared it for her? No it was all right, she was going out of the back door. From the window he saw her disappearing round the side of the house into the small square qarden. He didn't like her to be alone there. She was a shy person, but now new people had moved into the house next door, and there was a danger of some silly woman making friends with her. He didn't want* ***that*** *just now.*

The anaphoric reference word, in boldface, is the demonstrative ***that*** but this word does not clearly refer to just one element in the phrase that precedes it. *That* may refer to the content of the story, the act of the narrator, his anxiety.

As we know cataphora refers to a word or phrase later in the narrative, it clarifies its referent, a phrase in which the referent appears before its noun phrase. Examples below express the general intent of cataphoric phrases: "What I decided to do is this," or "This is what I have decided," in which the pronoun *this* precedes the explanation or definition that follows.

Anaphora and cataphora within a narrative are known as discourse deixis, the use of antecedents and precedents in a text. Such a question arises why anaphor and cataphora are described here because they are considered a fundamental part of linguistic analysis of narrative, but they will not be used in the reader's evaluative questions because these terms do not contribute to the reader's determination of context, narrator's point of view, narrator's marginizing strategies, or silenced characters.

Besides, social deixis is considered to fulfil another deictic function in narrative. So the words and phrases are used to determine the social status of a narrator and recipient, as well as the form of address (familiar, polite, honorific) within a narrative. Example: *Mirs Edyth never spoke to Ronald. When she passed Ronald would say with trembling voice:* ***"Good morning, ma'am," and she would wave her hands instead of answering*** *(emphasis added).*

Socially deictic expressions in this selection are in boldface. In this passage, the narrator, Ronald addresses to Mirs Edyth by the polite form "*Ma'am.*" With this greeting Ronald shows deference and evidence of appropriate Southern social manners by saying good morning with trembling voice and speaking the expected greeting phrase, *Good morning,* followed by the equally deferential and required honorific, *ma'am*. This passage illustrates the full spectrum of social deixis: the familiar; the polite *(Ma'am Edyth*); and the honorific *ma'am*, although in the South, the use of "*sir" and "ma'am*" is so pervasive in all levels of social conversation that it may be more correctly considered a polite form of address.

The social forms of address in a narrative are clear indicators and the character of these indicators has dominance in a story situation, their title confers authority over other characters in a story, and it becomes easy for a reader to determine which character is privileged and which character is marginized or silenced.

1.4. Determination of Deictic Shift Theory

Deictic Shift Theory is a set of premises about readers and stories that grew out of research on the function of deixis in fictional narratives. Mary Galbraith considers the Austrian psychologist Karl Bühler to be the first researcher to note the operation of deixis in narrative text in his work, The Theory of Language. Here deixis is said to be constituted differently for fictional narrative.

Besides, we searched Deictic Shift Theory similarly to the state experienced by readers and writers in which they imagine themselves participating in a world that is not literally present, experiencing the events and situations from a position inside the story. Segal(2000) further explains that much of the meaning of the story may be understood only from a cognitive position inside the story.

Segal offers seven propositions and his first proposition is form and content. It is the study of linguistic features such as sentence and paragraph structures, verb tense, pronoun use, lexical choices, descriptive style of voice quality, and grammar style (conversational, academic, colloquial, idiomatic). Let's pay attention to form. Form looks at how text appears on the page and looks at such paralinguistic devices as punctuation style, blocking and shaping of text, paragraphing and other breaks in the text, and use of multiple fonts. A narrator opens a story with short phrases, and uses verb-less sentences throughout the text. In this way, he tells the reader as much about point of view, about story context, and tone of the story as the words tell.

Segal (2000) groups form and content together, but we consider them to be actually separate features of the text for the reader and they are formulated as separate questions. Form is the two-dimensional appearance of the text itself, the visual first impression. But content requires reading the story, it requires shifting from the lived world into the story world, and experiencing the story world from the point of view of the narrator or another character.

Content, and the next proposition, context, require the reader's ability to model the story world from her knowledge of the lived world. It is called as "mental modeling." Some readers have the difficulty understanding the content and context. They consider the content and the context to be the murky areas in the narrative. In this case some questions arise from an unclear understanding of a story, such as: What does this story mean to me? How can I know the narrator's point of view? Why do I need to know which character is silenced? The answers may be found in the language of the story through the process of asking specific questions of the text, questions developed to reveal answers to the four summary questions proposed in this study. The meaning of the entirety of a narrative is greater than the linguistic meaning of the text's contents. Analysis of context looks at the descriptive background and situational settings of the narrative's presentation - when, where, what, and who - and at the rhetorical and lexical choices the narrator uses to explore and exploit the story.

We consider that similar to content questions, the reader's questioning analysis of context presumes that the reader's general knowledge of her world, along with her understanding of social and life experiences, adds to the meaning of the narrative.

We consider that context is a problematic concept in linguistic research and discourse analysis in that it is often difficult to define what is and what is not to be included as context in studies of specific texts.

We consider the context in creative narratives to be the direct representation of the raw material of fictional reality... the phenomenal experience of a subject. We fully agree with several ideas on this field. Context in deictic studies as the specific story world assembled in the act of reading the words of the text.

Segal describes context as the "story world," as those "events of a story primarily talc [mg] place within a single spacetime continuum" identified as the story world. The story world contains people, places, objects and events that exist in spatial, temporal and causal relationships with one another." The fully populated "spacetime continuum" constrains and limits the characters and situations in the story in a way that gives the reader the feeling of coherence.

While explaining the difference between context and content we can see that context provides the background and cultural and social milieu in which a particular story occurs. But content tells of particular characters, events, and times portrayed against the backdrop of context. Content is explicitly described in the narrative. But context is often implicitly assumed in the narrative.

Segal (2000) states that "Mental Model" is used in Deictic Shift Theory. It is a term that was borrowed from cognitive psychology and psycholinguistic research. It describes the lived experience of every human being. In the premises of Deictic Shift Theory, the reader of a narrative uses her life mental model to construct a model of the story's world as it is encountered in reading. We consider that the reader's mental model assumes that the events and objects in the story world will resemble those found in the lived world unless informed otherwise by the story contents or the genre, science fiction or fantasy narratives. And because the reader's mental model assumes a default of resemblance with lived experience, the narrator need not explicitly state everything about a

character or event; many details are assumed by the reader and made a part of the reader's interpretation of the story. Consider the example. It is an example from *How is your mother? by Simon Brett* which illustrates a gap filled in by the reader:
It was Monday morning, and Patridge was making his breakfast. He turned on his cooker and prepared to boil an egg. He looked out of the window with satisfaction. In the interval between the weekend and Monday he had dug the garden and planted all the roses/.

The narrator explicitly states that the day was Monday, then describes the scene occurring "between weekend and Monday." The narrator does not explain the process that Patridge did during the weekend.. The narrator assumes the reader knows that Monday means for Patridge beginning a new working day and skips over the unnecessary details of where, when, why and how Patridge moved from weekend to Monday morning between sentences.
The process of the modeling the story world allows the reader to locate characters in a text both spatially and temporally: who speaks, when and where. Modeling also establishes a relationship with the story world and the characters, allowing the reader to participate mentally in the relationships created among the characters in the narrative.

Segal (2000) adds another aspect to the topic of mental models and constructs a mental model of the world of the story before and during writing, reader does.

The author "makes a deictic shift into the mind of the fictional narrator" and views the story world from the narrator's perspective. We believe that the narrative cannot be said to represent the actual author's thoughts, feelings, or beliefs. Therefore, this study will focus only on the narrator's experiences, descriptions, assumptions, fears, etc., as revealed in the text.

2. Determination of Discourse Theory of Silencing

The discourse theory of Silencing has arisen out of Critical Discourse Analysis. This theory shares all the theoretical and methodological perspectives of the Critical Discourse Analysis.

Silencing is a performative category of discourse. It is an act, which gives preference to some speakers (or narrators) and represses other speakers (narrators).

According to Blackledge(2005) CDA is neither a single theory nor a uniform and consistent methodology; its plurality and "eclecticism" and "dynamism" are evidence that CDA arose from a concern with the social rather than the "purely linguistic." CDA is a way of thinking about discourse, theory, as well as a way of recording data in discourse, methodology , and it is concerned with the identification of social behaviors as expressed in language. CDA refers to a wide range of perspectives that have their root in linguistics, all of which share a concern for critical examination of social and cultural practices CDA is more than just the "specific analyses of language structures and usages," it is the evaluation of relationships among language, social norms and ideologies.

Looking through the central features of CDA we see that the first feature is the analysis of relationships, predominantly the relationship of text to its "social, discursive and historical context." The CDA researcher searches for the structural relationships of dominance, discrimination, power and control as manifested in language. But we think CDA researcher searches for the attitudes and beliefs of power and social inequality.

The second feature is that CDA researchers are sure that the meaning of a text is not contained within the text itself. So readers or hearers make sense of the text by linking it to their previous knowledge and expectations, an essentially unlimited variable that is composed of not only the reader's knowledge, but constrained by the reader's interests and presumptions. The fact that readers link texts to their own experiences and that their interests and assumptions contribute to the understanding of a text is identical to the mental model presumption in Deictic Shift Theory research.

Blackledge assumes that CDA takes as its central purpose that of revealing structures of power in language; it is in language that discriminatory practices are acted out, it is in language that the "unequal relations of power" are replicated, and it is in language that inequalities and the rhetoric of discrimination is contested and corrected. We agree with Blackledge. So CDA emphasis is on the understanding of discourse in relation to social problems; to social structural variables such as race, gender, and class; and above all to power.

Social differences are constructed in language, in the structuring of language use in discourse. This means that language, and language ideologies, are" anything but neutral, especially in societies where some language and identity options are privileged above others". Blackledge presents another research assumption: if racism (and this hypothesis could extend to any type of social problem or social discrimination under study) is reproduced in discourse, then it is reproduced across all categories of communication - social practices, discursive practices, and in texts.

The search for any type of discrimination in discourse means that the researcher is aware of discriminatory acts perpetrated through language and has adopted a stance -whether political, social, educational, personal - toward the discriminatory acts.

The political standpoint of the analyst will never be entirely absent, that it is not possible to conduct research free from value judgments, that " there is no value-free CDA, and that ultimately, there is no value-free science." CDA "situates its analysis both in its social, cultural and historical context and in the perspective and position of the researcher(s), in particular, explicitly defining and defending its own sociopolitical position."

CDA examines texts through three process lenses: 1."*intertextuality" 2."interdiscursivity," 3."recontextualisation."* *Intertextuality* is considered to be a cornerstone of CDA research. He explains that "every text is embedded in a context and is synchronically and diachronically related to many other texts." Blackledge states while it is occasionally easy to see the relationship of texts, it is more often difficult to identify embedded texts. Intertextuality is certainly a feature of creative short narratives – it is exemplified in the familiar expression, "There are no new stories, only new ways of telling them." According to Blackledge(2005) *interdiscursivity* is the property of discourse. It connects the type of text to the expected context and quality of discourse. They are generally found in a specific social situation. Blackledge's definition states that, "interdiscursive analysis links the particular conventionalized practices which are available to text producers in particular circumstances." We agree to this definition.. Interdiscursivity is also a feature of narratives. It is a part of the reader's mental model identifiying a correct type of discourse for a context. Blackledge gives an example that in a story's courtroom scene the reader expects to hear legal language, the reading of legal documents, and an adversarial cross-examination; this is the expected "conventionalized practice" extant in court settings. Legal phrasings and witness cross-examinations do not often happen in the supermarket, and the reader would instantly recognize it as an activity out of its usual discursive context.

*Recontextualization o*f discourse is both the repetition of a discourse or text in a new context and the transformation of that discourse. The repetition of a text in a different context involves a transformation, because discourse will attract new meanings in new settings. *Recontextualization* is the mainstay of newspaper reporting, talk shows, magazine articles, any public debate, gossip, rumor, and the organizational grapevine, where public or private events are re-presented, accurately or otherwise. We agree with this thought and it seems logical that all narratives are *recontextualizations* of previous narratives.

We can see the reason that the mental model concept works so well in understanding how readers connect to stories. So such themes like-"*good overcomes evil," "when one door closes, another one opens"* circulate in social conversation as platitudes and they are recontextualized in a variety of new story settings.

Recontextualization is a mainstay of Critical Discourse Analysis. It serves as the basis for many close and detailed discursive analyses of texts. *Recontextualization* is considered to be a fundamental presumption for all creative short narratives. It does not need to be developed into a question for readers. Studying the discourse theory of Silencing, we see that according to Thiesmeyer (2003), in the discourse theory of Silencing all discourse is an act

within the social sphere. Silencing is a "contradictory act" in that it operates through discourse, through "publicly learned and publicly used language with social frameworks and functions". As an act, silencing is the expression of unequal power relations among participants that has personal, social and global consequences; it is a discursive relationship in which the social value of the exchange is unequal. Silencing incorporates these discursive acts and the social frameworks, the contexts, that sanction silencing. Silencing in this study and as used in discourse analysis is not the result of illness, injury, or impairment; it is an active and socially constructed practice , one that is, or can seem to be, the result of personal choice. But silencing "clearly involves choices made by other people as well as by the potential speaker."

Silencing of characters is imposed in narrative in four ways: it may be externally- imposed, or it may be internally-imposed, it may be unrealized silencing, or it may be compliant silencing. Whatever the form, silencing is the result of social and political judgments about who may speak and who may not. We consider these forms of character silencing to be called *Forced, Chosen, Unrealized, and Compliant*. *Forced and Chosen silencing* indicate choices. These choices are made by individuals or groups to silence ideas and information selectively rather than allow free, open discourse among participants.

Unrealized silencing indicates either no choice or an unconscious acceptance of silencing. Clair(1998) states that in populations that have been discriminated against over long periods of time, the acceptance of silencing has become institutionalized and customary among the discriminated population (3). For example, customs which assign the legal status of property to women and children, a status that stripped their ability to claim rights as human beings or to speak for themselves, have silenced women and children for centuries. This custom, like so many others, has been so long a social reality. Acceptance of this status was unconscious and unrealized, because it was the condition of all women and children.

According to Thiesmeyer (2003), compliant silencing is a complex and coercive choice which participates in social discourse not through an individual's own words or actions but according to choices made by others as to what is acceptable to speak and do. It is an act of discourse that disguises the silencing contained within it (8). Thiesmeyer (2003) states: Compliance can be maintained by awareness of possible unpleasant alternatives. It occurs rather than by the coercive use of unpleasant alternative themselves. The power of a discourse lies in the discursive system's ability to preclude challenges.

Discursive assimilation is silencing by restricting an individual or group to a different acceptable kind of discourse expression than the expression the individual or groups might have independently produced. Discursive displacement, similar to discursive assimilation, is the silencing of forbidden speech and narrative by replacement with acceptable speech and texts that express dominant social ideas and customs, sacrificing or discarding the unacceptable discourse.

Discursive reproduction of accepted ideologies, unifying phrases, and conventional notions through mass media and educational institutions is silencing not only of personal voices but of the ideas and information these voices may have offered.

The goal of using acceptable discourse to silence unacceptable discourse is to eliminate the potential for any audience in the social sphere to gain access to unacceptable information. A society unable to hear about or be aware of the existence of ideas that differ too much from those normally permitted by the dominant ideology cannot use those ideas or information to challenge the dominant discourse.

Discursive reproduction is repetition, the re-producing, of acceptable discourse.
Consider the examples:
- *"We are a Democracy,"*
- *"It's the American Way,"*
- *"We are all equal in the eyes of the law," or "These colors don't run"*

These are nationalistic slogans which are particularly obvious examples of discursive reproduction of a dominant ideology. This ideology has no factual basis in practice.

An individual's group's silencing by dominant powers may come about by discursive deprivation, displacement, or assimilation; any one of these forceful processes has the ability to produce silencing; and the ideas of an individual or a group may be silenced by the consistent reproduction of a dominant ideology. Identifying the locus of silencing and the means that produced it are important ideas in this study and will be used in developing the evaluative questions for readers.

3. Conclusion

In summary, the following premises of silencing have been selected from the discussion above. First, silencing works in and through discourse, and is an act of discourse. Second, the silencing of characters operates in four ways: Forced, Chosen, Unrealized, and Compliant. And, third, the silencing of discourse works through four processes: discursive deprivation, discursive assimilation, discursive displacement, and discursive reproduction. Having studied the Deictic Shift Theory and the Discourse Theory of Silencing, we may come to the conclusion that Deictic Shift Theory is a set of premises about readers and stories that grew out of research on the function of deixis in fictional narratives. Deictic Shift Theory is described similarly as the state experienced by readers and writers in which they imagine themselves participating in a world that is not literally present, experiencing the events and situations from a position inside the story. We have found out that "Mental Model" is used in Deictic Shift Theory. It is a term which was borrowed from cognitive psychology and psycholinguistic research. It describes the lived experience of every human being. In the premises of Deictic Shift Theory, the reader of a narrative uses her life mental model to construct a model of the story's world as it is encountered in reading. Analyzing the discourse theory of silencing we come to a conclusion that silencing is a "contradictory act" in that it operates through discourse, through publicly learned and publicly used language with social frameworks and functions. As an act, silencing is the expression of unequal power relations among participants that has personal, social and global consequences; it is a discursive relationship in which the social value of the exchange is unequal. Identifying the locus of silencing and the means that produced it are important ideas in this study and will be used in developing the evaluative questions for readers.

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What Can I Do To Overcome My EFL Students' Speaking Challenges?

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Abstract
This study aims to overcome the speaking challenges of the students in an English preparatory class of 2020-2021 spring semester at a private university in Istanbul. Qualitative classroom action research design was operated to conduct the study. In the beginning weeks of spring semester, speaking skills challenge among the students was detected and observed. Accordingly an action plan was developed by using Ur (2009)'s advices. Developed action plan was implemented for 8 weeks. The study included 4 female and 2 male students as participants. Participants were chosen by homogenous sampling method that is one of the purposive sampling methods. To collect data, active participant observer technique and e-mail interview technique were employed. Data were analyzed by content analysis technique. As a result, 2 themes called affective improvements and practical improvements and in each theme 3 sub-themes were discovered. Sub-themes are reduced anxiety, increased motivation, improved self-efficacy, increased participation level, gradual ease in speaking, and examination. To conclude, the study shows that students benefited from the action plan which was prepared mostly by Ur (2009)'s advices.

Keywords: EFL Students, English Preparatory Year, Speaking Skill Problems

1. Introduction

In teaching English as a foreign language, it is generally essential for students to acquire four basic skills. These basic skills are divided into two categories, which are called receptive/passive skills and productive/active skills. Receptive skills category includes reading and listening while productive skills category includes writing and speaking.

Rise of communicative methods in language teaching has made speaking skills more important than ever (Öztürk, 2017). Yet it is the most difficult and complex skill to acquire (Esin, 2012; Nunan, 1992; Tarone, 2005; Rocio, 2012). Being able to communicate in a language is what makes students believe that they know a particular language (Koran, 2015). Even if they can read, listen and write very well in English, unless they can express themselves orally, they lack the most important aspect of knowing English since this aspect, speaking, is the proof that speaker is also capable in other skills of the language (Graves, 2010; Ur, 2009). Despite years of teaching-

learning activities, students find themselves saying one classical sentence: "I understand, but I can't speak." In most classrooms, teachers do not make time to improve speaking skills unless it is a speaking skills lesson. Thus, during the real-life practice of speaking, students experience challenges of speaking for affective reasons such as anxiety, theoretical reasons such as insufficient knowledge and practical reasons such as insufficient practice.

When students enroll at a university in Turkey, depending on their department's teaching language percent, it is either compulsory or optional for them to study English preparatory year. If the teaching language is %30 or more in English, students have to study an English preparatory year. However, if the teaching language is Turkish, students may still choose to study English preparatory year. During English preparatory year, it is aimed to have students acquire grammar rules, vocabulary, writing skills, reading and listening comprehension, and speaking skills to express themselves orally (Yükseköğretim Kurulu, 2021). Students' expectations from English preparatory year are mostly personal development and successful career (Davras & Bulgan, 2012; Şen Ersoy & Kürüm Yapıcıoğlu, 2015). Since English is a global language, every good job offer requires candidates to be able to communicate in English. Candidates, employees or employers may have to give presentations, attend meetings and/or close deals in English (Rao, 2018). Therefore, during the preparatory year, it is essential to have students speak.

Ur (2009) states that successful speaking activity has four characteristics: a lot of learner talk, even participation, high motivation and acceptable level of language which means that the produced language is understandable and relevant. However according to Ur (2009), the reason why successful speaking does not occur can also have four reasons. First reason is called inhibition. It means learners can avoid producing the language due to anxiety, shyness, fear of making mistakes and as a result facing criticism. Second reason is there may be nothing to say. Sometimes learners do not have anything to say about the topic which they are expected to speak about. Third reason is low or uneven participation. Some learners take up most of the speaking and others might feel there is not enough time for them to speak. Finally, fourth reason is mother-tongue use. Learners feel more secure in their mother tongue thus, they tend to use it if their classmates share the same mother tongue with them. This results in avoiding the use of target language and choosing the easier option especially if they are not motivated enough.

Ur (2009) gives tips on how to solve these speaking problems that are mentioned above. First of these tips is using group work. Although it is predictable that in group work students will use their mother tongue and make language mistakes, there is still time for useful practice. Second tip is speaking activities should be based on easy language and necessary vocabulary should be revised before the activity. Third tip is choosing an interesting topic and motivating tasks. Fourth tip is giving some instruction in discussion skills so that students know how to do the activity. Finally, fifth tip is keeping student talk in the target language. For this to happen Ur (2009) suggests appointing a monitor student to groups to remind the group to speak in the target language.

Ur (2009) differentiates between two types of speaking activities. The first one is topic-based and the second one is task-based. According to experiences and feedbacks that she got, task-based activities are more motivating since they have a purpose.

In this study, taking into account observed situations, students' needs and reasons behind the speaking problem, it was aimed to take an action plan to solve the students' speaking problems in the speaking lesson. To do that, all of Ur (2009)'s tips and some of recommended speaking activities were applied in the speaking lessons for 8 weeks. In a few of the weeks, there were two different activities, but most of the weeks, time was only enough for one activity. There were both group works and individual works. Ur (2009) suggests both topic based and task based activities although she mentions that according to her experiences task based activities are liked more. Since each classroom and student is different, in this study both types were applied. Group works arranged according to Ur (2009)'s tips or adapted from Ur (2009)'s book are as follows:

Discussion about advantages and disadvantages of online education: This topic-based activity was chosen to stimulate students' interests because they have a lot to say about this.
Choose the right flat mate: This is a task-based activity in which students should decide which of their friends would be the best flat mate for them.

Picture description race: Students chose this activity because in the previous exam they were asked to describe a picture. This activity includes two groups trying to make as many sentences as possible about the picture. The group who makes the most sentences in the given time wins. This activity was adapted from Ur (2009)'s book directly.
Picture description and spot the difference: Students chose this activity because in the previous exam they were asked to describe a picture. This time this is not a race. A picture is shown by the teacher and whole class tries to make sentences about the picture. This activity was aimed to be done individually such as a picture for each student separately. But students preferred to make it as a whole class mentioning that they feel less pressure, so the teacher agreed. This activity was adapted from Ur (2009)'s book directly.
Taboo: One student tries to explain a word and others guess what it is.
Discussion about advantages and disadvantages of online education: Students talk about it critically trying to include every aspect possible.
Individual works arranged according to Ur (2009)'s tips or adapted from Ur (2009)'s book are as follows:
Let's talk about a movie: Students wanted to do this activity and they chose Toy Story 4. Until the following week, both the students and the teacher watched the movie and in the classroom, everybody talked about the movie. Students shared their opinion about the best moment in the movie, their favorite and least favorite character, the reasons behind some characters' actions etc.
Create a story using the pictures: Students chose this activity because they stated that in the main course lesson, they had learned past tenses and they wanted to use it in speaking lessons.
Make a presentation about something you like: Students are asked to make a presentation about anything they like such as their favorite city, video game, food, lesson, movie, actor, singer, pet, planet etc. The reason why they were not restricted to one of these topics is to allow students to make it about their interests as Ur (2009) suggests.
Tell an interesting story about your life: Each student tells a story about his or her experiences which can be fun, weird, sad etc. Others listen until it finishes and ask some questions that they wonder.
Solve a problem: This activity was directly taken from Ur (2009)'s book. However, Ur suggests it as a group work, but in this classroom, it was done individually. In the book, there is a problematic situation about a child at a school. Students were asked to handle this problem the best way possible explaining with reasons. The students in this study are Psychology students, so this activity is thought to be highly suitable for them.

2. Method

2.1 Research Design

Speaking lessons take place 2 hours a week online on Blackboard Collaborate Platform where synchronous lessons can be done and recorded. On the official class list, there are 31 students. However, since attendance is not obligatory in online classes, approximately 10 students attend the online lessons each week. Few of these students are capable and eager to speak. However, most of them have problems expressing themselves and using the language at an acceptable level as Ur (2009) described. These students keep attending the lessons although it is clear that they need help.

In this study, qualitative action research design was operated. Action research design, which can be qualitative or quantitative, is very popular among teachers (Berg, 2017). Action research is conducted to solve a day-to-day problem or inform local practices (Fraenkel & Wallen, 2009). There are different types of action research. One of them is classroom action research, which includes the teacher as a data collector to work collaboratively with the students to improve her practices (Kemmis & McTaggart, 2005). During the spring semester, an immediate speaking challenge occurred and needed to be solved together with the students and the instructor collaboratively, therefore, classroom action research method was adopted in the study.

2.2 Participant Characteristics

This study includes six students (4 female, 2 male) who are in their English preparatory year at a private university in Istanbul. Students' level in English is A2. Medium age of the participants is 19 and none of them had studied

English preparatory program at high school or attended a course to improve their English. Participants' main field is Psychology at the university.

Participants were chosen by homogenous sampling method, a type of purposive sampling method where all of the members have certain characteristics (Fraenkel & Wallen, 2009). In our case, this certain characteristic is being afraid of participating and not feeling capable of speaking in the speaking lessons. The reason why these participants were chosen for this study is because they are regular attendants and they told the teacher about their worries and problems during the lessons.

2.3 Data Collection Process

Before and during the action plan, data were collected by participant observation. Participant observation method allows teachers or researchers to observe the participants of a study in a natural context (Berg, 2012). Participant observation method includes active participant observer, privileged active observer, and passive observer techniques. In the current study, active participant observer technique was managed. Active participant observer technique is the way teachers watch and reflect on their own practices during their own lessons. In this technique recording the observations are essential (Mills, 2014). Thus, field notes were used to record these observations. After the action plan, data were collected by e-mail interview method. According to Mills (2014), e-mail interviews are useful tools which can save time by allowing participants to respond in their own time. The reason why this method was chosen for this study is both because it is time saving and students have time to think so they feel less pressured while answering. As a data collection tool semi-structured interview form was used. Before the data collection process, all students were informed about the study and their written and verbal consent was taken to participate in this study. Students filled the form in their mother tongue so they could express themselves correctly.

2.4. The Process of Developing and Implementing Action Plan

In the first few speaking lessons, the teacher was active participant observer and taking notes on a teacher journal. After these observations, 10 specific problems were discovered and to overcome these problems, the teacher prepared an ***action plan*** using her observations and Ur (2009)'s book as a guide. Challenges and actions are as shown in Table 1:

Table 1: Challenges Experienced by Students and Actions to Overcome Them

Challenges Experienced by Students	Actions to Overcome the Challenges
Students don't feel comfortable with turning on their cameras	Students do not have to turn on their cameras unless and until they want to, however in return of this new agreement, microphones will be turned on. This way both the students and the teacher make a sacrifice
Students make excuses about not having a microphone	
Students give wrong information because of excitement and say that they forget what they know because they are getting excited on the microphone. They ask the teacher what they can do about their excitement	Group work and pair work will be used to reduce anxiety and divide responsibility. In addition, the teacher will make sure students know that they will get help from the teacher where necessary. Looking at the short notes will be allowed so that the students do not worry about forgetting what to say. After a few of these group works, some of which will be taken directly or modified from Ur (2009)'s recommendations, for students to take longer turns, Ur (2009)'s recommended activities for individual speaking will be used
Students are not sure if the teacher will help them when they are stuck while speaking	
Students ask to look at their notes while speaking	
Students tend to speak and type in their mother tongue	The teacher will visit groups one by one and when the teacher is in another group, a student will be chosen to monitor the use of target language (Ur, 2009)
Students are trying to change the topic towards music and movies by asking teacher about her favorites	The speaking activities will be arranged according to students' interests and needs (Ur, 2009). To make sure

Students cannot find anything to speak about so their speaking takes a short time and they say "What more can I say about it?."	this happens, at the end of each class, students will offer activities for next class or choose from teacher's options
Students don't understand some of the related vocabulary used during activities	Needed vocabulary will be revised before speaking activity and activities will be based on easy language which means they will only have to use the words they are familiar with (Ur, 2009)
Teacher talk is so much that students rely on it	The teacher will not interfere to fill silences so that students will challenge themselves to speak (Ur, 2009)

This action plan above was created by using observations of the teacher and Ur (2009)'s book. The action plan was implemented for 8 weeks.

2.5. Validity and Reliability

In action research, validity and reliability are subject to many threats (Fraenkel & Wallen, 2009). However, according to Lincoln and Guba (1985) some measures can be taken to improve credibility, transferability, authenticity, dependability and conformability of the study. To improve credibility, member-checking, spending plenty of time in the field and data collection triangulation were used. To improve conformability and dependability research process was supervised by the second researcher.

2.6. Ethical Considerations

Before data collection, participants were informed about the study and their consent was taken to participate and give information for the sake of the study. They were also told that they have a right to change their mind about participating the study any time they want. Two participants were unwilling to give information after seeing the questions, so they were allowed to withdraw from the study without giving any information. In the consent form, it is stated that the information would only be used for this study and would not be given to third parties for any reason. Names of the participants and institutions are not shared in the study in order to make sure no harm can be done to them because of the study.

2.7. Researchers' Position

The first researcher in this study is the instructor of the English preparatory class with which the research was conducted. Her B.A. is in English Language Teaching and M.A. is in Curriculum and Instruction. She has been an instructor at university level for six years. According to Berg (2017), action researcher's role is being a participant in the process when needed. In this study, the researcher is naturally a participant since she is the instructor and a part of the population and situation. The second researcher's role in the study is the supervisor and advisor of the study. The second researcher holds an undergraduate degree in teaching English as a foreign language and has experience of teaching English as a foreign language in Germany and Turkey. Furthermore, the second researcher has expertise in curriculum and instructional studies. The second researcher contributed to the design of the study, the development of the interview protocol, the analysis of the data, and the presentation of the results and discussion.

3. Results

Following the data analysis, two themes were discovered. The first one is "Affective Improvements" and the second one is "Practice Improvements." Under each theme three sub-themes were discovered. These themes, sub-themes and categories are presented with details below:

3.1 Affective Improvements

One of the sub-themes discovered under affective improvements is reduced anxiety. Students mentioned that during the process there was an evident "anxiety reduce." They gave some reasons as to why their anxiety was reduced and one of them was "accepting mistakes as a natural part of the process." For example, Student 1 said *"I was very anxious about making mistakes in the beginning, but later on I realized making mistakes was not a problem because after making a mistake we are being taught the correct version."* Student 3 stated the same thing with these words.

> In the first 2 lessons, I thought about not attending the lessons. Because I was afraid of making mistakes and did not want the others to see that I wasn't enough. But I am not afraid of making mistakes or saying something wrong anymore. Yes, I admit that I still get a little bit embarrassed when I make a mistake but I started to accept that mistakes are natural. I realized worrying and stepping back were not good options for me. I overcame my fears and just started to enjoy the lessons.

Another factor students mentioned for anxiety reduce is "group works." For example, Student 6 said: *"Group works are better because we share the responsibility of the task as a group. When it's only me who has to talk, I feel under pressure and stressed."* Student 4 stated:

> In the beginning lessons, I was too shy and afraid of making mistakes especially when we turned on our cameras because I did not know anybody in the classroom. Then I got used to it. I think group works are the best ever to speak in English and get to know each other.

The second sub-theme discovered under affective improvements is "increased motivation." Students mentioned that their motivation levels increased during the process due to some reasons. The first reason is that their prejudice about speaking was overcame and the second reason is that they started to enjoy the lessons. Student 3 stated this as follows:

> In the beginning, I had some worries and if I must add, when they first told us that we would have speaking lessons I just thought to myself 'What happens if don't attend?' Then I attended and my thoughts changed from negative to positive. Even if I said something wrong, I just tried to have fun. After the third lesson, I really –so to speak- started looking forward to next lessons. Because I was having fun. Especially the lesson that we played taboo was really nice. Also, doing different activities each week, I think, is keeping us away from being monotonous thus I wonder what will happen each week and long for it.

Student 4 also underlined this as follows:

> In the beginning, I was stressed and contemplating about how the lesson would proceed and all. I didn't want to attend because of my shyness and got bored. But then I overcame it. I stopped thinking about that and started to focus on the activities. I think the biggest help for me to overcome these things is the activities that we did and your attitude.

The third sub-theme discovered under affective improvements is "improved self-efficacy." Except one student, all students mentioned this topic. The categories emerged under this sub-theme are "less hesitation in speaking," "positive attitude" and "self confidence in participating." Student 1's statement about "less hesitation in speaking" is as follows; *"I was meticulous about attending all the lessons so I had a chance to practice more. My pronunciation got better. Before, I had hesitations in speaking but now I can make myself clear because I feel more comfortable."*

Student 3's statement about "positive attitude" is as follows:

> At first I did not have self-confidence and I was really embarrassed, so the first two lessons were really hard for me. However later on, with some positive energy from my teacher and some effort from my own, I gained my confidence.

Student 6's statement about "self confidence in participating" is as follows:
To be honest, in the beginning I was praying to God that my turn to speak would not come. I was shy and anxious. But in time, I just wanted to participate. I am happy with my participation but I am also aware that I should improve myself a little more in terms of speaking.

3.2 Practice Improvements

One of the sub-themes discovered under practice improvements is "increase in participation level." While all of the students agreed on the increase, four different reasons behind it were mentioned. The reasons mentioned by students are "having a say in the content," "teacher attitude," "being informed about the activity beforehand," and "getting used to the lessons." Student 5 expressed the first reason as *"I had fun and benefited all the activities but I was more active on the weeks that we as students chose the activity. Because that way, we also feel that we need to participate, because that was our choice."*

Student 3 expressed the second reason as *"Teacher's energy is great and it is reflecting on us. I totally overcame my speaking fear thanks to her. I like the fact that she can understand what we want to say even if we can't say it correctly."*

Student 1 stated the third reason as *"Teacher always informed us beforehand about the activities and was very clear in explaining. So, we could prepare ourselves."* Student 4 stated the fourth reason as *"In the beginning my participation level was so low. It was because of both my shyness and my inexperience. But later on, as I got used to the lessons and understood what I should do, my participation increased."*

The second sub-theme discovered under practice improvements is "gradual ease in speaking." Students said that their speaking became easier due to some factors such as easier activities and provided vocabulary. Before the explanation of the activities taking into account Ur (2009)'s advice, students were provided with needed vocabulary to use during the activity. Student 2 stated this as:

> In the recent activities, I have learned many words and I think previous activities were more difficult for me. Now I can say it is better. Because teacher helps us with words when we are stuck and that way we can learn related words. Previous activities were also nice but I couldn't benefit much because of the lack of vocabulary.

The third sub-theme discovered under practice improvements is "speaking exam." Students had different ideas about this theme. In the exam, there were two parts. In part one, students were asked different but familiar questions and expected to answer the question after thinking for one minute if they needed. In part two, they were shown a picture and asked to describe and answer some questions about the picture, again they could think for one minute if they needed. Some students stated that activities were helpful for the exam; some students stated that activities were not enough to be ready in the exam. For example, Student 3 stated:

> If I must evaluate myself about the exam, I really get excited. The worries I overcome in the lessons come back up and I make weird sentences. I usually make grammar mistakes and I believe I should improve myself on that.

Student 5 also stated a similar idea as; *"I don't see myself enough, maybe there can be more exam-like activities in the lessons."*

However, there were opposite ideas about the lessons' impact on the exam. Student 1 stated; *"I think exam was doable thanks to the activities done and materials used in the lessons. However, I think participation in the lesson should also be taken into account in evaluation."* Student 4 also stated the same idea as follows:

> The activities we did lately were really helpful for me. When we were doing them, I realized I was improving especially compared to the previous activities. For example, picture description activity that we did before the exam week was really really beneficial for me. I think the reason I got full point from the exam was that activity.

4. Discussion

In this action research study, it was revealed that the action plan was mainly beneficial in two areas called affective and practical. Students mostly stated the benefits in these areas and accordingly six sub-themes emerged called reduced anxiety, increased motivation, improved self-efficacy, increased participation level, gradual ease in speaking, and examination. In addition, according to teacher observations, students mainly improved affectively and practically. Although there are still grammatical mistakes in the utterances, the language became at an acceptable level as Ur (2009) describes it as a characteristic of a successful speaking activity.

Under the first theme "Affective Improvements," three sub-themes emerged. The first sub-theme was reduced anxiety. Students told some reasons as to why their anxiety was reduced. Accepting mistakes as a natural part of the process and group works are these reasons. When reviewed in the literature, fear of making mistakes is the biggest reason behind speaking anxiety (Çavuşoğlu Deveci, Buyruk Arslan, Erdoğan, & Yücel Toy, 2016; Öztürk & Gürbüz, 2014). Group works took place as advice of Ur (2009)'s to make unwilling students participate and it worked out as students themselves mentioned.

The second sub-theme was increased motivation. High motivation was Ur (2009)'s another characteristic of a successful speaking activity and she stated that the key to it was to choose topics that stimulate interest. This was a part of the action plan and in some weeks, students were allowed to choose the activities they want to do in the following weeks, so the activities would certainly be of their interest. Students stated that they started to enjoy the lessons and their prejudice was overcame. Although reduced anxiety, increased motivation and increased participation levels are different sub-themes, it can be said that they are related. Azizifar, Faryadian and Gowhary (2014) states that because of anxiety, students' participation, motivation and self-confidence may reduce. In this study, it was also revealed that students' self-confidence was increased which can be a result of reduced anxiety.
The third sub-theme was improved self-efficacy. This sub-theme had three categories called "self confidence in participating," "less hesitation in speaking," and "positive attitude." Except one, all of the students showed an improvement in self-efficacy. This could be caused by the first sub-theme "reduced anxiety."

Practical improvements theme had three sub-themes and the first one is increase in participation level which had four reasons as follows; "having a say in the content," "teacher attitude," "informing about the activity beforehand," "getting used to the lessons." Having a say in the content could be related to one of Ur (2009)'s solutions to solve speaking problems called "make a careful choice of topic and task to stimulate interest" as it increases the motivation and motivation affects participation. Teacher attitude is also an important point to consider about participation in speaking lessons (Koran, 2015). Students can be demotivated when their mistakes or pauses are met with intolerance (Soureshjani & Riahipour, 2012). In this study, students mentioned that they were not afraid of neither participating nor making mistakes thanks to the teacher's tolerance. Informing about the activity beforehand is also important for students to be able to participate. Saltan (2003) suggested doing activities that does not require the students to speak immediately since it makes them nervous, which is compatible with student statements in the study.

The second sub-theme was gradual ease in speaking. All of the students mentioned that they started to speak more easily due to provided vocabulary and easier activities. Ur (2009) suggests basing the activities on an easy language and teaching the related vocabulary before the activity. This suggestion was part of the action plan and it can be said that it worked out. In the literature, it is also stated that insufficient vocabulary is one of the biggest reasons of speaking problems (Çavuşoğlu Deveci et al., 2016; Boroujeni & Fard, 2013; Liu & Jackson, 2008; Gan, 2012).

The third sub-theme was examination. Some students believed that activities in the lessons were also helpful in the exam. Some students believed that there could be more exam-like activities in the lesson.

As a result of this study, some suggestions can be made. As stated above, in the exams, some students do not feel as relaxed and capable as in the lessons. Therefore, in some of the weeks, students may be asked random questions like a pop quiz to prepare them to react calmly and wisely to random questions. However, teacher should be careful to do that in a way that does not increase anxiety. In addition, the teacher of the lesson should take part in the

speaking exam as students may feel better and less shy if they know the teacher. Other than that, some students mentioned that they would improve better if the speaking lesson hours were more. Some of them believe that 2 hours a week is not enough. Finally, Ur's recommendations and tips worked out very well for this classroom. Even though it cannot be generalized, they can be applied and tried in other preparatory English classes to see if it results the same.

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Examining the Relationships among Internet Addiction Procrastination Social Support and Anxiety Sensitivity*

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Abstract
In this study, it was aimed to examine the relationships between individuals' levels of internet addiction, procrastination, perceived social support and anxiety sensitivity levels. The study group consisted of 358 participants (278 women 80 men). The data were collected using Demographic Information Form, Young Internet Addiction Test Short Form, Procrastination Tendency Scale, Multidimensional Scale of Perceived Social Support, and Anxiety Sensitivity Index-3. Correlational analysis was used to determine the relations among variables. Multiple regression analysis was used to determine whether the independent variables predicted internet addiction. Procrastination (β= .38), social support (β= -.11), and anxiety sensitivity (β= .33) predicted internet addiction at a statistically significant level. It can be inferred considering this finding that, the regression model which involves procrastination, social support, and anxiety sensitivity predicts 31% of internet addiction. Individuals who are lonely have higher levels of internet addiction than those who have a statistically significant relationship, and their perceived social support levels are lower than those who have a statistically significant relationship. Based on the findings some suggestions were made.

Keywords: Anxiety Sensitivity, Internet Addiction, Procrastination, Perceived Social Support

1. Introduction

Internet addiction is a problem that needs to be dealt with, which negatively affects the development of the individual, one's intra-psychic and interpersonal relationships, like many types of addiction. This situation can prepare the ground for a life that is rich in the virtual environment but isolated in the real environment. An isolated life may cause the individual to stay away from social support networks, as well as cause individuals who do not

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receive social support to turn to the internet environment and therefore develop internet addiction. Individuals have started to communicate online with social networks during the pandemic. Similarly, business life and education process continued via the internet. The individual's staying away from social environments may cause a lack of psychological benefits of social relations. This distance can create emotional problems in the individual. The individual spends more time on the internet to deal with all these problems (Şahan & Çapan, 2017). Social support as a universal human being need, can be met over the internet, and it can be resulted internet addiction. Procrastination, which is a behavior that can be seen in many types of addiction, can be exhibited by the individual in social, professional, personal, and relational areas. At this point, the tendency to procrastinate may be a behavior that will emerge because of internet addiction. When the individual exhibits the behavior of procrastination, individuals may prefer to use the internet instead of the behavior she has postponed. In this process, the internet can turn into an addiction and the individual can make the behavior of using the internet a habit instead of every postponed behavior. With the decrease in face-to-face communication in their relationships, there may be changes in the anxiety levels of individuals or their sensitivity to situations that may cause anxiety. The individual may prefer to spend time on the Internet to avoid conditions that will cause anxiety. In such a case, anxiety sensitivity can also be considered as a factor that increases internet addiction. In this context, the need to identify some factors related to internet addiction of the individual arises. Therefore, in this study, it is aimed to examine the relationships between internet addiction and individuals' procrastination tendencies, perceived social support and anxiety sensitivity.

1.1. Internet Addiction

The Internet has become a tool that is the center of attention of many people less than half a century after its invention. Every passing year, the Internet is widely used as a communication and information tool. Until March 2021, 5 billion 168 million people use the internet which corresponds 65.63 of whole world population, and the rate of internet usage in Turkey in 2021 is 82.6% for individuals in the 16-74 age group which is very close to Europe rate, 87.7% (Internet World Stats Usage and Population Statistics, 2021). Although its main purpose is to provide information exchange, the spread of the internet has led to new problem areas such as pathological overuse and internet addiction, which can be considered as a new type of addiction and has led researchers to work on these issues (Kutlu et al., 2016).

The concept of addiction is mostly used as the inability to stop using a substance or control a behavior (Günüç & Kayri, 2010). Internet addiction, ‘compulsive internet use,’ ‘pathological internet use,’ and ‘internet addictive behavior’ interchangeably used for problematic internet use (de Vries et al., 2018). Goldberg (1996) was the first person who created the definition of 'Internet addiction' and tried to explain the diagnostic criteria, and thus entered the literature as the concept of 'internet addiction' (cited in Doğan, 2013). Internet addiction can be defined as excessive use of the Internet and not being able to prevent this desire, feeling the need to spend more time, if no connection to the Internet, extreme tension, nervousness, and restlessness occur and leads to negativities in the individual's work, social and family life (Young, 2004). People with five or more of the following eight criteria defined by Young (1998) can be considered as addicted, and those who have less than five criteria can be considered normal internet users.

1. Excessive engagement with the Internet (thinking about previous online activities or thinking about the next online session)
2. Need to use the internet more and more to feel satisfaction.
3. Unsuccessful attempts to control, diminish, or stop Internet use.
4. Feeling pessimistic, depressed, or restless when trying to reduce or stop Internet use.
5. Staying online longer than intended.
6. Risking or losing a significant relationship, job, educational or career opportunity because of Internet use
7. Lying to family members, therapists, or peers to hide the extent of involvement with the Internet.

8. Using the Internet to escape from problems or alleviate a dysphoric mood (for example, helplessness, guilt, anxiety, depression) (Beard and Wolf, 2001 as cited in Karaca, 2019, p. 10).

The reasons for the purpose of using the internet can be because of psychological and sociological factors. As in substance addictions, the individual's social environment or her/his own curiosity mostly comes to the fore intending to internet addiction (Can, 2007). Meanwhile, the inadequacy of communication within the family (Bayraktutan, 2005) and the need to meet the accompanying social needs are factors in the increase in internet use of young individuals and the transformation of this use into an addiction (Ekşi & Ümmet, 2013). Whang, Lee, and Chang (2003) the loneliness levels of internet addicted individuals were high, and loneliness increased the time spent on the internet. Meanwhile, considering the possible causes of internet addiction, it has been found that individuals use the internet to avoid stress and procrastinate the responsibilities (Gong et al., 2021). The individual may prefer to use the internet as a different job than the job that needs to be done, and this may cause internet addiction. For this reason, it would be useful to examine the role of procrastination in the internet addiction.

1.2. Procrastination

The tendency to procrastinate is defined as the behavior of procrastinating without a valid reason for an important task that an individual has decided to do beforehand (Balkıs, 2006). Procrastination tendency and transforming procrastination into behavior; not wanting to do a task can be expressed as the whole of the stages of producing justified excuses/reasons to psychologically relieve oneself to delay, along with deciding to postpone this task with the condition and belief of doing it at a later time (Knaus, 2000). Procrastination can be viewed as a combination of disbelief in one's ability to perform a task, inability to delay gratification, and attributing one's responsibility to others or blaming someone else for failing to perform actions (Rebetez et al., 2016). In the literature, researchers distinguish procrastination as trait procrastination and state or situational procrastination like academic procrastination. Hence, researchers consider procrastination mostly as a personality trait (Ferrari & Scher, 2000; Milgram et al., 1998; Şirin, 2011), as a tendency to postpone things in general until later (Çakıcı, 2003). Situational procrastination is the procrastination that a person exhibits in only one aspect of her/his daily life (Blunt et al., 1998). Based on the studies on the causes of procrastination, the main reasons for procrastination are the individual's inability to manage time (Balkıs, 2007; Klingsieck, 2013) and anxiety as the first and most important cause (Scher & Osterman, 2002). In this case, anxiety can be evaluated as an active emotional state both as a cause and as a result of procrastination. According to studies based on theoretical foundations, the causes of procrastination are anxiety about failure (Solomon & Rothblum, 1984; Zarick & Stonebraker, 2009), social anxiety (Ferrari, 1992), cognitive test anxiety (Cassady & Johnson, 2002), lack of self-regulation (Klassen et al., 2008), laziness (Senecal et al., 1997), perceiving the task as an imposition (Milgram et al., 1988), learned helplessness (McKean, 1994), low self-esteem (Beswick et al., 1988; Meyer, 2001), low self-confidence (Beswick et al., 1988), self-focused perfectionism (Klingsieck, 2013; Seo, 2008), and external locus of control (Deniz et al., 2009). Along with all these causes, internet addiction has a direct and indirect effect via core self-evaluations on procrastination (Gang et al., 2018), although this result does not explain whether internet addiction is predicted by procrastination or not. In reducing procrastination, perceived social support has an important role (Yang et al., 2021); and social support may also mitigate internet addiction (Wang & Zhang, 2020). For this reason, beyond procrastination, perceived social support can also be important in predicting internet addiction.

1.3. Perceived Social Support

Perceived social support is the individual's belief that he knows the existence of people he can consult when he needs, and that he has interpersonal relationships that satisfy him (Dour et al., 2014; Nur Şahin, 2011). In other words, perceived social support, which is perceived as different from actual or received social support, refers to the individual's personal belief in the existence of social support. It is the sum of the thoughts that the people around her have a secure relationship and that the individual will be supported, and it is the meaning that the individual attributes to her/his social relations (Arıcıoğlu, 2008; Dülger, 2009). While perceived social support

represents the subjective meanings that an individual attributes to the social support from his/her environment, actual or received social support refers to the number of supportive behaviors from individual's social environment that the individual reports (Dour et al., 2014). There are studies examining internet addiction and perceived social support. There is a negative relationship between internet addiction and perceived social support (Esen, & Gündoğdu, 2010; Günüç & Doğan, 2013; Tanrıverdi, 2012; Özcan and Buzlu, 2005). Meanwhile, poor perceived social support predicted internet addiction (Çevik & Yıldız, 2017; Karaer & Akdemir, 2019; Tudorel, & Vintilă, 2018) and poor perceived social support is a risk effect for internet addiction (Chen et al., 1991). The reasons for internet addiction are the obstacles in the social relations of the individual (Inderbiten et al., 1997), the lack of support from the social environment (Papacharissi & Rubin, 2000), and the need to meet their social needs (Ekşi & Ümmet, 2013). Besides, perceived social support mediates anxiety treatment (Dour et al., 2013), while poor perceived social support is associated with anxiety symptoms (Karaer & Akdemir, 2019; Yahyaoğlu, 2019) which can be related to anxiety sensitivity; and anxiety sensitivity may increase internet addiction (Soulioti et al., 2018).

1.4. Anxiety Sensitivity

Anxiety sensitivity is at the core of the 'fear expectation model' in which the motivation to avoid a situation that causes fear in the individual is basically dependent on anxiety sensitivity and anxiety expectation (Mantar et al., 2011; Reiss, 1991). Anxiety sensitivity is characterized as a severe fear that the sensations and symptoms resulting from the individual's anxiety will have physical and/or social consequences that will cause harm (Reiss & McNally, 1985; cited in Elhai et al., 2018). Anxiety sensitivity is a basic fear that exists in the structure of the individual and is constantly recurring (Reiss & McNally, 1985 as cited in Starcevic & Berle, 2006) and intensifies anxiety related symptoms and related to anxiety disorders (Olatunji & Wolitzky-Taylor, 2009). It is 'fear of anxiety' or being afraid of fear as an individual variable with a cognitive structure (Starcevic & Berle 2006). The structure of anxiety sensitivity is based on the various sensations and symptoms associated with anxiety. These symptoms are mainly palpitations, dizziness and sweating and consist of sensations related to autonomic arousal as in panic disorder (Taylor et al., 1991, Reiss, 1991). The individual misinterprets sudden onset, relatively severe, and unexplained symptoms as symptoms of physical origin (Starcevic & Berle 2006). The individual believes that she/he will face a bad situation by making some negative inferences depending on these symptoms. There is some information that an individual's anxiety sensitivity is due to heredity, but it is generally argued that anxiety sensitivity usually originated in childhood as a result of life experiences while interpreting her life experiences in a wrong and negative way (Asmundson et al., 1999). It is different than trait anxiety due to trait anxiety is accepted as a tendency to demonstrate fear to various situations; anxiety sensitivity is a tendency to fear to arouse of body sensations (Stewart & Kushner, 2001). Anxiety sensitivity is related to addictions including alcohol use (Schmidt et al., 2007), problematic internet use (Hashemi et al., 2020, Taş, 2019), and problematic smartphone use (Elhai et al., 2018). The individual may develop internet addiction in order to sling out the effects that increase anxiety and anxiety sensitivity. Individuals with internet addiction may try to escape from reality more than non-addicted individuals (Whang et al., 2003). In this regard, it would be useful to investigate whether anxiety sensitivity predicts internet addiction with other previously stated variables as procrastination, and perceived social support.

1.5. Importance of the Research

The Internet, since it is easily accessible at home, school, workplace, and social environments, it can become an indispensable part of our lives. On the other hand, it can be a problem such as addiction (Yellowlees & Marks, 2007). In most of the research about the Internet, it is acted on that the individual loses his/her own control and experiences problems in social, professional, and academic functioning (Bozkurt et. al, 2016). As in substance addictions, the social environment of the individual or his own curiosity comes to the fore in the tendency to internet addiction (Can, 2007). When examining the literature, procrastination is associated with the internet addiction (Davis et al., 2002; Geng et al., 2018; Thatcher et al., 2007). Perceived social support is associated with internet addiction (Beyrami et al., 2015; Işık & Ergün, 2018). Anxiety sensitivity is associated with Internet addiction (Soulioti et al., 2018). Even though stated variables are related to internet addiction, as far as we reached in the databases, there is no specific research holding procrastination, perceived social support and anxiety

sensitivity together to predict internet addiction. As in other addictions, to cope with internet addiction, the nature of the internet addiction may enrich by this research. Besides it may be possible to bring a different perspective to cope with internet addiction by examining the relationships between procrastination tendency, perceived social support, anxiety sensitivity, and internet addiction.

1.6. Hypotheses

H1. Procrastination, social support, and anxiety sensitivity predict internet addiction.

H2. Internet addiction level varies according to demographic variables of gender, and the presence of romantic relationship.

2. Method

The research was carried out with the descriptive survey method as it examined the relationships between internet addiction, procrastination, perceived social support and anxiety sensitivity. Relational method is frequently used in studies on the relationships between multiple variables related to psychological counseling (Heppner et al., 2008). Internet addiction was the predicted (dependent) variable in the study, and the predictive (independent) variables were procrastination tendency, perceived social support and anxiety sensitivity.

The population of the research consists of all individuals aged 18 and over who use the internet. On the other hand, since online data collection tools were used, the convenient sampling method was used. This sampling method enables easy access to participants when other sampling methods are not applicable.

3. Participants

In the research 358 individuals participated voluntarily and anonymously. 278 (77.7%) were female and 80 (22.3%) were male. The average age of the participants is 42.88. A total of 345 data were selected for the analysis.

3.1. Data Collection Tools

The research was prepared in the form of a Google form and applied in a way that volunteers could fill in an average of 10 minutes.

3.1.1. Personal information form. It included demographic variables of gender, age, educational status, and marital status of the participants.

3.1.2. Young's Internet Addiction Test Short Form (YIAT-SF). The YIAT-SF, which was developed by Young to measure internet addiction. Pawlikowski et al. (2013) decreased the item size to 12 items. It is a five-point Likert scale (1=Never, 5=Very often) (Kutlu et al., 2016). Kutlu et al. (2016) adopted the scale into Turkish. Fit index of confirmatory factor analysis values were $\chi 2$=144.93, sd=52, RMSEA= .072, RMR= .70, GFI= .93, AGFI= .90, CFI= .95, IFI= .91. Cronbach alpha was .91, and test re-test reliability in three weeks was .93. In our study, the Cronbach's alpha value was calculated and found to be .84.

3.1.3. Procrastination Tendency Scale. The original form of the scale was developed by Lay (1986) in order to evaluate students' procrastination tendencies in every field in general. The scale is a 5-point Likert-type (1 'Doesn't fit at all,' 5 'Completely fits'). Balkıs (2006) adopted the scale into Turkish. A total of 5 items were removed from

the scale, and the number of items in the scale is 15. According to the factor analysis, the findings have an eigenvalue of 4.80, which constitutes 32.09% of the total variance. A factor (eigenvalue) assumed to be the main factor was found. The internal reliability coefficient was found to be .84 (Balkıs, 2006). In our study, the Cronbach's alpha value was calculated and found to be .83.

3.1.4. Multidimensional Scale of Perceived Social Support. The original form of the scale was developed by Zimet et al. (1988). Eker and Arkar (1995) adopted the scale into Turkish. There are 12 items and 3 sub-dimensions in the scale. According to factor analysis, the eigenvalue of 12 items was less than 1 the largest one was included in the relevant 3 factors and the total explained 75% of the variance. The sub-dimensions of the scale are 'family support,' 'friend support' and 'a special person'. Reliability coefficients of the Turkish version of the scale are a special person $\alpha = .92$; family is $\alpha = .85$ and friend is $\alpha = .88$. Overall scale internal consistency score is .89. The scale is a 7-point Likert type scale, and the answers are given between 'definitely yes and absolutely no' (Eker et al., 2001). In our study, the Cronbach's alpha value for overall the scale was calculated and found to be .90.

3.1.5. Anxiety Sensitivity Index–3 (ASI–3). It was developed by Taylor et al. (2007) to measure anxiety sensitivity. The scale consists of physical, cognitive, and social sub-dimensions 18 items in total and all dimensions include six items. The scale has a five-point Likert type measurement, and '0' means too little and '4' means too much. Mantar et al. (2011) adopted the scale into Turkish. In factor analysis it has three factors: physical, cognitive, and social. 3 factor structure explains 61.72% of the total variance. They found the Cronbach's alpha coefficient as .93 (Mantar et al. 2011). In our study, the Cronbach's alpha value was calculated and found to be .93.

3.2. Procedure

Before the data gathering, Sakarya University Rectorate Ethical compliance permission was requested from the Ethics Committee. Ethical permission was obtained with the document numbered E.7805 on 07/09/2020. Later, permissions for the use of scales were obtained via e-mail from the authors. The scales were administered via Google Forms to individuals aged 18 and over, whose personal information is confidential, who voluntarily participated and filled out the informed consent form.

4. Data Analysis

In line with the hypotheses of the research, the data were evaluated using Pearson correlation and multiple regression analysis, t-test and one-way analysis of variance. Relationships between variables were determined using Pearson correlation analysis. After Pearson correlation analysis, whether the independent variables (the ones related to the dependent variable) predicted the dependent variable significantly or not was evaluated using regression analysis. Mahalanobis' distance values were detected to determine whether there were multivariate extremes in the data set, these values were then evaluated on the basis of $p < .001$ significance level, and accordingly it was determined that there were 31 of data that impairs the premises of "normality" and "linearity" in the dataset, so these data were excluded from the dataset. In addition, whether the dependent variable changed according to demographic variables was evaluated with t test, one-way analysis of variance and Welch test. In this context, t-test was used to evaluate whether the levels of internet addiction, procrastination, perceived social support and anxiety sensitivity differ according to gender. One-way analysis of variance was applied to determine whether individuals' internet addiction levels differ significantly according to age and educational status. During this analysis, one-way analysis of variance was used in case of homogeneous variance, and Welch test was applied in case of non-homogeneous variance. Levene's statistics were applied to determine the homogeneity of the variances.

5. Results

The correlations between variables were examined using Pearson correlation analysis and the obtained results are given in Table 1.

Table 1: Descriptive Statistics and Correlations

Variables	1	2	3	4
Internet addiction	1			
Procrastination	.44**	1		
Social support	-.23**	-.15**	1	
Anxiety sensitivity	.39**	.13*	-19**	1
$\bar{x}$	24.75	35.77	62.48	24.39
Std. Dev.	6.56	11.20	16.42	16.61

Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).*

A positive significant correlation between internet addiction and procrastination (*r*= .44), and anxiety sensitivity (*r*= .39) and a negative correlation between social support (*r*= -.23) at the .001 level as seen in Table 1. Meanwhile, other significant Pearson correlation coefficients were found between the procrastination and social support (-.15), and procrastination and anxiety sensitivity (.13). Also, there was found social support and anxiety sensitivity (-.19). Based on these findings, it was investigated whether internet addiction was statistically significantly predicted by procrastination, social support, and anxiety sensitivity using multiple regression analysis.

The suitability of data for regression analysis was evaluated using Mahalanobis' distance values, kurtosis, skewness values and normal distribution graph. In this respect, firstly Mahalanobis' distance values were detected to determine whether there were multivariate extremes in the data set, these values were then evaluated on the basis of p< .001 significance level, and accordingly it was determined that there were 31 of data that impairs the premises of "normality" and "linearity" in the dataset, so these data were excluded from the dataset. Afterwards, indicators of normal distribution (kurtosis, skewness, and normal distribution graph) were analyzed to examine the suitability of dataset for regression analysis. The obtained results were presented in Table 2 and Figure 1.

Table 2: Results about the Assumptions of Normal Distribution and Regression Analysis

Variables	***Skewness***	***Kurtosis***	***VIF***	***CI***
Internet addiction	.43	-.38		
Procrastination	.54	-.62	1.03	3.68
Social support	-.67	-.05	1.06	6.51
Anxiety sensitivity	.66	-.41	1.5	13.34

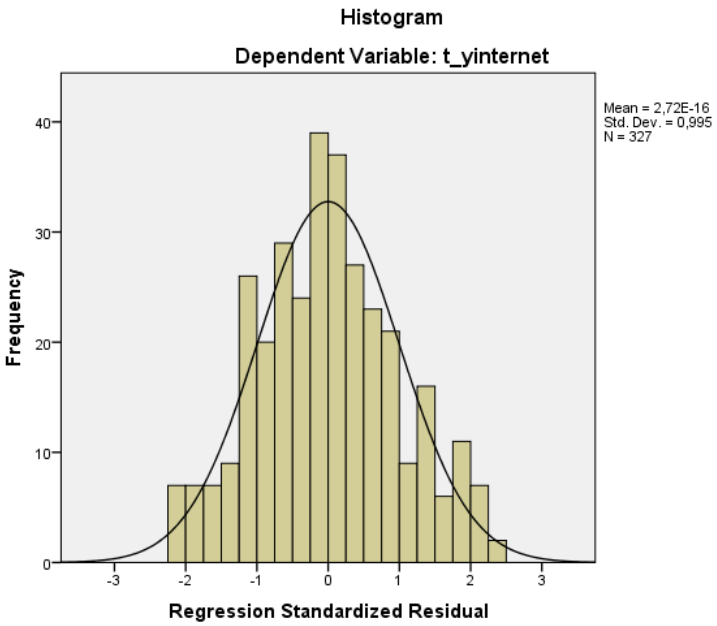

Figure 1: Normal Distribution Curve

Table 3: Results of Regression Analysis

Dependent variable	Predictor Variable	*B*	*Std. Error*	*β*	*t*	*p*
Internet addiction	Constant	16.49	1.74		9.49	.000
	G. Procrastination	.22	.03	.38	8.11	.000
	Social support	-.05	.02	-.11	-2.37	.018
	Anxiety sensitivity	.13	.02	.33	6.90	.000

$F(3,323)= 50.48$, $p<.0001$

$R= .565$; $R^2= .313$

As shown in Table 3, procrastination ($\beta= .38$), social support ($\beta= -.11$), and anxiety sensitivity ($\beta= .33$) predicted internet addiction at a statistically significant level as shown in the table. It can be inferred considering this finding that, the regression model which involves procrastination, social support, and anxiety sensitivity predicts 31% of internet addiction.

5.2. Results Related to the presence of romantic relationship

Table 5: The Results of T-test for Presence of Romantic Relationship

					Levene's Test		T-Test		
	Romantic Relationship Status	*N*	$\bar{X}$	*S. D.*	*F*	*p*	*t*	df	*p*
Internet addiction	Single	172	27,13	7,233	.039	.843	4.034	325	.000
	With a partner	186	23,60	6,917					

Procrastination	Single	172	36,54	11,168	1.444	.230	1.267	325	.206
	With a partner	186	35,32	10,617					
Social support	Single	172	57,02	16,391	3.283	.071	-6.159	325	.000
	With a partner	186	66,97	14,421					
Anxiety sensitivity	Single	172	25,01	15,925	.175	.676	.512	325	.609
	With a partner	186	24,37	16,750					

As indicated in Tables 5 internet addiction and social support levels significantly varied depending on the romantic relationship status of the participants. Regarding internet addiction, the mean scores of single participants ($\bar{x}$= 27.13) were statistically and significantly higher than participants with a partner ($\bar{x}$= 23.60). Meanwhile, regarding social support, the mean scores of single participants ($\bar{x}$= 57.02) were statistically and significantly lower than participants with a partner ($\bar{x}$= 66.97). No significant difference was found regarding procrastination and anxiety sensitivity.

6. Discussion

In this study, there is a positive relationship between internet addiction and procrastination and anxiety sensitivity, and a negative significant relationship between internet addiction and perceived social support. In other words, as the procrastination tendency and anxiety sensitivity increase, internet addiction increases; and as perceived social support increases, internet addiction decreases. Besides, internet addiction was predicted by procrastination, social support and anxiety sensitivity as we hypothesized.

According to the findings of our study, individuals with a high procrastination tendency are likely to have more internet addiction and procrastination predicted internet addiction. In literature, procrastination predicts internet addiction better than academic procrastination (Uzun et al. 2004), and those who procrastinate tend to be more vulnerable to internet addiction (Genga et al., 2018). According to the cognitive behavioral approach, the person who shows the behavior of procrastination prefers to do other things instead of starting work (Burka & Yuen, 1983 as cited in Akbay, 2009). The behavioral approach also argues that procrastination is a behavior that provides pleasure to the individual for a short time (Lamba, 1999). In line with these perspectives, participants who have higher procrastination scores in this study may delay the things they should do; instead spend more time to have instant pleasure while being on the internet and this situation may turn into a habit and then an internet addiction. Whatever they do on the internet (social media, online games, web-surfing, or whatever they have fun), the participants of this study may procrastinate the things and prefer instant pleasure instead of doing what they should do. In line with this finding, overcoming procrastination may help coping with internet addiction.

According to our findings, individuals with a lower perceived social support had higher internet addiction scores and perceived social support predicted internet addiction negatively. When individuals experience obstacles in their social relations, they often resolve them through the Internet to maintain their personal relations (Inderbiten et al., 1997; Papacharissi & Rubin, 2000). Hence, the inadequacy in family communication and the need to meet social needs are effective in the increase of internet use and its transformation into an addiction (Bayraktutan, 2005; Ekşi & Ümmet, 2013; Özcan & Buzlu, 2005; Tanrıverdi, 2012). Whang et al. (2003) concluded that internet addicted individuals have high levels of loneliness, and that loneliness increases the time spent on the internet. In other words, inadequate perceived social support can accelerate internet addiction. It may be similar participants in our research. Participants who have lower levels of perceived social support may compensate it via pseudo social relations through social media, if they have problems in their families they may suppress the lack of social support with online games, and such kinds of activities may provoke internet addiction. To cope with internet addiction, social support of individuals may be enhanced. If the individual learns more appropriate social skills,

overcomes social fears she may have more social support, so helping the individuals with lower social support such skills may prevent them the internet addiction.

Our findings revealed that there is a significant relationship between internet addiction and anxiety sensitivity and anxiety sensitivity predicted internet addiction. Anxiety sensitivity has "fear of bodily symptoms", "fear of losing cognitive control", and "fear of being aware of anxiety symptoms". Physically, the individual is afraid of having a heart attack and experiencing shortness of breath (Rodriguez et al., 2004; Watt & Stewart, 2000). In the cognitive dimension of anxiety sensitivity, the individual thinks that she will have difficulty focusing her mind or controlling her thoughts (Taylor et al., 2008). The social dimension of anxiety sensitivity includes fears about being noticed by the society (Taylor, 1995). Similarly, individuals with internet addiction tend to escape from reality more than non-addicts Whang et al. (2003). In our study, individuals with higher anxiety sensitivity may escape from such mental and social difficulties and change his or her focus from reality to virtual universe via internet use to get away from factors that increase anxiety sensitivity. In other words, if people with higher anxiety sensitivity may regulate their anxiety, they may be less likely to develop internet addiction.

In our study, mean scores of single participants regarding internet addiction were statistically and significantly higher than participants with partners. While keeping in mind that single individuals are more prone to internet addiction (Ko et al., 2007; Yen et al., 2007), and they try to eliminate the perception of loneliness through sharing sites and interactive chats, thus reinforcing their addictive behavior with the feeling of relaxation (Tsai & Lin, 2000; Caplan, 2007 cited in Aslan & Yazıcı, 2016). Single participants of our study may feel the same way to keep away feelings of loneliness and have relaxation via internet use. Such an escape via internet may lead to internet addiction. Regarding perceived social support, in our study, single participants' mean scores were statistically and significantly lower than those with one partner. When the perceived social support level is low, the individual feels lonely (Salimi & Bozorgpour, 2012; Suri et al., 2019) and use the internet more (Büyükşahin-Çevik & Yıldız, 2017). Meanwhile, a partner may be perceived the first social support and prevents the individual heavy feelings of loneliness. As a result, single individuals of our participants may have higher internet addiction scores due to the lower perceived social support. In this regard, if the individuals' social skills are improved, they may have more social bonds and it may enhance their social support as a result internet addiction may decrease.

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Investigation of the Effect of High School Students' Attitudes to Physical Education Course on Empathic Behavior in Sports Environment

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Abstract
The aim of this study is to examine the possible effects of high school students' attitudes towards Physical Education and Sports lessons on their empathic behaviors in the sports environment. Mean age $\bar{x}$ =15.12± SD=1.05, n=133 male, n=117 female, total n=250 high school students participated in the study. In the study, the "Physical Education Lesson Attitude Scale for High School Education Students" developed by Güllü and Güçlü (2009) and the "Empathy Scale in Sports" developed by Erkuş and Yakupoğlu (2001) were used. In the analysis of the data "Independent groups t-test" was to compare students' scores on used empathy in sports and physical education lesson attitudes according to gender, pearson correlation analysis was used for the relationship of the scales according to the age variable, and simple linear regression analysis was used for the prediction of empathy in sports. According to the results, it was found that the attitude towards physical education and sports lessons is a significant predictor of empathy in sports.

Keywords: Empathy, Pe Lesson, Attitude, Sport

1. Introduction

With the development of technology, the game activities attended by children and young people in the parks and streets that we are accustomed to seeing and participating in in the 20th century have begun to move to the virtual environment in the 21st century. Computers, smart phones, game consoles and applications that act as intermediaries in the use of these tools have also provided the creation of a social network with third-party options, changing the habitual routines of individuals and making the existence of a different order a part of daily life. The interest of children, adolescents and young people in digital games has increased especially with the Covid-19 pandemic, and it has been observed that the number of scientific studies focused on digital game addiction has increased in the literature (Barr & Copeland-Stewart, 2022; Çakıroğlu et al., 2021; Nguyen et al., 2020; Paschke et al., 2021; Wannigamage et al., 2020). The effect of Physical Education and Sports classes, which is one of the first areas in which individuals grasp the importance of a healthy and active life, on basic movement education,

sports and creating sportive awareness is an undeniable reality (Klakk et al., 2013). On the other hand, it is also known that these courses are included in the curriculum of education and the important role of movement and sports interest in the formation of cognitive, affective and social contributions to human life (Klakk et al., 2014; McKenzie et al., 1996). It should also be added that the situations where the applications of virtual worlds, which have features that support sedentary life, are not balanced with factors such as movement training, sports, and healthy life, poses possible threats in every aspect of the health of young generations (Hazar & Hazar, 2018; Hazar, Tekkurşun Demir, Namlı, & Türkeli, 2017). It is known that the development of technology affects active life. In this dimension, it is important in many respects to maintain strong attitudes towards Physical Education and Sports lessons in increasing health, sports and mobility. Evaluation of the attitude towards Physical Education and Sports course will also help in the management of quality-enhancing activities in this field. In addition to the effects of attitudes on human life, the effects of empathy, which is one of the most important phenomena of social life, on behaviors and social psychology are known. Evaluation of the effects of attitudes towards Physical Education and Sports lessons on empathetic behavior in the sports environment will be able to provide a scientific framework that will explain the behaviors in the sports environment. From this point of view, the aim of this study is to examine the possible effects of high school students' attitudes towards Physical Education and Sports lessons on their empathic behaviors in the sports environment.

Attitudes are generally evaluations of people, objects, and thoughts(Fazio, 1986a; Oskamp & Schultz, 2005a; Zanna & Rempel, 2008). Morris et al. (2008) defined the concept of attitude as “a relatively stable organization of beliefs, feelings and tendencies towards something or someone, an attitude object” (Morris et al., 2008). Attitudes can be shaped as positive or negative as can be understood from the definitions. We can express positive attitudes by having, adopting, and loving a positive opinion of other people, objects, or thoughts. It is possible to express negative attitudes as not being interested in other people, objects and thoughts, not taking action, not adopting and not liking (Demirhan & Altay, 2001; Terry, 2001). Many factors play a role in the formation of attitudes. These factors can be said based on various researches such as age, gender, genetics, personality, family, education, socioeconomic level, education, society, media, religion and culture (Banaji & Heiphetz, 2010; Eagly & Chaiken, 1993; Fazio, 1986b; Oskamp & Schultz, 2005b; Rajecki, 1990; Terry, 2001). It is possible to talk about a close relationship between these factors and sports, a phenomenon that is strongly involved in human life in terms of social, cultural, psychological, physiological and emotional aspects. It is possible to observe from the studies in the field that the Physical Education and Sports course is also the subject of many attitude-oriented studies due to its different structure from other courses (Dagdemir & Aka, 2019; Gürbüz, Özkan, & Gürbüz, 2012a; Silverman & Subramaniam, 1999; Yilmaz, 2019). Attitudes of individuals can affect their lives and health. Individuals' positive attitudes towards healthy life can bring physical activity to the forefront by staying away from harmful substances. Physical Education and Sports classes are included in the education curricula in order to develop the individual's attitudes towards a healthy life from a young age. Physical education; It is defined as training activities that ensure proper functioning and development by regulating the harmony between muscles and joints, improve the structural and functional values of the person's body, and contribute to the efficient use of his bodily strength (Açak, 2006). In this context, it can be said that the individual has a positive development towards physical education and sports lessons from a young age, has a positive contribution to adopting a healthy lifestyle and values education. (Capel & Piotrowski, 2000). Although physical education and the concept of sports are closely related, there are some differences between them. While sports have a more competitive structure, physical education activities are more related to the personal development of the individual. Values education, which is one of the main objectives of the Physical Education and Sports course, is also found in sports. Among these values, empathy emerges as a concept that people need throughout their lives. Empathy can be defined as the process of putting oneself in the place of the other person and looking at events from their point of view, understanding and feeling the feelings and thoughts of that person correctly and conveying this situation to them. It is defined as being able to Express oneself to the other person that they understand them correctly (Davis, 2006; Dökmen, 1990; Elliott et al., 2011). As can be understood from this definition, empathy is a phenomenon that has an important role in human life. When we consider the concept of empathy in sports environments, it can be said that athletes are in a social relationship with their coaches, competitors, teammates, referees and spectators, and using these features in the performance process can affect success. In sporting events, the player's use of empathic skills with regard to his teammates, coaches and opponents; It can be an important factor in predicting how they will behave,

in the formation of team spirit and, accordingly, in team success (Dorak & Vurgun, 2006; Erkuş & Yakupoğlu, 2001).

The aim of this study is to evaluate the effects of high school students' attitudes towards Physical Education and Sports courses on their empathic behaviors in the sports environment.

2. Method

This research was designed as a survey. “Survey models are research approaches that aim to describe a past or present situation as it exists. The event, individual or object that is the subject of the research is tried to be defined in its own conditions and as it is. No effort is made to change or influence them in any way”(Karasar, 2009). Average age $\bar{x}$ =15.12± SD=1.05, n=133 male, n=117 female, total n=250 high school students participated in the study. "Physical Education Attitude Scale for High School Education Students" developed by Güllü and Güçlü (2009) was used to determine the attitudes of high school students included in the study towards physical education lesson. There are 35 items in total, 11 of which are negative and 34 of which are positive, in the Physical Education Lesson Attitude Scale. The scale is in a 5-point Likert type, and the grading format is made as "Totally Agree (5), Agree (4), Undecided (3), Disagree (2), Strongly Disagree (1)". The 11 negative items in the scale are 3, 17, 19, 20, 24, 25, 26, 29, 30, 34, 35 and 24 items. While the lowest score that can be obtained from the scale is 35, the highest score that can be obtained is 175. The increase in the score indicates that the level of attitude towards the physical education lesson is high (Güllü & Güçlü, 2009). In order to measure the empathy levels of the athletes, the 'Empathy Scale in Sports' developed by Erkuş and Yakupoğlu (2001) was used. The Empathy Scale in Sports is a scale consisting of 16 items and two factors (prediction and emotional empathy in sports). The scale is evaluated between 0 (never) and 4 (always) points. Accordingly, the scores obtained from the scale range from 0 to 64. The high total score to be obtained from the scale indicates that the athlete's empathy is also high (Erkuş & Yakupoğlu, 2001b). In the analysis of the data "Independent groups t-test" was to compare students' scores on used empathy in sports and physical education lesson attitudes according to gender, pearson correlation analysis was used for the relationship of the scales according to the age variable, and simple linear regression analysis was used for the prediction of empathy in sports.

3. Results

Table 1: Distribution of students according to gender

	n	%
Male	133	53,2
Female	117	46,8

Table 1 shows the distribution of students by gender. It was determined that 133 (53.2%) of the students were boys and 117 (46.8%) were girls.

Table 2: Descriptive statistics results of the scores the students got from the scales

	n	$\overline{X}$	ss
Emotional Empathy in Sports	250	15,84	3,75
Prediction in Sports	250	33,78	7,01
Empathy in Sports Total	250	49,62	9,83
Physical Education Lesson Attitude	250	128,73	19,83

In Table 2, the results of the descriptive statistics scores obtained by the students from the scales are given. As a result of the analysis, the mean score of the emotional empathy dimension in sports was 15.84, the mean score of the prediction dimension in sports was 33.78, and the total mean score of the empathy scale in sports was 49.62; it was determined that the mean score of the physical education lesson attitude scale was 128.73.

Table 3: Comparison results of students' empathy scale scores in sports by gender

	Gender	n	$\overline{X}$	ss	t	p
Emotional Empathy in Sports	Male	133	15,37	3,73	-2,11	,03
	Female	117	16,37	3,72		
Prediction in Sports	Male	133	33,13	6,50	-1,58	,11
	Female	117	34,53	7,50		
Empathy in Sports Total	Male	133	48,50	9,26	-1,93	,05
	Female	117	50,90	10,33		

Table 3 shows the results of the "independent groups t-test" used to compare students' empathy scale scores in sports by gender. As a result of the analysis, a statistically significant difference was found according to gender in the emotional empathy sub-dimension of the students in sports (p<.05).

Table 4: The results of the relationship between the ages of the students and the empathy scale scores in sports

		Emotional Empathy in Sports	Prediction in Sports	Empathy in Sports Total
Age	r	-,031	,110	,067
	p	,631	,082	,292

Table 4 shows the result of the Pearson correlation analysis showing the relationship between the ages of the students and their empathy scale scores in sports. As a result of the analysis, no significant relationship was found between the ages of the students, and the empathy scale scores in sports (p>.05).

Table 5: Comparison results of students' physical education lesson attitude scores by gender

	Gender	n	$\overline{X}$	ss	t	p
Physical Education Lesson Attitude	Male	133	130,53	20,57	1,53	,12
	Female	117	126,68	18,83		

In Table 5, the results of the "independent groups t-test" used in the comparison of the physical education lesson attitude scores of the students according to gender are given. As a result of the analysis, it was determined that the physical education lesson attitude scores of the students did not show a statistically significant difference according to gender (p>.05).

Table 6: The results of the relationship between the ages of the students and their physical education course attitude scores

		Physical Education Lesson Attitude
Age	r	,078
	p	,220

Table 6 shows the result of the Pearson correlation analysis showing the relationship between the ages of the students and their physical education course attitude scores. As a result of the analysis, no significant relationship was found between the ages of the students and their physical education lesson attitude scores (p>.05).

Table 7: The effect of students' physical education attitude on emotional empathy in sports

Variable	B	Std. Dev	β	t	p
(Constant)	9,30	1,50	--	6,17	,00

Physical education lesson attitude	,05	,01	,26	4,38	,00
R= ,26 R2adj= ,07 F(1,248) = 19,19 p= ,00					

Table 7 shows the results of simple linear regression analysis regarding the prediction of emotional empathy in sports. According to the results of the analysis, it was determined that physical education lesson attitude was a significant predictor of emotional empathy in sports (p<.05) and explained 7% of the total variance.

Table 8: The effect of students' physical education lesson attitude on prediction in sports

Variable	B	Std. Dev.	β	t	p
(Constant)	17,07	2,71	--	6,28	,00
Physical education lesson attitude	,13	,02	,36	6,22	,00
R= ,36 R2adj= ,13 F(1,248) = 38,72 p= ,00					

Table 8 shows the results of simple linear regression analysis for predicting prediction in sports. According to the results of the analysis, it was determined that physical education lesson attitude was a significant predictor of sports prediction (p<.05) and explained 13% of the total variance.

Table 9. The effect of students' physical education lesson attitude on empathy in sports

Variable	B	Std. Dev.	β	t	p
(Constant)	26,37	3,81	--	6,90	,00
Physical education lesson attitude	,18	,02	,36	6,16	,00
R= ,36 R2adj= ,12F(1,248) = 37,95 p= ,00					

Table 9 shows the results of simple linear regression analysis regarding the prediction of empathy in sports. According to the results of the analysis, it was determined that the physical education lesson attitude was a significant predictor of empathy in sports (p<.05) and explained 12% of the total variance.

4. Discussion

The aim of this study is to examine the effects of higher education students' attitudes towards Physical Education and Sports lessons on their empathic behaviors in the sports environment. According to the data obtained in the study, it was determined that the average score of the attitude scale towards the Physical Education and Sports lesson in sports was 128.73. Considering that the lower score of the scale is 35 and the upper score is 175, it can be said that the attitudes of the sample group towards Physical Education and Sports course are positive. These results are supported by different studies in the field (Choudhary, 2021; Czyz & Toriola, 2012; Gürbüz, ÖZKAN, & Gürbüz, 2012b; Siegel, 2007; Stelzer, Ernest, Fenster, & Langford, 2004; Zekeriya & Atilla, 2011). According to the data obtained in the study, no significant difference was found in the attitudes of the students towards the Physical Education and Sports course according to the gender variable. Similar results have been obtained in academic studies conducted in recent years (Böke, Güllü, & Kış, 2020; Kılıç & Çimen, 2018; Uluışık, Beyleroğlu, Suna, & Yalçın, 2016) (Göksel & Çağdaş, 2016; Keskin, 2015; Tortop, 2005) There are also studies in the literature that found a significant difference in favor of men in the attitudes of gender towards physical education and sports lessons. (Balyan, 2009; Kangalgil, Hünük, & Demirhan, 2006; Koca, Aşçı, & Demirhan, 2005). When the history of the studies is examined, it is revealed that the studies with significant differences in favor of men were conducted earlier than the studies without any difference. It can be interpreted that the Turkish Women's Basketball and Volleyball National Teams' achievements in organizations such as the European Championship, World

Championship and Olympics after 2010 contributed to the development of Turkish society and girls' attitudes towards physical education and sports.

According to the data obtained in the study, a significant difference was found in favor of girls in the total empathy scores in the sports environment. There are various studies in the literature that have found a difference in favor of women in the effect of gender on empathic behavior (Balcı, 2012; Kavussanu & Boardley, 2009; Manger et al., 2001) It can be said that empathic behavior skill is related to empathy skill in sports environment. As a result of the analysis, no significant relationship was found between the ages of the students and the empathy scale scores in sports ($p>.05$). It can be said that the closeness of the age group considered in the study can be considered as a factor in reaching this result.

According to the data obtained in the research, there are simple linear regression analysis results related to the prediction of emotional empathy in sports. According to the results of the analysis, it was determined that physical education lesson attitude was a significant predictor of emotional empathy in sports ($p<.05$) and explained 7% of the total variance. According to the results of simple linear regression analysis regarding the prediction of empathy in sports, it was determined that physical education lesson attitude was a significant predictor of empathy in sports ($p<.05$) and explained 12% of the total variance. In addition, according to the results of simple linear regression analysis regarding the prediction of prediction in sports, it was determined that physical education lesson attitude was a significant predictor of prediction in sports ($p<.05$) and explained 13% of the total variance. It can be said that attitudes towards Physical Education and Sports lessons are effective as a predictor of empathy sub-dimensions in sports. It can be said that the theoretical and practical dimensions of the courses related to sports education in the curriculum of the Physical Education and Sports courses will contribute to the empathy in the sports environment together with the positive attitude (Arufe-Giráldez et al., 2019). On the other hand, it can be said that the values such as cooperation, cooperation and respect, which are included in the game philosophy of the game activities in the Physical Education and Sports course, can be an effective factor on the empathic behavior towards the coach, his/her teammates, referees and other stakeholders in the sports environment (Dorak & Vurgun, 2006). Considering the positive effects of empathy behavior on team spirit, respect for the game, respect for the opponent and performance in sports, it can be said that attitudes towards Physical Education and Sports lessons are important in supporting the basic philosophy of sports. (Sevdalis & Raab, 2014). In addition, considering that the level of empathic behavior is an important factor in participating in sports, it can be said that besides developing an attitude towards physical education and sports lessons, students' empathy levels are also important, and situations where both features are combined will have a beneficial feature in terms of sports (Kwon, 2018). According to the results of the research, it can be stated that institutions and people who are in a decision-making position especially on Physical Education and Sports lessons have a responsibility in this dimension for the strengthening and development of sports culture.

5. Conclusion

In the light of these data, it was concluded that the attitude towards Physical Education and Sports course is a significant predictor of empathy in sports. It can be said that attitudes towards Physical Education and Sports course can be considered as one of the factors in explaining empathetic behavior in sports environment.

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The Analysis of Reading Motivation of High School Students Based on Certain Variables

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Abstract
Reading habit, the ability to sustain the reading activity, is required for quality reading. Those who tend to read need to be motivated one way or another. Reading motivation is closely associated with the reading goals and trends of the individuals, and the time they devote to reading. The present study aims to determine the reading motivation of high school students based on certain variables. Thus, the reading motivation levels of the high school students, and the differences between their motivation levels based on gender, grade level, school type, socioeconomic level, education level and occupation of the parents, newspaper and magazine subscription, internet access, and the reasons for not reading variables are determined. The study was conducted with 1070 students attending nine high schools in Sinop province in Turkey and screening method during the 2019-2020 academic year. The study findings demonstrated that there were significant differences between reading motivation levels of the high school students based on gender, school type, newspaper and magazine subscription, internet access and the reason for not reading variables, while no significant differences were determined based on the grade level, socioeconomic status, education level, and the occupation of the parents.

Keywords: Reading, Reading Education, Reading Motivation

1. Introduction

Although it varies from person to person, it could not be denied that reading is a necessity. Everyone reads for different reasons. At every stage of life, an individual needs to read something with or without a purpose. In this process, it is important to maintain quality reading. For quality reading, individuals should desire to read. Thus, the reading goals and trends of the individuals, and the time they devote to reading are associated with their motivation.

The most important tool required by the modern individual, who is a member of the information society, is the reading skill to solve the problems in daily life, access knowledge, determine the required knowledge, associate it with prior knowledge, and employ it when necessary (Bozkurt, 2006).

In recent years, the contribution of qualified reading habits in training healthy individuals has been emphasized. Thys, PISA (International Student Assessment Program) project allowed the nations that desire to determine the level of academic achievement of the students on an international platform when compared to other nations (Berberoğlu & Kalender, 2005).

One of the motivating factors for the present study was the fact that Turkey did not exhibit significant achievements in reading comprehension skills in PISA and moved back in reading skill rankings over the years. Turkey ranked 39th out of 65 countries in PISA 2009, while it ranked 42nd out of 65 countries in 2012 and 50th out of 72 countries in 2015. In PISA 2015, the rate of students with lower proficiency (level 1 and below) in reading skills increased when compared to PISA 2009 and PISA 2012, while the rate of students with high proficiency (5th level and above) in PISA 2009 and PISA 2015 decreased when compared to 2012. The mean rate of students at the top level was 5.6% in PISA 2015, the same rate was 8.3% across OECD countries, and 0.06% in Turkey (Taş, Arıcı, Ozarkan, & Liberty, 2016).

As is known, the school is the first and most effective environment where students acquire reading skills. Motivation, which is the most important factor behind the acquisition of these skills, is associated with student beliefs, goals and values, and affects activity choices (Eccles & Wigfield, 2002). Thus, the research problems of the present study that aimed to determine the reading motivation levels of the high school students based on various variables was determined as follows:

1. What is the general reading motivation level across high school students?
2. Is there a significant difference between the reading motivations of the students based on gender, grade level, socioeconomic level of the parents, the education level of the mother, the education level of the father, newspaper subscription frequency, internet access, the reasons for not reading?

1.1. The Aim and Significance of the Study

Reading plays a key role in cultural knowledge. High school students, who are active in social life, should be accultured for better communication skills. Thus, it could be suggested that reading leads to the acquisition of the social values of the self, the environment and the society. Based on the present study findings, the variables that affect the reading motivation of the high school students were determined. It could be suggested that the interpretation of these findings and resulting recommendations could eliminate of the main factors that prevent high school students from reading and improving their reading habits, while contributing to the literature.

2. Method

The research model, the study group, data collection and analysis are discussed in this section.

2.1. The Research Model

The present study is a relational screening research. Screening models aim to describe a current or past case in detail. Screening model has a past or present state as it is, the realization of learning and the desired behaviors in the individual. Relational screening model is used to determine the existence of co-variation between two or more variables. In the relational screening model, the variables together whether it has changed; if there is a change, it is tried to determine how it is (Karasar, 2000).

2.2. The Study Sample

The study sample included 1070 volunteer students attending nine high schools in Sinop province in Turkey in the 2019-2020 academic year. This sample was preferred in the research as being easily accessible.

2.3. Data Collection

The study data were collected with the form. A form including two section; demographical information and “adult reading motivation scale” was given to the students. Adult Motivation Scale, developed by Schutte and Malouff (2007) and adapted to Turkish language by Yıldız et al. (2013). The scale included 4 factors and 21 items. As a result of the analyses, the scale was finalized with 19 items. For the validity study of the scale, confirmatory factor

analysis was performed. Within the scope of reliability study, test-retest method was used, and Cronbach alpha internal consistency coefficient was calculated. At the end of the study, a valid and reliable scale used for analyzing the reading motivations of adults was obtained.

2.4. Data Analysis

The study data were analyzed in three stages. In the first stage, missing data were determined, and it was found that the rate of missing data was below 5% for almost all variables. The MCAR Test revealed that the missing data were randomly distributed within the data set (p>.05). In the second stage, the data validity and reliability were determined for the Reading Motivation Scale. The confirmatory factor analysis confirmed the structure reported in the literature. Mc Donald's ω coefficient was calculated for each scale dimension. In the last stage, the hypotheses for each research problem were tested (data size, continuous dependent variable, normality, homogeneity of the variances). In the final stage, independent samples t-test, ANOVA and descriptive statistics were employed.

3. Findings

In this section, findings associated with the research problems are discussed.

1. What is the general reading motivation level across high school students?

Table 1: Includes descriptive statistics conducted on the reading motivation scale and four sub-dimension scores

Scales	Minimum	Maximum	Mean	SD	Skewness		Kurtosis	
Reading As Part Of The Self	8	40	26,96	6,26	-,428	,075	,156	,149
Reading Self Efficacy	4	20	12,60	3,29	-,066	,075	-,034	,149
Reading Recognition	3	15	9,57	3,07	-,247	,075	-,497	,149
Other Realms	4	20	13,26	3,45	-,377	,075	-,003	,149
Reading Motivation - Total	19	95	62,39	12,84	-,403	,075	,521	,149

The review of Table 1 revealed that the maximum possible score in the "reading as a part of the self" dimension was 40, and the minimum possible score was 8, the maximum score for the “reading efficacy” dimension was 20, and the minimum possible score was 4, the maximum possible score for the "reading for recognition" dimension was 15, the minimum possible score was 3, and the maximum possible score for the "reading to do well in other realms" dimension was 20, and the minimum possible score was 4, the maximum possible score in the reading motivation scale total score was 95 and the minimum possible score was 19. The analysis of the mean high school student scores in all dimensions demonstrated that their motivation was generally above the moderate level.

The assumptions were controlled before the parametric tests, which were conducted to determine whether the reading motivation of high school students differ based on variables such as gender, grade level, school type, socioeconomic level, education level and occupation of the parents, the frequency of newspaper and magazine subscription and the reason for not reading. The scores obtained from the reading motivation scale were continuous. Furthermore, the skewness and kurtosis coefficients were -,497 and ,521, respectively. Tabachnick and Fidell (2014) stated that values between -1,5 and +1,5 were acceptable for normal distribution. Normality was tested via the Q-Q graph, which matched the observed value for each score with the expected value in the normal distribution and it was revealed the graph yielded a straight line that referred to normal distribution. Later, the variances of the dependent variables were analyzed with the Levene F test for each sample equality. The variances of the dependent variable were equal for each sample (p>,01).

a) Is there a significant difference between the reading motivations of the students based on gender?

Table 5 presents the results of the independent samples t-test for the reading motivations of high school students based on gender.

Table 2: T-test results for the reading motivations of high school students based on gender

Gender	N	Mean	Std. Deviation	sd	t	η2
Female	583	65,54	12,15	1070	**9,214***	,074
Male	489	58,57	12,57			

*p<0.01

Reading motivations of high school students were statistically significantly different based on gender, ($t_{(1070)}$=9,214, p<,01). The reading motivation of female students ($\bar{X}$=65,54) was higher than that of male students ($\bar{X}$=58,57). Furthermore, the effect size was determined as ,074.

b) Is there a significant difference between the reading motivations of the students based on grade level?

Table 3 presents the ANOVA results for the reading motivations of high school students based on grade level.

Table 3: ANOVA results for the reading motivation of high school students based on grade level

Grades	N	Mean	Std. Deviation	Source of the Variance	Sum of Squares	sd	Mean Square	F
9th Grade	340	62,41	13,17	Between Groups	1207,646	3	402,549	2,506
10th Grade	271	62,73	11,68	Within Groups	163519,927	1018	160,629	
11th Grade	246	64,16	11,84	Total	164727,573	1021		
12th Grade	165	60,70	14,29					
Total	1022	62,64	12,70					

*p>0,05

Reading motivation of high school students does not significantly differ based on grade level, $F_{(3, 1018)}$=2,506, p>,05.

c) Is there a significant difference between the reading motivations of the students based on school type?

The ANOVA results for the reading motivations of high school students based on school type were presented in.

Table 4. ANOVA results for the reading motivation of high school students based on school type

School Type	N	Mean	Std. Deviation	Source of Variance	Sum of Squares	sd	Mean Square	*F*	*η²*	Diff.
1.School	155	61,88	12,48	Bw. Groups	5118,543	8	639,818	*3,967* *	*,029*	**6>8**
2.School	125	64,06	12,53	Wt. Groups	171624,814	1064	161,302			**9>8**
3.School	93	62,48	12,24	Total	176743,357	1072				
4.School	97	61,90	12,19							
5.School	83	58,65	14,83							
6.School	226	63,97	12,16							
7.School	107	63,33	12,06							
8.School	102	57,71	12,84							
9.School	85	65,16	14,12							
Total	1073	62,39	12,84							

*p<0,01

It was found that the reading motivations of high school students significantly differed based on school type, $F_{(8,1064)}$=3,967, p<,01. Furthermore, the effect size, eta squared, was ,026 and indicated a moderate effect. Scheffe test revealed that the reading motivations of the students studying at 6. School ($\bar{X}$=63,97) and 9. School ($\bar{X}$=65,16) were higher than those studying at 8. School ($\bar{X}$=57,71).

d) Is there a significant difference between the reading motivations of the students based on socioeconomic level of the parents?

Table 5: ANOVA results for the reading motivations of the students based on socioeconomic level of the parents

Income	N	Mean	Std. Deviation	Source of Variance	Sum of Squares	sd	Mean Square	F
0-1000	78	62,32	12,44	Between Groups	1610,404	5	322,081	1,946
1001-2000	240	61,47	12,45	Within Groups	168671,987	1019	165,527	
2001-3000	241	60,91	13,85	Total	170282,391	1024		
3001-4000	203	63,31	12,98					
4001-5000	128	63,70	11,42					
5001+	135	64,29	13,12					
Total	1025	62,42	12,90					

*p>0,05

Reading motivation of high school students do not significantly differ based on income status, $F_{(5, 1024)}$=1,946, p>,05.

e) Is there a significant difference between the reading motivations of the students based on the education level of the father?

ANOVA results for the reading motivations of high school students based on the education level of the father were presented in Table 9.

Table 6: ANOVA results for the reading motivations of high school students based on the education level of the father

Education Level	N	Mean	Std. Deviation	Source of Variance	Sum of Squares	sd	Mean Square	F
Primary School	316	61,66	13,64	Between Groups	880,682	3	293,561	1,775
Secondary School	228	61,55	12,93	Within Groups	172795,412	1045	165,354	
High School	256	62,73	11,60	Total	173676,095	1048		
University	249	63,84	13,00					
Total	1049	62,41	12,87					

No statistically significant difference was observed in the reading motivations of high school students based on the education level of the father, $F_{(3, 1048)}$=1,775, p>,05.

f) Is there a significant difference between the reading motivations of the students based on the education level of the mother?

Table 7 presents the ANOVA results for the reading motivations of the students based on the education level of the mother.

Table 7: ANOVA results for the reading motivations of high school students based on the education level of the mother

Education Level	N	Mean	Std. Deviation	Source of Variance	Sum of Squares	sd	Mean Square	F
Primary School	400	61,41	13,59	Between Groups	822,448	3	274,149	1,653
Secondary School	250	63,24	11,70	Within Groups	171529,025	1034	165,889	
High School	249	62,48	13,58	Total	172351,472	1037		
University	139	63,75	11,42					
Total	1038	62,42	12,89					

*p>0,05

There was no statistically significant difference between the reading motivations of high school students based on the education level of the mother, $F_{(3, 1034)}$=1,653, p>,05.

i) Is there a significant difference between the reading motivations of the students based on newspaper subscription frequency?

The ANOVA results for the reading motivations of high school students based on newspaper subscription frequency were presented in Table 8.

Table 8: ANOVA results for the reading motivations of high school students based on newspaper subscription frequency

Subscription Frequency	N	Mean	Std. Deviation	Source of Variance	Sum of Squares	sd	Mean Square	F	η²	Diff.
No subscription(1)	391	60,10	13,17	Bt. Groups	3687,153	3	1229,051	7,555*	,021	**4>1** **2>1**
Occasional subscription(2)	529	63,49	12,33	Wt. Groups	171793,977	1056	162,684			
Frequent subscription(3)	101	63,50	13,13	Total	175481,130	1059				
Daily subscription(4)	39	67,14	13,24							
Total	1060	62,38	12,87							

*p<,05

The findings indicated that there was a statistically significant difference in the reading motivation of high school students based on newspaper subscription frequency, F(3, 1056)=7,555, p<,05. The effect size, eta squared, was found as 0,02, which indicated a low effect. Scheffe test results revealed that the high school students, who stated that their newspaper subscription was occasional ($\bar{X}$=63,49) and daily ($\bar{X}$=67,14) had a statistically significantly higher reading motivation when compared to those with no subscription ($\bar{X}$=60,10).

j) Is there a significant difference between the reading motivations of the students based on magazine subscription frequency?

Table 9 presents the ANOVA results for the reading motivation scores of the students based on magazine subscription frequency.

Table 9: Kruskal Wallis H results for the reading motivations of high school students based on magazine subscription frequency

Subscription Frequency	N	SO	H	df	E²	Diff.
No subscription(1)	531	60,00	41,179*	3	,037	**2>1**
Occasional subscription(2)	444	64,42				**3>1**
Frequent subscription(3)	60	66,99				
Daily subscription(4)	24	66,37				
Total	1059	62,39				

*p<,05

A statistically significant difference was observed in the reading motivation of high school students based on magazine subscription frequency, $H_{(3)}$= 41,179, p<,05. The effect size, epsilon squared, indicated a mid-level effect with a value of ,037. Bonferroni test results revealed that the high school students who reported magazine subscription as occasional (SO=64,43) and frequent (SO=66,99) had a statistically significantly higher reading motivation compared to those reported no subscription (SO=60,00).

k) Is there a significant difference between the reading motivations of the students based on internet access?

Table 9 presents the t-test results for the reading motivations of high school students based on internet access.

Table 9: T-test results for the reading motivations of the students based on internet access

Internet Access	N	Mean	Std. Deviation	sd	t	η²
Yes	939	62,68	12,93	1058	2,185*	,04
No	121	59,97	12,21			

*p<,05

Reading motivations of high school students were statistically significantly different based on internet access, $t_{(1058)}$=2,185, p<,05. The findings indicated that the high school students with internet access had a higher reading motivation ($\bar{X}$=62,68) when compared to those without internet access ($\bar{X}$=59,97). Furthermore, the effect size, eta squared, was found as 0,02, which indicated a low effect.

l) Is there a significant difference between the reading motivations of the students based on the reasons for not reading?

ANOVA results for the reading motivations of the students based on the reasons for not reading were presented in Table 10.

Table 10: ANOVA results for the reading motivations of the students based on the reasons for not reading

Reasons For Not Reading	N	Mean	Std. Deviation	Source of Variance	Sum of Squares	sd	Mean Square	F	η²	Diff.
Time Constraints(1)	248	66,00	12,36	9287,392	9287,392	5	1857,478	12,036*	,057	**1>2** **1>3**
Indolence(2)	248	60,23	11,39	152939,553	152939,553	991	154,329			**1>5**
Dislike(3)	163	58,72	14,60	162226,945	162226,945	996				**6>2**
Other Priorities(4)	100	62,50	11,93							**6>3**
Lack Of Habit(5)	164	60,03	10,34							**6>5**
Other Reasons(6)	74	67,41	15,29							
Total	997	62,15	12,76							

*p<,05

A statistically significant difference was found between the reading motivation of high school students based on the reasons for not reading, $F_{(5, 991)}$=12,036, p<,05. The effect size, eta squared, was determined as ,057, which is an indicator of mid-sized effect. Scheffe test results revealed that the high school students who reported time

constraint ($\bar{X}$=66,00) as the reason for not reading were statistically significantly higher when compared to the students who reported the reason for not reading as indolence ($\bar{X}$=60,23), dislike ($\bar{X}$=58,72) and lack of habit ($\bar{X}$=60,03). Scheffe test also revealed that the students who reported other reasons for not reading ($\bar{X}$=67,41) had a statistically significantly higher reading motivation when compared to those who reported indolence ($\bar{X}$=60,23), dislike ($\bar{X}$=58,72), lack of habit ($\bar{X}$=60,23).

4. Concluding Remarks: Discussion and Suggestions

The present study indicated that, variables such as gender, newspapers and magazine subscription frequency, internet access and the reasons for not reading were effective factors on the reading motivation of high school students. Whereas the findings also revealed that school type, socioeconomic level, education level and the occupation of the parents were not effective on the reading motivation of high school students. The mean scores for general reading motivations of high school students yielded an above medium level of reading motivation.

The present study established that there was a statistically significant difference in reading motivation of high school students based on gender. The reading motivation of female students was higher than the reading motivation of male students. Similarly, Wigfield and Guthrie's (1997) study, conducted on 105 5th grade students with the use of diaries and reading motivation scale, also found that female students had a higher reading motivation when compared to male students. Progress in International Reading Literacy Study (PIRLS, 2016) indicated that 4th grade female students received higher reading scores than the male students in 48 of 50 countries (Mullis, Martin, Foy and Hooper, 2017). Such gender-based differences were also observed in PISA 2015 and female students performed better in reading skills (OECD, 2016; Taş, Arıcı, Ozarkan and Özgürlük, 2016). Results on reading motivation also presented similarities with reading skills. It was established that female students were more motivated in reading and enjoyed it more when compared to male students (Wigfield and Guthrie, 1997; Eccles, Wigfield and Schiefele, 1998; Baker and Wigfield, 1999; Marinak and Gambrell, 2010; Clark, 2016). In a study conducted by Yıldız (2013), reading motivations of 3rd, 4th and 5th grade primary school students were investigated. The findings indicated that extrinsic motivation was more effective for female students' inclination to reading compared to male students and as the grade level increased the intrinsic and extrinsic motivation for reading decreased. The finding of the present study that female students had a higher reading motivation compared to male students was consistent with these findings in literature. There exists also supporting evidence in literature on the relationship between reading motivation and reading success (Wang and Guthrie, 2004; Morgan and Fuchs, 2007). It was found that the reading motivations of high school students significantly differed based on school type. The findings of the present study revealed that there was a statistically significant difference in the reading motivation of high school students based on newspaper subscription frequency. It was also determined that, there was a statistically significant difference in the reading motivation of high school students based on magazine subscription frequency. Internet access was also found to be a statistically significant factor that positively affects the reading motivation of high school students. In the present study, which focused on the reading motivations of high school students, it was determined that the most statistically significant different reason for not reading was "time constraint." Students with a subscription to any magazine or newspaper had higher reading motivation and this finding supported the assumption that constant reading of magazines and newspapers positively affected reading motivation.

There is plethora of research on reading motivation in literature. In his research, Yıldız (2010) investigated the reading motivations of the 3rd, 4th and 5th grade elementary school students. According to the research results, external motivation was more efficient in female students' tendency towards reading compared to the male students; and as the level of grade increased, internal and external motivation towards reading decreased. Construct validity of the Reading Motivation Profile scale including 20 items and adapted into Turkish by Yıldız (2010) was tested using confirmatory factor analysis. At the end of the adaptation, a scale form of 18 items indicating the value towards reading in 9 items and indicating the readers' sense of self factors in 9 items was obtained. This scale was used to investigate to what extent students valued reading and to what extent they considered themselves adequate as a reader. İleri and Öztürk (2013) developed a reading motivation scale for determining the reading motivations of elementary school students towards texts. Data of the study were collected from 259 fifth grade students. In this study, a 60-item pool was created from several studies (Wigfield and Guthrie, 1995; Chapman

and Tummer, 1995; Gambrell et al., 1996) in the literature. The scale items decreased to 30; and after asking the opinions of experts there were 27 items. In terms of the validity of the scale, the opinion of the expert was asked; and exploratory factor analysis was performed for the construct validity. In terms of the reliability, internal consistency coefficient was calculated. Appropriate values were obtained at the end of the analysis. In conclusion, a valid and reliable scale including 4 factors (perceiving the difficulty of reading, reading competence, effort for reading, and social aspect of reading) and 22 items was obtained. Durmuş (2014) readapted the reading motivation scale previously adapted into Turkish by Yıldız (2010) in a different group. Data of this research were collected from totally 357 students in 5, 6, 7, and 8th grades. In the study, 29 out of 54 items in the scale were used. Exploratory factor analysis method was used for revealing the construct validity of the scale, and Cronbach alpha internal consistency coefficient was used for the reliability. At the end of the study, appropriate results were obtained, and a valid and reliable scale including 4 factors (importance and attention, competition, social environment, and type and quality of the book) and 29 items was created. There were 2 factors (love of reading and reason for reading) and 14 items in the reading motivation scale that Katrancı (2015) developed with the participation of 1224 students in the 4th grade of elementary, and the 5 and 6th grades of secondary education. Katrancı used exploratory and confirmatory factor analyses to calculate the construct validity of the scale, and calculated Cronbach alpha internal consistency coefficient for the reliability of the scale. At the end of the study, a valid and reliable scale used for investigating the reading motivations of the students was obtained. Savaşkan and Özdemir (2017) conducted a study with first-year students from different departments of the faculty of education, and reported that gender, profession of father, economic status, frequency of buying newspapers, frequency of buying magazines, frequency of reading in electronic environment, and the reasons for unwillingness to read were efficient upon reading motivations of students whereas the variables such as department, educational level of father, educational level of mother, and profession of mother were not efficient.

Baker and Wigfield (1999) argued that socioeconomic level did not significantly affect reading motivation. In such respect, the present study is consistent with Baker and Wigfield's (1999) study. However, Clark (2016) determined that children of families with a lower socioeconomic profile realized reading activities less compared to other children.

The findings of the present study suggested that grade level of the high school students did not cause a significant difference in their reading motivation. This finding was different from the findings of Eccles, Wigfield and Schiefele (1998).

There were no studies in literature that focused on the other variables of the present study, which were taken into consideration to determine their relationship with reading motivation. Thus, the present study is expected to contribute the literature.

Recently, several practices were implemented in Turkey to develop reading skills and reading habits (Turkey Reads, 100 Essential Works, Reading Hours, etc.). Given the findings of the present study, which established that reading motivation of high school students that affected reading habits was not considerably high, it is possible that these projects might not meet the expected gains in reading skills. It is as well essential to conduct research on the reasons that the individuals at high school age does not have enough reading motivation, despite such practices.

Based on the findings of the present study, it is possible to state the following suggestions for practitioners and researchers:

It is essential to review the methods/techniques and approaches used in schools, which are intended to deliver reading habits to students, and effective methods that attract students and enhance their reading motivation should be adopted.

The findings of the present research revealed that students who frequently bought newspapers or magazines or had subscriptions had a higher reading motivation. Hence, it is essential to improve the reading materials in school

libraries and classroom libraries, to support the students' acquisition of reading skills and to ensure a continuous ability to obtain books.

The developed model and the tested relationships in the present study can be applied to different grade levels, socioeconomic levels, and disadvantageous group through adding/removing new variables.

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A Qualitative Study of the Perspectives of Music Students on Distance Piano Education

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Abstract
The aim of this study is to determine whether distance education is a viable option for music department students to receive an adequate piano education. Furthermore, the study seeks to discover encountered in distance piano education and to make recommendations about how piano education could best continue during the current pandemic. The study examines the conditions under which university students who receive piano education through distance education are affected either positively or negatively. It highlights the importance of student attitudes toward distance learning as this can determine student feelings, expectations and the desired outcomes of their education. The findings were obtained by conducting qualitative research using the phenomenological design method. For this study, an interview form was prepared and used as a data collection tool to gather student perspectives about piano education. The results of the study revealed that students found piano education through distance learning as not beneficial overall, the overall achievement of students was found to be negatively affected in distance education. Significant disadvantages of piano education were found through distance learning platforms. According to the results of the research, further recommendations are made to improve the current distance education methods.

Keywords: Student, Distance Education, Piano Education, Pandemic, Türkiye

1. Introduction

As was common throughout much of the world, Türkiye in 2020 was severely affected by the COVID-19 pandemic and the country has turned to technology as a means of continuing education. The education situation at Turkish universities is not different from other institutions around the world. Music departments, in particular, have been noticeably affected by the challenges of distance education, especially in the field of piano education.

In this study, the details of our research on piano education are discussed as a result of interviews with students studying at Erzincan Binali Yıldırım University Faculty of Education, Music Department who experienced distance education in the spring term in 2019-2020 academic year. The study aims to determine whether distance education is adequate for music department students who specifically are receiving piano instruction. The study also seeks to outline the problems students encounter in distance piano education and to offer recommendations about piano education during the current pandemic. The study also examines the conditions in which university

students who receive piano education through distance education are affected either positively or negatively.

In order to ensure that the individual education was sustainable and not interrupted, different teaching methods were used instead of face-to-face training. Among these methods, various technological education platforms were used primarily. It is understood that the methods of acquiring information and learning have changed with the spread of computers and the internet today (Karahan, 2016, p. 215). Advanced technological tools and equipment enable distance education methods to occur through computers and the internet. The demand for distance education has significantly increased, due to an increasing desire for universities to reach a broader audience, a desire for lower costs by students and an increasing need to efficiently obtain knowledge (Gök & Çakmak, 2020, p. 1917). Distance education is a teaching method in which students and teachers are physically separated yet can connect through audio, video and messaging programs via computer and internet-based technologies (Roffe, 2004). In addition, distance education is a method used in cases where face-to-face education is not available or is not possible especially when there is not adequate infrastructure or face-to-face education cannot continue for health reasons.

Furthermore, Kaya (2002) defines distance education as, "a teaching method from a specific center in cases where it is not possible to carry out classroom activities due to the limitations of traditional learning-teaching methods, between planners and students, through specially prepared teaching units and various environments for communication and interaction." In other words, distance education aims to provide a more accessible education process (Taşlibeyaz et al., 2014, p. 139). Through distance education, where teachers need to effectively educate and students need to successfully learn, the participants require some kind of technology to meaningfully interact with each other (Daniel, 2006).

Since distance education depends entirely on the development of communication technology, it can be inferred that the limits of distance education are directly proportional to the development of communication technology (Karataş, 2020, p. 155). Ideally, distance learning which encompasses a huge range of educational tools is used to provide students with an easy, cheap and flexible education by using technology, which is cited from Horton (2000) by (Taşlibeyaz et al., 2014). Others have observed that the "integration of computer programs with distance education, access to information on the internet easily, quickly and at low cost, using multimedia tools and techniques, and increasing user interaction with developing technologies have improved," (Kılınç, 2015).

There is a broad spectrum of advantages to distance education as well as disadvantages. Some of the benefits of distance education can be classified as follows:
1 - Physical infrastructure for schools is not required.
2- There is no limit on the number of students.
3- A variety of student levels is possible.
4- The ability to use the latest teaching software and applications.

On the other hand, some of the disadvantages of distance education are as follows:
1- Self-study techniques may not be adequately developed in this context.
2- It may not be possible to work within the framework of a specific curriculum.
3- There may be limited or no access to technology.
4- Not being able to benefit from lessons with classroom-based activities.
5- Deficiencies in developing appropriate skills or attitude-oriented behaviours.
6- Working students may experience a lack of time to devote to studying.
7- An excess number of students may lead to limitations in communication.
8- Socialization problems may occur.

Nevertheless, despite all the possible concerns, İşman (2011, p. 6) concludes that effective distance education is not only feasible but quite beneficial. Similarly, others have argued that "developments in the field of education show that it is not a necessity for individuals to be in the classroom and to perform teaching-learning activities at certain time intervals in order to learn. Distance education offers the individual the choice to participate in teaching-learning activities," (Okan & Arapgirlioğlu, 2019, p. 212). This study, however, takes into account the

original research of student perspectives in piano education through distance learning. The data obtained in the study can play an important role in considering the advantages and disadvantages of distance piano training.

Distance education is used in a variety of educational fields including music instruction. It is thought that music education, which is continually adapting to the various technological developments, would be much more effective when it utilizes a teaching method that makes use of a variety of developing educational technologies (Yungul, 2018, p. 1335). Due to the current situation with the pandemic, many music instructors tried to quickly adjust their educational activities and general approach to accommodate distance education. Much was done to meet the needs of students through online or remote offline platforms (Hash, 2021). One notable example of distance music education is in the field of orchestral rehearsal and practice. It was shown that orchestral practices through distance education were possible in which there is an advanced audiovisual communication system (Sağer et al., 2014).

Teaching piano, which has an important role in music education, can also be performed online. Various examples of this can be seen through web-based tutorials or online lessons. In addition, Pike and Shoemaker (2013) found that students in online piano classes displayed good communication skills with their teacher during each lesson. In the same study, it was determined that the distance learners exhibited a strong interaction with the material and their learning level was at the same level as the students in the face-to-face group. This study states that children are accustomed to using computer technology during education, thus online piano education presents itself as a viable alternative to face-to-face education. Similarly, a comparative study by Karahan (2016) did not find a significant difference in the development levels of piano performances among students of traditional piano teaching and of those with distance piano education. It was observed that if students had access to a piano, had a healthy working environment, and had the necessary technical infrastructure, then distance education was successful and beneficial to the students. Also, the piano is quite important in the education process as a solo instrument, an accompaniment instrument and as an effective training tool with its polyphonic qualities (Yazıcı, 2013, p. 132). For music teachers, the piano is also an instrument that can be utilized as an in-class or as an extracurricular musical activity (Sönmezöz, 2011). Piano education, which is traditionally carried out in a one-to-one education setting, is conducted in a manner appropriate to the level of each student (Ertem, 2014, p. 3).

Considering that a large number of students who need remote instrument training are those who receive postgraduate education, it is said that distance education makes a great contribution to undergraduate education. Some of the various benefits that distance education offers in this context are the elimination of common difficulties experienced in instrument and student transportation to education facilities and the ability of students to access education regardless of their location or residence (Can & Yungul, 2017, p. 158).

The piano is an essential component of music education in terms of instruction, acquisition, and of course performance. However, the traditional approaches and practices of piano education have entered into a new phrase that requires primarily distance education in light of the pandemic. Because of the abruptness of many social restrictions, educators were faced with little or no preparation for the sudden changes. As education patterns were quickly readjusted, many students who received piano education were adversely affected both in terms of a lack of materials and overall morale.

While similar studies on distance piano education have been performed, it should be noted that many of the studies that were conducted were more experimental and related to practicalities. This study, however, focuses on the importance of the student's attitude toward distance learning in piano education. Attitude is critical in determining a student's feelings, expectations and their desired outcomes of education.

In this study, research was conducted that focused on the views of students about distance piano education. All of the piano education in the study was given through distance education due to the pandemic. The data that was obtained in the study will contribute to reconsidering the advantages and disadvantages of distance piano training.

2. Method

This qualitative study was designed phenomenological. Phenomenology is a type of qualitative study that "focuses on phenomena that we are aware of but do not have an in-depth and detailed understanding" (Yıldırım & Şimşek, 2013, p. 78). The different facets of the course and how it was applied were examined in detail particularly with respect to variables such as technology, communication, study time and anxiety level.

1.1. Study Group For The Research

The study group consisted of students who took the first-year "Piano Education" course in the Department of Music Education, Faculty of Education, Erzincan Binali Yıldırım University, in the spring term of 2019-2020 academic year in Türkiye. The research consists of students who participated on a voluntary basis. In total, the research was conducted with 23 students who completed several surveys. The ethical consent was received from Erzincan Binali Yıldırım University Ethical Council on 18/12/2020 with the protocol number 11/6

2.1. Data Collection Tool And Data Analysis

Participants completed the course by doing piano training for 1 hour per week via distance learning for a total of 14 weeks. The piano skill level of the students participating in the research was basic. The students who participated in the distance piano education course were asked to participate in the lessons, record their work on video and upload their videos to the distance education system. The piano educator would later follow the development process of the students by watching the recorded videos, giving feedback from a distance about their observations and discuss opportunities for the student to continue to develop.

As a data collection tool in the study, a semi-structured questionnaire was prepared to assess student views on distance piano education. The questionnaire was sent to the students and they were asked to answer the questions in writing. The questions, whose answers were received via email, were numbered and put in order.

1. What are your thoughts about distance piano education before taking the course?
    - Do you think distance piano education is useful?
    - Do you think learning to play the piano through distance education is possible?
    - Do you think learning the piano through distance education affects your overall achievement?
2. What are your thoughts about distance piano education in comparison to face-to-face education?
    - Was piano training through distance learning beneficial for you?
    - Was learning the piano through distance learning understandable?
    - Has distance learning on the piano affected your overall success?
3. What are your thoughts about distance piano education?
    - Did you encounter any problems while studying piano through distance learning?
    - Are there any advantages or disadvantages to piano training through a distance-learning format?
    - Has distance piano training met your expectations in terms of learning an instrument?
    - How would you like piano education to continue in light of the pandemic?

In preparation for the questionnaire, an academic expert in the field was consulted. Certain aspects were evaluated such as the clarity of the questions, the question's comprehensibility and its scope in the relevant field. Finally, an assessment of the questions was made by a research expert and in order to ensure the validity of the study, reliability measures were taken below in Table 1.

Table 1: Validity and reliability measures

Validity	**Internal validity**	Taking Expert Opinion
		Confirmation of the participant

		Quoting directly
	External Validity	Explanation of data collection tools and process
		Explanation of data analysis
		Selection and explanation of the working group
Reliability	**Internal reliability**	Prevention of data loss by using a questionnaire
		Quoting directly
	External reliability	Appropriate discussion of the data

In the study, measures were taken to prevent data loss by asking the participants to answer the questions in the questionnaire in writing. Thus, an effort was made to prevent the use of any false statements. Furthermore, content analysis was used to analyse the data. The responses to the questions were examined by 2 experts, and themes were created by identifying codes that displayed similar characteristics.

In order to ensure external reliability, data collection and data analysis methods have been clearly expressed. The codes and themes created are given in the tables in the findings section. In the findings section, the statements of the participants in the questionnaire were directly quoted. Participants are shown with the letter S (student) for the quotations that were made. Moreover, the data were discussed in comparison with similar studies in the field.

3. Findings

The data obtained as a result of the student responses were analysed, and the findings obtained in line with the research questions are presented below.

3.1. Findings Regarding Student Perspectives About Piano Education Prior to Engaging in Distance Learning

Table 2: Themes and codes for the usefulness of distance piano education

Theme	**Codes**	**f**
Helpful	-Distance Learning	4
	-Disciplined Work	2
Not Helpful	-Instrument Availability	8
	-Application	7
	-Return	4
	-Correction	4

Out of the 23 participants in the research, 6 students (26%) stated that distance education would increase the efficiency of their learning. These students assumed that if a program was well organized, working in their home environments and using their time at home would be beneficial for piano education. Conversely, 17 students (74%) stated that distance piano education would not be beneficial. Some of the issues they discussed were lack of ability to practice and the financial difficulty of purchasing an instrument like a piano. They also commented on how

there would be no feedback on whether the work performed during the lesson would be applied correctly or incorrectly in terms of technical issues and other playing criteria. Some of the student views regarding this issue are presented below:

S1: We cannot learn *anything and most of our friends do not have the opportunity to complete their piano education at home.*

S5: Individual success *can be beneficial as it will emerge as a result of planned, devoted and disciplined work as well as a person's abilities.*

S8: Every individual *who learns piano has to be productive for each hour, since face-to-face education is not possible at the school, a better result can be achieved by studying well during those potentially productive hours.*

S18: I think music *education will be effective by feeling, touching and being in a musical environment, not in the virtual environment.*

S19: The biggest *responsibility here falls on the teacher. How they explain the lesson, give homework and check the homework. The learner must also evaluate and study them. This will be useful when the two are working together.*

S20: There are *downsides to me. While the school environment is more disciplined, organized and provides the opportunity to ask questions to the teachers during the lesson, it requires a great deal of effort to provide these opportunities in the home environment.*

From what can be ascertained from the responses of the participants, some students believed that the piano lessons would be beneficial in terms of learning the piano on their own. Yet, as piano education is based on performance, the overall emphasis of the students was a preference for having face-to-face piano lessons.

Table 3: Theme and codes for understandability in distance piano education

Theme	**Codes**	**f**
Understandable	-Online course	2
	-Feedback	2
	-Learning	3
Not Understandable	-Application	10
	-Communication	6
	-Technology	2

The participants for this research group also commented on the area of understandability. Four students (17%) expressed that live lectures, other online links and teacher-student feedback would be helpful in understanding the material. In contrast, 19 students (83%) responded negatively and felt that piano education would not be understandable due to the lack of technological infrastructure. They stated that the effectiveness of a piano education course would vary from person to person in terms of communication and that piano education is a skill that requires practice. Several of the student views regarding this feature are presented below.

S3: The instructors *should support the students with videos or live lectures if they can be developed in this direction.*

S16: Video applications are significant in our weekly lessons and this will be an important option. I don't think there will be any difficulties.

S21: The teacher must personally apply the technique of standing in front of the students and playing the piano.

S23: I think it will be understandable by giving studies and lessons that have various ranges of complexity.

After examining the *responses* of the students, it was found that the comprehensibility level of distance piano education differs from person to person.

Table 4: Themes and codes for general success in distance piano education

Theme	Codes	f
Overall Success	-Piano Education	11
	-Distance Learning	8
	-Teacher-Student communication	3
	-Grade average	6

When *participant's* opinions were gathered about the success of distance learning and the general success of other courses, all 23 students (100%) stated that both the piano lessons and other lessons would affect their overall level of success. However, 7 students (30%) stated that the change to distance education would most likely improve their skill on the piano positively. Some of the student views regarding this are presented below:

S10: *Since* every lesson in the music department is interrelated and piano education is the foundation, it will affect my other lessons positively.

S23: Certainly it is affected, but it doesn't affect the overall success negatively. On the contrary, it has positive effects. It positively affects the overall success of our other lessons on piano. It enables the student to progress in more effective and accurate ways.

However, 16 students (10%) stated that there would be negative effects. They communicated concerns that distance education would not be effective for learning to play the piano and could negatively affect other lessons as well. There were other concerns that the communication level between the teacher and the student would not be sufficient and this would affect the overall grade average of the students. Some of the student views regarding this issue are presented below.

S16: Of course, it will affect our education and the same level of discipline will not be provided. There will be problems with participation. I think there are still deficiencies in the system and in tracking.

S18: Rather than its effect on grade success, the fact the instruction for the instrument that I need to take and use in school and in my professional life will not be communicated effectively through distance education, will end up affecting my future success.

3.2. Findings Regarding Student Perspectives About Piano Education After Transferring to Distance Learning

Table 5: Themes and codes for the usefulness of distance piano education

Theme	Codes	f
Helpful	-Operation time	2
	-Self Study	3
	-Anxiety	1
Not Helpful	-Instrument Availability	9
	- Application	2
	- Concentration	1
	- Communication	1
	- Feedback	2
	- Distance Learning	10

Out of the 23 participants participating in the study, only 3 students (13%) were able to set aside more time for piano education in their home environment through distance learning. They stated that it was beneficial because they were less anxious since they were able to play the piano on their own. By contrast, 20 students (87%) stated that distance piano education was not beneficial. Their reasons consisted of not having the ability to purchase a piano or a similar instrument, they could not receiving adequate feedback on the pieces they practiced, and that the communication between the teacher and student was not effective because of the platform. Some of the student perspectives in this area are presented below:

S8: Since there is no obligation to go to school in distance education, I found the opportunity to study the piano whenever I want, and however I want. I think I got a better result because I usually work at hours that I think are productive.

S17: There was no anxiety for me.

S5: I could not maintain sufficient concentration in my home environment.

S9: The educator also has problems with the student. If the educator does not give positive feedback, the student cannot get enough information about the course.

Table 6: Theme and codes for understandability in distance piano education

Theme	Codes	f
Understandable	-Operation time	2
	-Planning	1
Not Understandable	-Communication	1
	-Piano piece	3
	-Application	6
	-Distance Learning	15

Among the participants in the research group, the 2 students (9%) which spent a significant amount of time studying piano lessons and carrying out consistent planned study times were the same students that found the course to be understandable. However, 21 students (91%) did not find the course to be adequately understandable. They stated that there was a lack of communication between the teacher and the student, that the piano pieces were difficult with respect to the student's level and that the piano lessons were not sufficient for them to fully understand.

Table 7: Themes and codes for general success in distance piano education

Theme	Codes	f
General Success	- Face-to-face education	5
	- Distance Learning	11
	- Grade average	19

When the opinions of students regarding both distance piano education and the general success in other courses were examined, all 23 students (100%) were seen to be effected in this context. However, 21 students (91%) expressed that when piano education was done in a distance education format, it was not a positive learning experience for them and that it negatively affected both piano education and their success in other lessons. Finally, 2 students (9%) reported that they found success in both distance piano education and other distance learning lessons.

3.3. Findings Regarding Student Attitudes About Distance Piano Education

Table 8: Theme and codes regarding the problems students encounter while studying piano through distance education

Theme	Codes	f
Problems Encountered	- Instrument Availability	13
	- Internet connection	1
	-Homework preparation and submission	6
	- System problems	3
	- Family members	2
	- Covid 19 pandemic	3
	- Communication	2

Of the 23 students participating in the study, the largest problem was concerning access to a piano or similar instruments. This was largely due to insufficient financial means. Other issues the students faced were things such as the inability to turn in homework on time because of the lack of internet data or internet infrastructure and the inability to enter the distance education system due to internet issues. Some participants also had problems concerning lack of time due to responsibilities with children or other family members. One other unique issue that was observed was grief due to the pandemic. Students reported how the loss of loved ones to Covid-19 and the worry of catching the virus themselves had a negative effect on them.

3.4. Findings Regarding the Student Perspectives of the Advantages and Disadvantages of Distance Piano Education

Table 9: Theme and codes regarding the pros and cons of distance piano education

Theme	Codes	f
Positive	- Lack of Anxiety	8
	- Operation Time	9
Negative	- Discipline	2
	- Instrument Availability	11
	- Incorrect Learning	9
	- Communication	7
	- Technological Tools	3

Of the 23 students who participated in the study, 15 students (68%) felt they performed better because they were less anxious having they played the piano on their own through distance education. These students stated that the positive aspects were that they were able to learn certain compositions better because they spent significant time on piano education in their home environment. Yet even with less anxiety, all 23 students (100%) stated that distance education created a lack of structure and discipline in piano education. Other issues that were faced were difficulties in obtaining a piano or a similar instrument, at times learning compositions incorrectly, and that the teacher-student communication could not be effectively provided because of technological limitations.
In this context, some of the student perspectives that related to positive elements:

> S5: No matter how hard I try in face-to-face training, the only feeling I cannot suppress is my anxiety. Not being confronted one-on-one in distance education ensures that a person is more in control of their anxiety.

S6: Since distance learning involves video shooting, the anxiety factor is easier to overcome and this can be a significant advantage.
S8: Undoubtedly, time was among the advantages of piano education in my distance learning program. Because there was not much time to study piano in a face-to-face setting, I think the time to study piano actually increased with distance education.

Some of the student perspectives related to some negative elements:

S2: Distance piano education is a situation that requires discipline and focus.
S7: Not everyone has a piano at home. The instruments at home are not like the pianos we play at school. Since we could not identify our own mistakes, there was a large deficiency.
S16: There is too much disconnection from the school. There is also a lack of participation and a lack of discipline. There is too much lack of concentration and too much of a lack of seriousness.
S20: The facilities offered at school for playing a piano cannot be provided in the home environment. At home, you also cannot control your working time and you can be distracted.

3.5. Findings Regarding Student Expectations of Learning the Piano Through Distance Education

Table 10: Themes and codes of distance piano education regarding student's expectations

Theme	**Codes**	**f**
Expectation	- Operation time	1
	- Learning	10
	- Success	12

Out of the 23 students included in the study, only 1 student (5%) stated that the distance learning program met their expectations. They stated that they were able to devote a large amount of time to piano education in their home environment during the program. The student commented:

S10: I had plenty of time to improve myself. During this time, I had the chance to improve myself by learning a lot of information, including knowledge of notes, accents, and other information.

Conversely, 22 students (96%) stated that distance education hindered their learning of the piano and, thus, their success was negatively affected. Some of the student views regarding this situation are as follows:

S17: I would like to learn more. There are many things I do not know about the piano. I would like to progress, and to be honest I would like to come to the level of accompanying a piece on the piano.
S12: I think it is a rote system. We do not learn engaging information in the lessons in general, not just for the piano lessons.
S5: There is a problem with concentrating in environments outside of school because there are many aspects socially that disrupt you from your work or from your lesson that you are studying. This initially reduces the desire to learn and then prevents learning in more permanent ways.
S1: We could not learn anything and the program was insufficient.

3.6. Findings Regarding Student Perspectives in Performing the Piano Through Distance Education

Table 11: Themes and codes for distance piano education regarding lessons

Theme	Codes	f
Conducting the lesson	- Face-to-face education	7
	- Stopping	4
	- Online education	11

While 1 student (5%) out of 23 participants who were involved in the study did not express any opinion on this question, 22 students (96%) commented on how they believe distance piano lessons should be conducted. Some of the student's perspectives regarding this situation were as follows:

> S1: I would like piano training to take place when face-to-face education restarts because we do not see any benefits with distance education. It also affects our other lessons and it also affects our final grades.
> S5: Considering the possibility of the school being suspended and reopening later, the piano course can be moved to a different term.
> S10: I was pleased with the training our teacher did this term. It was nice to upload videos to the system every week, just like our teacher required, to improve myself. In the same way, I want the piano training to continue by sending videos every week.
> S15: I would prefer face-to-face training in our schools with the necessary hygiene and social distancing.
> S17: Actually, live lessons could be done instead of recorded videos. The limitations of distance learning don't allow us very many options.
> S18: I would prefer my piano education to be postponed to the next school term so the training can occur face-to-face.
> S22: In this format, I would like the applied aspects of piano training to be removed and only study the theoretical aspects with the required homework.

4. Discussion

Examining the perspective of students before and after the process of distance education, the findings of this study indicate first that there were difficulties in procuring and purchasing a piano. Shoemaker and Stam (2010) note that in environments where financial resources and equipment are limited, the possibility of learning an instrument or learning vocals through distance education is weak. The observations of this study significantly overlap with our findings. Due to the high cost of pianos and their large size and weight, students had difficulty in purchasing pianos. Although digital pianos provide an alternative in terms of weight and size, they were not purchased because of their high cost. Since institutions that teach piano also provide the instrument in established piano study rooms, the majority of students desired that piano education would be carried out in a face-to-face education format.

In addition, considering that the compositions played on the piano are based on performance, it has been concluded that communication and feedback in distance education presents a major obstacle in the effective transfer of knowledge. This study shows that the communication and feedback by the instructor were not adequate in demonstrating to the students which of their actions needed correction. Dumlavwalla (2017) concluded that while students adapt over time, there is an emotional and personal disconnect in communication between students and teachers during online lessons. Furthermore, Comeau et al. (2019) stated that piano teaching through distance education has substantial disadvantages because verbal communication cannot be adequately provided and there is no physical contact between the teacher and the student to transfer the technical skills required to play the piano. The participants also claimed that distance piano training was not useful because they could not concentrate outside of the school environment. Similarly, Birişçi (2013) also found that "the students who mentioned the technical problems experienced in the video conferencing an obstacle to the communication between the teacher and the student during the lesson and that they had a negative feeling not being in a face-to-face environment with the teacher and not being motivated to participate in the lesson."

Additionally, the students emphasized that the online piano course was not understandable due to significant communication issues. They stated that students with little musical education or knowledge did not understand the topics and the terms mentioned through distance learning, and because of this students generally faced various difficulties understanding the content (Enbuska et al., 2018).

Furthermore, it was concluded that when piano education is not carried out face-to-face, the outcome negatively affects both the success of the student's piano education as well as other lessons. Parallel with this study, Özer and Üstün (2020) identified problems such as challenges with internet connection, unhelpful study environments, difficulties due to lack of materials, and inability to adapt to the distance education systems. They also found further issues such as teachers assigning an unhealthy amount of homework and students both not understanding the lessons and not communicating with the instructors. According to Keskin and Özer (2020), in an online teaching environment, students were able to acquire more theoretical knowledge than applied knowledge. They further found that students could not communicate well with instructors and technical problems with education systems also posed a problem. With similar results, Yılmaz (2020) observed that web-based distance education was not as efficient as face-to-face education specifically for departments where the applied courses were predominant. Based on their findings, the conclusion was made that in both theoretical and applied courses students are inefficiently learning through distance education platforms. Therefore, it is observed that many negative factors experienced by students in a distance education environment have directly affected their success. Among the data obtained, one unique insight was that while some students were anxious and found it difficult to play the piano in a face-to-face setting, when the setting was switched to distance piano learning, the students were able to feel more comfortable and perform better. Kruse et al. (2013) stated that in remote connections through Skype, piano lessons have a natural and comfortable feel, and it enables a level of continuity in the education process despite the distance. The students participating in this study also stated that they were not nervous because they had the freedom to play pieces on their own. However, this situation may also negatively affect the ability of the student to be adequately trained in terms of vocalizing well and maintaining a solid stage performance. As rehearsals and performances are an integral part of performing arts, performance appraisals and practices must also be included in art education (King, 2018).

Finally, when the students were surveyed about how to better perform piano education during the pandemic, it was apparent that the majority of the students believed that the course would have been better if it had been delayed. These students expressed their views on continuing piano education after the pandemic was over when necessary conditions could be better met and face-to-face education was available again.

According to the results of the research, the following is recommended for the sustainability of piano education through distance learning:

- Better developments are necessary for piano education through distance learning methods.
- Piano teachers should receive training for best practices in distance education.
- Educators must provide adequate information to students on how to continue distance piano education successfully.

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Game Technique Applications in Teaching Arabic Words as a Foreign Language to Children

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Abstract
In this study, games were prepared that will contribute to improving the vocabulary of children learning Arabic. Considering the target audience, it is known that game techniques and word teaching offer a fun and lively course environment and increase the motivation of the student. In this study, qualitative research methods were used. Document analysis technique was used in the collection of data. The findings were analyzed by the method of exponence analysis and a systematic framework was established for the study. The analysis of the documents according to the gains in the 2-8th grade Arabic curriculum prepared by the Ministry of National Education was carried out by a linguist and it was aimed to increase the reliability of the study. Three language experts were consulted for the scope validity of the games associated with the achievements and the games were rearranged in line with the incoming feedback. A total of 13 games were presented at this stage. Care has been taken to ensure that game designs are available to the entire class. In addition, it is important that the games are able to strengthen both oral and written communication. At the end of the study, it was proposed that games that can be played in open spaces such as outdoors and using technological devices can be designed in the form of dual or group work for children learning Arabic.

Keywords: Foreign Language, Second Language, Arabic, Vocabulary Teaching, Game Techniques

1. Introduction

Language is a system with its own rules that communicate people's feelings and thoughts and allow them to get in agreement with each other. Words are also the basic building blocks of this system, namely language, both in the mother tongue and in the foreign language. It is not possible to think of language without words. Word learning is a process that can continue from the moment the individual first begins to learn the language to death. The individual can learn new words at every stage of his life (Dagbasi, 2019) There are many definitions of what the word means in language. The Turkish Language Association defined the word as "meaningful sound unity of sound and word." According to Gulensoy (2010), the word; among people who speak the same language, consisting of one or more syllable sound groups, in the mind, when used alone, corresponding to a certain concept; it is the unit of language that establishes a relationship between concrete or abstract concepts that reflect a certain

emotion and thought. Kantemir (1997) defines the word as a collection of meaningful voices or sounds that play an active role in the sentence setup.

People need words to understand both what is written and what is said, and to convey their feelings and thoughts to others. For this reason, there is a direct link between the effective use of comprehension and telling skills and the richness of vocabulary (Karatay, 2007). Apaydin states that the process of learning words in a foreign language is not an immediate action, but is reinforced by a continuous and conscious repetition (2007).

The first thing to do to improve the vocabulary of students is to determine what to teach. Which words to teach is a priority. Other stages of vocabulary teaching can be carried out more healthily if a comprehensive evaluation of word selection and correct decisions are made. While the presence of spoken words in daily life is quite large, the presence of words taught through textbooks in schools is quite limited. Therefore, by prioritizing more important and useful words for students in vocabulary teaching, a significant contribution can be made to the students' vocabulary. This indicates that the words to be given to the students in the course should be selected with great care by a certain system and purpose (Tağa, 2016).

One of the most important aspects of word teaching is to actively and passively divide the words to be taught to students into two groups. Active words are the words that the student uses when writing and speaking. Passive words are words that the student understands while reading and listening, but does not use them in his speech and writing. Separating words actively and passively significantly affects word teaching. Once meaning is given for active words, pronunciation and writing studies must also be carried out. In passive words, the meaning of the word is given, no pronunciation and writing work is carried out. However, when making this distinction, the teacher or the authors of the curriculum have the task of determining which word is active and which word is passive. This determination can be made according to the objectives of the course and program (al-Huli, 2018).

It should be noted that the problems in vocabulary teaching will affect the other language skills of the students, individual differences of the students should be taken into account, the words to be taught for each class and age group should be meticulously planned, taking into account the number of words, difficulty degrees, active-passive situations, functional or comprehensive, and methods and techniques suitable for vocabulary teaching should be selected (Dagbasi, 2019). In their research, The Oiler and others (2012) have already listed the methods and techniques used by teachers in word teaching as follows: using the dictionary, using the word in a sentence, matching words, matching words, teaching puzzles, teaching with games, reading different types of text, drama, finding meaning from sentences, using visuals, creating stories from words, using illustrated dictionaries. As you can see, word teaching with the game is listed in the middle.

According to Dagbasi (2019), the number of words to be taught during each course hour during the academic year is important. Trying to teach a large number of words is actually teaching a small number of words; trying to teach a small number of words can also lead to unnecessary repetitions, loss of time and energy. Although the Arabic curriculum is based on helix, this spiral cannot be achieved because textbooks are not usually written in a series, because the fifth-grade Arabic textbook author and the sixth-grade textbook author may think differently in many respects, especially active-passive word selection.

Demirel (2004) emphasizes that between fifteen and twenty new words can be taught in a forty-fifty-minute course, but that this number can be up to thirty according to the nature and interest of the student group, and then it is too optimistic to expect so many words to be pronounced correctly by students, the word to be used appropriately in a sentence, and to know what the meaning of the word is. Altun (2017), who argues that the most important element of foreign language teaching is word teaching, states that having a lot of common Arabic-Turkish words is an advantage in Arabic teaching and makes the following recommendations for the process of successful word teaching:

1- Using the advantage of Turkish-Arabic interaction, common words in two languages can be included in textbooks.
2- In Turkish, some verses, hadiths, prayers, words in Arabic abandonment can be taught to students for use in daily life.

3- Students should keep a word notebook, the student should write the words he/she has learned here. The words that are written can be repeated until they become repetitions.
4- The words to be taught to students can be selected from words that will meet their daily needs and help to express their own thoughts and feelings.
5- Words should be remarkable, intriguing, up-to-date to cover different areas; jokes, cartoons, poems, stories and plays.

In his work titled "How to Learn Arabic," Aydın stated that word teaching can be done by showing real objects, gestures and, using previously learned words, with the help of converse meanings, with the help of photographs, pictures, posters, drawings made on the board, etc., but did not mention the game and the game technique at all.

1.1. Game Technique in Foreign Language Teaching

Many different methods and techniques have been applied in foreign language teaching from the past to the present. Since it is aimed to teach the foreign language in the best way, it has been tried to reach the techniques that will both increase permanence and provide a pleasant learning process. However, it should be noted that foreign language teaching includes many factors such as learning age, purpose, learning environment and process, quality of teacher, teaching material. However, in addition to these factors, the method applied in foreign language teaching is very, very important. Especially when there are active, long-term students like children who have difficulty getting their attention, who like to have fun. According to Özcan and Daghbasi (2015), the game technique is one of the most ideal teaching techniques that can be used in foreign language teaching, especially when it comes to children.

The game, which is one of the teaching techniques with the group, should take part in in-class activities as it will strengthen both oral and written communication in children in foreign language teaching. Because the game is a technique that adds excitement, energy to in-class work, sometimes reinforces feelings of competition and sometimes togetherness. Purushotma (2005) stated that games can increase motivation. According to him, games can even be addictive. In Candemir (1989), the game technique is an important tool that overcomes all psychological obstacles and directs pronunciation and vocabulary teaching towards correct, easy, comprehension by opening all information channels.

According to Demirel (2004); games should be simple, easy and really interesting enough to allow all students to understand and participate comfortably. Therefore, the selected games should have the flexibility to adapt to different levels and abilities of the students. The rules of the game should be able to allow everyone in the class to participate and the game must have a specific purpose.

When planning how long we will devote to a game event, it should not set strict limits, but time should be kept flexible when clearly specifying goals. During the game process, it is up to the teacher to monitor whether the learning goals have been achieved, where to intervene, where to ask quality questions and where to end the game. These activities planned for learners can sometimes be kept short and replaced with another game event to make gains on learning goals (Özcan, Dagbasi, 2015).

1.2. Literature Reviews

In the studies carried out in the literature, especially the studies on Turkish word teaching targeted game techniques were observed. Gürdal and Arslan (2011) examined the method of teaching Turkish to foreigners with their game and puzzle activities in their studies. In another study, Argıt (2019), she compared the fourth and seventh-grade students in terms of game techniques and word teaching. Another work that stands out in this context was carried out by Işık and Semerci (2016). Within the scope of the research, the impact of educational games in English teaching to first grade 3 students was discussed. Another study encountered in the field article within the framework of this subject was put forward by Elia et al. (2017) and provided information about the "Language Park" held in the Department of Italian Language and Literature at Istanbul University. This virtual platform was established on the Istanbul University Virtual Campus, where Italian language learning games are featured. In

their work titled "Word Teaching with Games," Dagbasi and Özcan (2021) discussed the technique of games in word teaching through English and Arabic examples.

Another study on game techniques and word teaching belongs to Bakhsh (2016). Within the scope of the study, the subject of teaching words with games to young students in Saudi Arabia was examined. In addition, Rahman and Angraeni (2020) focused on empowering students with a role-playing game for an advanced vocabulary. In another study, Huyen and Nga (2003) discussed the use of game techniques and the learning of words. Finally, Florence and Alvin (2006) studied the use of online wordplay as course material for the development of English vocabulary in both teaching and learning.

1.3. Purpose of the Research

As a result of Turkish interaction with Arabs, Arabic has always been in the Turkish Education System, first as a religious language and then as a foreign language. Today, approximately one million and three thousand students are taught Arabic in more than 4,000 secondary schools and high schools affiliated with the Ministry of National Education. Almost half of these students are child students.

The aim of this study is to show the game technique in Arabic word teaching to children through applications and to make foreign language teaching permanent and enjoyable. These applications were prepared by the Ministry of National Education taking into account the gains in the 2-8th grades Arabic curriculum.

The questions of the study are:

1- Can game techniques be used to teach Arabic words to children?
2- What are the applications that can be an example of using this technique?

2. Method of This Research

2.1. Research Pattern

In this study, qualitative research methods were used. According to Baltacı, qualitative research (2009) is an interpretive process aimed at solving a problem that has been identified. In this process, qualitative data such as observation, interview and documentation analysis are used and these data are analyzed in accordance with the interpretive paradigm (Baltacı, 2019). The basis of this research is also based on the interpretive paradigm. The main thing in the interpretive paradigm is; it is the interpretation of behavior or any product put forward by people taking into account all kinds of conditions. In this context, the reason why this study is patterned with the qualitative research method is that the focus is on word teaching in the process of teaching Arabic to children who are target audiences and document analysis technique has been used in this process. In addition, the process steps that constitute the process of exemplary application in word teaching in the study reflect the interpretive paradigm**.**

2.2. Data Collection Techniques

Document analysis was used as a data collection technique in the research. Document analysis is a process based on the research, evaluation and interpretation of many technology-based and printed materials (Bowen, 2009). The documents of this study are given in the Primary Arabic Course (2, 3, 4, 5, 6, 7 and 8. Classes) Curriculum (2016) gains and studies on word teaching with games in foreign language teaching. In the research, the document analysis technique was carried out according to the following stages (Merriam, 2009):

1- **Finding the appropriate documents:** At this stage, the field has been scanned. Scans through Google Scholar are limited to the use of games in foreign language teaching. As a result of the screening, direct related studies for the purpose of the research are determined. (Argıt, 2019; Bakhsh, 2016; Dagbasi and Ozcan, 2021; Elia et al., 2017; Florence and Alvin in 2006; Gürdal and Arslan, 2011; Huyen and Nga, 2003; Light and Samarkand, 2016; Rahman and Angraeni, 2020).
2- **Check the authenticity of the documents:** The specified studies have been checked individually. With its data and findings, it was determined that the entire study was original. The databases where the

journals in which the studies are already published are also a reliable source of confidence that they are original.

3- **Creating a systematic system for coding and cataloging:** Elementary Arabic Lesson (2, 3, 4, 5, 6, 7 and 8. Classes) Based on curriculum (2016) achievements. Thus, a more systematic coding process was tried to be offered.
4- **Data analysis:** The data is analyzed with the descriptive analysis technique. Information about this stage is presented in detail in the next topic.

2.3. Data Analysis

The data are analyzed with the descriptive analysis technique. Descriptive analysis, one of the techniques of collecting data in qualitative research, is based on analyzing the data obtained in the research according to the previously determined themes (Özdemir, 2010). In this research, analysis with descriptive analysis technique was carried out according to certain stages (Yıldırım and Simsek, 2013). In the first stage, elementary Arabic Lesson (2, 3, 4, 5, 6, 7 and 8. Classrooms) Curriculum (2016) gains have been presented as analysis themes. Thus, a systematic framework was established to be used in the analysis of the data obtained as a result of document analysis. It then associates the program gains related to the data obtained as a result of document analysis. At this stage, it is noted that a logical relationship can be established between the program gains and the games contained in the data obtained as a result of the document analysis. In the final stage, the games are organized to reflect the program gains and defined to reflect the gain. Finally, some activities in the classrooms were also taken into account in the creation of the games.

In order to increase the reliability of the research, the analysis of the documents according to the gains was carried out by another field specialist. The coding consistency between researcher and field specialist is 90% (Miles and Huberman, 1994). In addition, the opinions of 3 field experts have been consulted for the scope validity of the games associated with the achievements. In line with the feedback from field experts, the games have been revised in relation to the gains. After that, six Arabic teachers' opinions were consulted for the applicability dimension. With feedback from teachers, some additions were made to the games in terms of program gains. In the final stage, the pilot application of the games was made for the dimension of clarity. The teaching process associated with the games developed for 10 students learning Arabic was carried out. During the games, the points that were not understood were noted by the researcher and the final version of the games was given by taking the opinions of the students about the points they did not understand about the games. A total of 13 games have been proposed in its final form.

3. Findings and Comments

It was noted that the games created here were compatible with the gains in the 2-8th grade Arabic curriculum prepared by the Ministry of National Education. Word games suitable for the level and age of child students are presented. In addition to this, games are designed from previously implemented in-class activities.

Sample Games:

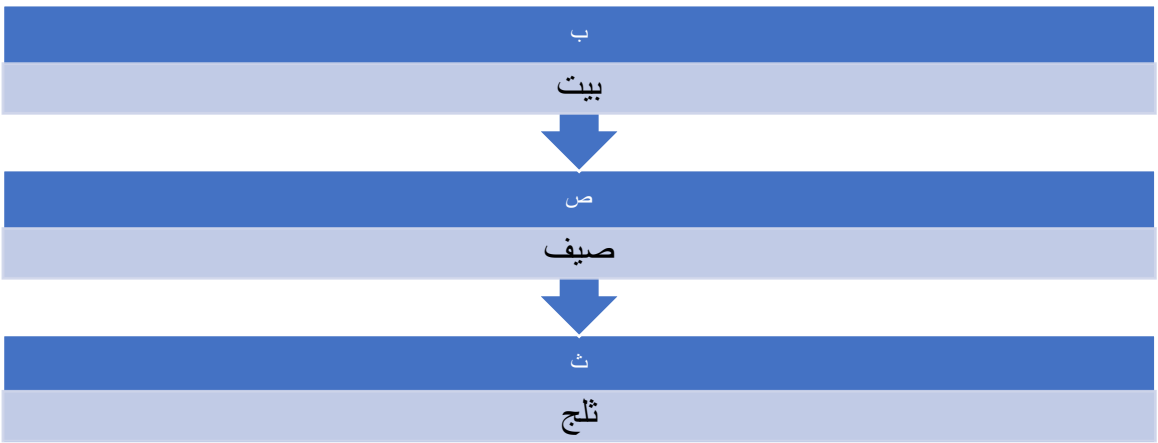
Game 1:
The teacher writes a word in the middle of the board. He or she asks students to write the words related to this word. Students write the relevant words on the branches.

Game 2:

The teacher reflects pictures of fruits and vegetables on the board. He or she writes their Arabic counterparts on their sides. He or she asks the students to say the Arabic equivalent of the fruit and vegetables he points to. Students should say it quickly at the given time.

Game 3:

The teacher divides the students. Matches each student with the other student. A student sings a letter. His partner says a word that begins with that letter.



Game 4:

The class is divided into the appropriate number of groups. The teacher writes a word on the board. Each group then sings a new word that begins with the last letter of that word, respectively. The group that says the most words within the specified time wins the game.

بنت - ترك - كلب – برد – دين – نار – راكب – بيت -تفاح – حب – برق – قرد – دخل - ليمون

Game 5:

The teacher writes some words on the right side of the board. He also writes the opposite meanings of these words on the left side of the board. Students take turns matching these words. The teacher writes contrasting words again.

طويل	**صغير**
كبير	**قصير**
حلو	**بارد**
حار	**مر**

Game 6:

The teacher writes the letters in the alphabet on the cards one by one and distributes them to groups/students in the class. Wins the game, completing the letters according to their place in the alphabet as quickly as they can. It will be especially useful to play when teaching letters.

ا ب ت ث ج ح خ

د ذ ر ز س ش ص

ض ط ظ ع غ ف ق

ك ل م ن هـ و ي

Game 7:

The teacher says he or she will mis-speak some words and asks the students to correct them.

كتوب	كتاب
كلش	كلب
جلميذ	تلميذ
غبق	طبق

Game 8:

The teacher writes the alphabet on the board and rounds three letters out of it. He or she asks students to derive words in these letters.

موز:

خ	ح	ج	ث	ت	ب	ا
ص	ش	س	ز	ر	ذ	د
ق	ف	غ	ع	ظ	ط	ض
ي	و	هـ	ن	م	ل	ك

Game 9:
The teacher reflects colors on the board. It points to a color and asks students to sing it quickly in Arabic.

Game 10:
The teacher numbers a group of students from 1 to 10. He writes numbers 1-10 on the board. The student who has received the number indicated by these numbers sings in Arabic. Another group of students is then numbered.

١٠ ٩ ٨ ٧ ٦ ٥ ٤ ٣ ٢ ١

Game 11:
The teacher writes some phrases on the board. He or she asks students to write the word that describes this phrase on the board.

نكتب به
ندرس فيها
نشاهده
نلعب بها
نجلس عليه
نأكل بها

قلم
مدرسة
تلفاز
كرة
كرسي
ملعقة

Game 12:
The teacher writes on the board the opposite meaningful words that he or she wants to teach in previous lessons. Then all the students stand up. The teacher says the word, selects a student and asks the student to say the opposite of the word. The student who gives the correct answer sits in his place; the one who can't keep standing. This game can also be played with synonyms or words of the same genre.

قريب	**بعيد**
سريع	**بطيء**
تحت	**فوق**
كبير	**صغير**
مبكرا	**متأخرا**
قليل	**كثير**

Game 13:
Words related to the subject are hidden in the puzzle. Students are not told what words to find. Instead, images are given, and students find words hidden from them.

ب	**ط**	**ي**	**خ**	**ق**	**ل**	**ت**	**ف**	**ا**	**ح**
خ	ء	ر	ذ	ى	ح	خ	ك	ء	**ت**
غ	ث	و	ف	ر	و	ل	ة	لا	**و**
د	ك	ذ	ل	ب	ر	ت	ق	ا	**ل**
ك	م	ث	ر	ى	ش	ك	ر	ز	**و**
ل	غ	ص	ب	ى	ل	ي	م	و	**ن**
ط	ن	غ	ى	ن	ص	ف	ث	ئ	**ف**
ب	ن	ش	ع	ن	ب	ظ	غ	ب	**ذ**

4. Results and Recommendations:

Research in the literature reveal the importance of play in teaching children a foreign language. It is thought that games with good planning, carefully selected words, predetermined time and rules explained especially contribute to the teaching of words. The applied game techniques, which allow repetition and active use of words, are considered as an auxiliary factor that stands out for the course, student and teacher.

It is stated that the application of play techniques in teaching foreign language to children adds vitality to the lesson and increases the desire for the lesson by providing a cheerful lesson environment. In addition, it is thought that playing games provides support in overcoming the obstacles encountered in the teaching of a language with different sounds, intonations and alphabets, such as Arabic. It has been observed that different games interfere with the boring course environment.

Arabic teachers, whose target audience is children and who apply games in their lessons, can help develop their students' thinking and comprehension skills. In a language with different language structures, such as Arabic, the process of teaching words is monotonous, so with games they can make students willing to learn. In this context, it is also important that they consider that the games and their content are appropriate for the level and interest of the audience. They are aware of the importance of games in the development of children. In addition, they can

easily teach words such as concrete, synonymous, active/passive, which are difficult to teach. It can be said that children who learn Arabic with games in the classroom are interested and highly motivated towards the lesson. It is observed that the games increase children's self-confidence and improve their ability to read, speak, write and listen.

It is evaluated that games without a penal and reward system, which are suitable for the level of students, allow everyone to participate, whose time has been defined and whose rules have been explained, provide support for Arabic teaching. In this context, the lesson is well planned and the words to be used in the game are selected depending on various variables. In this way, the development of vocabulary in a language with many differences, such as Arabic, is supported. Words are easier to learn and permanent. Finally, it is seen that playing games supports children who have difficulty attending the course and helps to express themselves.

The plays created and selected in this study are prepared to be compatible with the achievements in the 2-8th grade Arabic curriculum prepared by the Ministry of National Education. However, this does not mean that the prepared word games are suitable only for Turkish students. It can also be easily applied to children who are different from native Arabic.

Those who will work in this field can design a single game that lasts a long time that the whole class can participate in. In addition, they can target games that will allow for binary or group work. In addition, games aimed at vocabulary can be designed with the support of technological tools. With the help of computers, smart boards and similar devices, different and interesting games can be created. In addition, some games can be planned in a lively manner in open spaces and gardens in accordance with the interest of the target audience.

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Out of School Girls in Nigeria: Implications for National Development

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Abstract
Education is a right for all children. Discriminating against either the boys or the girls has serious consequences for future national development. In Nigeria, there are alarming figures showing a large percentage of boys and girls of school age not attending formal education. The focus for this paper therefore is on the girl child bearing in mind the serious implications of not education them on the society. In 2019, 10.19 million children were found to be out of school and 38% of them were girls. Some of the factors attributed to this ugly situation in Nigeria are early marriage, early pregnancy, violence at schools, funding is targeted at boys, child/domestic labour, dangerous journeys to schools, kidnapping, poor sanitation in schools, dilapidated desks/chairs, few female teachers to encourage them to attend school, religious and traditional practices etc. The implications of not addressing these factors as identified in the paper will lead to slower economic growth and reduced income, gender disparity, child mortality rates in communities will soar, she cannot be a policy maker who influences national decisions and women will be less likely to have access to social protection. Finally, recommendations like adequate funding to the education sector, provision of enabling environment, create more awareness among rural dwellers on the need to enroll, retain and encourage the girl child to complete school, Girls4Girls and SHE4HE programmes of UNICEF be sustained, provision of adequate security for all children in and out of school were proffered.

Keywords: Girls Education, National Development, Out of School

1. Introduction

All the countries of the world espouse education as the only fulcrum of national development. It is apparent that for any nation to make significant progress in every facet of their wellbeing, the people have to be educated in the various relevant fields of knowledge. The government of a country works assiduously to ensure the upliftment of its citizenry via the provision of the desired political, economic, and social equity. Education is directly linked with national development as it causes a change that promotes greater productivity and work efficiency in the individual. It is the singular most important agent in transforming a people; national development cannot take place unless a decorous proportion of its population is disciplined in attitudes and beliefs about work, quality of life and other related values.

For many years now a lot of girls have been out of school in Nigeria. The most current figure is put between 10.5 and 13 million implying that "one in every five of the world's out-of-school children is in Nigeria" (UNICEF, 2020; Umar, 2020). Girl education is the avenue by which women and girls can contribute maximally to national

development. Section 18 of the Nigerian Constitution, the Universal Basic Education (UBE) Act 2004, the Child Rights Act 2003, and Article 17 of the African Charter all guarantee the right of every Nigerian child (including girls) to education. The UBE Act and the Child Rights Act further made provision for free and compulsory basic education for all children up to junior secondary level. Although these measures have been put in place, the girl-child education accomplishment in Nigeria is still truncated.

A nation does not develop in any way or aspect without women given their right of place in the system that sustains it. Education is an incentive to the development of the nation because it equips its citizens to galvanize the development process. Based on the foregoing, therefore, this paper aims at discussing the importance of educating girls and the implications of leaving them out of school on the development of Nigeria as a nation.

2. The Concept of National Development

A country is developed if it is able to provide qualitative life for her citizenry. Nigeria just celebrated her 61st Independence Anniversary. Unfortunately, however, the nation has been battling with the problems of development in spite of huge human, material, and natural resources at her disposal. Waleola (2015) asserts that development is a desirable phenomenon in national sustenance. It is a product of careful design, effective resource mobilization and collaborative action with the people and their leadership. It entails sacrifice and dedication coupled with careful observation and openness to change.

National development is a multifaceted process involving the restructuring and repositioning of the economic, political, educational, and social infrastructures. The major aim of national development is to meet the needs of the present without jeopardizing the ability of the upcoming generation to meet their own needs (Edidiong & Daniel, 2019). This implies that it is a process of well-being, progress, growth and balance that harnesses the evolutional succession in stages, where human societies leave a rudimentary model until they arrive at a model which is considered unique and universal.

A nation that is developed frees the population from fear and exploitation. It expands the range of choices available to the people that allows for democratic decisions and enjoyment of human, economic and political liberties (Bhawna, 2020).

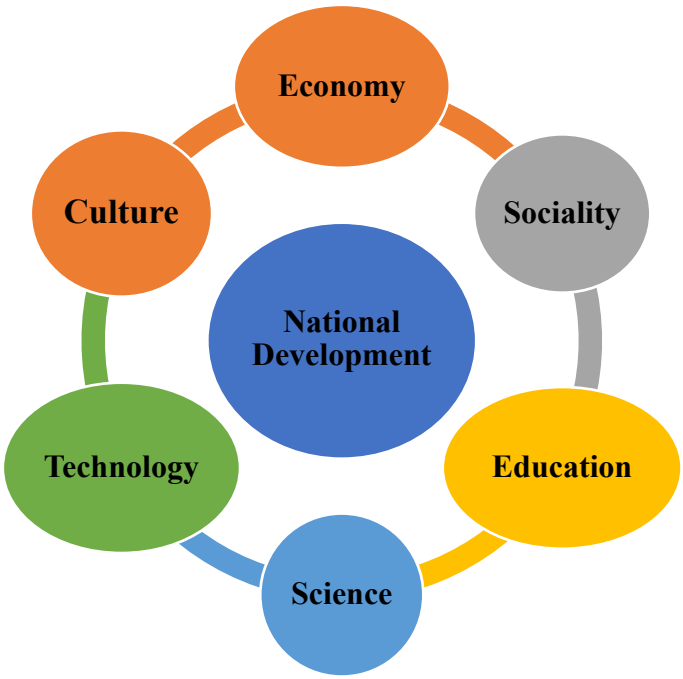

Diagram 1: Components of National Development

Source: Author

The diagramme above shows the components of national development. It exhibits the interconnectedness of the components to the effect that the central ideology is realized. A nation is yet on its way to being fully developed where any of these components are essentially nascent.

3. Girls Education in Nigeria

Man has developed the means of passing on his leaning – values, skills, and attitudes – to the next generation. Girls also benefit from this process of education. It is through education, formal or informal, that the girl-child comes to know what her society cherishes. By means of education the young woman is prepared to take part in perpetuation and further development of this knowledge and ideals. Unfortunately, however, Nigeria still falls short of the desired result of giving males and females' equal Opportunities and equal access to opportunities to advance socially, economically, politically and otherwise.

UNICEF (2012) undertook a country study and found out that about 10.5 million Nigerian children who were supposed to be in basic education were not. In other words, one out of every three primary age children is out of school, and roughly one out of four junior secondary age children was out of school. The percentages of out of school children according to geopolitical zones in Nigeria are presented in the chart below:

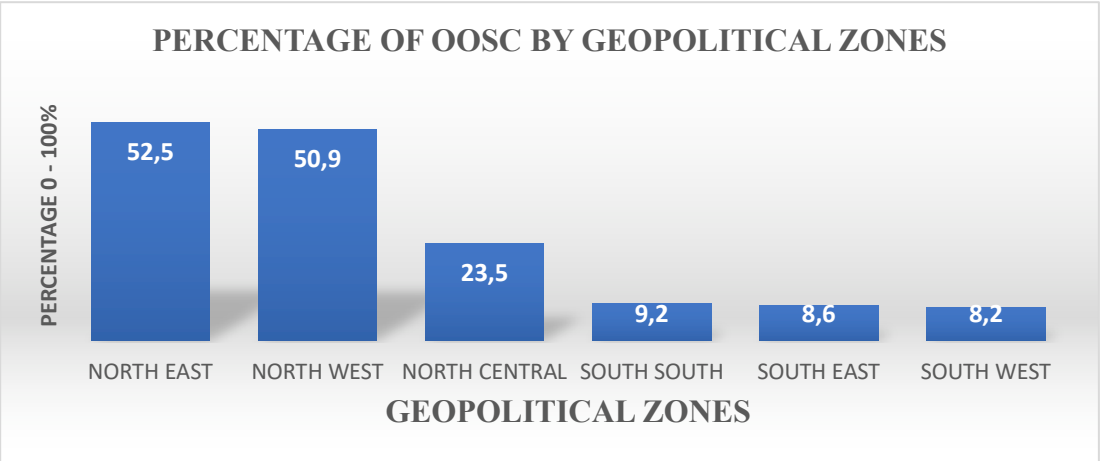

Chart 1: Percentage of out of school girls by geopolitical zones in Nigeria

Source: UNICEF, 2012.

EduCeleb (2020) also carried out a survey and reported that out of 10.19 million children who did not go to school in 2019, 38% of them were girls. The table below contains details according to States with the highest rates and the states with the lowest rates:

Table 1: States with highest and lowest rates of out of school girls in Nigeria

SN	STATE	NUMBER OF OUT OF SCHOOL GIRLS
1	Akwa Ibom	298, 161
2	Sokoto	270, 586
3	Katsina	267, 132
4	Niger	257, 165
5	Taraba	246, 123
6	Kaduna	242, 100
7	Kano	240, 766
8	Oyo	170, 800
9	Zamfara	165, 245
10	Kebbi	144, 000
11	Adamawa	143, 166
12	Imo	32, 457

13	Gombe	31, 500
14	Bayelsa	28, 735
15	Cross River	26, 279
16	Enugu	20, 378
17	Ekiti	15, 955
18	Ebonyi	15, 454
19	Ondo	8, 700
20	FCT	4, 678
21	Delta	3, 668

The records of out of school girls in Nigeria are appalling. The information above indicates the need for government and other agencies which are saddled with the mandate for girl child education to expedite action to bridge the gaps that are apparent. The importance of education to a child and also for overall development of a nation cannot be over emphasized particularly the girl-child.

4. Benefits of and Barriers to Girl-child Education

Education holds many benefits for any nation. It has the capacity to improve the competences of the people who, in turn, bring positive social changes in society (Tabreek, 2017). This is why the United Nations in 1948 decreed the right of everyone to education and made it free, at least in the elementary and fundamental stages, and compulsory too. The International Bill of Human Rights contains provisions on compulsory and free primary education and on nondiscrimination in education. The Convention on the Elimination of All Forms of Discrimination against Women (UN General Assembly, 1979) and Convention on the Rights of the Child (UN General Assembly, 1989) contain elaborate set of legally enforceable commitments concerning both rights to education and to gender equality. The Jomtien Declaration (UNESCO, 1990), Dakar Framework for Action (UNESCO, 2000b), and Millennium Development Goals (MDGs; UN, 2000) call for early childhood care and education, learning programmes for all young people, and improvement in the quality of education.

All the international organizations above emphasize the important place of education because it is the means to

1. Reducing poverty and driving sustainable economic growth – Girl-child education has been proven to increase income for wage earners and increase productivity for employers, yielding benefits for the community and society. Women's productive activities, particularly in industry, empower them economically and enable them to contribute more to overall development. Whether they are involved in small or medium scale production activities, or in the informal or formal sectors, women's entrepreneurial activities are not only a means for economic survival but also have positive social repercussions for the women themselves and their social environment (UNIDO, 2001).
2. Preventing inequality and injustice – Educated women are more likely to participate in political discussions, meetings, and decision-making, which in turn promote a more representative and effective government.
3. Leading to better health – Educated women (with greater knowledge of health care and fewer pregnancies) are less likely to die during pregnancy, childbirth, or during the postpartum period. Increased education of girls also leads to more female health care providers to assist with prenatal medical care, labour and delivery, delivery complications and emergencies, and follow-up care.
4. Decreasing child marriage – The absurdity giving out under-aged girls into early marriages results at the end of a girl's schooling. The result is illiterate or barely literate young mothers without adequate tools to build healthy, educated families. Educated girls typically marry later, when they are better able to bear and care for their children.
5. Reducing mother and child mortality rates – Mothers channel much more of their income to expenditures on children than their husbands do is overwhelming. Education also increases the willingness to seek medical care and improves sanitation practices. The children of more educated women are much more likely to grow up healthy.

In spite of the remarkable benefits, the girl-child in Nigeria is yet a far cry from gaining complete and unrestrained access to basic education. The second goal of the Dakar framework for action aimed at granting all children, particularly girls, access to, and complete, free and compulsory education of good quality by 2015. The fourth goal aimed at 50% improvement in levels of literacy especially for women by 2015. The fifth goal aimed at eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to, and achievement, in basic education. (UNESCO, 2000b, p. 8). All these plausible ambitions are far from being achieved in Nigeria.

There are various factors that have been identified as barriers to the education of the girl-child. These are different depending on the countries and communities where the girls reside. There are some others which are relatively common to all climes.

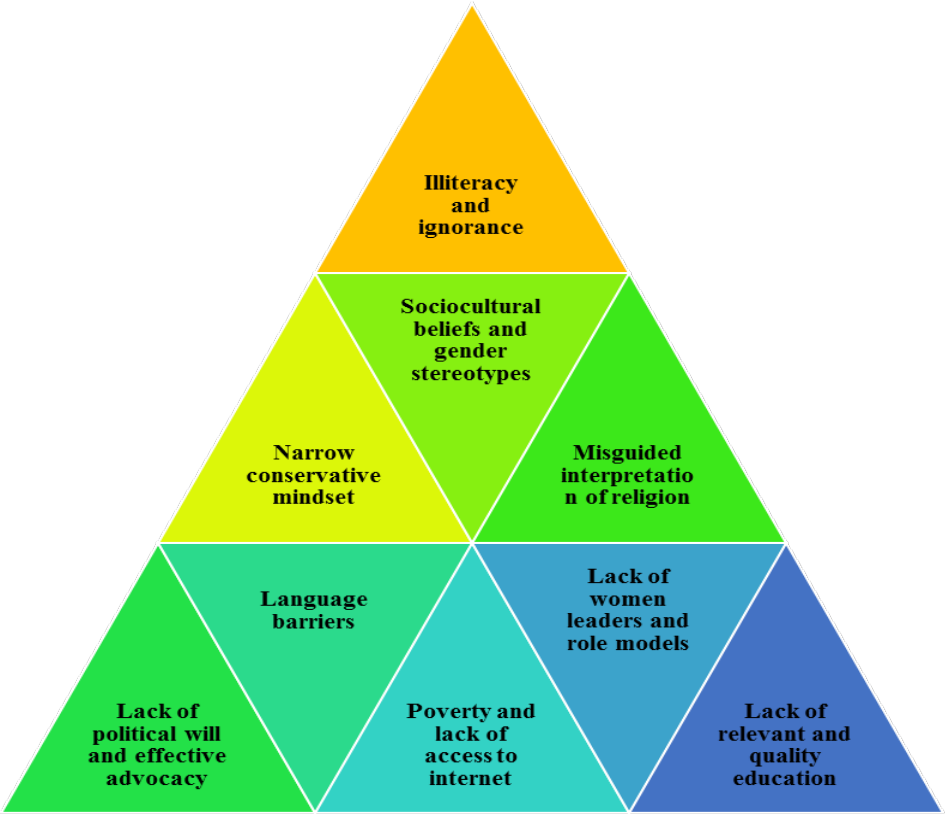

Diagram 2: Barriers to Girl-child education in Nigeria.

Source: Tabreek (2017)

In addition to the above reasons as contained in the diagramme, this author during UNICEF G4G Reading Hubs activities with some young girls and women in Bauchi State in 2019, got the following responses from them on why girls do not want to go to school, complete their schooling and transit to secondary schools.

1. Early marriage: young girls as
2. Pregnancy: Many do not return after giving birth due to those rules, stigma, fees, lack of childcare and the unavailability of flexible school programmes.
3. Violence at school: Not only is this a violation of their human rights, it is also one of the most common causes for girls to drop out of school. Many are abused on their way to and at school.
4. Lack of funding: Too many girls are being left behind because funding is targeted to boys' education.
5. Child/domestic labour: Many girls spend every day working to help feed themselves and their families.
6. Dangerous journeys: The walk to school can be dangerous or intimidating. During violent conflicts, girls are deliberately targeted by armed groups and government forces. They often suffer sexual violence, abduction, intimidation and harassment. These makes it difficult to send their female children to school. Surprisingly, they gave examples with Chibok and Dapchi schools girls kidnapping.

7. Poor sanitation: That many schools don't have separate toilets and washrooms for girls. Because of this, many girls, particularly adolescents who are menstruating, do not go to school because of a lack of privacy, unavailability of sanitary disposal facilities and water shortages.
8. Dirty classroom spaces, dilapidated desks/chairs
9. Too few female teachers to encourage them to attend school.
10. Because they are girls is often enough to deny them education. They gave examples with religious and traditional practices that discriminate against them to continue with their education.

Despite its contributions to nation development, girl-child education suffers due to any one or more of the factors mentioned in the diagram above. The effect of this situation has led to deprivations that have hindered women from maximizing their capacities in the development process of their communities. In Nigeria, women are generally barely held in high-esteem, consequently girl-child education is seen as a wasteful venture as people think that the role of women is for procreation and home keeping. This is the challenge of girl-child education today. This ought not to be so. All the barriers to girl-child education must be broken through and conducive learning milieu should be provided for the girl-child to ensure a prosperous nation.

5. Implications

This paper posits that girl-child education is one way through which we can disrupt the vicious circle of abuse, poverty, and oppression of women. Education empowers women; it makes them aware of their rights, and enables them to maintain good health and raise healthy children and families. An educated girl has a positive ripple effect on her health, family, community and society as a whole (Bhagavatheeswaran et al., 2016). However, the implications of not keeping the girl-child in school are atrocious. These include:

1. An exogenous increase in girls' access to education creates a better environment for economic growth. Nigerian women account for 41% ownership of micro-businesses in Nigeria with 23 million female entrepreneurs operating within this segment. This
places Nigeria among the highest entrepreneurship rates globally (Andrew, 2020). Societies that prefer not to invest in girls pay a high price for it in terms of slower economic growth and reduced income.
2. Families that are reluctant to sending their daughters to school because they believe that boys will receive a higher wage in the future but this is a vicious cycle where women cannot compete against male wages, not due to their capabilities respective to their gender but because they are not being offered equal opportunities in their upbringing. A nation that allows this trend will perpetuate gender disparity.
3. If the girl-child is allowed to stay out of school, she is deprived of her right to education and will be doomed to be illiterate. Consequently, she cannot educate her children and look after her family's health properly. Child mortality rates in communities will soar instead of plummeting.
4. A girl-child who is not educated cannot grow up to participate effectively in politics, business, and national leadership. She cannot be a policy maker who influences national decisions.
5. Women will be less likely to have access to social protection. Gender inequalities in employment and job quality result in gender gaps in access to social protection acquired through employment such as pensions, unemployment benefits or maternity protection.

6. Conclusion

Educating the girl-child is beneficial to a nation. When girls are allowed to stay out of school, it undermines the efforts made by the government and other organizations at nation building. Nigeria's slow economic growth is not unconnected to the level of education and participation of women in running the affairs of the country. It is, therefore, imperative to go back to the drawing board and take into cognizance all that need to be done to send and retain the girl-child in school until completion.

7. Recommendations

This paper considered the benefits of education for the girl-child and the consequences of keeping the girl-child out of school. In order to overcome the challenges that have been identified above, the following recommendations are made:

i. The government at the federal, state, and local tiers should provide adequate funding to the education sector that will ensure that every girl-child in particular and boys in general are catered for through provision of portable water, building safe and inclusive learning environments for girls and boys, hiring and training more female qualified teachers.
ii. The government at the federal, state, and local tiers should provide the enabling environment where women can participate in entrepreneurial ventures. At the school levels, life skills be encouraged especially for the girl-child.
iii. Government and relevant non-governmental organizations should create more awareness, among rural dwellers most especially, about the importance of education and the need to allow the girl-child to go to school. Example of such is the Girls4Girls and SHE4HE programmes of UNICEF.
iv. There should be ample access in the political arena where women are given room to participate in electoral processes. Women who are elected are more likely to speak, advocate, symbolize, and act on behalf of women and children compared to their male counterparts.
v. Government and communities should provide adequate security for all children in and out of school.

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Arabic Teacher Candidates' Perceptions of the "Ideal Arabic Teacher"

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Abstract
In this study, prospective Arabic teacher's opinions about the ideal Arabic teacher characteristics were examined. The study was carried out according to the phenomenology study pattern, which is one of the qualitative research methods. The study group of this research, which was carried out in the 2021-2022 academic year, was determined by convenience sampling; The study consisted of 63 freshmen and sophomore teacher candidates, 25 male and 38 female, studying in the Arabic Language Teaching Program of the Faculty of Education at Süleyman Demirel University. Document was used as a data collection tool in the research. Teacher candidates were asked to write an essay about the ideal Arabic teacher. The compositions of the students formed the documents of the research. Interpretation of the data was done by content analysis. The findings of the study showed that pre-service teachers' views on the ideal Arabic teacher were divided into three themes: "Personal Characteristics "Professional Characteristics" and "Field Competence."

Keywords: Ideal Arabic Teacher, Ideal Qualifications of Teachers, Teacher Candidates School

1. Introduction

In a constantly developing and changing world, societies want to maintain their current positions and take firm steps towards the future. The development of the society is ensured by the inclusion of individuals in the qualified education system. The education system consists of three basic elements that are in constant interaction: the teacher, the student and the curriculum (Yetim and Göktaş, 2004:542). Ensuring continuity in the education system and the success of the program depend on the qualifications of the teachers who will implement this system. No training model can produce services above the qualifications of the personnel who will implement that model (Abazaoğlu, 2014:3). Goe (2007: 1) emphasizes that there is nearly global consensus that teacher quality is important in terms of student achievement.

Teaching is defined as "a special profession that takes on the education, training and related management duties of the state" in Article 43 of the Basic Law of National Education No. 1739. Başaran (1994:15), on the other hand, defines a teacher as a person who interacts with his students, gets parental support, uses different teaching and learning environments in the most efficient way, and specializes in both theoretical and practical fields. Kavcar (1999: 4), who states that teacher is the architect of the qualified education process, defines teacher as the "intellectual raising the people of the future" who has an important role in the construction of the future. In line

with these definitions, the characteristics that teachers should have is always come into question and it should be noted that special attention is given to teacher quality as a factor that affects students' learning (Walsh, 2001:8).

It is possible to see that many classifications are made in studies about what teacher competencies should be. However, in general, the competencies that the teacher should have are divided into personal, field and educational competencies (Çalışkan, Işık, & Saygın, 2013:576). However, just having these qualifications may not be enough for teachers to be defined as an ideal teacher (Müldür and Çevik, 2020:125). Korthagen (2004: 87) states that it is difficult to define the ideal teacher and emphasizes that there should be harmony between the teacher's environment, behaviors, competencies, beliefs, personality and identity. In The McNair Report prepared in 1944, four different qualities that should ideally be found in every teacher are mentioned. These four qualities are; to have general education from an education institute that will make the person a teacher, to have high knowledge and skills in the field, to have teaching ability, to evaluate the relationship of his/her own field with other fields of knowledge. Another view on the qualities that ideal teachers should have belongs to Lamm. According to Lamm (2000), the ideal teacher is a disciplinary expert who provides culture that ensures his/her student's acculturation. He/she is an agent of socialization who sustains social norms and protects the current social order. The ideal teacher individualizes his/her students in the position of developer, shaper and instructor, and he/she has the characteristics of being a professional expert in the field of study. (Lamm (2000) cited by Arnon and Reichel (2007:444). Miron (1983:51), on the other hand, gathered the ideal teacher characteristics to provide effective education in four groups in his/her study with the participation of university students studying in different faculties; presentation of the course (clear-intelligible explanation, concretizing the course, using appropriate teaching methods, providing thought development), assistance (transmitting information, motivation, developing creative thinking), counseling; "Quality of emotional and social interaction between teacher and student" (providing feedback, interest and encouragement, flexible, sincere, tolerant, honest and helpful), personal qualities (a pleasant appearance, sense of humor and friendliness). Özabacı and Acat (2005:214) state that in order to be able to perform the teaching profession successfully, it is necessary to determine the basic characteristics that teachers should have, as well as the teaching programs, methods and techniques, tools, and that these characteristics can be determined by institutions, individuals and groups related to the profession Mınıstry of Natıonal Educatıon Republıc of Turkey has divided the general qualifications of the teaching profession into three categories in order to determine the characteristics that teachers should have and to follow the new developments in the field of education (MEB, 2017: 14):

Table 1: Teaching profession general competencies

A Professional Knowledge	B Professional Skill	C Attitudes and Values
A1. Content Knowledge	B1. Planning of Education and Teaching	C1. National, Spiritual and Universal Values
She/he has an advanced and critical perspective on theoretical, methodological and factual knowledge in his/her subject field.	She/he plans education and teaching processes effectively.	She/he observes national, moral and universal values.
A2. Content Educational Knowledge	B2. Creating Learning Environments	C2. Approach to Students
Has a command of the curriculum and pedagogical content knowledge.	She/he prepares appropriate teaching materials and builds an healty and safe learning environments, where effective learning can be achieved for all students.	She/he has an attitude that supports the development of students
A3. Knowledge on Legislation	B3. Managing the Learning and Teaching Process	C3. Communication and Cooperation
As an individual and teacher, she/he conducts her/himself	She/he manages the teaching and learning process effectively.	She/he establishes an effective communication and cooperation with

according to the legislation related to her/his duties, rights and responsibilities.		students, colleagues, families, and other educational stakeholders.
	B4. Assessment and Evaluation	C4. Personal and Professional Development
	Uses measurement and evaluation methods, techniques and tools in accordance with the purpose.	By carrying out self-appraisal she/heparticipates in personal and professional development activities.

Educating teacher candidates with the qualifications in the specified categories will enable them to adapt to the teaching profession and be successful when they start their professional life. (Yetim and Göktaş, 2004:543). The increase in the expectations of the society from educational institutions and teachers increases the differentiation of the roles of teachers and the importance of teacher training in the education system (Temizkan, 2008:463). In order to provide teacher competencies that will contribute to the increase in quality in educational institutions, it is necessary to provide appropriate teaching and practices to teacher candidates (Yanpar Yelken, Çelikkaleli, & Çapri, 2007: 205). Ideal teacher perceptions are of great importance as teacher candidates will be able to practice their teaching profession from the moment they complete their education. In addition, the perceptions of the candidates towards the teaching profession will affect how they will perform their profession and accordingly how they will train students (Atabek Yiğit and Balkan Kıyıcı, 2019: 21), and their training as ideal or near-ideal teachers will provide a positive direction to social life (Arıcı, 2021:681). In studies on the ideal teacher perceptions of pre-service teachers in Turkey, the role of teachers in transferring information is more prominent (Çakmak, 2011; Özabacı & Acat, 2005; Kara, 2020; Saban, 2004a); content knowledge or mastery of the subject area is at the forefront (Akbulut, 2004; Çetin, 2001; Gençtürk et al., 2012; Işıktaş, 2015; Kaya, Polat & Karamüftüoğlu, 2014; Taşkaya, 2012), the importance of communication skills is emphasized (Başaran & Baysal , 2016; Kaya et al., 2014).

When we look at the literature, it is thought that the study will meet the need in this field, since no study has been found in Turkiye about the ideal teacher perceptions of Arabic teacher candidates. In the literature researches, a study was carried out by Al-Muslim and his friends (2020) in order to determine the qualifications of the ideal Arabic teacher for students and teachers. In this study, the qualifications that Arabic teachers should have are divided into four categories. In terms of personality category, the Arabic teacher should be hardworking. Required qualifications in terms of knowledge and creativity category are language proficiency, content knowledge competence, commitment and professional dedication. In terms of sociability and communication category, the Arabic teacher should be interested, patient and sincere. According to the teaching category, the required qualifications are stated as competence in the use of learning and teaching techniques, clarity in the expression and being able to attract the attention of the students. From this point of view, in our study, it is aimed to determine prospective Arabic teacher's opinions about the ideal Arabic teacher. For this purpose, pre-service teachers were asked to write a text on the following subject.

- What do you think the ideal teacher should be?
- What do you think are the characteristics of an ideal Arabic teacher? In this direction, what kind of Arabic teacher do you want to be?

2. Method

2.1. Aim of Study

In this study, which aims to reveal prospective Arabic teacher's opinions about the ideal Arabic teacher, the phenomenology design was used in accordance with the qualitative research method and the structure of the research. Phenomenology studies, in which the common meaning of individuals' experiences with a concept are sought, focuses on defining the common characteristics of all participants who experience that concept (Creswell, 2016: 77).

2.2. Study group

Creswell (2007: 83) recommends careful selection of people who will explain the phenomenon or situation in phenomenological studies. In this direction, Arabic teacher candidates participated in the research based on the aim of determining the ideal Arabic teacher perception. The study group consists of volunteer teacher candidates who continue their education in the Arabic Language Teaching Department of Suleyman Demirel University Faculty of Education in the 2020-2021 academic year.

Table 2: Demographic characteristics of the study group

Gender	Grade		
	Freshmen	Sophomores	Total
Male	14	11	25
Female	18	20	38
Total	32	31	63

According to Table 2, a total of 63 Arabic teacher candidates from 25 freshmen and 38 sophomores participated in the research voluntarily.

2.3. Data Collection and Analysis

Document was used as a data collection tool in the research. In order to determine the perceptions of the teacher candidates about the ideal Arabic teacher, they were asked to write an essay about the ideal Arabic teacher. Students were asked to write these compositions, which would constitute the document of the research, on a voluntary basis. The data obtained through the documents were examined through content analysis. Content analysis is the detailed and systematic examination and interpretation of a particular material in order to identify patterns, meanings and themes (Berg & Lune, 2015: 380). The data written by the pre-service teachers in the composition were coded by the researcher and another expert, and these data were collected under some themes. The codes and themes obtained in the research are supported by direct expressions of teacher candidates. While coding, analyzing and quoting the expressions of the teacher candidates, codes were given to the teacher candidates (P1: Participant 1). Identity information of teacher candidates is kept confidential. In the analysis of the data, the similarity ratio between the codes determined by the researcher and the codes determined by another field expert was calculated (Miles, Huberman and Saldana 2014:29). According to the calculation, this rate was determined as 85%. In this case, it can be said that there is harmony between encoders.

3. Findings

As a result of the research, the characteristics that the ideal Arabic teacher should have according to the answers of the Arabic teacher candidates were examined in three themes: *"Personal Characteristics," "Professional Characteristics"* and *"Field Proficiency."* The codes and participant views on these themes are presented under sub-headings.

3.1. Personality Characteristics of the Ideal Arabic Teacher

The first theme that emerged for the ideal Arabic teacher is the theme of personality characteristics. The codes and frequencies related to this theme are presented in Table 3.

Table 3: Personality Characteristics of the Ideal Arabic Teacher

Codes	f	Codes	f
Patient	33	Idealist	6
Role model	23	Tolerant	5
Social/Communicable	22	Trustworthy	4
Open to improvement	21	Smiling	3
empathetic	20	Responsible	3

Fair	16	Sincere	3
Aimful	15	Devoted	3
Understanding	14	Bias-free	2
Hopeful	12	Determined	2
Self-confident	9	Respectful	1
Ethical	9	Creative	1
		Total	177

The personal characteristics that Arabic teacher candidates look for in an ideal Arabic teacher are shown in Table 3. According to the table, the most basic personality characteristic that prospective Arabic teachers expect from an ideal Arabic teacher is patience. In addition to the teacher's patient attitude, being a role model, social/communicative, open to development, empathetic, fair, aimful, understanding, hopeful, self-confident and ethical are among the basic characteristics that an ideal Arabic teacher should have.

Some statements of Arabic teacher candidates regarding the personality characteristics of the ideal Arabic teacher are given below:
"It should not be forgotten that s/he must be a patient person. Because language is a process. Learning takes place over time, and certain students learn in a short time, and certain students learn in a longer period of time, and if we are patient and instill this in the classroom environment, a pleasant learning process will occur" (P27).
"Since s/he is a role model for students, s/he should set an example for his/her students with his/her speech, behavior, sitting, standing, knowledge, curiosity and respect. This situation is not only valid for Arabic teachers, of course, it is also valid for teachers of other branches" (P16).
"An Arabic teacher should establish good ties with the student in every aspect. Must have good communication with students. There should be a teacher and trainer who the students do not hesitate to talk about and with whom they can communicate easily" (P7).
"Our people have a misconception about learning Arabic; When Arabic is mentioned, there is a religion-oriented perspective, so an Arabic teacher should convey to his/her students that it is a language education and training. It should be emphasized that an Arabic teacher should also have an idealistic personality."(P11).

3.2. Professional Characteristics of the Ideal Arabic Teacher

Table 4: Professional Characteristics of the Ideal Arabic Teacher

Codes	f	Codes	f
Making the lesson fun, facilitating learning, motivating student	19	Using materials suitable for the structure of the course	11
Loving his/her profession	17	Providing student-centered instruction	5
Having time management	17	Having technological knowledge	4
Paying attention to student psychology and individual differences	15	Being experienced	4
Being disciplined	13	Having clear speech and narration	2
Using effective methods or strategies	12	Being a fair assessor/evaluator	2
Being a lifelong learner	11	Total	132

Table 4 contains the professional characteristics that prospective teachers look for in an ideal Arabic teacher. Accordingly, the most basic professional characteristic that prospective teachers look for in an ideal Arabic teacher is to make knowledge fun and motivate students by making it easier. In this direction, the pre-service teachers stated that the Arabic teacher should teach the language by providing an enjoyable learning environment and in accordance with the level of the student. In addition, they emphasized that they should love the teaching profession and provide time management in their lessons. In addition, Arabic teacher candidates stated that an ideal teacher should pay attention to student psychology and individual differences and be disciplined. Using effective methods or strategies, being a life-long learning teacher, using materials suitable for the structure of the course, providing student-centered teaching, having technological knowledge, being experienced, having clear speech and narration

and being a fair assessor/evaluator is among other characteristics emphasized by the teacher candidates on professional knowledge.

Some of the opinions of Arabic teacher candidates on the theme of professional characteristics are as follows:
"Arabic is understood by students today as a difficult language to learn. Some of the reasons for this are that the Arabic alphabet is different from the Turkish alphabet, it is difficult to read and write, and there are many grammar rules. But these are problems that can be overcome as you meet and learn Arabic. The teacher has a significant role in overcoming this process. The student, who is already unfamiliar with the language and approaches with anxiety, finds excuses to give up. But if s/he feels that s/he can succeed at the stage of learning the language, then the reasons for this problem are eliminated one by one. In this case, the most important task of the teacher is to make the target language popular, to make things that are difficult for the student simple and to teach them in a simplified form. I don't think a teacher who avoids doing these things has done his/her job properly. If we are teachers of Arabic, our job is to teach this language in its best form." (P.42)
"Language is constantly changing. The Arabic teacher should be able to keep up with this change, that is, s/he should be open to learning and hungry for knowledge, even if his/her education life is over. He should improve him/herself academically, constantly renew him/herself, and not forget that s/he was a student throughout his/her life." (P.25)
"If the physical conditions of the school are suitable, the Arabic teacher should create an Arabic class. Arabic class will contribute to students' willingness to learn languages. In this class, the teacher should draw the attention of the student to Arabic by using posters that encourage learning and interesting flash cards. If the physical conditions are not suitable for the Arabic class, s/he should hang frequently used words, conjunctions and speech patterns on corridor walls, boards, doors, stair steps. In addition, s/he should write the words to be taught with different colored pencils and teach the Arabic to the student using visual materials."(P.34)
"The ideal Arabic teacher should have reached a sufficient level in four language skills: reading, writing, speaking and listening." (P.50)
"Another characteristic that an Arabic teacher should have is fluent and intelligible pronunciation. Reading speed should be at a level that all students can follow the text."(P.12)

3.3. Field Competencies of the Ideal Arabic Teachers

Table 5: Field Competencies of the Ideal Arabic Teachers

Codes	f	Codes	f
Having sufficient field knowledge	31	Having a grasp of Arabic language	6
Being knowledgeable about Arab culture	14	Using a common language (English, etc.) in teaching Arabic	3
Loving Arabic and making others love Arabic	13	Being fluent in mother tongue	3
Having four basic skills of Arabic	13	Not using rote learning methods	3
Having good knowledge of Arabic vocabulary	10	Total	96

Table 5 shows the field competencies that teacher candidates look for in an ideal Arabic teacher. Accordingly, the most basic characteristic that prospective teachers look for in an ideal Arabic teacher is that the teacher has sufficient knowledge of the Arabic language. Having sufficient field knowledge is followed by characteristics such as having a grasp of the Arabic culture, liking and endearing Arabic, having reading, speaking, listening and writing skills, and having advanced vocabulary. In addition, Arabic teacher candidates are of the opinion that it would be beneficial for an ideal Arabic teacher to know a different language in teaching Arabic. Teacher candidates expressed some of their views on field competency as follows:
"In my opinion, an Arabic teacher should know the general rules of Arabic at least as well as the rules of the mother tongue. Thus, the teacher can best teach the rules of Arabic by showing the similarities and differences between the two languages to the students."(P:5)

"Another most important characteristic for me is his/her proficiency in Arabic language. S/he should have full grasp of the language s/he teaches. It should be at a level that can answer all kinds of questions about Arabic from students."(P:30)
"The teacher should make him/herself academically equipped and competent in terms of Arabic. S/he should learn Arabic comprehensively and be a really good educator on this subject."(P:7)
"It is not enough for the teacher to know Arabic very well. At the same time, s/he should know very well how to convey the knowledge to the student. Since every student's learning style and speed are not the same, the teacher should be aware of this aspect. (P:11)
"Instead of the rote-based learning method in teaching, studies should be carried out for students to understand and comprehend the logic of the language. Instead of the stereotypical perception of "language is difficult," it should be given the idea that "every language has its own logic, after sticking to that logic, learning and understanding are easier than we think." Besides, the student should be made to love the language. (P:2)
"It is not possible for an Arabic teacher to be fully proficient in Arabic only with the knowledge of syntax and grammar. Most importantly, s/he must do this job with enthusiasm, otherwise s/he will get bored after a while and cannot continue. First of all, s/he has to love this language himself so that s/he can make his/her students like it too."(P:16)
"In my opinion, the most effective learning is achieved through practice. For this reason, an Arabic teacher should not just lecture and leave the lesson, but should provide plenty of practice. The teacher should not give the rules and wait for the students to memorize, and plenty of activities should be done. Arabic should not be learned only by learning it in class, but by living and gaining experience in daily life."(P:52)

4. Discussion and Conclusion

In this study aimed to determine the perceptions of Arabic teacher candidates towards the ideal Arabic teacher. The findings of the research were discussed within the framework of the Ministry of National Education's general qualifications for the teaching profession (2017) and other related studies.

In the research, the opinions of teacher candidates about the ideal Arabic teacher were gathered under three themes: *"Personal Characteristics," "Professional Characteristics"* and *"Field Competence."* It has been observed that the characteristics in these themes overlap with the characteristics specified in the subcategory of the Ministry of National Education's teaching profession general competence areas " *Professional Knowledge," " Professional Skills"* and *"Attitudes and Values."*

Among the themes, it was observed that the teacher candidates mostly produced ideas for the "*Personality Characteristics*" theme, which was not specified within the scope of the Ministry of Education's general qualifications for the teaching profession (2017). It was seen that the theme that the candidates expressed the least opinion was the theme of *"Field Competence*." The teacher candidates did not express any opinion on the "Knowledge on Legislation" sub-competence in the "*Professional Knowledge*" category.

Teacher candidates stated that the most important personal characteristics they want an ideal Arabic teacher to have are *patience, role model* and *openness to social/communication.* In addition, the candidates think that teacher should be *tolerant, idealistic, reliable, open to development, smiling, empathetic, responsible, fair, sincere, goal-oriented, altruistic, understanding, unprejudiced, hopeful, determined, self-confident, respectful, moral* and *creative*. These statements given by the teacher candidates about the personal characteristics of the ideal teacher are similar to the ideal teacher personality characteristics stated in the studies of Arıcı (2021), Köse and Demir (2014), Çalışkan, Işık, Saygın (2013), Pozo-Munoz, et al., (2000).

While describing the professional characteristics of an ideal Arabic teacher, the pre-service Arabic teachers mostly included the expressions that make the lesson fun, facilitate learning, motivating students, loving their profession, and having time management. Other characteristics stated by the candidates are; *using materials suitable for the structure of the course, providing student-centered instruction, having technological knowledge, paying attention to student psychology and individual differences, being experienced, being disciplined, having clear speech and narration, using effective methods or strategies, being fair evaluator, being lifelong learner.* In the research, all the findings obtained in the theme of professional characteristics overlap with some sub-categories

of Teaching Profession General Competencies stated in Table 1. These categories were determined as managing the teaching and learning process, assessment and evaluation, and creating learning environments.

According to teacher candidates, an ideal Arabic teacher should have sufficient field knowledge, be fluent in the Arabic language, be knowledgeable about Arab culture, use a common language (English, etc.) while teaching Arabic, love Arabic, make other love learning Arabic, be fluent in mother tongue, have four basic skills in Arabic, not apply rote learning methods and lastly should have good knowledge of Arabic vocabulary in terms of field competencies. Al-Muslim et al.'s (2020) study found out that knowledge and creativity, language proficiency, content knowledge competence, commitment, professional dedication were Arabic teacher qualifications. In line with this study, the field qualifications of the ideal Arabic teacher of the Arabic teacher candidates in the present study were compatible with Al-Muslim et al.'s (2020) study.

When the research is evaluated as a whole, it is seen that the teacher candidates are aware of the characteristics that the teachers they will take as models should have in terms of personality, professional and field competence. However, it was determined that the prospective teachers who participated in the research and who were in the first years of teacher education had deficiencies in the knowledge of legislation and it is thought that studies should be carried out to eliminate these deficiencies.

In addition, it is thought that it would be beneficial to include studies that determine the ideal teacher perceptions of teacher candidates studying in the Arabic Language Education departments of education faculties in other universities. Besides, it may be beneficial in terms of self-evaluation to conduct a study on how teachers who work as Arabic teachers within the Ministry of National Education and private institutions evaluate themselves by taking their opinions about the ideal Arabic teacher.

In this study, data were collected through compositions written by teacher candidates. It is thought that quantitative researches to determine the characteristics of an ideal Arabic teacher will contribute to the field.

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Determining the Training Needs and Qualification Levels of Counsellor Candidates regarding "Therapeutic Skills" in the Process of Individual Counseling Training

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Abstract
This study is aimed at determining the training needs and qualification levels of counseling candidates concerning invitation to speak, reflecting feelings, minimal encouragement, reflection of content, personalization, self-addition, self-disclosure, summarization and confrontation skills during the psychological counseling process. In the present study, summative content analysis was used. 20 students (12 female, 8 male) who took Invidividual Counseling Course in the spring term of 2019- 2020 academic year constitute the study group. "Counselor Qualifications Evaluation Form" developed by Eryılmaz and Mutlu- Süral was employed to identify the qualifications regarding the skills. Supervision was observed to be sufficient in terms of developing the qualifications of minimal encouragement, reflection of content, reflecting feelings (except from counselor's prolonged speech), summarization and self- disclosure. On the contrary, it was seen that supervision was not sufficient in developing other qualifications as personalization, initiation to speak and self- addition and it was found that candidates needed training regarding confrontation skills.

Keywords: Therapeutic Skills, Individual Counseling, Qualification Level

1. Introduction

It has been acknowledged that psychological counseling education in Turkey is mainly carried out at undergraduate level as well as master's and doctoral programs. In this regard, it can be said that Individual Counseling is a course for students studying at undergraduate level in the field of psychological counseling education through which they, for the first time, are able to put their psychological counseling skills and theoretical knowledge gained during their education into practice for clients to provide psychological assistance. Therefore, it has been thought that the training carried out within the scope of this course plays a pivotal role as the students gain the opportunity to acquire a real psychological counseling experience and take steps towards occupational self- concept of psychological counseling (Meydan, 2014).

On a national scale, it has been stated that, according to some researchers, it is not known how and what quality this training is provided to counseling candidates within the scope of Individual Counseling course (Aladağ and Kemer, 2016; Siviş, Çetinkaya and Karanmak, 2012). Büyükgöze and Kavas (2011) revealed the different practices regarding psychological counseling process among universities. In addition, Atik (2012) states that there is no standard set for the psychological counseling practices in Turkey and adds that this training do not become adequately widespread. Consequently, it has been seen that there are certain problems related to this field and prospective expectations of improvement.

It is possible to put forward that the problems within the context of the topics touched upon in the field of Individual Counseling are rooted in the problems related to the standards in our country as well as the ones arising from the nature of the profession. The difficulties faced by counselor candidates at the earlier levels of education are regarded as the necessity of their training. These difficulties may be fulfilling internship requirements, seeing a large number of clients, performing reading activities and doing homework (Howard et al., 2006). Furthermore, another challenge that counselor candidates encounter is that they are required to realize the old ways of psychological assistance- such as advising and seeking immediate solutions- are no longer functional and to try to acquire new skills as active listening and reflecting feelings (Ronnestad and Skovholt, 2003). Besides, the counselor candidates need to develop prepared and cautious attitudes in order to perform psychological counseling services properly. Psychological counsellor candidates should avoid taking unnecessary risks when trying to help their clients in a best way and making decisions on their own in relation to the client. The counselor candidates should be relaxed with the counseling process and make the client feel that the counseling process is under his/her control. Since they do not completely know how and what to do due to lack of knowledge, skills and experience in general, high anxiety, self- critism and self- doubt and confrontation may be considered as the difficulties faced by earlier periods of the training (Woodside et al., 2007). In order to overcome these difficulties, the supervisors, instructors and lecturers are said to be the most effective individuals in psychological counseling education, as of the very first practices, for counselor candidates (Tanhan, 2018). It has been emphasized that as these critical difficulties experienced by counselor candidates are regarded as developmentally natural in the profession, those who are involved in psychological counseling education are able to overcome those challenges through the preventive approaches of supervisors or lecturers prior to the practices (Borders, 2016; Tarhan, 2018).

One of the fundamental prerequisites of effective psychological counseling assistance is that the person who provides psychological help is also an effective counselor (Hackney and Cormier 2005; Meydan, 2014). On the other hand, being an effective psychological counsellor may be possible by having certain theoretical knowledge and skills as well as supporting those knowledge and skills with psychological counseling practices (Gibson and Mitchell 2008; Meydan, 2014). As a result, it can be uttered that counselor candidates can only acquire such a fund of knowledge by completing an adequate and effective education.

Meydan (2014) highlights that psychological counseling skills consist of both verbal and non-verbal skills, and that their most basic function is to enable counselors to communicate with their clients. Accordingly, professionals who provide psychological assistance are required to have gained a number of acquisitions in order to be successful in the process of psychological help.

Therapy is the process of establishing a relationship and gaining trust between the counselor and the client. To facilitate this relationship, counselors need highly advanced therapeutic skills. Therapeutic skills are verbal and non- verbal ways to communicate with clients with the aim of creating an emotional environment in which a therapeutic bond (agreement) can be formed, maintained and safely terminated. This relationship is crucial to help clients discover how their life experiences affect their ways of being, and, if they want, to find new meanings and ways to relate to themselves, others and life (Ingram and Robson, 2018). As stated by Eryılmaz and Mutlu- Süral (2014), therapeutic skills include invitation to speak, reflecting feelings, minimal encouragement, reflection of content, personalization, self- addition, self-disclosure, summarization, confrontation and structuring.

One of the main assumptions of curriculum development is that a robust curriculum should be based on students' needs analysis. The processes used to gather information regarding students' needs are known as needs analysis (Richards, 2001). Need recognition is a series of systematic processes determined for the purpose of identifying

needs, making decisions and setting principles about the curriculum or dividing corporate development and resources (Witkin and Altschuld, 1995). However, needs assessment is used to address the majority of areas of educational programing and student development (such as academic, emotional, social, professional, aesthetical, physical and moral) at local, state, regional and national levels. Needs assessment is a process that can be utilized for a number of different purposes, such as helping planning, identifying and diagnosing problems, and helping assess the merit and value of another program or effort (Stufflebeam et al., 1985). Needs refer to the difference between what the current situation is and what it should be (Sönmez et al., 2019). The difference between expected competencies and performance of the counselor candidates may give an idea about their educational needs while designing a curriculum concerning individual counseling skills of counselor candidates. The curriculum to be developed based on this knowledge may facilitate acquiring expected competencies and guide the development of individual counseling education curricula.

The current study is designed to determine the training needs and qualification levels of counselor candidates concerning 'therapeutic skills' in the process of individual counseling. This study aims to examine candidates' training needs and qualification levels towards invitation to speak, reflecting feelings, minimal encouragement, reflection of content, personalization, self- addition, self-disclosure, summarization and confrontation skills. Through this study, it was attempted to determine the frequency and competency levels of the therapeutic skills, constituting psychological counseling process, exhibited by counseling candidates over time. In addition, their training needs regarding individual counseling competencies were tried to be revealed. Therefore, it is thought that the training needs and qualification levels in the field revealed in the present study may contribute to the educational quality in psychological counseling field.

2. Method

Qualitative data analysis is a process in which researcher organizes the data, divides it into units, synthesizes, reveals patterns, explores significant variables and decides what information to include in his/ her report (Bogdan and Biklen, 1992; Walcott, 1994). Since the main purpose of this study is to determine what supervisory skills shown by candidates are, at what level they are able to perform these skills and what are their needs in the 'Individual Counseling' course, the qualitative approach was adopted in the current study.

In the study, the recordings of 8 sessions carried out by counseling candidates who participated in the study were obtained. Through these records, the therapeutic skills of counseling candidates were investigated based on "Counselor Qualifications Evaluation Form" and research data were collected by marking 'Yes' if the candidate showed a behaviour concerning the related skill and 'No' if s/he did not. If the candidate exhibited a behaviour related to one of the therapeutic skills in a session, it was considered sufficient for the relevant session; however, it was not examined how many times s/he repeated this skill in the same session. It was investigated that the level of use of therapeutic skills, in other words, whether the candidates are able to use the skills at expected quality in the relevant session. For this reason, content analysis, which is one of the qualitative research methods, was included in the study. As content analysis, summative content analysis was used. In a study that employed summative content analysis, the first step is to identify and measure specific words or content in the text in order to comprehend the textual use of the words or content. This quantification is not an attempt to grasp meaning; rather, to explore usage. Beyond the count of words or appropriate sentences is the interpretation of the content. In this regard, the main focus is on exploring the meanings underlying the words or content (Hsieh and Shanon, 2005). Content analysis, which is one of the qualitative research methods, was used in this study, the main purpose of whose is to determine the training needs and qualification levels of counselor candidates concerning 'therapeutic skills' in the process of individual counseling. Content analysis is mainly based on the analysis of written and visual data. In the content analysis, categories related to the research subject are generated and then, words and sentences are assigned to these categories in accordance with the data obtained from the candidates examined and, finally, counting are performed (Silverman, 2001).

2.1. Population and Sample of the Study

20 students (12 female, 8 male) who took Individual Counseling Course in the spring term of 2019- 2020 academic year constitute the study group.

2.2. Data Collection Instruments

Within the scope of Individual Counseling Course, candidates were requested to perform eight sessions and audio recording were asked for each of the sessions. The candidates were, then, asked to decode the recordings. Based on approximately 120 hours of recordings, candidates' training needs and qualification levels were investigated according to the identified categories. Since these qualifications require to be examined in terms of certain criteria and categories, "Counselor Qualifications Evaluation Form" developed for use in "Developmental Comprehensive Supervision Model" developed by Eryılmaz and Mutlu- Süral (2014) was employed. The form includes four main sections and sub- sections as *structuring* (duration, process, objective), *therapeutic conditions* (concreteness, transparency, empathy, here and now, respect), *therapeutic skills* (invitation to speak, reflecting feelings, minimal encouragement, reflection of content, personalization, self- addition, self- disclosure, summarization and confrontation skills) and *managing therapeutic process* (managing the client, managing self and managing the counseling process). As the current study centred upon therapeutics skills, only the skills under this title were examined. If the candidate exhibited the behaviour included in the form, 'Yes' option was marked and it s/he did not, 'No' option was marked. For instance, if the candidate asked a question related to invitation to speak skill, then 'Yes' option was marked and the question or statement used by her/ him was noted under the 'invitation to speak' category. Following, the suitability of the question or statement in terms of the purpose of use was evaluated and the counsellor candidates' training needs and qualification levels in terms of the related skill were decided.

With the aim of ensuring the confidentiality of the participants, codes ranging from C1 to C-20 were used instead of their names. The current study was actually based on recordings of the sessions. However, from time to time, either group interviews or client- supervisor interviews were conducted to have a better understanding on the behaviours of counselor candidates.

3. Findings

This section covers the findings regarding the skills of invitation to speak, reflecting feelings, minimal encouragement, reflection of content, personalization, self- addition, self- disclosure, summarization and confrontation.

3.1. Findings regarding Minimal Encouragement Skill

Minimal encouragement is the responses by counselors to encourage their clients to explain more about themselves and their problems. According to the transcription of the recordings carried out in 8 sessions of 20 counselor candidates, it was determined that the candidates fulfilled this skill at expected qualification at the end of the supervision performed after the sessions. It was revealed that, during counseling process, candidates were able to encourage the clients to speak by asking questions consisting of "hımm," "yes" or one word or by repeating the keywords that represent the main idea in the client's statements. In one of the interviews conducted by C7, s/he was revealed to use this skill as follows:

Client: *I said I was going to be a teacher. But I went there so ignorant.*
C-7: *I see.*
Client: *My teacher said never mind. My father said to my teacher s/he knew the best. He told me he knew the best. I mean, I went there without knowing anything.*
C-7: *So, you didn't know anything about it?*
Client: *Exactly. Without knowing anything, I just whaled into it.*

As seen in this sample, the counselor candidate appropriately uses minimal encouragement skill and carries forward the counseling process and generates the suitable environment for the client to encourage her/ him to speak more about herself/ himself.

It was found that the common mistakes made by candidates regarding "minimal encouragement" skill were that they used the phrases such as 'I see, Hı Hı!, Yes' and 'Alright' very often and did not use expressions or other therapeutic skills that would contribute to the process and help themselves understand the client and enable the client to express her/ his feelings and thoughts. Nevertheless, it was determined that as the sessions continued, the number of mistakes were observed to decrease; especially after the sixth session, there were no unnecessary uses encountered.

3.2. Findings regarding Reflection of Content Skill

The reflection of content is to clarify the client's statements in terms of content, and to reconvey his/ her statements by summarizing them in different words without affecting the content. The main purpose of this skill is to check whether the client's thoughts are correctly understood by the counselor, to make the client's thoughts more explicitly expresses and to ensure the client's thoughts to be understood. According to the content analysis, it was seen that this skill is the one that the candidates were the most competent. It was determined that nearly none of 20 candidates used it incorrectly. A sample of correct use is as follows:

> **Client:** *One of the first things is to feel incomplete about certain things like this. Then comes the idea that I can't do anything on the test. And then there is forgetfulness during the exam, which is probably related to anxiety. This affects stress level a lot. And the attitudes of the teachers in the classroom may be related to the increasing level of stress.*
> **C-12:** *You think you're going to fail the test you feel incomplete, and the teachers' behaviours increases your anxiety level.*
> **Client:** *Yes, that's exactly what it is. In fact, I could deal with them all if I could tell them apart.*

As this sample shows, the counselor candidate correctly used reflection of content skill. The fact that the client says *'Yes, that's exactly what is it is'* is an indication that the candidate has used the reflection of content skill correctly. Similarly, other candidates were found to effectively use this skill. On the contrary, although it was not common, when the recordings were examined, the mistake identified was that the candidates asked close- ended questions such as *"Do they have the same feelings as you?"* **(C- 10)**, *"Are you angry with your flatmates?"* **(C- 6)** and *"Are you thinking of leaving the department you're studying?"* **(C- 17)**. These mistakes, in particular, were observed during the very first sessions; however, it was determined that this skill was fully fulfilled after the supervision. *It may be concluded that the candidates' performances on the reflection of content skill are an indication that there is no training needed towards this skill.*

3. Findings regarding Personalization Skill

Personalization is of importance in the counseling process in order for client to clarify the purpose of his/ her having psychological counseling by discovering herself/ himself and to ensure that the client owns the existing problem to properly resolve the problem. When this skill is not used, the purpose may be prevented from clarifying and, therefore, the solution may not be developed. The analyses revealed that the personalization skill was not frequently used. It was found that counselor candidates used reflection of content skill in the sessions that stated that 'we used.'

> ***Client****: My roommate. She's the problem. She's an untidy, sloppy and messy person who doesn't put the things in their place. She doesn't hang her clothes neatly in her closet, put her books in her bookcase and, then, she asks us. I'm overwhelmed. I can't stand that anymore.*
> ***C-15:*** *This mess, Aslı's mess, bothers you.*
> ***Client:*** *Exactly.*
> ***C-15:*** *To be organized is important for you. You can't stand untidiness. It makes you angry to have an untidy space in the same house even if you are staying in separate rooms.*

It was determined that C-15 used the personalization skill correctly during the counseling process, allowing a clear understanding of the problem by the client. C-15 was observed to attempt to help the client understand the real problem by using reflection of content skills.

At the end of supervision process, it was seen that the counselor candidates were not able to administer the personalization skill at expected level of competence. A sample of this was given below:

> ***Client****: When I graduate, I want to start my master's degree right away, but I don't have a job. I had better get a job first. Then, I'm thinking of applying for a master's degree. But this time, there is military service. If I work, I have to go to the army, so I give up the idea of having master's degree. If I did a master's degree, military service would be deferred as I was a student, but this time it would be difficult for me to have a career. I'm so confused.*
> ***C-20****: You think a master's degree will help defer military service, but it will prevent you from getting a job?*

In the sample above, the candidate attempted to use personalization skill. However, s/ he exhibited a behaviour that was not suitable for personalization skill by converting the client's statements into a question. Instead, it would be right to use such a statement as *"You can't decide what to do because you think that doing a master's degree will help defer military service but will also hinder you to get a job"* for personalization skill. As a result, it may be concluded that candidates need training towards personalization skill.

4. Findings regarding Reflecting Feelings Skill

Reflecting feelings skill is related to clarifying the client's feelings. This skill is used to clarify the client's feelings and to check whether the counselor perceives his/ her feelings correctly. Reflecting feelings skill is the determination and transmission of the feelings about the problems of the clients that they have difficulty in identifying. It is important to determine the client's feelings related to his/ her problem properly in order to have a positive impact on the communication between the counselor and the client. The counselor candidates were found to be able to use this skill by accurately determining what the clients felt during the counseling process. The conversation below may be given as a sample:

> ***Client:*** *I'm home and crying. I'm already very affected from this.*
> ***C-7:*** *Alright, you got on the board in class. Did you get any feedback from your classmates in this process, any reaction to you, etc?*
> ***Client:*** *They laughed.*
> ***C-7:*** *And that made you sadder.*

Although reflection feelings skill was generally used correctly, certain counselor candidates were not able to use this skill required by the psychological process correctly as in C-15.

> ***Client:*** *I was in the certification program as usual at the weekend. I'm in the same place seven days a week. If you can't reach me you know that I'm at school. And in class, as a matter of fact, this week was good and so were the subjects. There was nothing to me off. On the contrary, good things happened. For example, the subjects were really nice when we discussed nice things as love poems.*
> ***C-15:*** *It's been a very emotional week for you.*

In the sample above, the fact that the candidate summarized the client's experiences in a general sense without fully reflecting his/ her experiences prevents him/ her from noticing the intensity of his/ her feelings. In this respect, the candidate was not able to use the reflecting feelings skill correctly and appropriately. It was determined that candidates had difficulty in determining reflecting feelings, particularly in long speeches of the client.

5. Findings regarding Summarization Skill

The summarization skill is an important skill that facilitates two-way communication to occur, helps the clients to ease and contributes to the solution of the problem gradually in the psychological counseling process. According to Voltan-

Acar (2020), this skill refers to summarizing a certain part or whole of the consultation process by using it in company with feelings or content reflection. It was determined that the candidates were able to use summarization skill correctly.

> ***C-5:*** *…We talked about identity confusion last week. You said you were confusing your roles and when I first asked when this happened, it actually started this year. Because I was a student for 20 years. I haven't adapted since I started business life. I'm going to İzmir, I'm still my mother's daughter and still young but I'm coming here. You said you had to be mature and it was tiring to be caught in the way of it… In fact, it's affecting your life. You mentioned it was a little negative. Last week, you went to İzmir and you said that it was good for you.*
> ***C-9:*** *Now, to sum up, you think that you should never make mistakes, because your mother especially wants you to do. You're afraid of making mistakes, but you're making the mistakes that you don't do by losing control as you are trying not to make mistakes. And it makes you extremely uncomfortable.*

Summarization also refers to the confirmation from the points of view of both parties that the process continues in a correct way. It contributes to the process to continue properly and to achieve the desired outcomes. It was observed that the candidates were able to use this skill effectively during 8- session- counseling process.

6. Findings regarding Invitation to Speak Skill

The purpose of invitation to speak skill is to be able to understand the feelings, thoughts and experiences of the clients directly or indirectly related to the problem. It is a skill that the counselor requires to use effectively in order for the client to express herself/ himself better. According to the examination of recordings, the counselor candidates used this skill through open- ended questions.

> ***Client:*** *Anger is reflected in daily life. When I get up this morning, it raises questions about whether I should go to the class or not. I'm more withdrawn when I talk to people. It affects my circle of friends. Maybe I know someone less that I can know better. Our relationship is not so close although we can have a close relationship. We can say that it affects my home, friends, my classes and everything in my daily life.*
> ***C-20:*** *Anxiety, anger, do you think they affect your daily life and relations with other people?*
> ***Client:*** *Yes.*
> ***C-20:*** *So, this anxiety affects your relations physically. Can you explain a little bit how these will affect you in the future?*

As seen in the example above, the candidate attempted to provide a clear understanding of what is the main situation affecting the quality of life of the client. Moreover, the candidate also attempted to demonstrate the importance of the situation for the client by asking open- ended questions.

It was shown that the counselor candidates were able to use invitation to speak skill successfully. However, in certain sessions, it was observed that this skill was not used when it was required to be used.

> ***Client:*** *For example, I had a friend from secondary school. We were very close to each other those times. It was a boy. He wasn't very good with the girls. We were just friends and already talking. Then, at the high school, last summer, or maybe not last summer, but the summer before because we were at the high school. He texted me, and we started talking. I speak as if I am talking with an ordinary friend because he's just my friend. I don't see him in a different way. But he said that he loved me, sometimes he told me such nice words, compliments that I've never heard before. And if a man is over-complimenting to you, you shouldn't trust him. I didn't trust, either. After that, we talked for about a month or two. Even though I said I didn't trust him, I inevitably got used to those words and compliments, and, after a while, I start to feel normal. You're starting to feel confident even if you don't say it orally. Then, he suddenly stopped talking and I found out that he was talking to another girl. I felt so bad. I mean, you don't normally love him, so why does a person cry. I felt myself cheated. It was so bad. It's been two years since then and I haven't talked to anyone. I mean as a boyfriend.*
> **C-13:** *Okay, I see.*

In this example, the fact that the candidate says "Okay, I see" may not contribute to the client to see the problem, to discover herself. In addition, it may also affect the counseling process adversely. Instead, it would be appropriate for the candidate to deepen and make the problem more pronounced by asking open- ended questions such as *"How has your situation with just one person affected your sense of trust in other people?"*

While asking open- ended questions to fulfill the invitation to speak skill, it was determined that the counselor candidate asked questions in order to satisfy his/ her own curiosity in two sessions. The situation in one of the sessions is presented below:

> ***Client*****:** *I have siblings in my family who study like me but I couldn't get used to the school. Some nights, I wake up crying in the dorm. My friends are always there for me, I thank them. There are friends who smoke, sometimes they smoke in front of the window in the room. That smell when the match burns reminds me of my father, I feel like crying and running away, going home. I don't want to be there.*
> **C-13:** *How many brothers or sisters are you?*
> ***Client:*** *Two brothers, three sisters. There's a lot of us.*
> **C-13:** *How do your friends help you, what do they do?*

In invitation to speak skill, counselor candidates were observed to use such a phrase as "I see" often. However, in certain sessions, when this phrase is used repeatedly, it does not contribute to the counseling process.

7. Findings regarding Self- Addition Skill

In the psychological counseling process, the counselor's participation in the positive or negative feelings of the client and in his/ her opinion and the client's ability to show his/ her own reaction is called as self- addition. The key point in using this skill is to clarify the problem of the client, to approve his/ her correct behaviours towards the solution of the problem and to encourage the client to act. In this respect, it is one of the important skills of the psychological counseling process.

In the 160 sessions examined, it was determined that self- addition skill was used correctly. One of the examples where this skill was used correctly is as follows:

> ***Client*****:** *I'm yelling at him. I'm calling him. I'm hitting him when it's time. If he understood at once, it's best to solve by talking to him.*
> **C-17:** *Yes, it's best to talk it out. Any other approach might make him more vicious. And now that he's a teenager, he can do the things he wouldn't do.*

As seen in this example, the candidate agrees that the solution of the client is the right method. The candidate explains what the client may face if this method is used.

In the recordings investigated, it was determined that self- addition skill appeared in the form of reflection of feelings and content and that the candidates were not able to use this skill sufficiently.

> ***Client*****:** *Studying in Uşak… there's nothing here, there's nothing to do.*
> ***C-16:*** *You don't feel free!*
> ***Client:*** *The teacher and I didn't hit it off. I'll be so relieved if I know what to do. If another teacher gives the same class, I'll take it. I'll even take the class next year again. There's one lecturer in the department so it doesn't matter! I don't know how to fix my relationship with my teacher or whether I should do this or not.*
> **C-10:** *You're doubtful about what to do, you're having conflicting feelings. I had a similar problem I was at the university.*

In the supervision process with the counselor candidates, it was determined that the candidates did not fully understand the self- addition skill. *As a result of the supervision, this skill was used by nine candidates at the desired quality in the following sessions; however, the remaining candidates were not able to use this skill sufficiently.*

8. Findings regarding Self- Disclosure Skill

Self- disclosure skill refers to the counselor's talking about his/ her own life and feelings related to the client's problem. In other words, the counselor shares his/ her own feelings and thoughts about the client's problem with the client. This skill is of importance in that it helps the client understand and solve the problem. When the recordings obtained from the sessions were examined, it was found that the counselor candidates were able to use this skill properly and appropriately.

> ***Client*:** *Talking before a crowd makes me so nervous, I feel sewat coming out of the middle of my back. I don't know why this is happening. Actually, I'm prepared for the subject I'm talking about, but when I'm in front of people, I'm cut off. I feel like I'm going to say something that's irrelevant. I'm stuck.*
> ***C-8:*** *Actually, I had a similar experience in high school. And I was thinking "I'd rather do a heavy work, I mean physically, than talk in front of a crowd."*

As in the example above, the candidate continues the psychological assistance process with an example from his/ her own life to make the client feel better. Although not often, it was determined that the candidates disclosure themselves in a way that does not contribute to the counseling process.

> ***Client*:** *You know, the dorm is crowded. If you tried to work in the room, you wouldn't be able to work. There's a study room, and people would talk while studying there. You can't work.*
> ***C-11:*** *Noise bothers you, I can't work in a noisy environment, either.*
> ***Client:*** *No, the noise doesn't bother me too much, but the crowd distracts me. When everyone's dealing with other things, it's just the curiosity about what's s/he doing, what other people are doing.*

The candidate disclosures himself/ herself without completely understanding the problem. It might have been more effective if s/he had used self- disclosure skill after understanding the problem through invitation to speak skill.

9. Findings regarding Confrontation Skill

Confrontation is when the counselor fulfills the empathy condition and reveals the inconsistencies s/ he observes. It is, in other words, a skill used to express the contradictions of the client regarding the problem in the counseling process (Eryılmaz and Mutlu-Süral, 2014). Using this skill, the counselor attempts to contribute to the solution of the problem by enabling the clients to be aware of their feelings, thoughts and behaviours by focusing on the discrepancies among them. When the recordings were examined, it was found that candidates did not use this skill.

10. Result and Discussion

This study is aimed at determining the training needs and qualification levels of counseling candidates concerning invitation to speak, reflecting feelings, minimal encouragement, reflection of content, personalization, self-addition, self- disclosure, summarization and confrontation skills during the psychological counseling process. It was determined in the current study that the counselor candidates were not able to use the skills of personalization, self- addition, self-disclosure, summarization and confrontation at desired levels. The supervision activities carried out were not sufficient for the candidates to fully acquire these skills.

Although not often, candidates were observed to affect counseling process adversely by asking unnecessary questions in terms of invitation to speak skill among therapeutic skills. Furthermore, by over-using such patterns as "yes, I see," they caused them to lose their effectiveness and meaning. Ivey el al. (2006) describe the question as an open invitation. However, questions are often perceived as intrusive by clients, in spite of they are seemingly harmless (Cormier, 2016).

Through the supervision conducted in the current study, it was attempted to prevent the candidate from asking unnecessary questions. Nevertheless, the candidates continue making this mistake due to their lack of experience. Candidates need to be shown what open-ended and close-ended questions are and where they should use them.

Carkhuff (2008) stated that personalization skill is the most challenging interpersonal skill to learn and apply. It can be said that it may not be easy for the counselor candidates to gain this skill with their applications consisting of eight sessions in the study. For a high-level personalization skill, a counselor candidate requires to understand the client's problems, objectives, feelings and to catch the deficits; however, for a low-level personalization skill, s/he requires to accurately report the meaning of what the client says (Bernard & Goodyear: 2019). In this regard, it may be concluded that the counselor candidates need more practice and supervision for a high-level personalization skill. It may be asserted that personalization skill may not easily enhance through the applications required by Individual Counseling course since students have to pay attention to a number of features in the counseling process and to use various skills at the same time. It may be argued that it may be possible to develop the skills that are intended to be acquired in the applications performed with not fully acquired skills. In order for the counselor candidates to be effective in the counseling process, personalization skill and other skills are required to be acquired in advance with a certain qualification before applying.

It is important to use therapeutic skills in the counseling process; however, the fact that counselor candidates are not adequately qualified for these skills affects the use of these skills. In a study conducted by Şahin et al. (2019), counselor candidates highlighted the importance of using these skills. Nonetheless, the frequency of use of these skills varies. The candidates were observed to use reflection of content skill the least.

As a result of this study, it was determined that the frequency of use of therapeutic skills was different. Therefore, the findings of the current study have yielded different results from those of the study carried out by Şahin et al. In the study, the candidates were observed not to use confrontation skill. It is not appropriate to use confrontation skill in the first session; this skill is used in the later sessions of the counseling process when the client-counselor trust is provided (Cormier, 2016). According to Developmental Assistance Model, it is a skill that should be used by the counselor when the benefit of client is believed towards the end of the phase of client's self-understanding (Eryılmaz and Mutlu-Süral: 2014). In this respect, the candidates should bring the client to the level of confrontation by using certain skills as structuring, therapeutic conditions and managing therapeutic process. In case there is lack in previous skills, this may have negative effects on the counseling process (Bek and Gülveren, 2021).

In the present study, where counselor candidates were examined in terms of therapeutic skills, it may be concluded that they need training concerning personalization and confrontation skills. The qualification level of the candidates may be enhanced by generating a curriculum for the development of these skills. During these trainings, it is possible to allow the candidates make practice and, based on their experiences, the skill may be acquired by using such different methods as micro- teaching where they are able to gain skills by evaluating themselves.

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Problems that Classroom Teachers Encounter in the Education Process of Syrian Migrant Students in Turkey

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Abstract
With this research, it is aimed to determine the problems faced by classroom teachers who have Syrian immigrant students in their classrooms in Turkey. The research was designed as a single case study, one of the qualitative research methods. Criterion sampling method, one of the purposive sampling methods, was used. The participants of the research are 10 classroom teachers. The data of the research were collected through semi-structured interviews. The collected data were analyzed by content analysis method. According to the findings, the most basic problem in the education process of primary school teachers with immigrant children in their class is the language problem. The language problem creates communication problems with immigrant children and their parents. While some of the teachers who have immigrant children in their class see this as an advantage, some see it as a disadvantage due to the problems they experience. Teachers offered solutions for children, parents and teachers to cope with the problem situations they experienced in their classrooms.

Keywords: Basic Education, Classroom Teacher, Syrian Children, Immigration, Immigrant

1. Introduction

The fact that people are constantly in a displacement activity shows that migration has existed throughout history. Migration is defined as a geographical, social and cultural displacement from one place to another for a short, medium or long term, aiming to return or permanent settlement (Üner, 1972; Yalçın, 2004). While migration events were caused by reasons such as hunger, war, famine and climatic conditions, today they have been replaced by reasons such as cultural, social, military, political, economic, religious, industrialization, education, and changing needs (Akıncı, Nergiz, & Gedik, 2015).

The concept of immigrant is used for people who immigrate to a different region within the country or to a country other than their own country in order to obtain better financial or social conditions, although there is no compelling

reason to migrate. Refugee is the concept used for people who migrate due to compulsory reasons such as war. Asylum seekers are defined as people who apply to obtain refugee status in the countries party to the relevant conventions and are waiting for this application to be finalized (IOM Migration Terms Dictionary, 2009). Temporary protection is defined as the protection provided to foreigners who are forced to leave their country and cannot return to the country they left, who come to or cross our borders en masse in order to find emergency and temporary protection or individually during this mass influx, and whose international protection request cannot be evaluated individually (Ministry of National Education, 2017).

According to 2019 data, 3,646,889 Syrians are under temporary protection in Turkey. Of these people, 499,329 are between the ages of 0-4, 504.443 are between the ages of 5-9, and the number of children between the ages of 0-9 under temporary protection is 1.033,772 (District of Migration Management, 2019). This situation, which is expressed as migration, started with the crisis experienced in Syria in 2011 and many people had to leave the country they lived in (Akşit, Bozok & Bozok, 2015). The general aim of the national education system in Turkey is to raise "good citizens." Especially in the realization of this aim, schools have great responsibilities (Bozkaya, 2021d). Syrian immigrants who came to our country were initially evaluated as temporary guests and a short-term education policy was prepared to assume that they would return. However, when it was understood that the war in Syria continued to intensify and that the Syrians would not return to their countries, studies were started for the education of these children. In this context, the Ministry of National Education (MEB) tried to find a solution to the education problem of Syrians with the circulars and various activities it published on April 26, 2013 and September 26, 2013. In 2014, when the Syrian population approached two million, the first comprehensive legal regulation was prepared for foreigners, immigrants and asylum seekers living in Turkey. In this way, education services are provided to migrant children inside and outside the camps (Temporary Education Centers and Public Schools) (Emin, 2016). Although educational services are provided, it is known that immigrant children have difficulties in adapting to the new environment, a different language, school, education system, teachers and peers (Uluocak, 2009). The most common problems that immigrants face are education, security, economic, housing, health and cultural integration (Bozkaya, 2021f).

The problem of education is among the most common problems that immigrant children face all over the world (Erdoğan, 2015). Şeker and Aslan (2015) reported that refugee students have problems in their research on studies conducted in other countries and that these problems stem from the language deficiencies of children, the problems experienced by parents in understanding the education process and supporting the child, and the fact that they did not receive any education in their own country. is encountering.

There are many studies in the literature examining the problems of immigrant students. When the studies in the literature are examined, it is seen that the studies on the problems of immigrant children are more intense. Studies have focused on problems such as school adjustment problems of refugee children (Kiremit et al., 2018), teachers' approach towards immigrant children (Sağlam & Kanbur, 2017), and peer culture of immigrant children (Yanık Özger & Akansel, 2019). appears to be oriented. There are studies in which the problems experienced by immigrant students in the learning and teaching process are examined according to the opinions of teachers or parents (Akalın, 2016; Başar et al., 2018). When the studies conducted in our country are examined, it is seen that there are very few studies on the experiences of primary school teachers who teach immigrant children and immigrant children in the education process (Avcı, 2019; Aydın & Kurtulmuş, 2018; Mercan Uzun & Tüm, 2016). Çoşkun and Emin (2016) stated that Syrian students have adaptation problems at schools, and in addition, the reluctance experienced by the administrators in the registration process of Syrian children in some schools is associated with negative attitudes and behaviors such as not being accepted by teachers, students and parents at school, exclusion, marginalization, and peer bullying. He also stated that the encounter made the adaptation process difficult. Bozkaya (2020), in his study titled "Multicultural Classroom Environment and Belonging," examined the studies carried out by the Ministry of National Education from 2010 to the present, by years, on the creation of a multicultural classroom environment and belonging. Bozkaya (2021a) carried out the study titled "Contemporary Subjects in Social Studies Lesson and Social Adaptation of Migrant Students."

When the studies carried out abroad are examined; Birman (2002) drew attention to the mental health status of refugee children in the classroom. In a study conducted in the United States (USA) with refugee children who

experienced migration at a young age, it was revealed how much the adjustment of refugee adolescents was primarily affected by their school experiences (Mosselson, 2006). Touching on the subject through multicultural educational environments, Bennett (2007) worked on teachers' perceptions of multicultural education environments.

In this study; In this study, it is aimed to reveal the problems faced by classroom teachers who have Syrian immigrant children in their classrooms during the education process. In this direction, the following questions were tried to be answered:

- What are the problems faced by classroom teachers in classrooms with Syrian migrant children?
- What are the strategies of classroom teachers to cope with the problems they encounter in classrooms with Syrian migrant children?
- What do classroom teachers need to solve the problems they encounter in classrooms with Syrian migrant children?
- What are the views of parents and other children in the classroom towards Syrian migrant children from the perspective of classroom teachers?
- What are the opinions of parents of Turkish and Syrian migrant children about education from the perspective of primary school teachers?
- What are the attitudes of the classroom teachers towards the presence of Syrian immigrant children in their classrooms?
- What are the suggestions of the classroom teachers to solve the problems they encounter in the classrooms with Syrian migrant children?

2. Method

The research has been designed as a case study, one of the qualitative research methods, in order to identify the problems experienced by Syrian migrant children in their basic institutions and to present them in detail. case study; In research, it is used to identify the details that make up an event, to develop possible explanations for an event, and to evaluate an event (Gall, Borg, & Gall, 1996). Yin (1984) mentions four different designs of the case study: the holistic single-case design, the holistic multiple-case design, the embedded single-case design, and the embedded multiple-case design. This research was designed as a holistic single-case design because it includes a single case and analysis unit. Within the scope of the study, the education of Syrian migrant children at primary school age was considered as a single case and classroom teachers with Syrian migrant children in their classes were taken as the unit of analysis.

2.1. Study group

The participants of this study were determined according to criterion sampling, which is one of the purposive sampling types (Merriam, 2015). The criterion in the selection of the sample in the study is that there is at least one Syrian immigrant child in the teacher's class. The study group of the research consists of 11 classroom teachers working in public schools affiliated to the Ministry of National Education in the city center of Hatay. Demographic information about teachers is presented in Table 1.

Table 1: Demographic ınformation on teachers

Code Name	Gender	Occupational Seniority	Total Class Size	Number of Syrian Children	Type of School Worked
T1	Female	2 years	25	4	Primary School
T2	Male	2 years	22	6	Primary School
T3	Female	2 years	25	5	Primary School
T4	Female	4 years	25	5	Primary School
T5	Female	6 years	25	5	Primary School
T6	Female	3 years	25	7	Primary School

T7	Female	1 years	25	8	Primary School
T8	Female	4 years	30	11	Primary School
T9	Male	7 years	20	6	Primary School
T10	Female	6 years	23	3	Primary School

According to Table 1, 8 out of 10 teachers in the study group are female and 2 are male. All of these teachers work in primary school and there are at least 3 Syrian immigrant children in their classes. Syrian immigrant students in the classrooms of the 10 classroom teachers in the study group regularly attend school.

2.2. Data Collection Tools

Research data were collected through semi-structured interviews. In this context, interviews were conducted with classroom teachers who have Syrian immigrant children in their class, using a semi-structured interview form. This form, which was prepared by the researchers in line with the relevant literature, was submitted to the expert opinion. A pilot study was conducted with two teachers who have Syrian immigrant children in their class, through the form, which was restructured in line with expert opinions. As a result of the pilot study, a repeated question was removed from the form and two questions with similar answers were combined. In this context, the final form of the interview form consists of two parts. In the first part, there are questions about the demographic information of the teachers, while in the second part, there are questions to determine the opinions, expectations and needs of the teachers, who have Syrian immigrant children in their class, on issues such as the problems they experience in the education process, solution suggestions for these problems, and the opinions of the parents against education.

2.3. Data Collection Process

Voluntary participation was based on the creation of the working group. In the study group of the research, face-to-face interviews were made with the classroom teachers by making an appointment on the appropriate day and hour. The interview with each teacher lasted an average of 25 minutes. The interviews were audio recorded with the permission of the teachers. Necessary legal permissions were obtained to conduct the research.

2.4. Analysis of Data

Content analysis method was used in the analysis of interview data in the research. In content analysis, it is tried to reach the concepts to explain the obtained data (Yıldırım & Şimşek, 2011). In this process, the audio recordings and notes of the interviews were transcribed and turned into written form. The interview records from the raw data were turned into a 32-page written document. The obtained data were coded by reading many times. After the data were coded, subcategories were created by combining related and similar data under the same code. After this process, all the data were read again and the related sub-categories were combined in the same group and categories were created. The data were analyzed by the researcher and quotations from the raw text data were presented in order to reveal a truth about the views of the participants. In this direction, teachers were given a code (T1, T2, Ö3, etc.) and their views were reflected through direct quotations. The codes, sub-categories and categories created from the raw data were presented to the expert opinion and a consensus was reached.

2.5. Reliability and Validity in Research

A common strategy for building credibility is member checking or member questioning. This strategy, also called participant validation, envisages reaching some of the people to whom the data was provided or interviewed and asking them for feedback on the findings that are beginning to emerge (Merriam, 2013). While detailed descriptions were used in the analysis of raw data, direct quotations were frequently used to stay true to the data itself. With detailed description, the environment in which the data is collected is in the minds of the readers.
will allow them to be revived. In terms of the validity of the research, the data provided in the interviews were evaluated separately by the researcher and two faculty members who have command of qualitative research

methods, coding was made and consensus was sought in the coding made. For the coding reliability calculation in the research; The reliability formula [Reliability = Consensus / (Agreement + Disagreement)] prepared by Miles and Huberman (1994) for qualitative studies was used. The data obtained through the interviews and the coding made are kept by the researcher in order to allow the interested parties to examine them.

2.6 Assumption and Limitations

It is assumed that the classroom teachers participating in this research gave the correct answer to the measurement tool, the sources used in the relevant literature section of the research are valid and reliable, and the validity and reliability of the data obtained from the semi-structured interview form used as a data collection tool in the research are high. In addition, this research is limited to interviews with 10 classroom teachers, who have at least one Syrian immigrant student in their class, between September 2018 and December 2018, and information and sharing including their experiences, perspectives, thoughts and evaluations. The results are expected to guide educators, families and researchers working in this field.

3. Findings

In this section, the categories created with the codes obtained from the study are given in order.

Table 2: Problems encountered by classroom teachers in classes with syrian ımmigrant children

Category	Subcategory	Codes
Communication	**Verbal communication deficiency**	Syrian migrant children do not know Turkish (T1, T2, T3, T4, T5, T6, T7, T8, T9, T10) Parents do not know Turkish (T4, T5, T8)
	Lack of cultural concept	National holidays and special days for Syrian migrant cannot be explained (T10)
Behaviour	**Disobeying the rules**	Syrian migrant children act the way they want (T1, T6)
	Aggressive behavior	Syrian migrant children's aggressive behavior (T4, T5, T6, T8)
	Lack of attention	Syrian migrant children not focusing during the activity (T1)

According to Table 2, the problems experienced by classroom teachers in the education of Syrian immigrant children are grouped under two categories. Most of the primary school teachers stated that they have problems in communicating with Syrian immigrant children. Under this category, subcategories of verbal communication inadequacy and cultural concept deficiencies were obtained. In order of frequency, teachers expressed communication problems as Syrian immigrant children not knowing Turkish, parents not knowing Turkish, and not explaining national holidays and special days. Excerpts from teachers' statements regarding these problem situations are given below.

T4: "We have language problems the most and we can't get along very well. These problems happen with both children and their parents."
T10: "Language problem is our most basic problem in terms of making some subjects comprehend with introductions and explanations to activities, which are generally caused by Syrian migrant children's inability to understand concepts and words. In addition, I observe that there is no response from time to time during the announcement of national holidays and special days."

Another problem experienced by the classroom teachers in the study group is behavioral problems. According to teachers' statements, behavioral problems of Syrian migrant children emerged as disobedience, aggression and lack of attention. Below are quotations from the statements of the classroom teachers regarding these problem

situations.

S6: "We generally have problems in Turkish-Language activities. Since their vocabulary in Turkish is low, they have difficulty in listening to the story while listening to the story, and they focus on different things. So the other kids get distracted too."

In the study, it was found that the classroom teachers made individual efforts to solve the problems encountered and received external support. The categories, sub-categories and codes of these sub-categories regarding the solutions of the teachers to the problems are presented in Table 3.

Table 3: Solution strategies of grade teachers against problem situations

Category	**Subcategory**	**Codes**
Using a communication tool	**Body language**	With hand gestures (T1, T3, T8) With signs (T4, T5, T6, T7) With tone of voice (T1)
	Translation program	Telephone translation program (T7)
Getting support	**Support from children**	Help from children who know Arabic (T2, T3, T10)
	Support from staff	Help from Arabic speaking staff (T4, T5, T6) Translator assistance (T9)

According to Table 3, the solutions of the classroom teachers about the problem situations they experience in the education of Syrian immigrant children; are grouped under two categories as using a communication tool and getting support. Under the communication tool category, body language and translation program sub-categories were reached. In order of frequency, teachers stated that they tried to communicate with signs, hand gestures, tone of voice and using translation programs on the phone. Excerpts from the statements of teachers about the solution of problem situations are given below.

S1: "At first we agree with hand gestures. Here is the location of the toilet, drinking water etc. with hand signals to things like that."
S7: "In the classroom, I sometimes try to explain myself by translating on the phone, most of the time I try to communicate with hand signals."

Another solution of the classroom teachers in the study group for the problems they experience in the education of Syrian migrant children is supported. In the support category, subcategories of support from children and support from personnel have been reached. In order of frequency, they expressed it as getting help from children who can speak Arabic and Turkish, from staff who can speak Arabic, and assistance from an interpreter. Quotations from classroom teachers are given below.

S3: "I can solve it by asking children who speak Turkish and Arabic to be a translator in communication."
S6: "When I have difficulties, I ask for help from our staff who speak Arabic at school."

During the interviews with the classroom teachers in the study group, the categories of personal development and personnel assistance were reached about what kind of support they needed in solving the problems experienced. The categories, sub-categories and codes of these sub-categories related to the needs of the classroom teachers are presented in Table 4.

Table 4: Needs of classroom teachers in solving problems

Category	Subcategory	Codes
Staff Assistance	**Translator Support**	The need for an interpreter in the classroom (T2, T3, T5, T6, T7, T8, T9, T10)
	School Staff Support	Guidance teacher (T1, T8)
Self-improvement	**language proficiency**	Knowing Arabic (T1, T4, T7)

According to Table 4, the needs of classroom teachers in solving the problems they experience in the education of Syrian immigrant children are grouped under two categories. The vast majority of teachers stated that they needed personnel assistance. Under this category, teachers expressed interpreter support and school personnel support sub-categories. Classroom teachers, in order of frequency, expressed the situation of having an interpreter in the classroom and directing them to the guidance teacher. Quotations from teachers regarding these situations are given below.

T1: "If I had someone with me, I could have been more comfortable in this regard. Sometimes our guidance counselor needs them because they have social adaptation problems."
T8: "I need a separate support to get along with families, I need a guidance service to solve behavioral problems, but I can't find a solution again because he doesn't speak Arabic either."

Another issue that the classroom teachers in the study group need in solving the problems they experience in the education of Syrian immigrant children is personal development. In this category, the subcategory of knowing the language has been reached. They stated that knowing Arabic would be effective in solving the problem. Excerpts from teachers' returns are given below.

T7: "The thing I need the most is language. Knowing Arabic would be very helpful."

In the interviews with the classroom teachers in the study group, it was seen that the situations that hinder the education process were concentrated in the categories of "communication problem" and "learning process." Categories, sub-categories and codes of these sub-categories related to the situations that hinder the education process of primary school teachers are presented in Table 5.

Table 5: Situations that disrupt the education process of classroom teachers

Category	Subcategory	Codes
Communication Problem	Not Knowing Turkish	Not having a good command of Turkish (T1, T2, T3, T9)
	Doesn't seem to understand Turkish	Don't pretend you didn't hear (T1) Disliking of communication (T4, T5)
Learning process	Indifference	Not wanting to do activities (T1)
	inability to concentrate	Inability to concentrate on activities (T6, T7, T8)
	Inappropriate classroom conditions	Smallness of the class (T10) Lack of material (T10)

According to Table 5, the opinions of the classroom teachers about the situations that hinder the education process are grouped under two categories. Most of the classroom teachers stated that they had communication problems. Under this category, classroom teachers expressed the sub-categories of "not knowing Turkish" and "doing not seeming to understand Turkish." In order of frequency, the teachers expressed the codes of not having a good

command of Turkish, not liking to communicate, and pretending not to hear. Excerpts from the statements of classroom teachers regarding these problem situations are given below.

T1: "It is usually Syrian immigrant students who disrupt education in my classroom. Because now I know that they understand Turkish, they pretend not to understand it and they do not listen to me. They try not to do the things I say as if they had never heard of it."

A

nother view of the classroom teachers in the study group about the situations that hinder the education process is the learning process. In this category, they mentioned sub-categories of indifference, inability to concentrate, and unsuitability of classroom conditions. When we look at the frequencies, there are codes such as not being able to concentrate on activities, not wanting to do activities, small class, lack of material. Excerpts from teachers' statements are given below.

T7: "The fact that Syrian immigrant children distract other children and do not listen to what I say hinders education."

In the interviews with the classroom teachers in the study group, it was seen that the attitudes of the parents towards the Syrian migrant children were concentrated in the positive and negative categories. The categories and codes related to the attitudes of the parents towards the Syrian migrant children from the perspective of the teacher are presented in Table 6.

Table 6: Attitudes of parents to Syrian migrant children from the perspective of classroom teachers

Category	Codes
Negative	Bad influence (T1, T5, T8) Complaining about the use of violence (T3, T6) Not wanting in the classroom (T4, T7, T9)
Positive	There is no distinction (T2, T10)

According to Table 6, the statements of classroom teachers and parents about their attitudes towards Syrian migrant children are grouped under two categories. Most of the classroom teachers stated that the parents had a negative attitude. Classroom teachers, in order of frequency, stated that parents complained about not wanting Syrian immigrant children in the classroom, influencing them badly, and inflicting violence. Quotations from teachers regarding these communication situations are given below.

T8: "The presence of Syrian immigrant children in the classroom makes other parents uneasy. They say that they are uneasy when they send them to school because they harm their own children even in the neighborhood."

Another of the attitudes of the parents of the classroom teachers in the study group towards Syrian immigrant children is positive attitudes. In this category, they mentioned the code that there is no distinction in the class. Excerpts from the statements of the classroom teachers are given below.

T2: "Since everyone in the neighborhood speaks Arabic, there is no distinction between Turkish and Syrian."
T10: "I did not hear anything negative from my parents. They take it as normal now."

In the interviews with the classroom teachers in the study group, it was seen that the opinions of the Syrian migrant children about the solutions they use when communicating with their parents are concentrated in the teacher solution and support categories. Categories and codes related to teachers' communication with parents are presented in Table 7.

Table 7: Communication of classroom teachers with parents of Syrian immigrant children

Category	Codes
Getting Support	Getting help from children who speak Arabic-Turkish (T10) Getting help from Arabic-speaking staff (T1, T5, T6) Translator assistance (T4, T8) Getting help from parents who know Arabic-Turkish (T2, T3, T5, T6, T7, T10)
Using a Communication Tool	By speaking word by word (T1) Translation programs (T4, T5)

Communication of classroom teachers with parents of Syrian migrant children; They were grouped under two categories as getting support and using a communication tool. In order of frequency, teachers; They stated that they received help from parents who could speak Arabic-Turkish, help from staff who could speak Arabic, help from an interpreter, and help from children who could speak Arabic-Turkish. Quotations from teachers regarding these communication situations are given below.

T6: "Using Syrian parents who know Turkish well as translators, and in some cases, with the help of a translator at our school."

Another method of communication between the classroom teachers in the study group and the parents of Syrian immigrant children is the teacher solution. In this category; they mentioned their codes by speaking translation programs and word for word. Quotations from teachers are given below.

T5: "I use translation programs on the phone."

In the interviews with the classroom teachers in the study group, it was seen that the parents focused on their perspectives on education in the positive and negative categories. Categories and codes related to parents' perspectives on education from the perspective of teachers are presented in Table 8.

Table 8: Perspectives of parents on education from the perspectives of grade teachers

Category	Subcategory	Codes
Positive	**Parents of Syrian migrant children**	They are trying to be supportive. (T3, T5, T10) They give importance to family participation (T4, T6, T7, T10)
	Parents of Turkish children	They value family involvement. (T1, T6, T7) They give importance to education. (T3, T4, T5, T8, T9, T10)
Negative	**Parents of Syrian migrant children**	The aim is for the child to leave the house (T1, T9) They do not give importance to family participation (T1, T8, T9) They do not go to school (T2)
	Parents of Turkish children	Families are not interested (T2)

According to Table 8, parents' perspectives on education from the perspective of classroom teachers are grouped under two categories. Most of the classroom teachers stated that parents have a positive perspective on education. Under this category, the subcategories of teachers, parents of Syrian migrant children and parents of Turkish

children are listed in order of frequency; they give importance to education, they attach importance to family participation, they try to support. Excerpts from teachers' statements regarding these situations are given below.

T6: "Most of the parents of my Turkish students attach great importance to education, they cooperate with me."

Another view of the primary school teachers in the study group about their parents' perspectives on education is negative attitudes. In this category, parents of Syrian migrant children and parents of Turkish nationals stated the codes "they do not attach importance to family participation, the aim is for the child to leave the house, they do not go to school, families are uninterested." Excerpts from teachers' statements are given below.

T1: "Syrian parents' perspectives on education are not attentive. I think they see it purely in terms of sending the child to a school or leaving the house. Because when we call them for education-related family participation or all other activities, we can't get any feedback from them. On the contrary, they act more carelessly"

In the interviews with the classroom teachers in the study group; When the data on how the presence of Syrian immigrant children in their classrooms affects teachers, it is seen that they focus on emotional and motivation categories. The categories, sub-categories and codes related to the presence of Syrian immigrant children in the classrooms of primary school teachers are presented in Table 9.

Table 9: Views of classroom teachers regarding the presence of Syrian immigrant children in their classes

Category	Subcategory	Codes
Motivation	**Positive**	Different culture (T10)
	Negative	They distribute the class a lot (T1,T6) Student prone to violence (T10) I'm getting tired (T2,T5) I have difficulties in communication (T3,T6,T7,T8,T9)
Emotional	**Positive**	All children are equal (T1,T9) It increases my professional satisfaction (T4)

The data on how the presence of Syrian migrant children in the classrooms of the classroom teachers affects the teachers were examined and grouped under two categories. Most of the teachers evaluated it in terms of motivation. Under this category, teachers expressed positive and negative sub-categories. In order of frequency, teachers; I also have difficulties in communication, they disperse the class a lot, I get tired, students who are prone to violence and different cultures have expressed their codes. Quotations from classroom teachers regarding these situations are given below.

S6: "It is very difficult for me to have language difficulties. I have to put more effort into trying to keep the classroom organized. The fact that Syrian students do not communicate with me even if they understand Turkish reduces my motivation."

Another view of the classroom teachers in the study group about how the presence of Syrian immigrant children in their classrooms affects teachers is the emotional dimension. In this category, they mentioned the positive subcategory. All children stated the codes as equal, increasing my professional satisfaction. Quotations from teachers are given below.

S4: "Sometimes there are times when I find it very difficult, but when I think that every child is special, contributing to them also increases my professional satisfaction."

In the interviews with the classroom teachers in the study group; When the data on the solution of the problems

experienced in the education process of Syrian migrant children are examined, it is seen that they concentrate on the categories of family-oriented, child-oriented and teachers-oriented. The categories and codes related to the solution of the problems experienced in the education process of refugee children are presented in Table 10.

Table 10: Opinions of primary school teachers on solving the problems experienced in the education process of Syrian immigrant children

Category	Codes
For Teacher	Translator support (T2,T3,T5,T8,T9,T10) Language education (T7,T8)
For Children	Giving relatives to different classes (T3) Extra training for language (T4,T10) Increasing language activities in the activity process (T6)
For Family	Language studies (T1) Literacy courses (T10)

When the data about the solution of the problems experienced by the teachers in the education process of the Syrian immigrant children are examined, the findings are gathered under three categories. The majority of classroom teachers expressed the category of teacher-oriented. In order of frequency, teachers; interpreter support, language education codes. Quotations from teachers regarding these situations are given below.

T7: "In order to get along with children, either we need to get a basic language education in university education or we need someone else to help us."

Another view of the classroom teachers in the study group regarding the solution of the problems experienced in the education process of Syrian immigrant children is the child-oriented category. They stated the codes of giving relatives to different classes, extra education for language, increasing language activities in the activity process. Below are quotes from teachers.

T10: "It may be good for them to participate in a short accelerated language program on language before formal education."

Another view of the classroom teachers in the study group regarding the solution of the problems experienced in the education process of Syrian immigrant children is the family-oriented category. They expressed the codes of language studies and literacy courses. Quotations from teachers are given below.

T1: "I think that something should be done together with more families. But when I think about their current attitudes, I can't give a concrete example for the solution of this because the education is not the most important thing for them. But I think something can be done about having a more language-oriented, more family-oriented situation."

4. Discussion

As a result of semi-structured interviews with eleven classroom teachers in the study, it was concluded that Syrian immigrant children had communication problems and behavior problems in the classroom due to language differences in the education process. The interaction of teachers and children is important in the education process. However, the lack of healthy communication in the classroom due to language differences complicates the education process and socialization of children with each other. The language problem is one of the problems frequently expressed in the literature. Language differences can cause children to become withdrawn or display aggressive behaviors because they cannot express themselves (Yo-hani, 2010). In the study of Uzun and Tüm (2016), it was seen that refugee children have communication and adaptation problems because they cannot

communicate with their teachers and peers due to language problems, and therefore cannot express themselves. In the study of Kardeş and Akman (2018), it was determined that language and school adjustment problems were the most observed problems in children.

In this study, it has been concluded that teachers try to communicate with Syrian children by using body language and getting help from Arabic-speaking staff or children due to language problems during the education process. The language problem is experienced by the teachers as well as the children. They have difficulties in cooperating with both children and parents in the learning process and try to come to terms with their own solutions. Bulut, Kanat Soysal, and Gülçiçek (2018) stated that communicating with body language in the education of immigrants is one of the methods frequently used by teachers. In his research, Göçmenler (2014) emphasizes that body language significantly affects people's perceptions of each other while communicating. He states that body language is used as an effective communication tool in environments where Turkish is taught as a foreign language. According to the statements of the classroom teachers, it has been concluded that Syrian immigrant children are behind in language development in their developmental areas. Language development affects not only children's communication skills, but also their social skills. In the research conducted by Avcı (2019), it was revealed that the main problem that refugee students experience at school is the language problem. He stated that various Turkish language activities such as songs and finger games are very important in preschool classes to support the language development of Syrian migrant children is doing. All these can contribute to Syrian migrant children's learning Turkish, their language development and being more active in the learning process.

From the point of view of the classroom teachers, it has been determined that the children in the classroom and their parents have a negative attitude towards Syrian immigrant children and they constantly complain. When the data is examined, it is thought that the main reason why parents and children have negative thoughts is due to the behavioral problems of Syrian migrant children. In addition, the different language, culture and clothing of Syrian migrant children may affect the attitudes of other children and parents. It is similar to the findings of the research conducted by Mercan Uzun and Tüm (2016). In the study, the main reason for the negative attitudes of families towards Syrian immigrant children; They stated that they have negative attitudes due to socio-economic impossibilities and undesirable behaviors of Syrian migrant children. Bozkaya (2021b) reached similar results in his study and stated that seminars should be organized to inform teachers and teacher candidates about the phenomenon of multiculturalism so that students with different cultural backgrounds living in Turkey do not feel excluded.

It was concluded that the classroom teachers had difficulties in communicating with the parents of Syrian immigrant children due to the language difference and they mostly received support from the staff, parents and children who spoke Arabic. However, it has been found that the parents of Syrian migrant children have mostly positive attitudes towards basic education, but they cannot participate actively in family participation activities due to language differences. In the study conducted by Şeker and Aslan (2015), it was stated that families could not participate in school activities because they were inadequate due to language differences. Despite this, teachers stated that families tried to support them in the process.

From the point of view of primary school teachers, it has been concluded that parents have an attitude towards basic education and try to participate in family participation activities. The fact that immigrant families adapt to a different culture, struggle financially and morally, and have a low level of education may affect their perspective on education. On the other hand, parents' attitudes towards education and family participation activities are very important for the development of children. Ekinci Vural (2012) found that family involvement studies in the preschool period; He stated that it could be described as a bridge that provides an important link between the family and the school, and that parents who encounter family participation studies in basic education will become more experienced and open to participation in the primary education period.

Classroom teachers stated that the presence of Syrian immigrant children in their classrooms contributed positively both physically and emotionally. In addition, it has been determined that teachers are affected both positively and negatively in terms of motivation. In the study conducted by Kiremit et al. (2018), some of the classroom teachers who have Syrian immigrant children in their class use this situation as an advantage; Some stated that they see it

as a disadvantage. Teachers, who see this situation as an advantage, think that they have a multicultural education environment by finding the opportunity to get to know a different culture; Teachers who see it as a disadvantage stated that they disrupt the education process of refugee students, reduce the motivation of Turkish students and teachers, and cause negative behavioral changes. Bozkaya (2021c) reached similar results in his study and stated that immigrant children who receive education at a young age are a positive process in shaping their worldview and assimilation of identities given by the state.

Classroom teachers offered solutions to families, children and teachers in the education process of Syrian immigrant children. Language studies and literacy courses can be given to families; that it may be effective to increase language studies and Turkish activities for children, and to assign children who are related to different classes; On the other hand, for teachers, they expressed suggestions that there should be an interpreter in the classrooms and that language training can be given to teachers. It may be beneficial for both parents and children if the school administration implements supportive practices for migrant children and families. In Avcı's (2019) study, it was concluded that training programs should be implemented to solve the problems teachers experience with refugee students. Bozkaya (2021e) reached similar results in his study, the short, medium and long-term effects of immigrant children on the Turkish education system, the place of immigrant students in Turkey's future, education that looks at immigration and immigrants from a wider perspective.

5. Results and Recommendations

In the study conducted with classroom teachers who have Syrian immigrant children in their classrooms, it was determined that the biggest problem was the language problem. This situation causes classroom teachers to have difficulties in communicating with both children and parents. It has been seen that other children in the class and their parents are prejudiced towards Syrian immigrant children and their attitudes affect the education process and socialization of Syrian immigrant children. In order for Syrian migrant children to benefit from education at a high level and teachers to have high motivation, it is important to have interpreters in schools and to support classroom teachers in terms of motivation by the school administration. In particular, it will be effective in increasing the participation rates of Syrian migrant children in basic education, arranging the classroom environment and ensuring family participation, solving language problems and school adjustment problems. At the same time, solving language and school adaptation problems in the basic education process can be useful in preparing for the next education levels.

In the light of the findings, the following recommendations can be made:

- Classroom teachers can be given in-service training seminars on what kind of practices can be done in the classroom for Syrian migrant children to learn Turkish and on communication.
- Language training can be given to Syrian migrant children and their families.
- It may be beneficial to have an interpreter in the classrooms who can assist the classroom teachers in terms of language.
- Classroom teachers constitute the study group of this research. In future studies, research can be conducted with teachers in secondary schools and high schools.
- This study is a qualitative research. Quantitative studies with a high sample size on the subject can also be conducted.

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Applying Scientific Approach to Improve the Recommended Competencies of English Junior High School Teachers in Palu City

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Abstract
The objective of the study is to investigate the effect of applying a scientific approach to improve recommended competencies of English junior high school teachers. A quasi-experimental design was employed with the use of convenience sampling techniques to select research subjects for control and experimental groups. The 30 items test was developed and used in pre-test and post-test for collecting data. The data were analyzed using t-test analysis to measure mean differences of the data sets from control and experimental groups. The result of data analysis indicates that the mean score of the experimental group, 77.19 is greater than the control group 61.15. This result shows the use of the scientific approach to teach research subjects in an experimental group has an effect in improving their competence on the recommended competencies mandated by the Law and regulations.

Keywords: Scientific Approach SA, Recommended Competencies, The Five Steps Principle of SA

1. Introduction

The recommended competencies are the mandate of the law that must be possessed by every teacher in carrying out their profession, as stated in Law Number 14 of 2005 concerning Teachers and Lecturers Article 10 paragraph 1 states that teachers must have pedagogic competence, personality competence, social competence, and professional competence. The four competencies are holistic and constitute an integrated unit that characterizes a professional teacher. To ensure the quality of educational administrations and services which is responsive to change and demands of the times, teachers must keep on increasing their competence continuously including (1) Pedagogical competence is the ability to manage student learning; (2) Personal competence is the ability of a strong personality, noble, wise, and authoritative as well as being a role model for students; (3) Professional competence is the ability to master the subject matter broadly and deeply; and (4) Social competence is the ability of teachers to communicate and interact effectively and efficiently with students, fellow teachers, parents or guardians of students, and the surrounding community.

In this context, Law Number 14 of 2005 on Teacher and Lecturer requires teachers and lecturers to understand, master, and apply properly the mentioned four recommended competencies in teaching and learning. Moreover, this law is strengthened by the issuance of a Government Regulation of the Minister of National Education of the Republic of Indonesia Number 16 of 2007 Concerning Standards of Academic Qualifications and Teacher Competency mandates teachers to know and apply Teacher Core Competencies and Teacher Subject Matter Competencies in their teaching and learning process. This regulation covers 10 core and 37 subject matter competencies on the pedagogic domain, 5 core and 13 subject matter competencies on personality, 4 core and 7 subject matter competencies on social, and 5 core and 11 subject matter competencies on the professional competency to possess and apply teaching and learning process.

Another regulation Number 19 of 2017 was issued to enforce the teachers undertaking their teaching professionally states that teachers are professional educators with the main task of educating, teaching, guiding, directing, training, assessing, and evaluating students in early childhood education through formal education, primary education, and secondary education. The mandates of the law and regulations described above are still far from reality in the context of implementation in the field, especially in the teaching and learning process, and the problem lies within each teacher (Syafar, 2013; 2018). Then, conducting researches on the issues will assess and develop teachers' understanding and implementation of the recommended competencies in the teaching and learning process.

Furthermore, the teacher is a very noble profession and the main actor in the world of education so this profession is a mainstay for every country to improve its Human Development Index. The aims of the government's regulations and policies intend to improve teachers' quality to know wholly the recommended competencies and perform them properly in their teaching practices and daily activities. However, whether the substance of the regulations and policies have been well understood and implemented by teachers and lecturers in their teaching activities is still a question mark. For this reason, this study poses a research question such as Does applying the scientific approach have an impact on increasing English teachers' understanding of the recommended competencies by the Law and regulation?"

In line with, the 2013 curriculum recommends the use of the Scientific Approach (SA) in the teaching and learning process at any educational level—from elementary to secondary schools. SA is a learning model that uses scientific principles that contain a series of data collection activities through observing, questioning, associating, experimenting, processing information or data, then communicating phenomena (Kemendikbud, 2014). Another goal of the SA principle of teaching and learning is to improve the ability of thinking skills, form the ability to solve problems systematically, create learning conditions so that students feel that learning is a necessity, train students in expressing ideas, improve student learning outcomes, and develop student character. In this context, learners will actively construct concepts, laws, or principles through the stages of observing problems, formulating problems and hypotheses, collecting and analyzing data, drawing conclusions, and communicating concepts, laws, or principles as found in (Majid, 20140; Hosnan 2014; Karar and Yenice 2012).

2. Theoretical Perspectives

The theoretical and philosophical basis of the SA comes from Piaget's theory of cognitive constructivism and Lev Vygotsky's theory of social constructivism. Cognitive constructivism argues that people produce knowledge and form meaning based upon their experiences. Two of the key components of Piaget's theory that create the construction of an individual's new knowledge are accommodation and assimilation. Assimilating causes an individual to incorporate new experiences into the old experiences. This causes the individual to develop new outlooks, rethink what were once misunderstandings, and evaluate what is important, ultimately altering their perceptions. Accommodation, on the other hand, is reframing the world and new experiences into the mental capacity already present. Individuals conceive a particular fashion in which the world operates. When things do not operate within that context, they must accommodate and reframe the expectations with the outcomes.

In line with, the core concept in constructivism is that knowledge is constructed as students build new knowledge based on what they have already learned. The student is not a passive receiver of transmitted information.

Therefore, as students enter learning situations with knowledge acquired from previous experiences, their prior knowledge influences what new or modified knowledge they will build from the new learning experiences (Pagliaro, p. 9 2013). Instead of answering questions that only align with their curriculum, the facilitator in this case must make it so that the student comes to conclusions on their own instead of being told. Also, teachers are continually in conversation with the students, creating a learning experience that is open to new directions depending upon the needs of the student as the learning progresses.

Meanwhile, according to Lev Vygotsky's theory of social constructivism, social worlds develop out of individuals' interactions with their culture and society. Knowledge evolves through the process of social negotiation and evaluation of the viability of individual understanding. Every conversation or encounter between two or more people presents an opportunity for new knowledge to be obtained, or present knowledge expanded. The exchange of ideas that goes along with human contact is at play here. In this context, a good constructivist teacher questions students' answers, without regard to whether they are right or wrong, to make sure the student has a good grasp of the concept. Additionally, instructors should have their students explain the answers they give and not allow students to use words or equations without explanations. They should also encourage students to reflect on their answers.

Social constructivism teaches that all knowledge develops as a result of social interaction and language use, and is, therefore, a shared, rather than an individual, experience. Knowledge is additionally not a result of observing the world, it results from many social processes and interactions. The process of learning requires that the learner actively participates in creative activities and self-organization. Teachers should allow their students to come up with their questions, make their theories, and test them for viability.

Students should also be challenged by their instructors to perform open-ended investigations, working to solve problems with realistic and meaningful contexts. This activity enables the learner to explore, and come up with either supporting or conflicting possibilities. Contradictions need to be investigated, clarified, and discussed. Through the process of reflecting on the collected data, learning is given a push. These ideas can only be accepted as truth if they can make sense to the community. If they do, they become shared knowledge. Learning occurs not through hearing or seeing, but primarily through interpretation. Interpretation is shaped by what's already known and is further developed through discussion (Roth, 2011).

Furthermore, SA is a learning model that uses scientific principles that contain a series of data collection activities through observation, questioning, associating, experimenting, then communicating (Kemendikbud, 2014). The learning process is expected to be directed to train analytical thinking in which students are taught how to make decisions instead of routine mechanistic thinking by simply listening and memorizing (Majid, 2014). Rusman (2015), states SA is a learning approach that provides broad opportunities for students to explore and elaborate on the material being studied, in addition, it provides opportunities for students to actualize their abilities through learning activities designed by the teacher. In line with Hosnan (2014), SA is a learning process designed so that students actively construct concepts, laws, or principles through observing, formulating problems, proposing hypotheses, collecting data with various techniques, analyzing data, drawing conclusions, and communicating. Karar and Yenice (2012), SA is a learning process designed in such a way that learners actively construct concepts, laws, or principles through observing stages--to identify or find problems, formulate problems, formulate hypotheses, collect data with various techniques, analyze data, draw conclusions, and communicate concepts, laws or principles found.

In line with Hosnan (2014) which states that PS has the following characteristics in the learning process: 1) Student-centred; 2) Involving science process skills in constructing concepts, laws, or principles; 3) Involving potential cognitive processes in stimulating intellectual development, especially students' higher-order thinking skills, and; 4) Can develop students' character. The purpose of learning by using PS is to develop students' character. In addition, to improve students' thinking skills so that students can solve every problem they face and have high learning outcomes. Ellizar et al., (2018), explaining that the scientific approach is a learning process designed so that students actively construct their knowledge through the stages of the scientific method. The same thing was stated by Dyer et al., (2011) who explained the concept known as the five discovery skills based on

creative intelligence, namely intelligence that is beyond cognitive abilities and involves two sides of the brain to create new ideas using 5 (five) skills, namely: 1) associating, 2) questioning, 3) observing, 4) experimenting, and 5) communicating.

In the research report Mahmoud (2014), shows the effect of learning using SA with the Discovery Learning Strategy model that can improve children's metacognitive abilities. This research uses the learning process by observing, asking, experimenting, associating, and communicating. The findings of this study are not in line with the results of Suyanto's (2018) research which examined teacher performance by applying SA through observing, asking, associating, reasoning, and communicating. The results showed that the teacher's performance in implementing SA was not optimal.

Apriauny, et al., (2017) states that the results of the interviews showed that the participants of this study did not appear to have an understanding of the five SA steps in teaching English. However, data from classroom observations show that some teachers have applied some steps of the approach quite well, particularly observing, questioning, and experimenting. In line with Firman, et al., (2018), states that the effectiveness of the economics learning module with SA showed the average results of the experimental class using the development of learning modules had a positive impact on student learning outcomes where the experimental class had a higher score than the control class. The score indicates that the module developed using SA can improve student learning outcomes effectively.

Nugraha and Suherdi, (2017) reveal that the five stages of the scientific approach are carried out completely in four meetings to deliver one material, although the five stages are not always carried out in every meeting that is different from the lesson plans made. SA applied by teachers can involve students in active learning activities. The way teachers lead active learning activities and student contributions vary depending on the stage. The SA that was applied succeeded in growing students' critical thinking and developing high-level student learning behavior. Second, the difficulties faced by teachers during the implementation were the problems of students' low English skills, time allocation, and teacher teaching management.

3. Methods

This study applies the quantitative method in terms of Quasi-Experimental Design. According to (Cohen et al., 2005) this design is one of the most commonly used in educational research that can be represented as follows:

Experiment	01	X	02
Control	03		04

The dotted line separating the parallel lines in the unequal control group diagram indicates that the experimental and control groups have not been equated with randomization—hence the term 'unequal.' Both groups will receive pre-test marked 01 and 03 and post-test 02 and 04. Label X indicates that the experimental group will receive treatment using the independent variable "scientific approach" while the control group will not receive treatment using the 'scientific approach, but use the form other variables that are not controlled and manipulated.

The population of this research is all English teachers of junior high schools who are members of the English Subject Teacher Consultation (MGMP) of SMP Rayon I and II, Palu City, totaling 153 people. The research sample was selected using a convenience sampling technique where the research subjects are selected based on their desire to be involved in the study, both experimental and control groups. The research instruments used in recording the data were tests. Quantitative data were analyzed using the t-test formula to look for differences or variations in the average score of the experimental and control groups.

The main instrument of this research is the objective test. The test was developed into 30 items with 4 choices and evenly distributed levels of difficulty to record information of teacher prior knowledge about teacher standard competencies in the pre-test. The same test was used in the post-test to assess teachers' standard competencies after they had been taught applying SA for the experimental group, no teaching was applied on the control group.

The aim of the pre-test was carried out was to determine the subject's initial or metacognitive knowledge about the recommended competencies which are what-so-called Core and Teacher Subject Matter Competencies.

The research instrument that had been developed was delivered to research subjects via an online google form to answer multiple-choice test questions by deliberately determining that teachers who answer early, numbers one to twenty were categorized as experimental groups, and numbers two one to forty were included in the group. control. This was done with the consideration and assumption that those who respond quickly might have the desire to participate in research online and that's what we did to be able to carry out this research in less scientific conditions because this research had not been able to control and manipulate research variables under the rules due to severe Covid-19 pandemic

To analyze the data, this research applied "Statistical Package for the Social Sciences" or "SPSS" with two applications, namely One-sample statistics and one-sample test, both of which aim to describe the comparison of the mean values. mean, standard deviation, standard error of the mean, and explanation of the central tendency of the distribution of scores for both control and experimental groups. The findings are firstly presented in descriptive statistics to display the central tendency distribution of the scores of research subjects on pretest and post-test.

4. Findings and Discussion

4.1. Findings

The findings of the study are presented and displayed in the five tables to expose scores of the pre-test and the post-test for both control and experimental groups. The first table displays descriptive statistics consisting of the number of research subjects with symbolized N, range, minimum-maximum, mean, standard error, standard deviation, and variance. The second and third tables are related to the one-sample statistics and one-sample test of the pre-test of both control and experimental groups. the fourth and fifth tables are concerned with the one-sample statistics and one-sample test of the post-test of control and experimental groups.

Table 1 describes the scores of the pre-test and post-test in which the range or the difference between the largest value and the smallest value of variability in the data on the pre-test are fairly distributed on both groups with the range 43 on control and 40 on experimental. The minimum-maximum scores are quite greater on the experimental group with a minimum of 40 and a maximum of 80 scores compared to the control group with 30 and 73. We can also scrutinize the average of the pre-test of both groups in which the score of experimental is 4 digits greater from 61.14 compared to the control 57.14. However, the standard error of pre-test to measure the accuracy of a sample distribution is higher 0.1 on experimental from 2.51 compared to 2.41 on the control group. The same score difference is also identified in the standard deviation to measure the dispersion of a set of data from its mean obtained from the pre-test for both groups. The dispersion is 0.44 greater in the experimental group 11.49 compared to the control one 11.05. The variance of data from the pre-test of both groups is 10 digits superior on the experimental 132.03 compared to that of the control group 122.03.

Table 1: Descriptive Statistics of Pre-test dan Post-test Scores on Control and Experimental Groups

Test	N	Range	Minimum	Maximum	Mean	Standard Error	Standard Deviation	Variance
Pre-test Control	21	43.00	30.00	73.00	57.14	2.41	11.05	122.03
Post-test Control	21	46.00	34.00	80.00	60.09	2.60	11.93	142.29
Pre-test Experiment	21	40.00	40.00	80.00	61.14	2.51	11.49	132.03
Post-test Experiment	21	21.00	68.00	89.00	77.19	1.29	5.93	35.16

The descriptive data that are displayed in Table 1 columns two and four concerning the results of the post-test indicate the change or difference from that of the pre-test. The range of the control group is 46 and the experimental 21 with minimum and maximum scores respectively 34 and 80 on control, while 68 and 89 of the experimental. The mean difference of the control group 60.09 from the experimental group 77.19 is quite significant with 17.1 digits of differences. We can also identify the score differences on both groups either standard error or standard deviation.

The standard error difference in score is 2.60 for the control group and 1.29 for the experimental. Meanwhile, the standard deviation of the control group is 11.93, different from the experimental one 5.93. The same thing happens on the variance data in which the control group is greater than 142.29 compared to the experimental group 35.16.

Table 2: One-sample statistics of pre-test on control and experimental groups

Pre-test	N	Mean	Std. Deviation	Std. Error Mean
Control	21	57.1429	11.04665	2.41058
Experiment	21	61.1429	11.49037	2.50740

Table 2 displays data about one-sample statistics which covers differences of scores in mean, standard deviation, and standard error mean. we can notice the difference of mean from the result of pre-test 57.14 on the control group and 61.14 on the experimental group. The standard mean error is 2.41 for the control and 2.50 for the experimental groups. These data correlate with the one-sample test below in Table 3 concerning the score of the pre-test of control and experimental groups.

Table 3: One-sample test of pre-test on control and experimental groups

Pre-test	t	df	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper
Control	23.70	20	57.14	52.11	62.17
Experiment	24.38	20	61.14	55.91	66.37

Table 3 display the score of one-sample test analysis indicating the *t*-distribution of 23.70 with 20 degrees of freedom, 57.14 of mean difference, with a confidence interval of the difference—lower 52.11 and upper 62.17 on the control group. The experimental group indicates *t*(24.38) with 20 degrees of freedom, 61.14 mean difference with a confidence interval of the difference on lower 55.91 and upper 66.37. We can identify from Table 3 the score differences of pre-test on both groups which are not significantly different.

Table 4: One-sample statistics of post-test on control and experimental groups

Post-test	N	Mean	Standard Deviation	Standard Error Mean
Control	21	60.09	11.92	2.60
Experiment	21	77.19	5.92	1.29

Table 4 displays data about one-sample statistics of post-test of control and experimental groups which covers differences of scores in mean, standard deviation, and standard error mean. We can notice the difference of mean from the result of post-test 60.09 on the control group and 77.19 on the experimental group, with a standard deviation of 11.92 for control and 5.92 for the experimental. The standard mean error is 2.60 for the control and 1.29 for the experimental groups. These data have similar differences with the one-sample test below in Table 5 concerning the score of the post-test of control and experimental groups.

Table 5: One-Sample Test of post-test on control and experimental groups

Post Test	t	df	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper
Control	23.08	20	60.09	54.66	65.52
Experiment	59.65	20	77.19	74.49	79.89

The result of one-sample test analysis of post-test of both control and experimental groups indicates *t*(23.08) with 20 degrees of freedom, 60.09 of mean difference, with a confidence interval of the difference—lower 54.66 and upper 65.52 on the control group. There are significant differences in scores on the experimental group in which the *t*(59.65) with 20 degrees of freedom, 77.19 mean difference with a confidence interval of the difference on

lower 74.49 and upper 79.89. We can identify from Table 5 that the score differences of post-test on control group are having significantly different from the experimental one.

All tables show the number of research subjects analyzed is 21 subjects in the calculation using the SPSS package. The results of the analysis with this package indicate that the average value difference is not much difference between the two groups on the pre-test. Likewise with the difference in the distribution of scores seen from the standard deviation where the control group has a deviation slightly lower than the experimental group. This shows that the individual scores are distributed more varied in the experimental group compared to the control group. Likewise, the mean standard error is also higher in the experimental group. The results of the one-sample statistical analysis indicate that the distribution of individual scores obtained by the research subjects and described in terms of the average value, standard deviation, and standard error of the mean is in the distribution position with a lower level of difference with the ability to answer the test at the middle to the upper level.

This increase, for the experimental group, is of course due to the process of manipulating the independent variable and affecting the dependent variable. The increase of seventeen digits can be classified as significant compared with the control group which was not treated SA. Statistically, there is also an increase of data on the control group around three digits if the results of its pre-test and post-test are compared.

5. Discussion

After having been analyzed the data on pre-test and post-test, the study comes up with interpreting the data based on the principle of the cause and effect relationship of the research variables. In this context, SA stands as the cause and improvement in understanding the recommended competencies by research subjects as the dependent variable. The propensity of statistical data obtained in pre-test as depicted in the findings indicate the prior knowledge of research subjects on the recommended competencies of both control and experimental groups. The data are slightly distributed at the same level of understanding the recommended competencies even though the scores of the experimental group exceed a little bit over the control group, but it is not significantly.

The one-sample statistics analysis displays and represents the total number of individuals in the sample with the mean, standard deviation, and standard error mean portraying slightly different data set distribution for both the control and experimental groups. In other words, they more or less have the same level of knowledge about the recommended competencies mandated by the Laws and Regulations. The variance in a *t*-distribution is estimated based on the degrees of freedom of the data set total number 21 sample size of observations minus 1. The difference in the average scores or mean scores of the control and experimental groups in the picture above shows the tendency of research participants to have the competence or prior knowledge of the recommended competencies in four areas—pedagogic, personal, social, and interpreting government policies regarding efforts to improve the quality and professionalism of teachers have not received a serious response and this is a question that needs to be found a democratic and scientific solution.

The result on pre-test shows a clear picture related to the prior knowledge or initial competence of research participants who are at a level slightly above the median value, both in the control group and the experimental group. Theoretically and practically, this value shows the importance of researching to change the level of understanding. Even so, the data analysis can provide an overview of the behavior of research participants towards their understanding of the recommended competencies as a mandate by the Law and regulations.

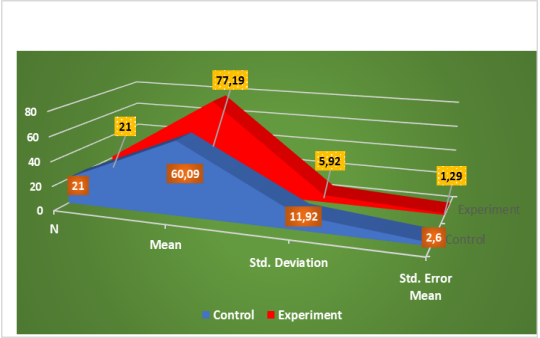

Figure 1: One-sample statistics of post-test scores on control and experimental groups

In general, the results of this study indicate the impact of the independent research variable on the dependent variable. However, it should also be stated that the level of difference in scores which is the basis for stating that there is a causal relationship is quantitatively above mean the category. The level of difference in data from pre-test and post-test to the two groups—control and experiment were at a level of significance. The results indicate that there is a difference in the average value between the group that received learning using SA and the group that did not receive treatment with the SA variable.

Analysis of the data through the one-sample test program in Figure 2 shows that there is a difference in the average value between the control and experimental groups, which means that there is an impact of learning using SA on the competence of research subjects. However, this result does not confirm with previous research such as that conducted by Suyanto (2018) which examined teacher performance by applying SA through the five steps principle--observing, asking, associating, reasoning, and communicating, where, the results showed that teacher performance was not optimal in implementing SA. Nevertheless, It confirms with the research conducted by Mahmoud (2014) which found an increase in children's metacognitive abilities as a result of learning applying SA with the Discovery Learning Strategy model. This study also applied the five steps principle of SA in the teaching and learning process.

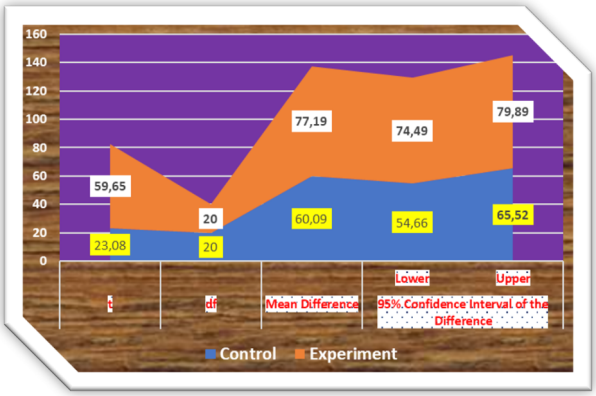

Figure 2: One-sample test of post-test on control and experimental groups

The results of this study contrast with the results of research by Apriauny, et al., (2017) which showed that the application of SA in English language learning with a qualitative research design showed that the participants of this study did not appear to have an understanding of the five steps of SA in teaching English. However, what is different in these two studies lies in the design and research studies, where one uses a quantitative design and the other one is qualitative. Then the quantitative research study applied the principle of the five stages of SA learning coherently to control and manipulate variables, while the qualitative design conducted observation or evaluation on research participants who were doing and applying the principle of the five stages of SA in the learning process.

The results of this study are also in line with the findings of Nugraha and Suherdi, (2017) who investigated the practice of a teacher applying SA in learning English. The results of their study show that the teacher's ability to apply SA completely in four meetings to deliver one material even though the five stages were not always carried

out in every meeting that was different from the lesson plans made. However, confirming to the findings of Firman, et al., (2018), showed the effectiveness of the SA principle in the development of the Economics module to improve the learning outcomes of high school students. The application of SA in learning shows that the average result of the experimental class has a higher score than the control class. These results indicate that the application of SA by controlling and manipulating the elements of learning materials and following the stages of the learning principles in a coherent and varied manner will have more impact on the dependent variable.

6. Conclusion

SA is a learning approach recommended by the Curriculum 2013 to be applied in the teaching and learning process by every teacher. This approach has five stages principle and learning models as well as stages in delivering learning materials in a coherent but flexible manner. The meaning of coherent but flexible refers to the five steps implementation stages -- observing, asking, associating, reasoning, and communicating which can be systematically integrated, combined, or reversed. This means that the teacher is not fixated on the first thing to do in applying the five steps concept. SA must be interpreted as a concept that can be interpreted by every teacher so that each teacher can apply this SA in the teaching and learning process based on subject matter characteristics and the nature of the subject being taught.

The five steps concept of SA encourages a learning principle that can be processed or applied using learning models or methods such as discovery-based learning, problem-based learning, student-centered learning, contextual teaching, and learning or community learning. This study uses SA as an approach used in the learning process by controlling the five steps concept which is adapted to the learning materials and media used. The use of SA during the learning process for the experimental group showed an increase in the acquisition score compared to the score obtained by the control group. The findings of this study indicate that there is a causal relationship between the use of SA in the learning process and the level of understanding of research participants on the recommended competencies by Law and Regulations

The improvement of cognitive or scientific abilities on the recommended competencies will theoretically have an impact and influence on the way the teachers think, behave, and adapt to every Government policy intending to improve the quality of teaching and learning as well as educational management. Therefore, if we refer to the results of this study which show that there is an increase in teachers' understanding of the recommended competencies as a result of the learning process using SA.

7. Suggestions

The teacher must understand comprehensively the five steps learning principles SA by exploring the philosophy and learning theories that become the basis and reference for the emergence of the approach. Then, understand deeply the learning methods or models with SA nuances such as—discovery learning, problem-based learning, student-centered learning, contextual teaching and learning, community learning, and others. Only with a deep understanding of the concepts and principles of SA learning, we can apply this approach as expected by the 2013 curriculum. SA is an approach that is defined as a research variable for all levels of education from Elementary School to Higher Education. Therefore, this study suggests that interested researchers can use the results of this study as a reference for carrying out research, with qualitative or quantitative designs. SA can be used as a research variable at the tertiary level in the form of action research—teaching while researching.

This study also suggests teachers that should know properly the five stages principle of applying SA in the teaching and learning process since this approach has been recommended by the government in Curriculum 2013. SA can also be employed as the research variable for conducting qualitative and quantitative research, especially classroom action research as this is one of the recommended competencies mandated by Law and regulations. Interested researchers can also explore and conduct mixed research design applying SA as the research variable to explore and investigate educational and teaching-learning issues.

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Distance Education During the Covid-19 Pandemic from the Perspective of Both Sides of Accountability: Opinions of Teachers and Parents

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Abstract
This study, which aims to examine the distance education experiences of people who work as teachers but who are also parents during the COVID-19 pandemic uses descriptive phenomenology, an approach used in qualitative research. The analysis revealed six main themes that explain the distance education experiences of parent-teachers -- students' academic learning environment, teacher-student communication, use of EIN (education information network) and live lessons, family support, advantages and limitations of distance education, and teachers' views on distance education. The study concluded that the academic learning environment students have during distance learning is inadequate, that the quality and duration of student-teacher communication during distance learning is inadequate, that the quality of teacher-student communication favored students in private schools over teacher parent-children communication, that parent-teachers possessed negative views about distance education, and that distance learning led to unequal opportunities among students..

Keywords: Covıd-19, Distance Education, Parent-Teachers, Pandemic, Education Information Network

1. Introduction

1.1 Introduce the Problem

Although the COVID-19 pandemic is effective on a global scale, it is more than just a deadly disease and has now become a phenomenon that affects social structures and institutions. It seems that this phenomenon will affect

societies for a long time and cause critical changes in social life. It is thought that among the most affected social structures during this pandemic now and in the future are education and training institutions.

The COVID-19 pandemic, which was totally unexpected, suddenly changed the form of education in the world. With the spread of the pandemic, 160 countries closed schools, 1.6 billion children and young people moved away from school, and the pattern of education changed to reduce learning loss (World Bank, 2020). With education taking on a new form due to the COVID-19 pandemic, new words, new problems, and new words began entering the literature. Now, countries have had to develop new strategies to support learning and prevent mental, physical, and cultural problems for their children who are living through a period of pandemic. While countries were developing strategies and receiving help from all the stakeholders of education, it was again teachers who helped the states the most in this regard.

The education ministries of many countries around the world have made several changes and arrangements to adapt to the current situation. With these arrangements came educational resources that could be used by families starting with students, teachers, and other educational employees. In addition, states had to plan education differently. Distance education was suddenly on the agenda, but what should it be like? What could it be like? How should distance education be managed? The search began for answers to these questions. Students should be able to continue their education at their own levels before the inequalities, learning gaps, and learning injustices that exist in countries' education systems grow further.

The World Bank has announced its guidelines for distance education, including short-, medium-, and long-term interventions for student learning. While short-term interventions focus on identifying and addressing urgent needs, medium-term interventions focus on strengthening the infrastructure in distance education, developing appropriate content, reviewing curricula, the professional development of teachers, strengthening school-student-teacher and student communication, and reopening schools. Long-term interventions consist of guiding principles for maintaining the distance learning model and using hybrid learning models (World Bank, 2020).

Technology is important in distance education, the individuals that use technology are also important. Successful integration of technology depends on teachers' comfort levels and their knowledge of technology. When teachers are uncomfortable with technology and its use, technology will not have an impact on the curriculum (Hutinger, Robinson, Schneider, 2004). In addition, another dimension to be considered in distance education is the usability of the e-learning system. In this study, the quality of information is the most important element in the e-learning system. When establishing the quality of the information to be used, the three elements that make an e-learning system a quality one are system navigation, system learnability, and understandable visual design (Alshehri, Rutter, Smith, 2019).

It is important to consider the above principles when conducting distance education. This is because, according to the World Bank report, the world was already struggling with a learning crisis before the pandemic began. In low- and middle-income countries, 53% of children could not read or understand a simple book until the age of 10 (Azevado et al., 2020). Furthermore, another study revealed that students experience learning losses only during summer break. As a result of the review of 39 studies and a meta-analysis of 13 studies made in the United States, it was found that students' learning loss during the summer break was higher than their reading skills in mathematics. In addition, it was found that while the loss increases with the grade level, this rate is higher for students from low socio-economic backgrounds. It has been stated that differences in income, practice, and learning may lead to this situation (Cooper et al., 1996). How should distance education be managed in a pandemic with no end in sight when students experience learning loss over just two months of summer break? How should it be planned? Teachers and educators should consider four steps when planning a digital education. These are 1 -- Analysis; 2 -- Setting goals and objectives; 3 -- Choosing teaching strategies; and 4 -- Managing assessment. While making these steps, the following should be considered. 1. What do I want my students to know? 2. What do I want my students to think? 3. What do I want my students to be able to do? 4. What do I want my students to feel? Steps should be formed by seeking answers to these questions (Ascough, 2002). What kind of place should teachers have in education? What should be the role of the stakeholders in education? What kind of role should technology play in education? What should the family's role in education be? What should the student's role in

education be? The answers to the questions were constantly sought and as the data came in, the solutions found began to change continually.

One of the findings showing that the COVID-19 pandemic is affecting society and education very quickly is the multiplicity and diversity of studies on the subject. When the literature is examined, it is seen that there are many studies on COVID-19 and education. Some of these studies include World Bank, 2020; Azevedo, Hasan, Goldemberg, Iqbal, and Geven, 2020; Çakın and Akyavuz, 2020; Pınar and Akgül, 2020; Yellow and Yellow, 2020; Yılmaz, Mutlu and Doğanay, 2020; Demir-Öztürk, Kuru, and Yıldız, 2020; Usta and Gökcan, 2020; Daniel, 2020; Almanthari, Maulina and Bruce 2020.

This study focuses on the opinions of parent-teachers who are accountable to their students' parents as a teacher in the distance education process and who personally conduct distance education but who are also parents following their own children's school education and whom other teachers are accountable to. Teachers are accountable in education. A teachers' main responsibility is to ensure high quality in teaching. Parents, on the other hand, are responsible for their children's behavior. They also hold the school and teachers accountable for education (UNESCO, 2017). This being the case, parent-teachers were specially selected for this study. The findings of this study should be considered valuable in terms of constituting data that can help the Ministry of National Education and all stakeholders during this time by revealing the problems encountered in distance education in Turkey during the COVID-19 pandemic and afterward through the eyes of parent-teachers.

The main purpose of this research is to reveal the experiences of parent-teachers with respect to the distance education conducted during the COVID-19 pandemic. To this end, answers were sought to the following questions: 1) What are the distance education experiences of parent-teachers as teachers? 2) What are the distance education experiences of parent-teachers as parents?

2. Method

This study used descriptive phenomenology, a qualitative research approach. Phenomenological approach offers researchers the opportunity to examine in more depth phenomena that they are aware of but cannot fully understand (Patton; 2002; Creswell, 2012; Yıldırım & Şimşek, 2011). The main purpose of descriptive phenomenological design is to describe the perceptions and experiences of people (Saban & Ersoy, 2016, 59). The goal of this study is to examine in depth the perceptions and experiences of parent-teachers regarding the distance education conducted by the Ministry of National Education over such networks as EIN, WhatsApp, Zoom, and Microsoft Teams during the COVID-19 pandemic as appropriate to the context and conditions in Turkey.

2.1 Participant (Subject) Characteristics

The study's working group consists of people who worked as teachers during the COVID-19 pandemic and were also parents. In the study, the maximum diversity and criterion sampling method, a purposive sampling method, was used to determine which parent-teachers were to be interviewed. The people to be interviewed in the study were selected based on having participated in distance education during the COVID-19 pandemic in the 2019-2020 spring semester while at the same time being parent-teachers serving in various schools with students at any level of formal education. The characteristics of the study group of the study selected according to these criteria are given in Table 1.

Table 1: Demographic Information of the Study Group

Variable		n	%
Gender	Female	29	72.5
	Male	11	27.5
Education Level	Undergraduate	26	65
	Master's Degree Without Thesis	8	20
	Master's Degree	5	12.5

	Ph.D.	1	2.5
Age	30–40	21	52.5
	41-50	19	47.5
Seniority	1-6	1	2.5
	7-13	6	15
	14-20	22	52.5
	21-27	11	27.5
Management Period	None	35	87.5
	1-6	1	2.5
	7-13	4	10
School Where Employed	Primary School	16	40
	Secondary School	12	30
	High School	12	30
The School Your Child Attends	State	28	70
	Private	12	30
Your Child's Education Level	Kindergarten	1	2.5
	Primary School	23	57.5
	Secondary School	10	25
	High School	6	15
Socioeconomic Level of the School Where He/She Works	Low	11	27.5
	Moderate	22	55
	High	7	17.5

The working group of the study consists of 40 parent teachers working in various districts of Ankara. Information regarding the working group of the study is provided in Table 1. Considering this information, it is assumed that the diversity required for maximum diversity sampling has been achieved.

2.2 Data Collection Tool and Data Collection Time

A questionnaire and semi-structured interview form developed by the researchers were used as data collection tools. The interview form includes nine questions describing the personal characteristics of parents' teachers and 10 questions to reveal their perceptions and experiences as teachers and parents during the distance education of their children during the COVID-19 pandemic.

Before the semi-structured interview form was prepared, the literature was reviewed by the researchers, and 10 questions considered for inclusion on the interview form were determined by the researchers. The prepared interview form was presented to two researchers and one measurement evaluation expert in the field of educational sciences and after the necessary feedback was obtained, it was reviewed by a linguist to check if the questions were understandable. Before the prepared form was applied, it was applied to two people who were teachers and parents at the same time and the final check was made to see if the questions were clear and understandable. After all these evaluations, the semi-structured interview form was finalized.

Permission from obtained from the ethics committee to apply the data collection tool in its final form. Before it was applied, the participants were given the necessary information then they gave their consent and stated that their participation was voluntary. The interview questions were sent to the teachers via E-Mail, WhatsApp, and Zoom, or face to face, and the written responses of the parents have collected again in the same way. Research data were collected between 07 and 21 July 2020.

2.3. Analysis and Interpretation of Data

The researchers obtained texts of the interviews by entering the data obtained from the participants using the semi-structured interview form onto a computer. The interview texts were analyzed using the descriptive and content

analysis technique with the help of the MAXQDA 20.1 qualitative data analysis program. The analysis revealed six main themes. In the presentation of these themes, the participants' opinions were quoted directly and interpreted based on the participants' remarks. While analyzing the interview texts, four steps were followed: bracketing, phenomenological reduction, imaginative variation, and synthesizing meaning and essences (Giorgi, 2009). In the study, codes, categories, themes, and the sub-themes making up the themes were generated by combining similarities and different expressions, and an attempt was made to ensure integrity and internal consistency by checking the relationship between the themes and sub-themes, and the relationship between each theme and the others. In determining the themes and sub-themes, the opinions of two researchers working in the field of educational sciences were consulted to ensure the reliability of the study. The parent-teachers whose opinions were consulted for the analysis of the data were given a code number (PT: 1, PT: 2, PT: 3...). Findings are presented with frequency values. Findings are given using direct quotations without comment, the point at this stage being to ensure.

For reliability, the themes obtained as a result of the data and the analysis process were compared with expert opinion and the findings of the literature. An attempt was made to provide first coder reliability then consensus percentage by recalling the answers given by the parents during the interviews on the data analysis program, then the consensus percentages recommended by Miles and Huberman (1994) were either added to another code/category/theme or renamed for the codes, categories, and themes under the percentages.

External reliability was provided by trying to make the necessary explanations in detail so that the study could be tested with other studies. In the study, at the stage of providing validity and reliability, an attempt was made to present the data obtained in the study in detail without any comments (Creswell, 1998; Merriam, 1998; Miles & Huberman, 1994).

3. Results

The data obtained from the interview questions prepared in line with the purpose of the study were analyzed using the MAXQDA 20.1 qualitative data analysis program and the results yielded six main themes. These themes are academic learning environment, teacher-student communication, use of EIN and live lessons, family support, the advantages and limitations of distance education, and opinions about distance education, respectively, and Figure 1 explains the main themes and associated sub-themes.

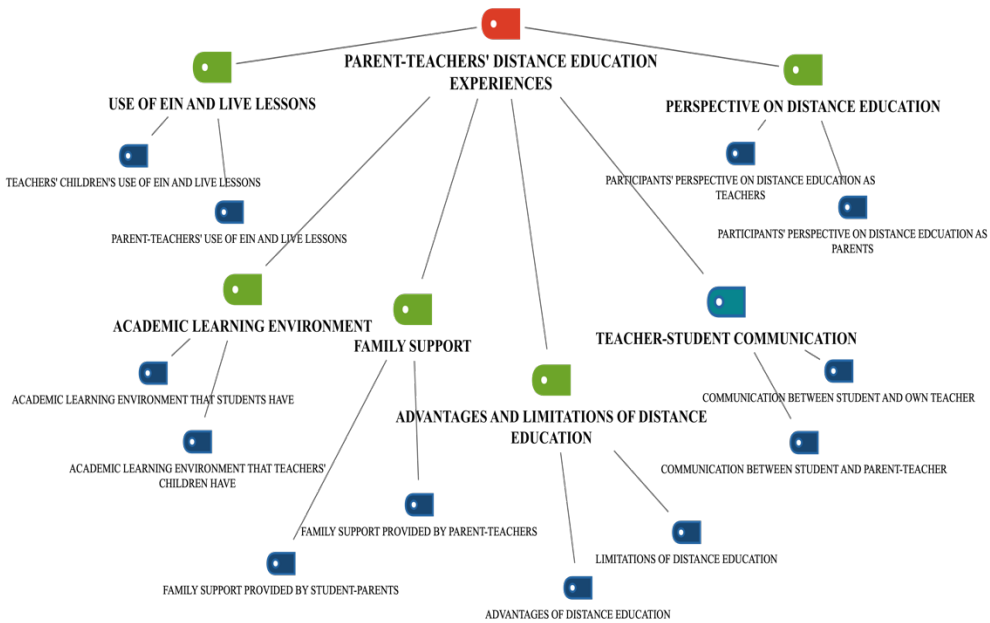

Figure 1: Themes and Sub-Themes Obtained From the MAXQDA Data Analysis Program

3.1.Academic Learning Environment

The theme of the academic learning environment is examined under two sub-themes: the academic learning environment that children of teachers have and the academic learning environment that students have.

"Do you think your home environment is suitable for your child to benefit from distance education? Please explain." The answers given by the parent-teachers to the question are explained in Table 2. Accordingly, all parent-teachers (n=40) stated that their children's academic learning environment is satisfactory in terms of distance education materials/equipment and internet access.

"Do you think your students' home environment is satisfactory for distance education? Please explain." The answers given by the parent-teachers to the question are explained in Table 2. Accordingly, regarding their students' academic learning environment, 55% of the teachers stated that their students' home environment was satisfactory in terms of access to distance education materials/equipment (n=22) and 42.5% for access to the internet (n=17).

Table 2**:** What Teachers and Parents Said About Students' Academic Learning Environment During Distance Education

Theme	Sub-theme	Category	Code	F	%
ACADEMIC LEARNING ENVIRONMENT	The Academic Learning Environment of Teachers' Children	Access to distance education materials (computer, tablet, smartphone, etc.)	Satisfactory	40	100%
			Not Satisfactory	0	
		Access to Internet	Satisfactory	40	100%
			Not Satisfactory	0	
	Students' Academic Learning Environment	Access to distance education materials (computer, tablet, smartphone, etc.)	Satisfactory	22	55%
			Not Satisfactory	18	45%
		Access to Internet	Satisfactory	17	42.5%
			Not Satisfactory	23	57.5%

All parent-teachers can provide the academic learning environment their children need as students during distance education. On the other hand, it can be said that more than half of the students do not have the academic learning environment they need. Parent teachers attribute this situation to their students' socio-economic level.

"…..Definitely Not -- Half of my students are refugees and the socioeconomic status of 4 to 6 of them is not good." PT: 27
"… Most of them are not satisfactory. In particular, very few use home internet. Everyone has a smartphone, but if there is a sibling, this is also a problem." PT: 34
"Most of my students' home environment is not satisfactory. Some do not have internet access; some do not have a computer." PT: 25
"It is not satisfactory for all my students. We even have students who don't have a television set." PT: 11

3.2. Teacher-Student Communication

The theme of teacher-student communication is examined under two sub-themes: communication between teachers' children and their own teachers and communication between parent-teachers and their students.

"Did the teacher establish communication with your child during distance education? How often did the teacher establish communication?" The answers given by the parents to these questions are explained in Table 3.

Accordingly, 97.5% of parent-teachers stated that their children's teacher established communication (n=39) while 2.5% said the teacher did not (n=1). Those students with whom communication was not established are 6th- Grade students studying in state schools.

A total of 42.5% of parent-teachers stated that communication between their children and their teachers took place daily (n=17), 37.5% frequently (n=15), and 17.5% rarely (n=7). According to the cross tables obtained from the data analysis program, while children of families whose children attended a private school were able to communicate with their teachers every day, only 18% of the children (n=28) studying at public schools were able to talk with their teachers every day (n=5).

Table 3: What Parent Teachers Said About Teacher-Student Communication During Distance Education

Theme	Sub-theme	Category	Code	n	%
Teacher-Student Communication	Communication Between Teachers' Children and Their Own Teachers	Communication not established/partially established		1	2.5
		Communication was established		39	97.5
		Communication frequency	Every Day	17	42.5
			Frequently	15	37.5
			Rarely	7	17.5
			No communication was established	1	2.5
	Communication Between Parent Teachers and Their Students	Communication not/partially established		7	17.5
		Communication was established		33	82.5
		Communication frequency	Every Day	8	20
			Frequently	27	67.5
			Rarely	5	12.5

"Did you establish communication with your students during distance education? How often did you establish communication?" The answers given by the parents to these questions are given in Table 3. Accordingly, 82.5% of teachers' parents stated that they established communication with their students (n=33), and 17.5% stated that they could not establish or only partially establish communication. Teachers who did not establish communication or could only partially establish communication stated they tried to establish communication but it was not possible to reach the students.

"I tried to establish communication. I made phone calls. We chatted on WhatsApp. I had many students that I couldn't reach...." PT: 18
"I had students with whom I couldn't establish communications because the channels of communication were closed" PT: 12

3.3 Using EIN and Live Lessons

The theme of the use of EIN and live lessons is examined in two sub-themes: teachers' children's use of EIN and live lessons and parent-teachers' use of EIN and live lessons.

"Did you ever use EIN in your child's education during distance education? Did your child ever attend live lessons? How often did your child's teacher/teachers give live lessons? Did your child ever watch the lessons of his/her grade on EIN TV? How often was your child able to watch EIN?" The answers given by the parents to these questions are given in Table 4.

Parent teachers stated that 67.5% of their children's teachers used EIN (n=27), and 32.5% did not use EIN (n=13). Of those teachers who did not use EIN, 77% work in a private school (n=11), and 23% in a state school (n=2). In this context, it can be thought that private schools do not prefer EIN because they have their own distance education

infrastructure, different networks, and applications. When the opinions about the live lesson experiences of teachers' children are examined, 67.5% of them stated that live lessons were given (n=27), and 32.5% of them stated that live lessons were not (n=13). When the crosstables are examined, 83% (n=12) of the parents whose children attend private school stated that their children did not use EIN, and 17% of them said they did take live lessons regularly (n=1). Remarkably, three of the parent-teachers whose children study at private schools and whose children regularly take live lessons do not give live lessons.

Table 4: What Parent Teachers Said About the Use of EIN and Live Lessons During Distance Education

Theme	Sub-theme	Category	Code	n	%
Use of EIN and Live Lessons	Teachers' Children's Use of EIN and Live Lessons	Teacher's EIN experience	Teacher used EIN	27	67.5
			Teacher did not use EIN	13	32.5
		Teacher's Live Lesson Experience (EIN, Zoom, Microsoft Teams, etc.)	His/her teacher gave live lessons	27	67.5
			His/her teacher did not give live lessons	13	32.5
		Frequency of teacher's live lesson	No lessons were given	1	2.5
			Frequently	15	37.5
			Rarely	7	17.5
			Every Day/Regularly	17	42.5
		Student watched EIN TV	Student did not watch EIN TV	14	35
			Student watched EIN	26	65
		Frequency of student's watching EIN TV	Never watched	14	35
			Rarely	3	7.5
			Every Day	23	57.5
	Parent Teachers' Experience of EIN and Live Lessons	Parent Teachers' Experience of EIN	Used EIN	39	97.5
			Did not use EIN	1	2.5
		Parent teachers' experience of live lessons (EIN, Zoom, Microsoft Teams, etc.)	Gave live lessons regularly	28	70
			Stopped giving live lessons	4	10
			Never gave live lessons	8	20
		Parent teachers' live lesson frequency	No lessons were given	8	20
			Rarely	4	10
			Every Day/Regularly	28	70
		Students watched EIN TV	Students did not watch EIN	4	10
			Their students watched EIN	36	90
		Frequency of students watching EIN TV	Never watched	4	10
			Rarely	20	50
			Every Day/Regularly	13	32.5
			I don't know	3	7.5

"Did you use EIN? What do you think about EIN? Did you ever give lessons to your students? How often did you do this? Did your students ever watch lessons of their own grade on EIN TV? How often were they able to watch?" The answers given by the parents to these questions are given in Table 4. Accordingly, it is stated that 97.5% of parent-teachers used EIN (n=39), and 2.5% did not. When the opinions of parent-teachers regarding their live lesson experiences are examined, it can be seen that 60% regularly gave live lessons (n=28), 10% rarely gave live lessons, and 20% never gave live lessons. Parent teachers stated that 90% of their students watch EIN (n=36), while 10% do not watch EIN (n=4). While 32.5% of the students watched EIN every day (n=13), 50% rarely (n=20), watched EIN, and 10% did not watch EIN at all. Some 7.5% of the teachers could not give information about how frequently their students watched EIN.

3.4. Family Support

The theme of family support is examined under two sub-themes: the support that parent-teachers give to their children and the communication between their children's own teachers.

"*Did you support your child during this time? How did you support your child?"* The answers given by the parents to these questions are given in Table 5. Accordingly, 97.5% of parent-teachers stated they supported their children (n=39) and 2.5% stated that they did not feel the need to support their children (n=1). The student of the parent-teacher who said there was no need for family support was a 1st Grade student at a private school. During distance education, parent-teachers support their children by encouraging them to keep up with their homework/lessons (n=23), to do activities/solve problems/read books (n=10); lecturing (n=10), motivating them (n=10), organizing their learning environment (n=2), and being aware of their psychosocial needs.

"... I provided support with such methods as extrinsic motivation, communication enhancement, and rewards." PT: 2
"I checked his WhatsApp groups and EIN page frequently to see if he was doing his homework." PT: 6
"...I often helped with my child's homework. He watched EIN TV and we provided support using videos from EIN. We also made him read test books and storybooks at home." PT: 7
"I had him do his homework at the times I set after the live broadcast. I checked. I went over the missing topics." PT: 21
"I personally did the checks. I did not share with him the information that he had moved up a class. He thought that his performance in live lessons would affect his report card positively. I never confused him." PT: 39
"...He needed his friends. So, I contacted other parents so he could video chat with them." PT: 40

Table 5: What Parent Teachers Said About Family Support Provided During Distance Education

Theme	Sub-theme	Category	Code	n	%
Family Support	Family Support Provided by Parent Teachers	Family Support Given		39	97.5
		Support provided	Following Homework/Lessons	23	57.5%
			Doing activities/Solving problems/Encouraging book reading	10	25
			Lecturing	10	25
			Motivating	10	25
			Organizing the learning environment	2	5
			Being sensitive to psychosocial needs	1	2.5
		Family support not provided		1	2.5
		Reasons for lack of support	The school provided all the support for the student	1	2.5
	Family Support Provided by Student Parents	Family Support Given		15	32.5
		Support provided	Following homework	8	53
			Motivating	6	40
			Organizing the learning environment	1	6.7
			Reference book support	1	6.7
		Family support not provided		25	67.5
		Reasons for lack of support	Socioeconomic level/Education level	11	44
			Not feeling responsible for the student's education	6	24
			Family conflicts/Communication problems	3	12

	Low motivation following direct grade passing system	2	8
	Failure to establish teacher-parent communication/language problem	2	8
	Working parents not being able to keep track of the student	1	4

"*Did your students' families give sufficient support at this time? How did the students' families support them*? Do you think families give sufficient help with their children's homework?" The answers given by the parents to these questions are given in Table 5. Accordingly, while parents of teachers stated that 32.5% of their students received family support (n=15), 67.5% of them thought that they were deprived of family support (n=25). Parent teachers said that during distance education, their students received support from their families in the areas of following their homework/lessons (n=8), motivation (n=6), organizing the learning environment (n=2), and providing reference books (n=1). Parent teachers attributed the lack of family support during distance education to socioeconomic level/education level (n=11), not feeling responsible for the child's education (n=6), inner family conflicts/communication problems (n=3), poor motivation following the direct grade passing system (n=2), lack of parent-teacher communication/language problem (n=2), and working parents being unable to keep track of the student (n=1).

"My parents gave adequate support given their means. Most of my parents cannot provide sufficient help with their children's homework. I contacted the parents of students who did not do their homework." PT: 25
"The majority of families were not interested in their children's academic development before distance education. Nothing changed during distance education. Families cannot give satisfactory support due to the low level of education and poor socioeconomic status." PT: 4
"Since most of our parents were unaware, they did not provide enough support. Most of them did not do homework, especially after learning that there would be no failing." PT: 6
"It all depends on the family's idea of education those who wanted education took an interest those who said it's the teacher's job did not." PT: 32

3.5. Advantages and Limitations of Distance Education

The theme of advantages and limitations of distance education is examined under two sub-themes, namely, advantages and limitations. "How would you explain the advantages and limitations of distance education?" The answers given by the parents to this question are given in Table 6.

When Table 6 is examined, it is seen that parents of teachers generated 18 codes regarding the advantages of distance education, whereas they produced 40 codes regarding its limitations. Accordingly, it can be said that parent-teachers emphasized the limitations of distance education more often and considered distance education to be limited.

According to the opinions of parent-teachers, the advantages of distance education over face-to-face education are: distance education ensures continuity of education in extraordinary situations (n=10), provides supportive education that students can benefit from when they need it (n=3), enables parents to be included (n=2), eliminates time and space limits (n=1), develops skills in using technology (n=1), and makes students responsible for their own learning (n=1).

"...It contributes to the individual development of students as we put more responsibility on students (keeping track of class times and attendance, use of technology, assignment following and checking...) We will include parents more actively in education activities..." PT: 24
"School education is very valuable and very important. If schools are opened and education starts, I would like distance education to take place on specific days of the week. It could be useful as some kind of repeat lesson or as if taking a private course." PT: 29

"The greatest advantage is that it lets education continue and children can do their lessons at home. Being able to attend classes with their own teacher and friends through live lessons is very valuable." PT: 30

Table 6: What Parent Teachers Said About the Advantages and Limitations of Distance Education

Theme	Sub-theme	Category	Code		n	%
Advantages and Limitations of Distance Education	Advantages of Distance Education (n=18)		Ensuring continuity of education in extraordinary situations		10	25
			Providing support training that students can benefit from when needed		3	7.5
			Ensuring that parents are involved in the process		2	5
			It eliminates time and space constraints		1	2.5
			Develops technology usage skills		1	2.5
			Makes students responsible for their own learning		1	2.5
	Limitations of Distance Education (n=40)	Creates unequal opportunities			18	45
		Limitations due to system features (n=31)	Mandatory attendance not a requirement (n=12)	Students not obligated to attend	7	17.5
				Teachers not obligated to attend	5	12.5
			Lack of assessment and grade passing system		7	17.5
			Poor interaction		5	12.5
			Weak technical infrastructure		3	7.5
			Insufficient content		2	5
			Inability to meet students' psychosocial needs		2	5
		Limitations arising from teacher characteristics (n=4)	Teachers' poor distance education skills		2	5
			Teachers are poorly skilled in using educational technologies		1	2.5
			Teachers do not give live lessons/students not being taught by their own teachers		1	2.5
		Limitations arising from family characteristics (n=5)	Parents' indifference to distance education		3	7.5
			Parents' shortcomings/level of education		2	5
			Having more than one student in the family benefiting from distance education		1	2.5

According to what the parent-teachers said, the limitations of distance education are explained as creating unequal opportunities (n=18), inability to make it mandatory for students or teachers to attend lessons (n=12), the lack of an assessment and grade pass system (n=7), poor interaction (n=5), poor technical infrastructure (n=3), insufficient content (n=2), not meeting students' psychosocial needs (n=2), teachers' poor distance education skills (n=2), teachers' poor skills in using education technologies (n=1), teachers not giving live lessons and students not being taught by their own teachers (n=1), parents' indifference to distance education (n=3), parents not having a level of education sufficient to support their children in distance education (n=2), and there being more than one student in the family benefiting from distance education (n=1).

"EIN TV has gained an important place in the world; the fact that it was so successful in such a short time was a stroke of luck for our country but if you ask me, distance education contains incredible shortcomings in capturing the spirit of education. Friendly relations and the use of body language, gestures, and mimicry are very valuable when giving lessons, especially for primary school students." PT: 7

"…Our biggest limitation is that our children, who cannot live under equal conditions with the country being so large, have limited access to education." PT: 22

"In my opinion, measurement and assessment in distance education should be done more effectively and frequently; in fact, checks should be made each week using the artificial intelligence logic in academic support to see if achievements are being made or not." PT: 30
"It should be mandatory and not optional for teachers to give lessons. Students should be penalized and those students who do not fulfill their responsibilities should get what they deserve and students that don't make an effort should be distinguished even in distance education..." PT: 32

3.6. Perspective on Distance Education

The theme of perspective on distance education is examined under two sub-themes: the perspective of the participants as parents and the perspective of the participants as teachers.

"As a parent during distance education, what are its good points and bad points?" The answers given by the parent-teachers to this question are given in Table 7. From this table, it can be seen that 65 codes were generated for what the parent-teachers called the bad points of distance education, while the number of codes for what they called the good points was limited to just 17. The parent-teachers described what they saw as the good points of distance education as the ability to continue education in a safe environment, making it possible to spend more time with their child, and preserving the sense of belonging to the school.

"…The only good thing was that it made it possible to spend more time with my child." PT: 4
"…As a parent, the good points were my child being able to see his friends and teacher albeit from afar and the continuation of his sense of belonging and commitment." PT: 5
"*…The most positive aspect is that they can continue in a safe environment without leaving school." PT: 26*

Parent teachers describe the negative aspects of distance education as difficulty in motivating the student (n=14), difficulty in establishing regular study discipline (n=14), making student learning the responsibility of the parent (n=7), not meeting the psychosocial needs of students (n=6), poor interaction (n=6), not planning the lesson times correctly (n=4), not having a live lesson calendar (n=3), everything (n=3), the teacher in EIN not being constant (n=2), giving too much homework (n=2), lack of an assessment and grade passing system (n=2), increased exposure to the screen (n=1), and changes in the student's routine (n=1).

Table 7: Parent Teachers' Perspectives on Distance Education

Theme	Sub-theme	Category	Code	n	%
Perspective on Distance Education	Participants' Perspective on Distance Education as Parents	Positive perspective on distance education (n=17)	Being able to continue education in a safe environment	7	17.5
			Spending more time with your child	5	12.5
			Ensuring/maintaining a sense of belonging to the school	5	12.5
		Negative perspective on distance education (n=65)	Difficulty in motivating the student	14	35
			Difficulty in establishing a regular study discipline in students	14	35
			Making student learning the responsibility of parents	7	17.5
			Failure to meet students' psychosocial needs	6	15
			Poor interaction	5	12.5
			Lessons times are not planned correctly	4	10
			Lack of a live lesson calendar	3	7.5
			Everything	3	7.5
			The teacher in EIN not being constant	2	5

		Too much homework	2	5
		Lack of assessment and grade passing system	2	5
		Increased screen exposure time	2	5
		Change of students' routine (sleep, lessons, meals, play, etc.)	1	2.5
Participants' Perspective on Distance Education as Teachers	Positive perspective on distance education (n=22)	Flexible Working	6	15
		Being able to continue education in a safe environment	5	12.5
		Monitoring students	5	12.5
		Creating the opportunity to be together with students	3	7.5
		Ensuring a sense of school belonging	2	5
		Enabling students to benefit from educational technologies	1	2.5
	Negative perspective on distance education (n=79)	Little interaction	12	30
		Communication/not able to reach students	11	27.5
		Students' access to distance learning materials	10	25
		Lack of assessment and grade passing system	9	22.5
		Monitoring students	8	20
		Inability to provide student motivation	7	17.5
		Student learning being the parent's responsibility	5	12.5
		Lack of low attendance/absence system	4	10
		Technical difficulties	3	7.5
		Adapting to distance education	3	7.5
		Mixing home- and work-life	2	5
		No overtime concept	2	5
		Students experiencing stress	1	2.5
		Difficulties experienced by students in home life	1	2.5
		Lack of teacher motivation	1	2.5

"As a teacher during distance education, what are its good points and bad points?" The answers given by the parent-teachers to this question are given in Table 7. From this table, it can be seen that 79 codes were generated for what the parent-teachers called the bad points of distance education, while the number of codes for what they called the good points was limited to just 22. As parent-teachers, teachers explain the positive aspects of distance education as flexible working, being able to continue education in a safe environment, student monitoring, ensuring school belonging, and enabling students to benefit from educational technologies.

"…The most difficult part is that the working hours are not clear. (Due to the students going to bed late and getting up late) I even had meetings at midnight. I think the best part is that the working hours are flexible :) (both difficult and nice)." PT: 3

"..The best part is that during the pandemic, our students and children stayed in lessons, albeit not face-to-face, by staying safe in their homes." PT: 26

As teachers, the parent-teachers explained the negative aspects of distance education are communication/inability to reach students (n=11), students' difficulty in accessing distance education materials (n=10), lack of assessment and grade passing system (n=9), student monitoring (n=8), inability to provide student motivation (n=7), parents being responsible for student learning (n=5), low attendance/absence tracking (n=4), technical problems (n=3), adaptation to distance education system (n=3), mixing home and work life (n=2), lack of overtime concept (n=2), students' stress (n=1), lack of teacher motivation (n=1), problems experienced by students in home life (n=1).

"…Teaching can't be done without eye contact or feeling emotions. So the hardest part was not being able to get a sense of the mood in class; it really demotivated me and my colleagues. It made me feel insignificant…" PT: 6
"The students' poor financial situation made it difficult to reach them at times. In my opinion, there were not many beneficial aspects." PT: 8
"It is never as efficient as face-to-face teaching. It was difficult to find interesting resources, to get the children involved, not to bore the participants, and to check homework." PT: 17
"Managing my home and school responsibilities from the same location was a new experience. In this sense, I had difficulty managing my time. I thought I was working harder and making an effort" PT: 20
"…participation and follow-up being entirely at the parent's initiative made it difficult for me." PT: 3

4. Discussion

While it was thought that the role of the teacher in distance education would decrease, on the contrary, the biggest duty and responsibility in distance education again lay with the teachers. Teachers' efforts have been crucial and paramount in the success of distance education during the COVID-19 pandemic. In this study, parent-teachers were asked their thoughts on distance education as both parents and teachers. The findings of the study revealed six main themes, namely, the academic learning environment, teacher-student communication, use of EIN and live lessons, family support, the advantages and limitations of distance education, and perspectives on distance education. Under the academic learning environment theme**,** the parents stated that their children's home environment and equipment were satisfactory for distance education, but the home environment and home equipment of more than half of the students they taught were not satisfactory for distance education. This finding matches the research findings consisting of 330 responses given in a study conducted by the OECD in 98 countries, and the PISA 2018 findings. In the OECD study, 139 people found it difficult *to access technological infrastructure*. 118 people found it somewhat difficult. 120 found it very difficult *to manage the technological infrastructure*, while 126 stated it was somewhat difficult. Even in OECD member countries, an average of *9 percent* of 15-yo students said they do not have a quiet place of their own where they can study at home. In Indonesia, the Philippines, and Thailand, this rate was more than 30 percent. Even in Korea, it was reported that one out of every five students studying at socioeconomically disadvantaged schools does not have a place at home where they can study. According to PISA 2018 data on students' access to technology, 95 percent of students in Denmark, Slovenia, Norway, Poland, Lithuania, Iceland, Austria, Switzerland, and the Netherlands had a computer for study at home while only 34 percent of students in Indonesia had a computer. Almost all students studying at socioeconomically advantageous schools in America have a computer for study at home. However, it has been stated that only three-quarters of the students studying at socioeconomically disadvantaged schools have computers (OECD, 2020). In the EIN and live lesson use theme, the majority of the participants stated that they used EIN and gave live lessons. In addition, most of the participants stated that their own children's teachers also used EIN and gave live lessons. This finding coincides with UNICEF's research findings in 127 countries. In the study, 68% of 127 countries were found to use a combination of digital and non-digital approaches (TV, radio, and take-home packages) in distance education (Dreeseni, Akseeri, Brossardi, Dewanii, Giraldoii, Kameii, Mizunoyaiii, Ortizi, JS., 2020). Under the family support theme, the participants stated that they supported their students in such areas as organizing the learning environment, encouraging them to do activities/solve problems/read books, following homework/lessons, giving lectures, and providing motivation. The least supported area was *"being aware of their psychosocial needs"* with only one participant stating that they supported the child in this area**.** Most of the participants stated that their students were not supported by their parents, with the reasons for the lack of support being the socioeconomic level and education level. Under the advantages and limitations of distance education theme, the participants *considered "continuation of education under extraordinary situations"* to be an advantage while stating that at the same time it led to unequal opportunities in education. In addition, the participants stated that the distance education system has limitations arising from its features, with the lack of mandatory attendance being one of the system's limitations. Under the perspective on distance education theme, the participants stated that distance education is difficult both as a teacher and as a parent. According to the findings, as parents, in particular**,** they found distance education to be negative due to such reasons as difficulty in motivating the student, difficulty in establishing a regular study discipline in the student, leaving responsibility for student learning to the parents, and failing to meet the students' psychosocial needs. The teacher stated that as

a parent, the positive aspects of distance education are being able to continue education in a safe environment and spend more time with their child. As a teacher, the participant listed the negative points of distance education as communication/inability to reach students, students' inability to access distance education materials, lack of an evaluation and grade passing system, student monitoring, inability to provide student motivation, and student learning being the parent's responsibility. The participant listed the positive aspects of distance education as flexible working and being able to continue education in a safe environment. The finding that flexibility is a positive aspect of distance education is in line with studies previously made by Yang and Cornelious, 2004; Vonderwell, 2003; and Hilton, 2012. Participants, both as parents and teachers, saw distance education as a difficult educational process. In addition, in both their identities, the participants regarded the fact that distance education places the burden of responsibility on the parents as a problem and while this is seen as a dilemma in distance education, it is also a contradiction in that all teachers want their students to be supported by their parents but regard this as a problem when it is expected of them. Similarly, both as teachers and parents, they stated that distance education is unable to meet the psychosocial needs of their students and children and that it needs to be emphasized that schools are not only places of learning, but also places where their students' psychosocial needs are met. This is because schools are an institution where children socialize and their characters are shaped.

Politicians and educators need to develop new strategies for distance education to reduce inequalities among students. When developing these strategies they need to consider through what channels lessons should be carried out, how to increase the efficiency of live lessons, and how to make the content of EIN more beneficial in light of the feedback given regarding distance education with respect to technology, students' emotional and social development, and how to apply the curriculum depending on class and time. Technological infrastructure needs to be improved. The technological shortcomings in access to education need to be reduced to a minimum. If necessary, families of students with technological deficiencies should be provided with computers, tablets, and technical support by contacting non-governmental organizations and industrial organizations. The processes of student-, teacher-, and lesson-assessment in distance education need to be improved. Regardless of the family's socioeconomic status, the academic and social development of the students should be handled with the philosophy that “every student is unique and can learn at their own level.” The process should be evaluated each time and feedback mechanisms should be developed. The curriculum should be followed constantly and both online and offline assessment should be made. Planning should be made for students to develop at the level of their class with their peers. Separate plans should be made for students who fall behind academically from their peers. EIN live lesson applications should be made for each class and the number of live lessons should be increased. A system to keep track of lessons and homework should be developed and the amount of online and offline material appropriate to each class should be increased. Live lesson applications should be made mandatory for teachers. Families should also be legally obliged to ensure their children attend live lessons. Along with online education, methods of education should be developed that make use of different television, radio, and social media. Methods for communicating with students and families need to be developed. Free communication channels should be provided to teachers and students to improve and sustain mobile communication and internet communication. For distance education to survive, the right questions need to be asked, cost-effective alternatives to traditional educational methods need to be developed, and activities to reveal active and interested students need to be designed. It should not be forgotten that “people not technology change education” (Ely, 1996). Efforts should be accelerated to improve the competencies of the teacher, the most fundamental element of education.

In light of the findings of this study, researchers can conduct studies aimed at a) making student's current learning environments suitable for distance education, b) applications that strengthen teacher-student communication, c) the arrangements that need to be made to make EIN use and live lessons widespread, d) the policy steps to determine how best to conduct student monitoring and assessment, e) developing activities such as booklets, brochures, videos, and broadcasts that can help ensure family support, f) applications that minimize the limitations in distance education, and g) applications that minimize the challenging and negative aspects of distance education for parents and teachers.

EIN (Educational Information Network): An online social education platform developed by the Ministry of National Education. This platform and EIN TV were used in distance education.

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The Influence of Regulations of the Ministry of Finance, Requirements from Related Parties, and the Application of IFRS in Teaching on the Quality of Accounting and Auditing Teaching Staff in Vietnam

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Abstract
This study was conducted to verify the direct influential relationship of the factors of the regulations of the Ministry of Finance, the requirements from the related parties, and the application of international financial reporting standards (IFRS) in teaching at universities and colleges with training in accounting and auditing in Vietnam, and the impact of those factors on the quality of accounting and auditing lecturers. The authors conducted a case study at 30 universities and colleges with training in accounting and auditing, and 208 lecturers who are engaged in teaching accounting and auditing in Vietnam. Next, the study employed the structural model analysis method by PLS_SEM software to process and analyze the collected data. Research results show that there is a relationship between regulations of the Ministry of Finance, requirements from related parties, and the application of IFRS in teaching to the quality of lecturers of accounting and auditing at the universities and colleges, with the order of influence from high to low, respectively, (i) Applying IFRS to the training of accounting and auditing majors, (ii) Regulations of Ministry of Finance on the application of IFRS and (iii) Requirements from related parties.

Keywords: Applying IFRS to Teaching, Quality of Teaching Staff, Teaching, Universities and Colleges, Vietnam

1. Introduction

In response to the trend of integration and convergence with international accounting, the Ministry of Finance of Vietnam has issued a roadmap to apply IFRS to enterprises in Vietnam (Ministry of Finance, 2020). Accordingly, as a training place for accounting and auditing human resources for enterprises, the universities and colleges with training in accounting and auditing in Vietnam need to make changes to meet the roadmap of applying IFRS of the Ministry of Finance, in line with the country's international accounting harmonization process in attracting investment and meeting the requirements of related parties.

However, currently in Vietnam, the accounting and auditing training process is still governed by the Law on Accounting, Accounting Standards, and the Enterprise Accounting System of Vietnam. Therefore, when switching to applying IFRS in teaching, it is required that lecturers teaching accounting and auditing professions need to be trained and fostered with knowledge of IFRS, and at the same time, the lecturers themselves are supposed to be eager for learning to develop expertise, understand and apply IFRS principles to teaching to ensure that the process of imparting IFRS knowledge is to the point, with enough principles of applying IFRS and suitable for each target audience.

In addition, to apply IFRS to teaching accounting and auditing professions at universities and colleges in Vietnam, in addition to the difficulties in rebuilding training programs and compiling training materials, investing in facilities and information technology infrastructure related to IFRS, etc, and improving the quality of accounting and auditing teaching staff of the universities and colleges in Vietnam in the current context is really necessary. This is because teachers are considered the most important and valuable learning resources for students; teachers need to have complete knowledge and understanding of the subject they are teaching, to have the necessary skills and teaching experience to effectively convey and exchange such knowledge and understanding to students in the teaching environment and teaching process.

In this study, to evaluate and measure the quality of the teaching staff, the authors used a set of standards on the competency standards of Profession-Oriented Higher Education (POHE2) issued by Vietnam's Ministry of Education and Training (Ministry of Education and Training, 2014). The structure of this research paper consists of five parts, the next part is the literature review, the third part is the research methodology, the fourth part is the research findings, the fifth part is the discussion of the research results, and the sixth part is the conclusion.

2. Literature review

In the field of higher education, the application of IFRS in teaching has been examined in a number of studies, each research depends on different perspectives to make assessments, raise opinions as well as to make various recommendations, typically:

Dow and Feldman (1997) argue that to teach IFRS effectively, it is necessary to teach in small numbers, teach in a case method and focus on specific case handling related to IFRS. Furthermore, it takes time to develop teaching content. Similarly, Hilton and Johnstone (2013) also point to the fact that time constraints prevent them from adding content and real-life situations to their curricula when teaching IFRS. Munter and Reckers (2009) state that developing IFRS-related teaching materials is very difficult, and 72% of the faculty surveyed for the study said that teaching IFRS in the curriculum is very difficult, involving many obstacles. Zhu et al. (2011) show that IFRS standards need to be mentioned more in the curriculum because teachers are increasingly appreciating the convergence between IFRS and US GAAP. Research results show the difficulty that the lecturers have to face when applying IFRS in teaching comes from the fact that IFRS documents are still very limited.

Research by Hodgdon et al. (2011) asserts that when teaching IFRS in the classroom, accounting teachers need to ensure that their students understand the real problem of IFRS, identify IFRS principles and related requirements, consider alternative accounting methods, reach consensus on principles, explain the application of IFRS in practice, etc. This process has promoted the change of teaching methods of the lecturers and enhanced the initiative and activeness of students in the process of approaching IFRS. At the same time, research by Jackling et al. (2013) on the impact of the transition to IFRS in Australia shows that the application of IFRS in teaching has led to changes in curriculum and teaching methods, quality expertise of lecturers at universities. Sharing the same view, Garnett (2011) asserted that when teaching IFRS in the classroom, accounting teachers need to ensure that their students understand the nature of IFRS, identify the principles and requirements IFRS which are relevant, consider alternative accounting methods when recording accounting data to reach consensus on the principles of recording and explaining the application of IFRS in practice. This process has helped to change the teaching methods of lecturers and improve students' initiative and activeness in the process of approaching reality.

Research by Coetzee and Schmulian (2012) suggests that accounting teachers need to change their pedagogical methods in teaching, need to be more creative to be able to convey the contents of IFRS. Accordingly, the study recommends IFRS teaching methods that can include case method, simulation method, case analysis, and group or individual presentation. At the same time, the study also suggests that students need to take more responsibility in the learning process and deal with real-life situations related to IFRS contents. In the same vein, Kalifeh (2017), which looks at changes in accounting curricula for college students in the United States when teaching IFRS, shows that progress has not been spread evenly across different regions in the United States. Kalifeh (2017) also proposes solutions to help improve the quality of accounting training to meet the requirements of international accounting integration. In the same research direction, Nanyan et al. (2019) show that schools applying IFRS in teaching will help students better adapt, increase their learning efficiency in ACCA's global exams at both basic and professional levels.

Besides the advantages, studies around the world have also noted that there are barriers to the teaching of IFRS such as the shortage of appropriately qualified teaching staff (Munter & Reckers, 2009; Zhu et al., 2011); there is no opportunity or means to retrain teaching staff so that they can teach a combination of IFRS and national accounting standards (Glover & Werner, 2015).

In Vietnam, Le (2017) states that to improve the quality of human resource training in the accounting profession at training institutions in the current context of deep integration, one of the most important measures is to foster and train IFRS knowledge for lecturers to fully and professionally teach so that they can approach and pass it on to students. Sharing the same view, Trinh (2019) also believes that the training and skills for accountants at universities need to change; the skills of bookkeeping and tax declaration only play a secondary role, serving the main purpose of accounting tasks. Or research by Phan (2020) shows that universities in Vietnam currently do not have a systematic curriculum on IFRS, and lecturers do not have full access to IFRS knowledge. Therefore, to apply IFRS in teaching, it is urgent to foster IFRS knowledge for lecturers through international professional associations in accounting and auditing.

From the review of the above domestic and foreign studies, the authors believe that: (i) When applying IFRS, all countries have established a roadmap, focusing on bringing IFRS into teaching to meet the needs of supplying human resources for related parties, such as enterprises, employers, etc.; (ii) The application of IFRS and the extent of application of IFRS to teaching in different countries are not uniform. Most of the studies have noted that there are positive effects when applying IFRS in teaching from different angles, including the curriculum, teaching methods, students, lecturers, teaching conditions, etc.; (iii) There are many factors that affect the introduction of IFRS into teaching at universities and colleges in different countries, with both internal and external factors of the universities and colleges; (iv) The quality of the teaching staff plays a key and important role in the process of bringing IFRS into effective teaching at the universities and colleges.

3. Methodology

3.1. Research Design

To carry out this study, the authors followed research steps illustrated through the following diagram:

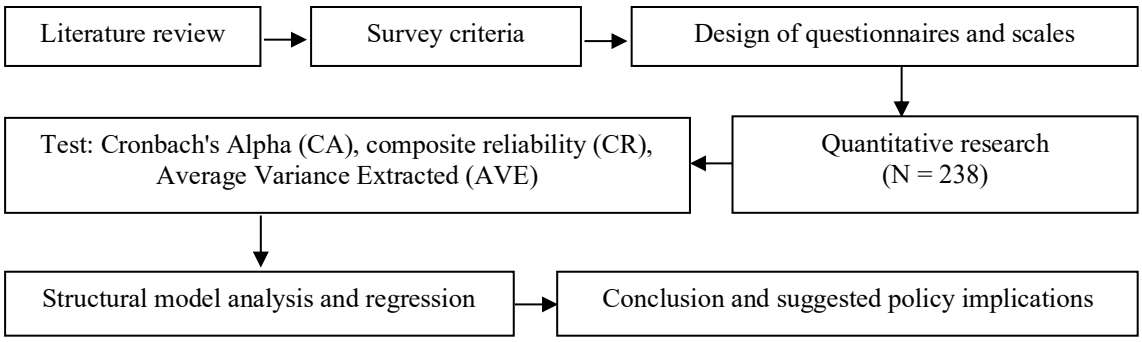


Figure 1: Research procedure

3.2. Research Hypotheses

Regulations of Ministry of Finance on the application of IFRS (X_2)

Regulations are promulgated by the State to harmonize the rights and responsibilities of each citizen and every organization in the social order, towards the harmonization of the community's interests; these are the principles that define social relationships, shape the behavior of members of society and regulate the functioning of society. Accordingly, Trinh (2019) believes that when the Ministry of Finance promulgates regulations on the application of IFRS, it will be a legal basis for training institutions to transform training programs of accounting and auditing for complying with the regulations; accordingly, lecturers must foster and update their knowledge of IFRS to meet teaching requirements, thereby contributing to improving the quality of accounting and auditing teaching staff. Similarly, there are studies by Tran et al. (2019), Pham (2019).

Hypothesis H1: Regulations on the application of IFRS by the Ministry of Finance affect the quality of teaching staff in accounting and auditing.

Applying IFRS to the training of accounting and auditing (Y)

When the universities and colleges apply IFRS to teaching accounting and auditing professions, lecturers of accounting and auditing are motivated to research, study, and update their knowledge about IFRS by themselves, contributing to improving research capacity and teaching quality. Studies by Trinh (2019), Pham (2019), and Phan (2020) all suggest that when the universities and colleges apply IFRS in teaching, the quality of the teaching staff will be improved through understanding and imparting knowledge about IFRS.

Hypothesis H2: Applying IFRS to the training accounting and auditing influences the quality of accounting and auditing lecturers.

Requirements from related parties (X_9)

Parties are considered to be related if one party can control or exercise significant influence over the other party in making financial and operational decisions. Studies by Freeman (1984), Thomas and Lee (1995), Mitchell et al. (1997), Bourne and Walker (2005), Bruce et al. (2008), Ackermann and Eden (2011) all point out that related parties have the right to propose and request legal and urgent requirements for suppliers of products, goods and service in general and other related issues.

Hypothesis H3: Requirements from related parties influence the quality of accounting and auditing teaching staff.

3.3. Research Model

Based on research hypotheses, the authors proposed a research model that is a multivariable regression model with the dependent variable of the quality of accounting and auditing teaching staff and the three independent variables mentioned in each hypothesis of the study, as follows:

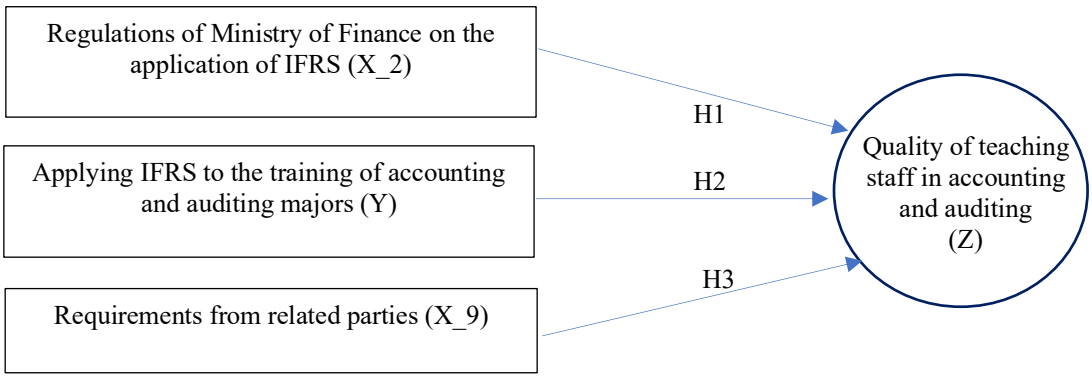


Figure 2: Overview of the research model

From the above-proposed model, the authors put forward the expected research equation as:

$$Z = \alpha + \beta1*X\_2 + \beta2*Y + \beta3*X\_9 + \varepsilon$$

Where:

α, β1, β2 and β3 are coefficients

ε: is error

3.4. Variables of the Research Model

To serve the process of compiling questionnaires and collecting the data, the authors use the Likert scale (5 options), the rating levels according to this scale are as follows: 1 – Strongly disagree; 2 – Disagree; 3 – Neutral; 4 – Agree; 5 - Strongly agree. The variables and scales of the research model are determined as follows:

Table 1: Variables and scales employed

Order	Factors	Observed variables	Encryption	Sources
Dependent variable				
1	Quality of teaching staff in accounting and auditing (Z)	The application of IFRS in teaching affects the professional capacity of lecturers.	Z_1	Recommended by the authors based on POHE2; Southeast Asia Teachers Competency Framework (SEA-TCF, 2018), and surveyed experts.
		The application of IFRS in teaching affects the teaching capacity of lecturers	Z_2	
		The application of IFRS in teaching affects the capacity of teachers to develop and guide the use of training programs.	Z_3	
		The application of IFRS in teaching affects the capacity of lecturers to relate to the professional world and professional development capacity.	Z_4	
		The application of IFRS in teaching affects the lecturers' capacity of doing scientific research.	Z_5	
Independent variables				
1	Regulations of Ministry of Finance on the application of IFRS (X_2)	Regulations of the Ministry of Finance on applying IFRS to businesses have prompted universities and colleges in Vietnam to apply IFRS in teaching	X_21	Trinh (2019); Tran et al. (2019);

		Regulations on the roadmap for applying IFRS to businesses are the basis for universities and colleges in Vietnam to determine the timelines for applying IFRS to teaching	X_22	Pham (2019); Phan (2020); Nguyen et al. (2020) and surveyed experts
		Regulations on the roadmap for applying IFRS to businesses are the basis for universities and colleges in Vietnam to orient IFRS-related contents to be taught in modules of training programs of accounting and auditing majors	X_23	
2	Applying IFRS to the training of accounting and auditing majors (Y)	Renovating or updating accounting and auditing training programs.	Y_1	Trinh (2019); Tran et al. (2019); Belyaeva (2019); Fogarty & Jonas (2019); Nanyan et al. (2019); Mkhongi (2020); Seifan (2020); Susan (2020); Braun et al. (2020); Szwarc (2020); López-Díaz (2021); Le et al. (2021); EL-Ariss(2021) and surveyed experts
		Establishing/adding learning outcomes related to IFRS knowledge for accounting and auditing training programs.	Y_2	
		Training/Updating knowledge about IFRS for teaching staff.	Y_3	
		Consulting with stakeholders (employment agencies, alumni, professional associations, etc.) about the contents of IFRS to be taught.	Y_4	
		Collecting/Updating/Standardizing documents (lectures, textbooks, reference books, monographs) related to IFRS for teaching purposes	Y_5	
		Orienting/encouraging trainers to select appropriate teaching methods to convey the contents of IFRS to learners	Y_6	
		Investing in facilities, information technology infrastructure, databases/learning materials to serve teaching/learning for lecturers/students	Y_7	
		Coordinating with professional associations and organizations (such as ACCA, SmartTrain, VAA, VACPA, etc.) to jointly support the process of applying IFRS to teaching.	Y_8	
3	Requirements from related parties (X_9)	Social needs (recruitment agencies, professional associations, etc.) influence the application of IFRS into teaching	X_91	Freeman (1984); Thomas & Lee (1995); Mitchell et al. (1997); Bourne & Walker (2005); Bruce et al. (2008); Ackermann & Eden (2011) and surveyed experts
		Learners' needs for future careers and employment opportunities that influence the application of IFRS into teaching	X_92	
		The comments/feedback of the alumni/student network influence the application of IFRS-related knowledge in teaching	X_93	
		Legislative requirements that affect the application of IFRS into teaching	X_94	

3.5. Sample and Data Collection

To collect data for the study, the authors used a pre-designed survey form based on the variables and scales identified. The final survey form was built based on 3 stages.

Stage 1, Developing a draft survey questionnaire: the authors conducted an overview of domestic and foreign studies related to the research problem to identify research gaps. Next, the research team delivered a drafted survey

questionnaire with survey questions consisting of two parts, specifically: (i) general information about respondents, (ii) survey information.

Stage 2, Expert consultation and experimental investigation to complete the scales, observed variables, etc. to be surveyed: in this stage, the authors conducted direct interviews with experts who are administrators, lecturers at universities and colleges, and experts working in professional organizations with the interviews and consultations of 25 people. At this stage, the research team carried out direct interviews about the survey questionnaires designed in Stage 1 and discussed research ideas with experts and lecturers to consider whether the survey questionnaire is appropriate or not, whether it is necessary to supplement or adjust the observed scales and variables accordingly.

Stage 3, Design of the official survey questionnaire: based on the interview results in Stage 2, the authors synthesized and produced a complete survey questionnaire. To increase the effectiveness, accuracy, and feasibility of the survey questionnaire, the authors conducted a discussion with the experts to continue to record more opinions of the experts to perfect the final survey questionnaire at its best.

At the same time, the process of surveying 30 universities and colleges and 208 accounting lecturers at the institutions was conducted through interviews, direct surveys, and surveys through Google Form.

3.6. Analyzing of Data

From the validly collected survey questionnaires, the authors transferred the data to Excel, coding for variables according to each part of the survey questionnaire. Then, all the data was put into PLS-SEM software. In the process of data processing and analysis, the authors employed a number of analytical and testing tools as follows:

First, the authors evaluated the internal consistency reliability through Composite Reliability (CR) and Cronbach's Alpha coefficient (CA). According to Henseler & Sarstedt (2013), the CR index should reach the threshold of 0.7 or higher, which is suitable for confirmatory research. Many other researchers also agree that a CR index of 0.7 or higher is an appropriate threshold for studies (Hair et al., 2017; Bagozzi et al., 1998). According to Hair et al. (2017), the condition to be accepted for the CA coefficient is that it is supposed to be greater than 0.7. At the same time, according to Devellis (2012), the CA coefficient needs to be 0.7 or more to be acceptable. Therefore, in this study, it is appropriate for the authors to choose a threshold for both coefficients to be 0.7 or more.

Second, the authors evaluated the convergence value through the average variance extracted (AVE). This is to ensure AVE is greater than 0.5. (Chin, 2010; Hair et al., 2014, 2017, 2019).

Third, the authors conducted the discriminant value evaluation. The purpose of this analysis step is to show the distinctiveness of a structure from other structures in the model. The Fornell-Larcker criteria are the first way to assess discriminant value; next is to consider cross-loadings. In this way, discriminability is ensured when the square root of the AVE of each variable must be greater than its correlation coefficient with other variables (Fornell & Larcker, 1981). Recently, Henseler et al. (2015) proposes to evaluate the discriminant value through the HTMT index (Heterotrait-Monotrait ratio). Accordingly, this HTMT index value must be less than 0.9 to ensure the discrimination between the two research variables (Hair et al., 2019).

Fourth, the author tested the research hypotheses: Testing the hypotheses about the direct relationship through the path coefficient β and the p-value of the t-test (student test). Specifically: After PLS-SEM is run, the path coefficient (β) represents the hypothetical relationship between the variables. The path coefficient has an approximate normalized value between -1 and +1. The path coefficient approaching +1 represents a strong positive relationship, and vice versa; the closer to zero the relationship between the two research variables is, the weaker the relationship is. (Hair et al., 2017).

Fifth, the authors employed the Bootstrap 1000 technique. This is to evaluate the significance of the path coefficients. At the 5% level of significance, if the p-value is less than 0.05, it indicates that the effects in the model are all significant and vice versa.

4. Results

4.1. Evaluation of the reliability and convergence value of the scale

The reliability of the scales for all research variables is presented in Table 2. The results show that the Composite Reliability (CR) of the research variables ranges from 0.874 to 0.941 and is higher than the minimum threshold of 0.70. The coefficients of Cronbach's Alpha (CA) of the research variables are also greater than the minimum threshold of 0.70 (ranging from 0.809 to 0.928), proving that the scales have high reliability. In addition, the Average Variance Extracted (AVE) values are all 0.635 or higher, which is higher than the minimum threshold of 0.50. Therefore, it can be concluded that the scales for the research variables are fully convergent.

Table 2: The results of the evaluation of the reliability and convergence value of the scale

Scale	CA	CR	AVE
Regulations of Ministry of Finance on the application of IFRS (X_2)	0.902	0.938	0.835
Applying IFRS to the training accounting and auditing majors (Y)	0.928	0.941	0.665
Requirements from related parties (X_9)	0.809	0.874	0.635

4.2. Evaluation of the scale discriminant value

The authors evaluated the discriminant value of the scales through the criteria of the Fornell-Larcker coefficient and the HTMT coefficient. The results obtained are as follows:

First, about the Fornell-Larcker coefficient

Table 3: The results of the evaluation of discriminant value by Fornell-Larcker's criteria

	X_2	X_9	Y	Z
X_2	**0.914**			
X_9	0.397	**0.795**		
Y	0.679	0.461	**0.815**	
Z	0.461	0.399	0.483	**0.865**

The results of table 3 show that the square root of the Average Variance Extracted ($\sqrt{AVE}$) (figures located on the diagonal, bold) of the variables are from 0.795 or more and larger than the correlation coefficient of the variables (the corresponding figures not in bold, in the same column of variables). Thus, the scales satisfy Fornell-Larcker criteria to get discriminant value.

Second, about the cross-loading

Table 4 shows that the cross-load coefficient of one observed variable is always greater than all its loading coefficients on the remaining observed variables. Therefore, the measurement model achieves discriminant validity.

Table 4: The results of the evaluation of the discriminant value of the scale by the cross-load coefficient

	X_2	X_9	Y	Z
X_21	**0.912**	0.342	0.689	0.471
X_22	**0.904**	0.362	0.578	0.388
X_23	**0.926**	0.382	0.577	0.393
X_91	0.270	**0.782**	0.403	0.306
X_92	0.377	**0.854**	0.383	0.346
X_93	0.344	**0.823**	0.368	0.372
X_94	0.251	**0.712**	0.293	0.203
Y_1	0.510	0.344	**0.781**	0.330
Y_2	0.563	0.378	**0.843**	0.323
Y_3	0.537	0.454	**0.842**	0.409
Y_4	0.607	0.426	**0.851**	0.397
Y_5	0.595	0.419	**0.831**	0.511
Y_6	0.521	0.284	**0.756**	0.371
Y_7	0.497	0.365	**0.776**	0.350
Y_8	0.577	0.313	**0.832**	0.394
Z_1	0.361	0.282	0.366	**0.840**
Z_2	0.427	0.326	0.554	**0.877**
Z_3	0.407	0.369	0.335	**0.873**
Z_4	0.419	0.409	0.422	**0.880**
Z_5	0.368	0.310	0.349	**0.855**

Three, about the HTMT coefficient

The authors continued to evaluate the discriminant value of the scale by using the HTMT coefficient. Table 5 shows that the values of HTMT coefficients range from 0.458 to 0.523, which is less than the threshold of 0.90. With the above analysis results, it is proved that the scale for the variables in the research model has the discriminant value.

Table 5: The results of the evaluation of the discriminant value of the scale by the HTMT coefficient

	X_2	X_9	Y	Z
X_2				
X_9	**0.458**			
Y	0.733	**0.523**		
Z	0.499	0.444	**0.505**	

Thus, the scales for the research variables have reliability, ensure convergent value as well as discriminant value. Therefore, the collected data can be well adopted to test the research hypotheses.

4.3. The results of testing the hypotheses about the relationship of the research model

The results of testing the research model in Table 6 show that all three variables X_2, X_9 and Y have a positive influence on the variable Z (the corresponding p-values are all less than 5%). In which, variable Y has the strongest influence on Z (with $\beta = 0.232$, p-value = 0.021 < 0.05) followed by variable X_2 (with $\beta = 0.224$, p –value = 0.009 < 0.05) and lastly is the variable X_9 (with $\beta = 0.199$, p – value = 0.005 < 0.05).

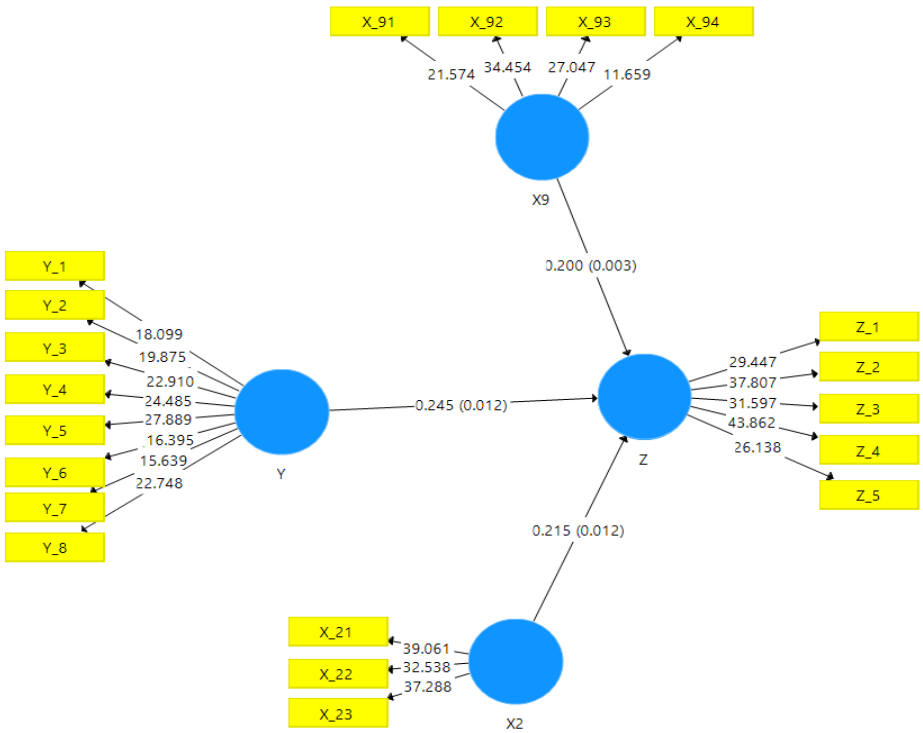
Table 6: Research model test results

Research variables	Research model	
	β coefficient	p-value
X_2	0.224	0.009
X_9	0.199	0.005
Y	0.232	0.021

From the results in Table 6, the regression model of factors affecting the Quality of teaching staff in accounting and auditing can be rewritten as follows:

$$\mathbf{Z = 0.224*X\_2 + 0.199*X\_9 + 0.232*Y}$$

Bootstrap 1.000 Analysis



5. Discussion

From the results of regression analysis, it is shown that the order of factors affecting the quality of accounting and auditing lecturers is (i) Applying IFRS to the training of accounting and auditing majors, (ii) Regulations of Ministry of Finance on the application of IFRS and (iii) Requirements from related parties. The results of this study are quite consistent with the reality at the universities and colleges with training in accounting and auditing in Vietnam, and these findings also have similarities with the research results by the researchers mentioned in the literature review and research hypotheses.

Therefore, according to the results of this study, the authors believe that, in order to apply IFRS to teaching at universities and colleges in Vietnam to meet the regulations on the application of IFRS by the Ministry of Finance and requirements from related parties in recruiting accounting and auditing workers, it is required that schools carry out the following activities:

Firstly, colleges with training in accounting and auditing need to urgently deploy training and refresher courses on IFRS knowledge for lecturers participating in teaching IFRS-related modules, considering collaboration with professional organizations and associations such as ACCA to foster IFRS knowledge for lecturers participating in teaching.

Second, schools need to quickly innovate and update their IFRS knowledge to put into accounting and auditing training programs by integrating IFRS knowledge into accounting modules, such as the modules of principles of accounting, financial accounting, international accounting. In the teaching process, it is possible to integrate and teach parallelly between knowledge of IFRS and knowledge of accounting standards and national accounting regimes so that learners can see the difference between accounting regimes of the country with IFRS.

Third, to unify the content and knowledge related to IFRS when it is put into teaching in the knowledge blocks in the training programs of the schools with training in accounting and auditing nationwide, the Ministry of Education and Training needs to coordinate with the Ministry of Finance to issue the learning outcomes of the training program on IFRS-related knowledge so that the schools can easily identify and apply when updating their training programs. At the same time, the universities and colleges are also expected to invest in their facilities to support teaching, including learning materials, information technology infrastructure, etc. to facilitate the teaching and learning activities regarding IFRS.

Fourth, on the part of the teaching staff, the lecturers must change their views on the teaching method; the teaching method should be turned from the presentation into case handling, to simulate reality and apply the principles of IFRS to handle accounting work at enterprises. Active teaching methods should be favored to improve the effectiveness of IFRS teaching for learners.

6. Conclusion

The results of this study show that the factors of applying IFRS to the training of accounting and auditing majors, regulations of the Ministry of Finance on the application of IFRS, and requirements from related parties influence the quality of accounting and auditing teaching staff. In detail, the application of IFRS in teaching accounting and auditing has had a significant influence on the quality of accounting and auditing teaching staff at universities and colleges in Vietnam. Therefore, to meet the requirements of the Ministry of Finance, related parties, and learners' needs, it is required that the universities and colleges in Vietnam organize training and refresher courses on IFRS knowledge for lecturers, investing in teaching aids and quickly innovating and updating training programs on accounting and auditing so that the training products, i.e. the learners, can meet the requirements from related parties in recruitment such as enterprises, professional organizations in accounting, auditing, etc.

Authorship contribution statement

Hong Thu NGUYEN: Conceptualization and design, design of research methodology and instrument. Ngoc Tien NGUYEN: data acquisition, data analysis and interpretation. Hong Thu NGUYEN and Ngoc Tien NGUYEN: Drafting manuscript, critical revision of manuscript, editing.

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The Water Awareness Via Drama: An Experimental Study on Pre-Service Science Teachers and Their Views

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Abstract
The aim of this research is to determine the effect and usability of drama in creating water awareness. The research was carried out with pre-service teachers who are studying in the Science Education Department of a state university in Turkey and who want to participate in the research voluntarily. A total of 17 pre-service science teachers (PSTs), 14 female and 3 male, took part in the research. In the research, a written interview form (WIF) consisting of 3 questions was used to determine the opinions of the PSTs about the usability of drama in raising water awareness. Applications in the study covered 12 weeks. In the applications, a drama application was made for each week about water. After the applications, the qualitative data obtained in the research were evaluated and interpreted. Descriptive and content analysis techniques were used in the analysis of qualitative data. The results of the research show that drama can be an effective method in creating water awareness. As a matter of fact, the opinions of PSTs are in this direction and point out that the usability of drama in creating water awareness is high. In the light of the findings obtained at the end of the research, the results were discussed and some suggestions were given.

Keywords: Drama, Creating Water Awareness, Drama in Education, Pre-Service Science Teacher

1. Introduction

Water is one of the essential components of life and has been one of the main factors determining the fate of civilizations for centuries. Today, due to the ever-growing population and increasing water use, the extent of the crisis is increasing day by day, especially in terms of water-poor countries. Based on the fact that there will be no artificial substance that can replace water in the future, it is predicted that water will become a strategic scarce resource by increasing its importance (Mengü & Akkuzu, 2008). Water is not only necessary to sustain life, but also a very valuable resource in that it plays an integral role in the life support system, economic development, community well-being and cultural values (Çolakoğlu, 2009). On the ground, fresh water is vital to nearly every aspect of the lives of humans, animals, plants, the environment, and ecosystems. Despite all the developments, the planning and management of water on earth are difficult. At the root of this difficulty is the lack of understanding of the effects of land, ocean and atmospheric systems on water, and in this case, there are factors such as population growth, increase in water demand, industrialization, urbanization, water pollution,

deforestation (Sivakumar, 2011). Large numbers of people die each year from water-related diseases. This situation mostly affects children and the elderly (Klawitter & Qazzaz, 2005). Sufficient and high quality water is one of the most important needs for healthy people and quality production. For this reason, it has become imperative not to leave future generations in a difficult situation and to find solutions to increase usable water and to use existing water economically (Ergin, 2008).

So much so that water is one of the indispensable elements of life. The life and survival of living things depend on the available fresh water resources on earth. Because 80% of the body of a person, who is the most equipped among living things, consists of water, and 2/3 of the earth is covered with water. Water is a vital substance that shapes the earth, creates and sustains all kinds of life. Since water is a vital substance that comes from nature and is intertwined with nature, it is naturally a natural part of science lessons. It is almost impossible for a science teacher to continue his lessons without knowing water and its components, sharing it with his students, or raising awareness about the importance of water to his students. Because water is in the basis of every phenomenon in every natural event. For example, while there is water in the living areas of living things in a lake, river or ocean, on the other hand, there is water in the metabolic structures of all these living things. Although the effects of global climate changes on water are known (Kundzewicz et al., 2008; Chiew & McMahon, 2002; Ludwig et al., 2009; Bergström et al., 2001; Milly et al., 2008; Arnell, 2004; Barnett et al., 2004; Mata & Budhooram, 2007), the insufficiency in water resources And considering the unavoidable depletion, knowing the value of the available water resources and acting economically in this context is only possible by understanding the importance of this vital substance. An awareness to be created on the importance of a valuable substance such as water for life can increase the amount of heritage to be left to future generations. This can only be possible if a conscious generation uses water correctly, effectively and economically. Defining water in terms of integrity in the field of science education and raising awareness about its importance can be an important value in the processing of science subjects. It is very meaningful to raise awareness about water, which means life, for the world, which is struggling with various environmental problems and will face a very valuable natural resource shortage such as water in the very near future.

Understanding the importance of water for humanity and the earth can only be possible with an effective and effective education. Awareness situations to be created regarding the importance of water can play an effective role in ensuring the necessary care in the use of water in life. Providing this awareness from an early age is very important in the construction of future generations. Because the formation of societies that consume water consciously is an important step in the continuity of an important and vital resource such as water for a sustainable life. Different teaching methods can be functional in creating water awareness in education. In this context, in this study, it is desired to create an awareness of water, which has a very important place in science education, and to investigate how effective a life-centered method such as drama will be in this awareness. In other words, it is aimed to examine whether a method such as drama, which is based on the experiences of the individual in a fictional environment and offers quite rich life situations, can create water awareness.

Drama is a form of role-playing, improvisation, etc. on a fictional ground that allows learning by doing, being active, student-centered, giving the teacher the role of a guide, having playful forms in its structure. It is an enjoyable and entertaining teaching method that examines real-life situations with basic techniques such as, providing permanent and meaningful learning (Bertiz, 2015). In drama, the individual, by being himself in the role of the analyzed event or situation, not only provides a chain of experiences regarding realistic and rational solutions in a fictional environment, but also succeeds in establishing meaningful relationships with regard to the event, situation or concepts examined. At the same time, drama offers unique opportunities in terms of learning environments and experiences. For education and learning environments, drama is an effective method that provides meaningful and permanent learning (Bertiz, 2021). Drama includes dramatic conflict situations and playful processes on a fictional ground. Solutions to the problem situation are sought through improvisation and animations. The existence of conflict situations in drama is very important for the continuity of the process and for the search for more effective solutions to the problem situation. Because the situations of opposition in drama make the interest in the events and the happenings permanent. In other words, it makes the events worth watching. This interest can enrich the search for solutions to the problem in question. Drama has an important place and effect in science education as in many other fields. In this sense, there are many studies that reveal the

effect of the method in science education, underline the positive effect on course success and attitudes towards the course, and show that positive attitudes towards the method are developed, and more specifically, its contribution to permanent and meaningful learning, which increases interest (Altıntaş & Kaya, 2012; Bailey, 1994; Bailey & Watson, 1998; Bertiz, 2010; 2015; Bertiz et al., 2010; Bertiz et al., 2017; Christofi & Davies, 1991; Çam et al., 2009; Duveen & Solomon, 1994; Hamurcu, 2009; Kılınçaslan & Şimşek, 2015; Linfield, 1996; Metcalfe et al., 1984; Tveita, 1998; Watts et al., 1997). However, studies on water, which can be included among environmental issues in science education, and the importance of water in life are quite insufficient. In addition, in the context of the importance of water in life, it is very valuable to create a water awareness in terms of sustainability in future generations. At the same time, the effect of methods such as drama that can create water awareness is a matter of curiosity. Because, water-based events or situations that will be handled through the contrast situations in the drama can create a lasting and instructive effect. Because, while there may be those who want the water to be healthy and clean in nature, the natural opposition situations that will be created by those who are on the front that pollute the water due to their economic and work activities are exactly the desired environment in the drama. In other words, making students understand the importance of a vital component of life such as water and creating an awareness of its role in life can produce very fruitful results with an environment that will enrich the situations of opposition.

Accordingly, in this study, it was aimed to determine whether drama will have an effect on creating water awareness in pre-service science teachers (PSTs) from a science education perspective. The sub-objectives of the research are as follows. In this study,

1) To determine the effect of drama on creating water awareness in PSTs through some events and life situations that include the importance of water,
2) It is desired to determine the usability of drama in creating water awareness and in science education.

2. Method

2.1 Research Design

Case Study Design, one of the qualitative research methods, was adopted in the study. It is stated that the case study design is an appropriate way to describe and analyze a situation or phenomenon (Merriam, 1998). Sturman (1999) claims that it is a distinctive feature of case studies to have integrity in situations that require in-depth human research (Cohen et al., 2006). Case studies, in which the researcher explores in depth a program, an event, an activity, a process, or one or more individuals. The case(s) are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures over a sustained period of time (Stake, 1995 as cited in Creswell, 2003; p. 15).

2.2 Participants

The research was carried out with pre-service teachers who are studying in the Science Education Department of a state university in Turkey and who want to participate in the research voluntarily. A total of 17 pre-service science teachers (PSTs), 14 female and 3 male, took part in the research. The descriptive statistics of the participant group in the research are given in Table 1.

Table 1: Descriptive statistics of the participant group in the research

		GENDER		TOTAL
		Female	Male	
Participant Group	N	14	3	17
	%	82,3%	17,7%	100,0%

A total of 17 (100%) PSTs, 14 female (82.3%) and 3 male (17.7%), participated in the research on a voluntary basis. While 12 of the PSTs in the participant group are studying in the 3rd grade of the Science Education Department, 5 of them are studying in the 2nd grade. The ages of PSTs vary between 19 and 21.

2.3 Data Collection Tool

Written Interview Form (WIF): A structured written interview form was used as a qualitative data collection tool in the research. This form included 3 open-ended questions. The questions were formed in a clear and understandable way that PSTs could easily answer. In the creation of the form, the opinions of two field experts and two language experts were taken. In line with these opinions, the form was arranged and given its final form. In the form, a sufficient space was left under each question in which the PSTs could freely express their thoughts. Thus, the PSTs were given the opportunity to express their opinions without limitations. The written interview form is aimed at determining the views on the usability of drama in raising water awareness and in science education. Accordingly, with this form, it was tried to determine the effect and usability of drama on creating water awareness and science education subjects. The response time for the written interview form varies between 30 and 40 minutes.

2.4 Procedure and implementation

The practices were carried out in the drama classroom of a large and well-established state university in Turkey. A drama classroom was used for drama practices. The researcher also developed drama lesson plans by taking the opinions of two field experts. The plans, which are prepared in detail by including the basic stages of the drama and establishing cause and effect relationships, mean a facilitating program for the scenario for the leader. However, although these plans are an indicator for the activities in the process within the framework of the objectives and sub-achievements of the lesson sessions, the fine details up to the role distribution are left in the process due to the nature of the drama. Because what role people will play, what kind of groups will be formed and in this sense, all consensuses develop in the process. As a matter of fact, spontaneous situations or events, which are the nature and dynamism of the drama process, provided creative and effective environments during the practices.

In the research, specific objectives have been established for applications where another dimension of water is examined every week around the water theme. These objectives have been designated as an important guide to the course of the course. Accordingly, the application order, name and objectives of each lesson session according to the weeks are presented in Table 2. After 12 weeks of applications, written opinions of 7 randomly selected PSTs were taken.

2.5 Data Analysis

A qualitative method was followed in the analysis of the research. Accordingly, the data obtained from the WIF was analyzed and interpreted with descriptive content analysis. In the first step of the analysis of the data in the research, themes were formed from the questions asked to pre-service science teachers (PSTs) and the striking expressions under these themes were described as they were. Thus, the validity of the research was increased by sharing the statements in a clear and objective way. In this context, the answers given by the students to the questions were examined, themes and codes were created from frequently repeated expressions and analyzes were made. The frequency distributions of the resulting codes are presented in a table. Thus, it was aimed to reveal certain tendencies of PSTs' thoughts about the drama method by changing the angle and analyzing it in depth. In order to ensure reliability in data analysis, independent coding was done with another researcher and a consensus of 93% was reached among the coders. According to the coding control that gives internal consistency, the consensus among coders should be at least 80% and for this; Reliability Coefficient=Number of Subject/Terms on which Consensus was reached ÷ (Number of Subject/Terms on which Consensus was reached + Number of Subjects/Terms on which Consensus was reached) X 100 (Miles & Huberman, 1994; Patton, 2002).

Table 2: Prepared Drama Lesson Sessions and Aims

Order of Application	Drama Lesson Session	The Purpose of the Drama Lesson Session
Application 1	Drama and Inception	Comprehending the theoretical infrastructure of drama/Understanding the word origin of drama/Examining the historical process of drama/Recognizing the theorists who played a role in adapting the drama to the educational process/Comprehension of the basic structure of drama/Determining the techniques required in drama
Application 2	King Midas	Examining the techniques used in drama through a story
Application 3	Faces, Dreams and Dreams	Experiencing the stages and application of drama structurally / Developing imagination / Developing creativity
Application 4	Water and Earth I	Determining how water is formed on earth / Understanding how water is formed on earth / Examining how the water cycle occurs in nature
Application 5	Water and Earth II	Determining the paths through which water passes on the earth / Determining the specific areas where water passes on the earth / Determining the areas of use of water in daily life
Application 6	Water and Its Benefit	Determining the benefits of water on earth / Determining what kind of benefits water has on earth / Understanding the importance of water in daily life
Application 7	Water and Life	Identifying water-oriented habitats on earth/Defining water-oriented living spaces/Recognizing the importance of water for all living things and life from ancient times to the present
Application 8	Life Without Water	Recognizing the problems that may be encountered when there is water scarcity / Identifying the sociological areas where water scarcity can be experienced / Recognizing the negativities that can be experienced when there is water scarcity / Recognizing the importance of water for life through water scarcity
Application 9	Water Crisis	Identifying ways to save water and being aware of the importance of water saving / Identifying ways to save water / Recognizing the importance of water saving / Developing solutions to a possible water crisis
Application 10	Journey to Mitsa Island and a Day on the Island	Examining solutions for thirst and drought/Developing and examining solutions for thirst and drought/Developing imagination and creativity
Application 11	Island and Happy Life Full of Water	Identifying the areas of use of water in a living area and being aware of the benefits of water / Determining the areas of water use on the island and the ways of using water / Awareness of the benefits that water brings to a living area / Awareness of the negative effects of thirst and drought on the individual before migration / Developing imagination and creativity
Application 12	No Water on the Island!	Developing solutions to a water crisis in a living space/Finding solutions to a water crisis in a living space/Recognizing the importance of water for a living space

3. Results

Table 3 below shows the codes, percentage and frequency distributions of the PSTs whose written opinions were taken during the interview.

Table 3: Codes, Percentage and Frequency Distributions of the Interview Group

Gender	N	%	PSTs in the Interview and Their Codes
Female	5	71	1F, 5F, 6F, 13F, 14F
Male	2	29	2M, 3M
Total	7	100	1F, 5F, 6F, 13F, 14F, 2M, 3M

1F: 1st Female PST/5F: 5th Female PST /6F: 6th Female PST /13F: 13th Female PST /14F: 14th Female PST
2M: 2nd Male PST /3M: 3rd Male PST

In this section, the expressions and opinions revealed in the written interviews with the PSTs are described as under the theme of each question.

3.1 Drama as a method and its educational effectiveness

In the written opinions taken from some of the PSTs, it is seen that they have adopted drama as a method. This can actually be seen as an important situation for the water awareness-drama meeting. Because the PSTs witnessed the drama and its practices through the water issues that set out to raise awareness of water, and they acquired positive attitudes towards the method in the handling of this issue. 1F's thoughts on drama are as follows: *"I feel very lucky to have learned the drama method. I believe it really helped me a lot. The training process I received was very effective. It has contributed to my knowledge of what drama is, its development, its history. The circle of friends we made and the sincere behavior of our teacher made us love this method even more. The most important thing I learned in this drama method was to build our self-confidence. I believe we did it even better thanks to our teammates and our coach."* (1F)

1F considers himself lucky to know the drama method. She also argues that the drama and the events in the process contributed to him very seriously. She also stated that he witnessed that the drama increased his self-confidence. These sincere thoughts that 1F said about the drama method were expressions to be considered. Expressing that she also found the process educational and instructive, 5F's statements about the method and process in general are as follows: *"I found the process educational and equally entertaining for myself. I remember looking forward to the next lesson every week. Most of the time, we didn't even realize how the time passed together. I think, above all, it gave me a lot of experience in how one can look at different situations from different perspectives."* (5F)

It is seen that she uses deep and methodically impressive expressions about the drama method, which she finds educational and entertaining. Expressing that what is done with drama is very enjoyable and fun, even they do not understand how time passes, she emphasized the immersive nature of drama in a sense. 6F's views on the same question are as follows: *"I found the drama method very useful. I think it helps the development of communication, socialization skills, the development of imagination, emotional and psychomotor behavior development, empathy skills, as well as self-expression and critical thinking skills using all of the sense organs... It's an effective process."* (6F)

The expressions used by 6F, who were seen to have obtained very detailed information about drama throughout the process, were also noteworthy. For example, by exemplifying the effectiveness of the process, 6F stated that she was quite creative in the applications, had fun, and what she learned remained in his memory. The comments and views of 13F, who started with the permanence and effectiveness of the drama, are as follows: *"I think that drama is a very permanent and effective method in education and training. Because it appeals to the student mind in many ways. It also increases creativity and productivity. When we associate the subjects discussed in drama with life, we can grasp the importance of many subjects. In drama, the child can move freely. He uses his imagination. Drama is also a good environment for friendship and self-confidence…"* (13F)

13F draws attention to the self-awareness that occurs in the practices, and argues that drama improves the attention phenomenon in the person. For example, she stated that they realized that water has many uses and

importance that many of them did not realize until today. The views of 14F, who mentioned the fun aspect of drama, were as follows: *"I think drama is an event that all teachers and teacher candidates should learn. Because I really think it pays to learn while having fun. I think it would be very useful to apply the drama method to the fields of learning. Because, especially for my department, being able to reach the level of children of that age and teach something without suffocating them is an important event. We learned something by having a lot of fun in the drama app. First of all, it was really enjoyable to be able to produce something quickly and try to apply it."* (14F)

She stated that 14F drama is fun and enjoyable. Here are 2M's thoughts for the drama: *"The drama method is an effective and catchy method. Following the process and directing its course by people who are competent in terms of implementation will increase the level of effectiveness of this method. The drama method has a longer retention time and spreads over time. In other words, the information obtained can remain in long-term memories."* (2M)

According to 2M, which emphasizes the drama method as a method that provides permanence, beyond providing information at the cognitive level with drama, what is much more important is to provide development in the affective field. The views of another male PST, 3M, on this question are as follows: *"The drama method has primarily been a method that allows us to enter the inner world of events. If we consider the methods applied in the school education systems that each of us has taken for years, it is clear that it is a method that only gives instant ideas to the individual and trains for exams. The biggest difference of the drama method is that it allows individuals to experience the subject first and to learn by living through it. Buddha is a sign of permanent and life-long education. The drama education we receive is a very effective tool in the education system, especially in this respect. In addition, drama education motivates students and adds them to the education system with pleasure. During the implementation process, I saw and adopted this feature of drama at every stage."* (3M)

Expressing that he has adopted drama in a sense by expressing that drama must be included in education, 3M states that drama allows learning by doing-living, what is learned through drama is permanent, and at the same time, the drama environment is fun.

3.2 The effect and usability of drama in creating water awareness

In the second question directed to the PSTs, it was questioned whether it was possible to create water awareness in individuals with drama and the effect of drama on this issue in general. The PSTs, on the other hand, explained the effect of drama from their own perspective on this question, basing it on certain reasons. For example, the views of 1F, one of the PSTs, on this question are as follows: *"The fact that we touched on different aspects of water every week has effectively created drama and water awareness for us. We developed ourselves with a different aspect of water every week. Sometimes we became trees, sometimes we became princes, sometimes we became an umbrella. But we did these roles on the water. We grasped the water and revived the water. If necessary, we became water and tried to understand water that way."* (1F)

1F states that drama is an effective method and process in creating water awareness, with examples from the implementation process. She argued that working on a different aspect of water each week improves them and it is fun at the same time. Talking about the implementation process for this question, 5F's views are as follows: *"We examined the importance of water for other living things every week. Each time, we have described the need for water of a living thing that we have constructed. Maybe a drop of water on a leaf did not seem necessary to us before. I think it was very effective since water awareness and need were imposed on people depending on their imagination and creativity. During the discussions we had together at the end of the day, I realized how many areas I actually used water in my life."* (5F)

It is seen that 5F makes very effective and remarkable sentences on the effect and usability of drama in creating water awareness. Here are 6F's views on this question: *"With drama, water awareness can be created in individuals. Because with drama, we can think creatively and critically about the impact of an event on individuals, its impact on society, and its impact on the world, in possible situations such as before, during and*

after the event. It is very important to be conscious individually and socially for the consumption of water, which is of great importance for human beings. For this reason, I think it would be more beneficial to apply the subject of water awareness in children." (6F)

Emphasizing that water awareness can be created through drama, 6F said that drama as one of the reasons for this; It shows its effect on the individual, society and the world in the examination of events as allowing critical and creative thinking. In addition, 6F advocates that water awareness should be gained through drama from an early age. Because she believes that conscious societies will be formed in this way. 13F's views are as follows: *"The work we have done has contributed to raising water awareness. I think it will be beneficial for individuals who take part in such events. Drama also compares people with reality, so it is an important activity in comprehending some facts. If I were to explain based on our work; We said what can we do in a time of water scarcity. In order to generate ideas, it is necessary to think as if you are in that scarcity, then many different solutions can be found."* (13F)

Like her other friends, 13F also thinks that drama is an effective method for creating water awareness. She even expresses this by presenting evidence from his own earnings, as in others. The opinions of 14F and 2M, who briefly and concisely described the effect of drama, were as follows: *"I think that drama is an effective learning method. Therefore, what should definitely be given about water awareness can be given. While we are dealing with that subject, we are brainstorming and thinking about what we can do, what should be, how we should explain, we actually set out from the events we have applied in life."* (14F)

"We evaluated water from a different perspective every week in the studies on water. We envisioned what kind of problems we would face in a waterless world. In addition to verbal awareness, this plays a role in making sense of water and embodying it more emotionally, both in individuals who play the drama and in the audience watching the drama. Concrete data is even more memorable. In other words, the drama method makes it easier for us to concretize the events. Thus, it is definitely an effective method for raising awareness in teaching water awareness." (2M)

Drawing attention to the fact that the drama actually examines the events that come from life, 14F was one of those who argued that the method would definitely be effective on water awareness. Again, stating that drama is an effective method in creating water awareness, 2M thinks that drama contributes to the interpretation of events with its affective aspect, and that it is also effective in concretizing events in general. 3M's views on this question were as follows: *"The most important feature of drama is to create awareness of the subject in individuals. The important thing is not to tell the subject, to have it written down and to memorize it, but to apply this knowledge to life. Drama method makes this awareness by making it fun for individuals. In each study, we aimed to be able to look at the event from many different perspectives and solve the problems by experiencing them, thanks to imagination and brainstorming. Maybe we discovered aspects of a small problem that are not seen in daily life. For example, we discovered how much wasted water is actually made in our daily lives. Each discovery brought a new solution. We combined these solutions with imagination and played."* (3M)

3M draws attention to a very different aspect of the gain provided by drama in creating water awareness. Because 3M states that many people have gained knowledge at the cognitive level on the point of being sensitive about water, using water carefully, avoiding waste and not polluting the water, but this has not been translated into behavior and transferred to daily life.

3.3 Drama as a method proposal in creating water awareness from an early age

In the third question, the PSTs were asked whether drama could be suggested as a method in creating awareness to prevent water problems from an early age in the globalizing world, and their thoughts on this subject were sought. The views of 1F of the PSTs on this question were as follows: *"And it would be very nice. I totally agree with this idea. We could not possibly understand water awareness in a better way. Or they can't understand. As it is said in the question, it is necessary to know many aspects of water problems in our globalizing world. In other words, everyone can apply and teach the drama method very well, including children."* (1F)

1F states that drama is a good method in creating awareness about the importance of water and water problems from an early age. As a method proposal, she thinks this is a rational and logical idea. 5F's comments for this question are as follows: *"I read in an article that whatever we tell an individual not to do, the brain is motivated to do it. No matter how much you say don't do it, he will definitely do it. I don't believe in the effectiveness of saying "do/don't do" in order to raise awareness on various issues anyway. In cases where the reasons are clearly stated, the individual should be confronted directly or indirectly with the consequences of these reasons. I think the drama will be effective in that respect."* (5F)

According to 5F, with drama, the person is confronted directly or indirectly with the consequences of an event or situation. In a way, this is much more effective than telling someone or forbidding something. The views of 6F, who think that the drama is effective, are as follows: *"Drama is one of the effective teaching methods applied to children. Raising awareness in individuals is a process that should be implemented from an early age. Awareness acquired from a young age, that is, raising the awareness of a generation is the first step in raising the awareness of societies. Young people form the future of a society. It is very important to raise the awareness of the new generation in our country, which does not yet have water consumption awareness or is at a deficient level."* (6F)

According to 6F, it is important for future generations to create water awareness from a young age and to create awareness about the importance of water and water problems. This can produce effective results with the drama method. Because, according to 6F, while the individual learns permanently in a fun environment with drama, on the other hand, he thinks both critically and socially about the reasons for water problems. The views of 13F, who are also warm to raising water awareness with drama like 6F from an early age, are as follows: *"Water awareness is created if the issue of water is handled with drama from an early age, and the child's effective participation is ensured. And in this way, the individual who understands the importance of water acts accordingly. He uses water carefully in his own life. They can inform their surroundings about the importance of water, pay attention to water resources, and warn people about water use. It can take measures to prevent water scarcity and drought. In our study, we addressed scarcity and realized that it was a really difficult situation."* (13F)

The opinions of 14F regarding the subject and the question are as follows: *"I think it should definitely be recommended. It is an important auxiliary method for splitting awareness. Because every person has differences in perception and understanding. For those who can understand by reading, reading is sufficient, but for those who understand by seeing, drama is an effective method. Of course, one method alone is not enough. It needs to be supported in different ways. Drama is also a method that will provide important support."* (14F)

Expressing that drama can definitely be recommended as a method in this regard, 14F was one of those who expressed a positive opinion about the method in creating awareness for water. 2M's thoughts are as follows: *"Drama is already an effective method. This method is a very good method for creating awareness on many issues. Especially in young minds, the information desired to be taught can be taught easily and permanently. Knowledge will not be forgotten for many years from a young age. The individual will be able to transfer his knowledge to his daily life and use it effectively."* (2M)

2M believes that drama can be a very effective process in structuring young minds. He also thinks that the information learned by young minds will be permanent and will not be forgotten for many years. Therefore, according to 2M, what is learned with the drama method can be used effectively in daily life by transferring it to life. In this respect, 2M believes that drama will be effective in creating awareness for water from an early age. The views of another male PST, 3M, are as follows: *"I think the drama method is a very effective method for awareness formation. If we are thinking about our future, drama education must be included in the system and the awareness of the next generation of the globalized world must be laid. It is necessary to start this change from a young age. Another advantage of drama is that when practiced at a young age, awareness can almost turn into character. This is the foundation of a conscious society. In a conscious society, it will support and protect people with new ideas for the future."* (3M)

3M thinks that drama is effective because it provides a learning environment by living, because water problems cannot be prevented by just reading. Table 4 shows the percentage and frequency distributions of frequently repeated statements regarding the drama method and its usability in creating water awareness.

Table 4: Percentage and Frequency Distributions of Frequently Repeated Statements Regarding the Drama Method and Its Usability in Creating Water Awareness

Question	Frequently Repeated Phrases	*f**	%
1. How did you find the drama method? Do you think the method is an effective process for education and training? Explain your feelings and thoughts on this subject, taking into account your feelings during the implementation process.	Drama is a very effective process	6	85,7
	Drama is a method that provides permanence	6	85,7
	Drama is an enjoyable and entertaining process	4	57,1
	Drama allows learning by doing-experiencing	2	28,5
	Drama is a useful process	2	28,5
	The creativity of the individual develops with drama	2	28,5
	Drama develops attention and awareness	1	14,2
	Drama develops a sense of self-confidence	1	14,2
2. In the applications, we worked on one aspect of the work on "Water" every week. Considering the practices we have done, do you think that "water awareness" can be created in individuals through drama? What do you think about the effect of the method on this issue? Explain the reasons.	Water awareness can definitely be created with drama	6	85,7
	Drama is an effective process in creating water awareness	6	85,7
	Drama is a method that provides permanence in creating water awareness	3	42,8
	The individual is creative and critical with drama in creating water awareness	3	42,8
	The individual learns by doing-living with drama in creating water awareness	2	28,5
	Drama is an enjoyable and entertaining process in creating water awareness	2	28,5
	Cognitive knowledge can be transformed into behavior with drama in creating water awareness	1	14,2
	Issues become concrete with drama in creating water awareness	1	14,2
3. Can drama be suggested as a method to prevent the "Water Problems" that are expected to turn into an important crisis in the near future, in our globalizing World, and to create awareness in individuals from an early age? Explain your thoughts with reasons.	It is effective to use drama from an early age for water awareness	6	85,7
	What is learned turns into behavior for years to come	3	42,8
	In this process, children learn by doing-living with drama.	1	14,2
	With drama, the child experiences an enjoyable and entertaining process	1	14,2
	Permanence is ensured with drama	1	14,2
	In this process with drama, the child thinks creatively and critically	1	14,2

*: The frequencies in the table show the number of people. (N=7)

When Table 4 is examined, the expressions of "Drama is a very effective process" (*f*=6, 85.7%) and "Drama is a method that provides permanence" (*f*=6, 85.7%) stand out as the highest frequency in the first question. out. In the second question, the expressions "Water awareness can definitely be created with drama" (*f*=6, 85.7%) and "Drama is an effective process in creating water awareness" (*f*=6, 85.7%) are of high frequency. Finally, in the

third question, the highest frequency was the expression "The use of drama from an early age for water awareness is effective" (*f*=6, 85.7%).

4. Discussion and Conclusion

Written interviews with some of the PSTs support the determination that drama is an effective method in raising water awareness. Because, in their opinions, the PSTs stated that drama is an effective process in general, it provides permanence, they learn by doing-living with drama, they develop a sense of self-confidence, and they experience a fun and enjoyable process. Because there are many studies in the literature that support these views (Calp, 2020; Ormancı & Ören, 2010; Başcı & Gündoğdu, 2011; Bertiz, 2010; 2015; Saylan et al., 2016). In addition, they stated that drama provides creative and critical thinking and provides the opportunity to look at events from different perspectives. The positive sentences used by the PSTs about drama in the first question directed to them made them think that they liked and adopted drama very much. It should be considered important in terms of the results of this study that PSTs adopt drama in general as a method and develop positive attitudes towards the method. Because, PSTs acquired these positive attitudes towards the method during practices on water. In other words, PSTs were satisfied with drama and creating water awareness. Because environmental issues can often be seen as boring. However, it is quite striking and remarkable that the PSTs said that they enjoyed it instead of getting bored during this study. Apart from this indirect determination, in the second question directed to the PSTs, the opinions of the PSTs on this issue were taken directly. It has been observed that the PSTs have included expressions that clearly and clearly reveal the effect of drama on creating water awareness. They even explained all these by giving examples on their own, and revealed that the implementation process had certain reflections even on their own daily lives. It can be said that the effect of the method has a very important effect when this developing situation is evaluated as an adult individual's putting the knowledge and experiences they have gained through this whole application process into behavior in their own lives. Because it is known that it is not easy to transform the knowledge acquired at the cognitive level into behavior during the learning experience. Moreover, this situation becomes even more difficult for environmental issues. For example, a person who knows that keeping the water running while brushing his teeth is a waste does not comply with this behavior while brushing his teeth. Therefore, the fact that drama has a behavioral effect on some PSTs in such a short time makes the method important.

For some of the PSTs, the reflection of the gains in practice in their daily lives and the behavioral changes in this sense can be attributed to the effectiveness of the drama in the affective dimension. In other words, the individual who is involved in the events themselves, who empathizes with the event, phenomenon or person and who develops feelings and emotions can put the knowledge and experiences they have learned into behavior. For behaviors, only the knowledge acquired at the cognitive level may be insufficient. From this point of view, drama is an important method with its strong affective aspect. Because it is known in the literature that drama has an impact on attitudes and affective areas (Bertiz, et al., 2010; Hamurcu, 2009; Oğuz Namdar & Kaya, 2019) On the other hand, the concept of awareness is explained through knowledge, attitude and behavior in some studies in the field of environment (Erten, 2004; Bertiz, 2010; Bertiz et al., 2017). Therefore, for water awareness, besides cognitive knowledge, the emotional and behavioral domains should also be considered.

Drama, which affects the daily lives of even adults, can be used to create water awareness from a young age. Because one of the important results and outputs of this research is to encourage the use of water awareness from an early age. In the third question directed to PSTs, it was emphasized whether drama could be suggested as a method for raising awareness about water from an early age. The PSTs emphasized that this would definitely give a good result, and they agreed that drama would have very effective results in this regard. It is obvious that raising awareness of the importance of water in childhood and raising awareness about water is important for future generations. This can be possible by using the drama method from the basic education ages. There are studies in the literature suggesting that environmental awareness should be created from an early age (Alım, 2006; Bertiz, 2010; Bertiz et al., 2017; Gülay, 2011). Water awareness, just like environmental awareness, should be created from an early age for a sustainable life.

Water is an important component of the environment and life. From this point of view, the continuity of an important part of life is also important. Therefore, water should be protected and guarded by humanity with great sensitivity and care. However, while water is a part of the environment and the human factor is in question, avoiding the elements that pollute the water may seem like a challenge. There may even be human-oriented obstacles to the protection and healthy use of water. Humans are at the forefront of the elements that pollute the water. In other words, this natural conflict situation that emerges is a unique opportunity for the drama method in the context of content.

Except for situations of opposition, it is possible to examine the importance of a vital substance such as water by using tension elements due to the nature of drama, and it can produce very effective results. Because the tension elements, which are mostly included in the drama, are quite appropriate in an investigation about water. For example, using a tension element developed on the basis that water decreases with certain periods and making the participant feel that it will disappear completely in the end can offer unique opportunities to keep the importance of water alive. In other words, the fact that water is a vital substance will also enable to create tension elements naturally. This will present effective life situations in explaining the importance of water in the life cycle.

From another point of view, water is a part of natural life. In other words, it is a substance that an individual who experiences the drama process uses constantly in his life and frequently experiences about it. Therefore, this rich experience of each individual in the drama will pave the way for a multidimensional view of the drama in which real life is moved to a fictional ground. This will also enrich the gains in the process. Because each individual has a meaning attributed to water, and this is as much as the individual participating in the process. In other words, the subject in focus is far away from something that the individual has never encountered before in his life.

5. Suggestion

Based on the results of the research, the following suggestions can be made; Creating awareness of water and its importance and creating water awareness should be carried out especially from an early age. Teaching methods that can be effective within the education system in creating global awareness of water, explaining and conveying the importance of water should be researched. In this context, in the century we are living in when serious water problems begin to be experienced globally, educators should pay attention to use life-based teaching methods such as drama in raising water awareness. In addition, the effect of drama on water awareness should also be investigated for different age groups.

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The Mental Toughness Levels of Athletics Coaches in Terms of Some Variables

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Abstract
The present study aims to examine the mental toughness levels of the coaches in terms of some variables who participated in the third (3rd) level athletics coaching course opened by the Turkish Athletics Federation at different times in 2021. The population of the research is 156 coaches who participated in athletics coaching courses, and a total of 141 of them are 85 men and 56 women (Age Average= 27.00±5.00). With the personal information questionnaire developed by the researcher, "Sport Mental Toughness Questionnaire-SMTQ-14" which was developed by Sheard et al. (2009) was applied. The skewness-kurtosis normality distribution test was used to determine whether the measurements were suitable for the normal distribution. According to the Skewness-Kurtosis technique, the mental toughness scale showed normal distribution for its total and sub-dimensions. According to the results of the research, it can be said that the total and sub-dimension levels of the participants' mental toughness scale are moderate. While there was no significant difference in terms of age and working time of the participants participating in the research, a statistically significant difference was found in terms of gender, place of residence, doing sport and duration of doing sports.

Keywords: Sport, Athletics, Mental Toughness

1. Introduction

Sport is a phenomenon that has been a part of human life since its existence, includes physical and mental efforts, has certain rules and gives pleasure to those who follow and do it. At the same time sports; is a field of occupation that is followed by large masses with admiration. This situation has enabled psychologists, coaches, organizations related to sports and sports fans to strive to increase success in sports. Organizations and competitions are frequently organized so that the athletes can show their performances comfortably. These events make the international effectiveness of sports feel, cause sports to be seen as a propaganda tool, and encourage the athletes to increase their performance by increasing competition (Turkmen, 2005). It is not appropriate to examine sports under a single dimension, because it is possible to divide it into different groups according to the place and time it is performed, as well as for competition and performance-oriented, healthy life, leisure time, strengthening social

ties, having a good time. For this reason, it is difficult to fit sports into a single and precise definition (Fisek, 1998).

Although there are different definitions on mental toughness, which is an important factor for the continuation of the high performance required for the athlete (Loehr, 1986), the common view on the concept is that it is an important psychological detail for success in sports. Although many definitions are made for mental toughness, in general; it is related to the ability of athletes to concentrate, to cope with pressure, to realize and not repeat their mistakes, to confront and persist with the luck factor, and to mental toughness (Bull et al., 2005; Jones, Hanton, & Connaughton, 2002; Thewell, Weston, & Greenlees, 2005). Mental resilience emerges as a necessary feature in situations such as being exposed to negativities and compelling actions during sports activities. Mental skills, which are a psychological dimension, are included in the conditions (physical performance, technical and tactical knowledge, skills, etc.) necessary to be a successful athlete. Elite athletes in almost every branch must have a high level of mental skills in order to be successful during their competitions (Gucciardi & Gordon, 2011).

Athletics is a very comprehensive sport in terms of content and requires different skills, and is divided into two groups as track and main competitions. Track competition is defined as short-middle-long distance running, walking, hurdle and flag running. Field competition consists of throws and jumps (Kuraner et al., 1979). Mental resilience is seen as a personality trait that supports harmony in people and reduces the negative effects of stress and stress in their lives (Jacelon, 1997). This personality trait is one that people can learn and develop over time. Individuals with high levels of mental resilience, that is, people who are a whole with their cognitive, affective, physical and social aspects, stick to their normal lives more and keep their own lives under control. However, these individuals are more committed to their work and see unexpected changes in their lives as opportunities for improvement. However, it is seen that people with low mental resilience are resistant to the differences they encounter in daily life, are in distancing and are focused on external control (Klag & Bradley, 2004). At the same time, mental toughness is the job of eliminating the difficulties, hindered situations and mental barriers that the athletes face during the competition and showing a high-level performance (Burton & Raedeke, 2008).

With the competition and performance in sports reaching higher levels, fine details have begun to determine the path to success and success. The possibilities of winning and losing in sports cause psychological pressure in athletes and they need to bring themselves to a state where they can feel the best in order to get rid of this pressure. For this reason, athletes have the obligation to maximize their skills and keep their performance at the highest level (Baker et al., 1990; cited in Temel, 2018). Accordingly, the importance of physical development in sports as well as mental development has emerged. In recent scientific researches, it has been emphasized that psychological factors as well as physical factors are an important factors in success and failure for athletes (Karharman, 2019). Although athletics is known as the basis of all sports, it is a very difficult sport to do at an elite level. Athletes have to struggle with many factors in this sport. While struggling, physical strength is as important as mental toughness. The mental toughness factor, which is one of the psychological factors, is of great importance in an individual and difficult sport such as athletics. Because the athletes are in a struggle with themselves and the competition track as well as with their opponent for the competition. In his/her struggle with himself/herself, his only rival may be the competition track and the second s/he ran, the length he jumped, the height s/he jumped or the distance s/he made the shot. In previous studies, positive correlations were found between the mental toughness levels of elite athletes and their achievement motivation levels. Accordingly, the level of mental toughness is important for athletes who do athletics.

2. Method

This research is a descriptive study aiming to examine the predictor of mental toughness levels of athletics coaches who participated in the third (3rd) level athletics coaching course opened by the Turkish Athletics Federation at different times in 2021, according to some variables. The descriptive method is a research method that aims to describe the existing phenomenon without the intervention of the researcher (Karasar, 1995). Descriptive studies aim to define the typical features of a certain group, to predict how people in a certain group will behave in certain situations and to make inferences on this subject (Borg - Gall, 1989). The data were collected by face-to-face interviews on the basis of randommethodsd and voluntariness.

2.1 Research Group

The research group universe consisted of 156 athletics coaches who participated in the 3rd level athletics coaching courses opened by the Turkish Athletic Federation at different times in 2021, while a total of 141 coaches, 85 of whom were male and 56 were female (Age Average= 27.00±5.00). The research scale was applied on a voluntary basis by interviewing the coaches face to face at the place where the coaching courses are held.

2.2. Data Collections

First of all, the available information about the purpose of the research is given in a systematic way by scanning the literature. Thus, a theoretical framework was formed on the subject. Secondly, the Mental Resilience Scale adapted to Turkish by Altıntas and Koruc (2016) and the information form to collect the personal information of the participants was used.
The data collection tools necessary to achieve the determined aims of the research are given below respectively.

2.2.1. Personal Information Form

In order to collect information about the personal characteristics of the participants and to create the independent variables of the research, an information form consisting of 6 (Gender, Age, etc.) items was prepared by the researcher.

2.2.2. Mental Toughness Scale

The Mental Toughness Scale developed by Sheard (2009) and adapted into Turkish by Altıntas and Koruc (2016) was used in the study to determine the mental toughness levels of coaches. The Mental Resilience Scale is a 4-point Likert -type scale consisting of 14 items. The scale has three sub-dimensions: trust (6 items), control (4 items) and continuity (4 items). Each question is given a score of 1-4 in the answer keys (Sheard, 2013; cited by Altıntas and Koruc, 2016). Internal consistency (Cronbach Alpha) reliability coefficients of this study was found .68 for confidence, .61 for continuity, .67 for control dimension and .65 for total mental toughness.

2.3. Analysis of Data

During the analysis and evaluation of the data; the data were analyzed using SPSS 25.0 for windows package program that arranged in Microsoft Excel 2003 program. Percentage and frequency methods were used to determine the distribution of personal information of the participants. The Skewness-Kurtosis (Skewness - Kurtosis) normality distribution test was used to determine whether the measurements were suitable for the normal distribution. According to the Skewness-Kurtosis technique, it did not show a normal distribution for the total positive perception and positive perception of the past tense sub-dimensions, but showed a normal distribution for the positive perception of human nature and positive perception of the self. As a result, the t-test for normal distributions and the One way – ANOVA tests were applied and POST HOCK Sheff tests were used to determine the source of the difference.

Table 1: The Skewness/Kurtosis Normality Test for the Total and Sub-Dimensions of the Mental Resilience Scale of the Individuals Participating in the Research

	Trust	Continuity	Control	Total
n	141	141	141	141
Skewness	-,054	,634	-.318	-,099
Kurtosis	-.586	,308	-.404	,690

When Table 2 is examined, it does not show a normal distribution for the total positive perception and positive perception of the past tense sub-dimensions according to the Skewness-Kurtosis technique, but it shows a normal distribution for the positive perception of human nature and positive perception of the self. In the event that the

Skewness and Kurtosis values are between -1.5 and +1.5, the relevant test scores or the group are considered to have a normal distribution (Özer & Engeç, 2015).

3. Results

3.1. Personal Characteristics of the Research Group

Data and comments on the demographic characteristics of the coaches participating in the research are given below.

Table 2: Distribution of the Sample Group Participating in the Research in terms of Demographic Characteristics

Personal Characteristics of Participants		n	%
Gender	Male	85	60.3
	Female	56	39.7
Age	Ages 22-26	54	38.3
	Ages 27-31	34	24.1
	Ages 32-36	18	12.8
	Ages 37-41	25	17.7
	Age 42 and +	10	7.1
Place of Residence	Metropole	49	34.8
	City	56	39.7
	District	24	17.0
	Town/Village	12	8.5
Working time	0-3 Years	112	79.4
	4-7 Years	17	12.1
	8-11 Years	12	8.5
Income status	Between 0 – 4500 TL	59	41.8
	Between 4501 TL – 7000 TL	47	33.3
	Between 7001 TL - 9000 TL	21	14.9
	9001 TL – and more	14	9.9
Doing Sports Status	Yes	113	80.1
	No	28	19.9
Exercise Time	none	28	19.9
	1 day per week	16	11.3
	2 days in a week	18	12.8
	3 days in a week	25	17.7
	4 days a week and more	54	38.3

The demographic characteristics of the participants were interpreted as follows. According to the gender distribution of the participants, 85 (60.3%) were male and 56 (39.7%) were female. According to age variables, 54 (38.3%) of them are in the 22-26 age range, 34 (24.1%) are in the 27-31 age range, 18 (12.8%) are in the 32-36 age range, 25 (17.7%) and 10 (7.1%) were aged 42 and over. According to the place of residence, 49 of them (34.8%) live in metropolis, 56 of them (39.7%) live in cities, 24 of them (17.0%) live in districts, and 12 of them (8.5%) live in villages and towns. According to the variable of working time of the participants, it is seen that 112 (79.4%) of them had 0-3 years, 17 of them (12.1%) 4-7 years, 12 of them (8.5%) 8-11 years working time. According to the income status variable of the participants, it is seen that 59 (41.8%) had 0 – 4500 TL, 47 (33.3%) 4501– 7000 TL, 21 (14.9%) 7001 – 9000 TL and 14 (9.9%) of them have 9001 TL and more income. In the

distribution of the participants according to the variable of doing regular sports, it was seen that 113 (80.1%) of them do sports regularly, while 28 (19.9%) do not do sports regularly. 16 (11.3%) of the participants who do sports regularly, once a week, 18 (12.8%) 2 days a week, 25 (17.7%) 3 days a week, 54 (38.3%) It was observed that ten of them had time to do sports.

Table 3: Results Regarding the Mental Resilience Levels and Sub-Dimensions of the Participants

	n	Cover.	ss	min	Max
Trust	141	19.55	2.531	13.00	24.00
Continuity	141	10.66	1,216	8.00	14.00
Control	141	10.29	2,682	4.00	16.00
Total	141	40,50	3,430	29.00	50.00

In Table3, the mental toughness score averages of the participants in general and their sub-dimensions are examined. As a result of this review; it is understood that while the average score of the total mental toughness level of the athletes participating in the research is 40.50, the average of the confidence level is 19.55, and the average of the control level is 10.29, while the continuity level averages of 10.66 are close to the medium level.

Table 4: T-test results of the Total and Sub-Dimensions of the Mental Resilience Scale by Gender

	Gender	n	$\overline{X}$	ss	sd	t	p -value
Trust	Male	85	19.85	2,509	139	1-710	,089
	Female	56	19,11	2,520			
Continuity	Male	85	10.53	1.150	139	-1.587	,115
	Female	56	10.86	1.271			
Control	Male	85	9.78	2,638	139	-2,877	,005
	Female	56	11.07	2,579			
Total	Male	85	40,15	3.421	139	-1,502	,135
	Female	56	41,03	3,406			

*p<.05

In Table 4, whether the mean scores of the mental toughness scale sub-dimensions of the coaches and their total differ according to the gender variable was examined by the t-test. As a result of the examination, the mean score of the male participants was $\bar{X}$= 9.78 and the mean score of the women was $\bar{X}$= 11.07, and a statistically significant difference was found between the control scores of women and men in favor of women (*t: -2.877 p<0 .05)*.

Table 5: F-Test Results of Total and Sub-Dimensions of Mental Toughness by Income Status of Coaches

		n	$\overline{X}$	ss	sd	F	p -value	
Trust	Between 0 – 4500 TL	59	18.80	2,571	3	3,043	,031	1-2
	Between 4501 TL – 7000 TL	47	19.85	2.511				1-4
	Between 7001 TL - 9000 TL	21	19.05	1,830				
	9001 TL – and more	14	19.78	2,778				
Continuity	Between 0 – 4500 TL	59	10.42	1,086	3	1,442	,233	-
	Between 4501 TL – 7000 TL	47	10.87	1.191				
	Between 7001 TL - 9000 TL	21	10.86	1,389				
	9001 TL – and more	14	10,64	1,393				
Control	Between 0 – 4500 TL	59	9.95	2,687	3	1,451	,231	-
	Between 4501 TL – 7000 TL	47	10.34	2,324				
	Between 7001 TL - 9000 TL	21	11.33	2,817				
	9001 TL – and more	14	10,00	3.397				
Total	Between 0 – 4500 TL	59	40,17	3,465	3	,644	,588	-
	Between 4501 TL – 7000 TL	47	41.06	3.206				
	Between 7001 TL - 9000 TL	21	40.23	3,833				
	9001 TL – and more	14	40,43	3,524				

*p<.05

In Table 5, whether the mean scores of the coaches ' mental toughness scale sub-dimensions and the total differ according to the income status variable was examined with the F test. As a result of the examination; the mean confidence score of the participants is between 0-4500 TL $\bar{X}$= 19.80, the mean confidence score of the participants is between 4501 and 7000 TL $\bar{X}$= 19.85, the trust score average of the participants is between 7001 and 9000 TL $\bar{X}$= 18.05. A statistically significant difference was found between the participants with an income of 0-4500 TL, 7001 - 9000 TL and 4501 - 7000 TL in terms of confidence scores (F:3,043). p<0.05).

Table 6: F-Test Results of the Total and Sub-Dimensions of the Mental Resilience Scale According to the Variable of Place of Residence of the Coaches

		n	$\overline{X}$	ss	sd	F	p -value	
Trust	Metropole	49	19.88	2,288	3	,864	,462	-
	City	56	19.61	2,542				
	District	24	19.17	2,959				
	Town/Village	12	18,75	2,563				
Continuity	Metropole	49	10.37	1.185	3	1,718	,166	-
	City	56	10.84	1,290				
	District	24	10,67	1.129				
	Town/Village	12	11.00	,853				
Control	Metropole	49	9.57	2,731	3	2,706	,048	1-4
	City	56	10.36	2,430				1-3
	District	24	10.96	2,956				
	Town/Village	12	11.58	2,466				
Total	Metropole	49	39,82	3,615	3	1,091	,355	-
	City	56	40.80	3.349				
	District	24	40,79	3.362				
	Town/Village	12	41,33	3,085				

*p<.05

In Table 6, whether the mean scores of the mental toughness scale sub-dimensions and the total of the coaches differ according to the variable of residence was examined with the F test. As a result of the examination; the mean control score of the participants living in the metropolis area is $\bar{X}$= 9.57, the mean control score of the participants living in the city is $\bar{X}$= 10.36, the mean control score of the participants living in the district is $\bar{X}$= 10.95, the mean control score of the participants living in the town/village is $\bar{X}$= 11.58 and in terms of confidence scores, a statistically significant difference was found between the participants living in the metropolitan city and the participants living in the district and town/village (F:2,706 p<0.05).

Table 7: T-test results of the Total and Sub-Dimensions of the Mental Toughness Scale According to the Variable of Doing Sports Status of the Coaches

	Gender	n	$\overline{X}$	ss	sd	t	p -value
Trust	Yes	113	19.88	2.412	139	3,230	,002
	No	28	18.21	2.601			
Continuity	Yes	113	10,57	1,201	139	-1,679	,095
	No	28	11.00	1,186			
Control	Yes	113	11.03	2,589	139	-2,389	,029
	No	28	10.36	2.831			
Total	Yes	113	40.49	3,625	139	-,117	,907
	No	28	40,57	2,545			

*p<.05

In Table 7, whether the mean scores of the mental toughness scale sub-dimensions and total of the coaches differ according to the variable of doing sports was examined with the t-test. As a result of the examination, the mean score of the confidence dimension of the participants who do sports was $\bar{X}$= 19.88 and the mean score of those who did not do sports was $\bar{X}$= 18.21, and a statistically significant difference was found between those who do sports and those who do not, in favor of the participants who do sports (*t:3,230 p<0.05*).
The mean score of the control dimension of the participants who do sports was $\bar{X}$= 11.03 and the mean score of those who did not do sports was $\bar{X}$= 10.35, and a statistically significant difference was found between those who do sports and those who do not in terms of control dimension scores in favor of the participants who do sports (*t:- 2,389 p<0.05*).

Table 8: F-Test Results of the Total and Sub-Dimensions of the Mental Toughness Scale by the Variable of Regular Exercise of the Coaches

		n	$\overline{X}$	ss	sd	F	p - value	
Trust	1 per week	16	18,75	3,194	4	3,300	,013	1-4
	2 per week	18	19.50	2,229				
	3 per week	25	20,28	2,685				
	4 and + per week	54	20,09	2.341				
	none	28	18.36	2,076				
Continuity	1 per week	16	11,50	1.033	4	3,617	,008	1-2
	2 per week	18	10.28	1,406				1-3
	3 per week	25	10,40	1,155				1-4
	4 and + per week	54	10,50	1.145				
	none	28	10,96	1.105				
Control	1 per week	16	10,75	2.295	4	1,390	,241	-
	2 per week	18	10,17	2.121				
	3 per week	25	9,28	2,716				
	4 and + per week	54	10.35	2,849				
	none	28	10.89	2.753				
Total	1 per week	16	41,00	2,633	4	,626	,645	-
	2 per week	18	39.94	3.621				
	3 per week	25	39,96	3,713				
	4 and + per week	54	40.94	3,872				
	none	28	40,21	2,470				

*p<.05

In Table 8, whether the mean scores of the mental toughness scale sub-dimensions and total of the coaches differ according to the variable of regular exercise was examined with the F test. As a result of the examination; confidence dimension average score of the participants who do sports once a week is $\bar{X}$= 18.75, average of the trust dimension points of the participants who do sports twice a week is $\bar{X}$= 19.50, the average trust dimension score of the participants who do sports 3 times a week is $\bar{X}$= 20.28, a statistically significant difference was found between the participants who do sports 4 or + times a week is $\bar{X}$= 20.09, and in terms of confidence scores, there is a statistically significant difference between the participants who do sports once a week and those who do sports 4 or + times a week (F : 3,300 p. <0.05).

Continuity dimension average score of the participants who do sports once a week is $\bar{X}$= 11.50, the average of the continuity dimension points of the participants who do sports twice a week is $\bar{X}$= 10.28, the average of the continuity dimension points of the participants who do sports 3 times a week is $\bar{X}$= 10.40, and a statistically significant difference was found between the participants who do sports 4 and + times a week, the mean of

continuity dimension is $\bar{X}$ = 10.50, and the confidence scores between the participants who do sports once a week and those who do sports 2, 3 and 4 times a week (F: 3.617 $p<0.05$).

4. Discussion and Conclusion

Total and sub-dimension (trust, continuity, control) score averages of the coaches participating in the study were examined. As a result of this examination, it was concluded that the total and sub-dimension levels of the mental toughness scale of the participants included in the study were at a moderate level. It can be said that the reason for this is the positive effect of sports on human psychology. When the literature is examined; in the study conducted by Demir and Türkeli (2019) on the students of the faculty of sports sciences, the fact that the mental toughness levels of the participants were above the average was made on the relationship between the loneliness levels of the American football players and the mental toughness levels in sports, and the values were higher than the average value. It is understood that the study conducted by Kurtulget et al., (2018) on basketball players is in parallel with the current study in terms of the mental toughness of the athletes at a good level in the continuity sub-dimension, the medium level in the confidence dimension, and the results of Harman's (2019) study on cyclists. It was observed that there was no significant difference in terms of age and working time of the participants participating in the study.

When the literature is examined, some studies that show parallelism with our study and some studies that do not. For example, in contrast to our study, Crust (2009) found no relationship between mental toughness and age. But, Crust et al. (2014) also stated that age is important in determining the level of mental resilience in parallel with the results of our study. Also, Marchant et al. (2009) and Nicholls et al. (2009) also states that mental toughness develops in parallel with age.

A significant difference was found in terms of gender, income status, place of residence, and duration of doing sports of the participants participating in the research. According to this; Among the coaches participating in the research, it was concluded that female participants had more mental toughness and control levels than male participants. It can be said that the reason for this is that women are supported by more people than men today. When the relevant literature is examined, it can be said that there are some studies that show parallelism with our study results or that do not. For example, in a study done by Yarayan et al. (2018), no significant difference was found between mental toughness and gender. However, there are studies in the literature that detect significant differences between the level of mental toughness in sports by gender (Farrokhi , Kashani, & Motasharei, 2011; Findlay & Bowker, 2009; Masum, 2014; Nicholls et al., 2009; Orhan, 2018; Yazıcı, 2016). Nicholls et al. (2009) reported in his study that mental toughness levels changed in favor of men. On the other hand, in his study on tennis players, Masum (2014) also mentions the mental t toughness levels that he determined in favor of men. Juan and Lopez (2015) also state that male athletes have higher mental toughness levels compared to female athletes.

According to the income level of the coaches, it was concluded that the participants with an income between ₺ 0 and 4500 had a lower level of confidence in mental resilience than the participants with an income between ₺ 7001 - 9000 and ₺ 4501 - 7000. From this point of view, it can be said that the abundance of material income is due to the fact that it has a significant impact on human life. When the literature is examined, Tekkurşun et al. (2019) on the students of the faculty of sports sciences, it is seen that there was no significant difference between exercise addiction and mental toughness levels in sports, according to the monthly income of the participants, which shows that this does not support the current study.

It was concluded that the participants living in the metropolis city had less mental toughness scale control level than the participants living in the district and town/village, according to the place of residence of the coaches. From this point of view, it can be said that the difficulty of living in a metropolitan city (in economic, social and cultural sense) has a negative effect on the mental resilience control dimension. When examining the literature, Kalkavan et al. (2020) on mountain bike athletes, it can be concluded that there was no significant difference between the mental toughness levels of the athletes depending on the environment in which they lived.

According to the coaches' doing sports variable, it was concluded that the participants who do sports have a higher level of mental toughness, confidence and control than the participants who do not do sports. It can be said that the reason for this is that sports have a positive effect on people's lives, as in everything else. When the literature is examined, no study has been found that examines the relationship between mental toughness and whether or not to do sports.

According to the variable of the frequency of doing sports of the coaches, it was concluded that the participants who do sports 3 days a week have a higher level of confidence in mental toughness than the participants who do sports 1 day a week. Therefore, the frequency of doing sports plays an important role in terms of positive perception. In terms of continuity, it is seen that the participants who do sports 1 day a week have more mental toughness than those who do sports 2, 3 and 4 days a week. It can be said that the reason for this is that doing more sports has a negative effect on the continuity of mental toughness. Again, when the literature is examined, it is seen that some studies support the current study and some do not. For example, Tekkursun et al. (2019) on the students of the faculty of sports sciences, it was determined that the mental toughness level of the participants in sports differed significantly according to the regular sports status. Accordingly, while it was not in parallel with the current study in the "Continuity" dimension, it was found that the mean scores of those who did not do regular sports in the "Control" sub-dimensions were significantly higher than those who did regular sports, which was in parallel with the current study. Crust (2009) stated that there is no significant relationship between mental toughness and sports experience. On the other hand, Nicholls et al. (2009) and Connaughton et al. (2008), it was found that mental toughness differs significantly in terms of sports experience.

5. Suggestions

In this section, suggestions developed according to the results of the research and the experiences gained by the researcher are given. The correlation or the effect of the mental toughness levels of the coaches who are coaching in various branches can be examined.

5.1. Suggestions for Future Research;

The mental toughness levels of coaches working in various branches were examined.

- It can be done to different sample groups.
- The research can be expanded and applied to a larger sample group.
- With different data sources such as interviews and observations, the validity of the research can be ensured and a richer information can be obtained.

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The Positive Perception Levels of Athletics Coaches in Terms of Some Variables

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Abstract
Positive perception status increases one's worthiness, self-confidence and perspective towards time positively (Icerson & Pines, 2013). The present study aims to examine the positive perception levels of the trainers, who participated in the second level athletics training course opened by the Turkish Athletics Federation at different times in 2021, in terms of some variables. A total of 246, 139 men and 107 women (Age Avg.=31 .04±7.37), constitute the sample of the study for athletics training courses. Personal information questionnaire developed by the researcher and Positive Perception Scale adapted to Turkish by Akın and Kaya (2015) were applied to the trainers. The skewness-kurtosis normality distribution test was used to determine whether the measurements were suitable for the normal distribution. According to the Skewness-Kurtosis technique, it did not show a normal distribution for the total positive perception and positive perception of the past time sub-dimensions, but showed a normal distribution for the positive perception of human nature and positive perception of the self. According to the results of the research, it can be said that the total and sub-dimension levels of the participants' positive perception scale are high. While there was no significant difference in terms of age and place of residence of the participants participating in the research, a statistically significant difference was found in terms of gender, working time, and duration of doing sports.

Keywords: Sport, Positive Perception, Athletics

1. Introduction

The science of psychology deals with all the behaviors that people have. It examines the mental structure of the person together with the conscious or unconscious, that is, involuntary behaviors of people and investigates their internal and external causes. In addition, it also examines the behavior of animals in order to understand and interpret the voluntary or involuntary behaviors of humans better (Azboy et al.2017). Psychologically sound individuals are the most resistant to stress. In other words, it is expressed as people who are not physically or emotionally depressed in the face of major stressful events (Atkinson et al . 1999).

Sports psychology; deals with the issues of how to maximize the performance of individuals in team sports and individual sports by investigating the psychological characteristics of individuals (Azboy et al. 2017). The reason

why sports psychology is aimed especially at elite athletes and to increase the performance of these athletes is because not only physical work but also mental development and work have an effect on success (Ercan, 2013). Accordingly, many psychological factors play an important role in the performance of athletes.

Weinberg and Gould (2011) define sports and exercise psychology as a branch of science that scientifically researches the behaviors of people involved in sports activities and applies the obtained information to sports environments, and sees sports psychology as a branch of kinesiology.

It is an important factor for the success of the athletes to use their psychological state in the best way. How does sports psychology help athletes perform better?
1. It helps to develop focus.
2. It helps the athletes to develop their self-confidence.
3. It enables us to cope with problems and new situations.
4. It helps us to choose areas in line with our own tendencies and characteristics in the sport we do.
5. It helps us to create harmony and communication within the team.
6. It increases motivation for high performance.
7. It allows you to return to the competition in case of any injury or mutilation.
8. It develops game-specific strategies and game plans (Azboy et al. 2017).

Perception is one of the most important sensory factors that shape the lives of individuals (Uzbaş, 2015). Perception, on the other hand, can be defined as the individual's recognizing external stimuli, making sense of them and evaluating them. In perception, the human brain perceives in accordance with the expectations arising from the individual's situation; experiences, different senses from the sense organs, and social and cultural values (Cüceloğlu, 2006).

If we want to define positive perception in general terms, we can say that it is a form of communication. As a matter of fact, it affects how individuals who communicate perceive each other, their attitudes towards each other and the quality of communication. (Kepekçioğlu, 2015). Positiveness, defined as having a positive disposition or positive thinking, refers to the hidden dimension that underlies life satisfaction, self-esteem, and optimism that is influenced by people's cognition, emotions, and actions. Positivity means that individuals have a positive orientation or positive evaluations towards themselves, the future and past experiences (Yıldız 2016).

The ability to respond positively to failures and negative obstacles is crucial to a successful athlete. Sports psychologists, as well as trainers around the world, put emphasis on positive thinking. However, despite its perceived importance, it has a relatively recent history in which researchers have identified four types of sport-oriented positive thinking: psychiatry, anxiety control, confidence-boosting, and instructional. Studies have determined that positive thinking positively affects the athlete towards sportive performance (Döklü, 2018).

In individual sports, the communication between the trainer and the athlete is experienced more intensely. Therefore, the positive perception levels of the trainers are important for the athletes to prepare well for the competition and for the athletes to make the right choices during the competition. When the literature was reviewed, it was seen that the number of studies was limited since positive perception in sports is a new subject. In addition, while there were a few positive perception studies on athletes, no studies on the positive perception levels of trainers were found. Accordingly, this research that we have done is important. In the study, it was aimed to examine the positive perception levels and mental endurance levels of athletic trainers in terms of variables such as age, gender, place of residence and etc.

2. Method

This research is a descriptive study aiming to examine the predictor of the positive levels of athletics trainers who participated in the second level athletics traininging course opened by the Turkish Athletics Federation at different times in 2021, according to some variables. The descriptive method is a research method that aims to describe the existing event/phenomenon without the intervention of the researcher (Karasar, 1995). Descriptive studies aim to

define the typical features of a certain group, to predict how people in a certain group will behave in certain situations and to make inferences on this subject (Borg - Gall, 1989). The data were collected by face-to-face interviews on the basis of random method and voluntariness.

2.1. Research Group

The research group; while the universe was composed of 248 athletic trainers who participated in the 2nd level athletics training courses opened by the Turkish Athletics Federation at different times in 2021, 139 of these trainers were male and 107 were female (Age Avg.= 31.04 ± 7.37). 246 of them constitute the sample of our research. The research scale was applied on a voluntary basis by interviewing the athletes face to face at the place where the competitions were held.

2.2. Data Collection

First of all, the available information about the purpose of the research is given in a systematic way by scanning the literature. Thus, a theoretical framework was formed on the subject. Second, Akin et al. (2015) and the "Positive Perception Scale" and an information form were used to collect the personal information of the participants.
The data collection tools necessary to achieve the determined aims of the research are given below, respectively:

2.2.1. Personal Information Form

In order to collect information about the personal characteristics of the participants and to create the independent variables of the research, an information form consisting of 6 (Gender, Age, etc.) items was prepared by the researcher.

2.2.2. Positive Perception Scale

Validity and reliability of the Turkish Form of the Positive Perception Scale s a result of the confirmatory factor analysis applied for the construct validity of the scale, Akın, A., & Kaya, M. (2015) revealed that the scale has three dimensions (positive perception of self, positive perception of past time, positive perception of human nature) as in the original form (x^2 =24.28, sd =16, RMSEA=.045, NFI= .96, NNFI=.97, IFI=.99, RFI=.93, CFI=.99, GFI=.98 and SRMR= .032). The factor loads of the items ranged from .57 to .95. Cronbach's alpha internal consistency reliability coefficients of the Positive Perception Scale were found to be .80 for the positive perception of the past time subscale, .71 for the positive perception of human nature and .75 for the positive perception of the self. Positive Perception Scale adjusted item-test correlations ranged from .55 to .65. Positive perception of self is =6.8; positive perception of past times is =1,2,4,7; and positive perception of human nature is= 3,5. There is no reverse coded item.

Internal consistency (Cronbach Alpha) reliability coefficients of this study; was found to be .80 for positive perception of self, .66 for positive perception of past time, .81 for positive perception of human nature, and .73 for total positive perception.

2.3. Analysis of Data

During the analysis and evaluation of the data; the data were analyzed using Spss 25.0 for windows package program arranged in Microsoft Excel 2003 program. Percentage and frequency methods were used to determine the distribution of personal information of the participants. The Skewness-Kurtosis (Skewness - Kurtosis) normality distribution test was used to determine whether the measurements were suitable for the normal distribution. According to the Skewness-Kurtosis technique, it did not show a normal distribution for the total positive perception and positive perception of the past time sub-dimensions, but showed a normal distribution for the positive perception of human nature and positive perception of the self. As a result, the t-test for normal distributions and the One way - Anova tests were applied and POST HOCK Sheff tests were used to determine

the source of the difference. Mann Whitney U and Kruskal Wallis Tests were applied for sub-dimensions that did not show normal distribution, and Independent Samples tests were used to determine the source of the difference.

Table 1: Skewness/Kurtosis Normality Test Regarding Total Positive Perception and Sub-Dimensions of Individuals Participating in the Research

	Total Positive Perception	Positive Perception for Past Time	Positive Perception for Human Nature	Positive Perception of Self
n	246	246	246	246
Skewness	-,974	-1,611	-1,025	-,543
Kurtosis	1,646	3,474	,717	-,156

When Table 1 is examined, it is seen that according to the Skewness-Kurtosis technique, it does not show a normal distribution for the total positive perception and positive perception of the past time sub-dimensions, but it shows a normal distribution for the positive perception of human nature and positive perception of the self. If the Skewness and Kurtosis values are between -1.5 and +1.5, the relevant test scores or the group are considered to have a normal distribution (Özer & Engeç, 2015).

3. Results

3.1. Personal Characteristics of the Research Group

The data and comments on the demographic characteristics of the trainers participating in the research are given below.

Table 2: Distribution of The Sample Group Participating in The Research in Terms of Demographic Characteristics

Personal Characteristics of Participants		n	%
Gender	Male	139	56.5
	Female	107	43.5
Age	Ages 22-26	90	36.6
	Ages 27-31	62	25.2
	Ages 32-36	34	13.8
	Ages 37-41	37	15.0
	Age 42 and +	23	9.3
Living Place	Metropolis	124	50.4
	City	72	29.3
	District	40	16.3
	Town/Village	10	4.1
Working time	0-3 Years	151	61.4
	4-7 Years	56	22.8
	8-11 Years	39	15.9
Doing Sports Status	Yes	199	80.9
	No	47	19.1
Exercise Time	none	47	19.1
	1 Day per Week	40	16.3
	2 days in a week	69	28.0
	3 days a week and +	90	36.6

The demographic characteristics of the participants were interpreted as follows.

According to the gender distribution of the participants, 139 (56.5%) were male and 107 (43.5%) were female. According to age variables, 90 (43.5%) of them are in the 22-26 age range, 62 (25.2%) are in the 27-31 age range, 34 (13.8%) are in the 32-36 age range, 37 (15.0%) and 23 (9.3%) are 42 years old and over. According to their living place, 124 (50.4%) live in metropolis, 72 (29.3%) live in cities, 40 (16.3%) live in districts, 10 (4.1%) live in villages and towns. In their distribution according to the variable of working time, 151 (61.4%) had a working period of 0-3 years, 56 (22.8%) had a working period of 4-7 years and 39 (15.9%) had a working period of 8-11 years. In the distribution of the participants according to the variable of doing regular sports, it was seen that 199 (80.9%) of them do sports regularly, while 47 (19.1%) do not do sports regularly. While 90 (36.6%) of the participants who do regular sports do sports 3 days or more a week, 69 (28.0%) do 2 days a week, 40 (16.3%) do sports once a week, 47 (% 19.1) of them did not do any regular sports.

Table 3: Results of Participants' Positive Perception Levels and Sub-Dimensions

	n	**Cover.**	**ss**	**min**	**Max**
Positive perception of self	246	12,3293	1,25897	2.00	14.00
Positive Perception of the Past Times	246	24,2033	3,46636	4.00	28.00
Positive Perception of Human Nature	246	11.0447	2,48630	2.00	14.00
Total Positive Perception	246	47,5772	5,63735	8.00	56.00

In Table 3, positive perception means scores of the participants in general and their sub-dimensions were examined. As a result of this review; the mean score of the total positive perception levels of the athletes participating in the research is 47.58, the mean score of the positive perception levels regarding the self is 12.33, the mean score of the positive perception levels related to the past times is 24.20, and the mean score of the positive perception levels regarding the human nature is 11.04 and all dimensions appears to be at a high level.

Table 4: T-Test Results on the Sub-Dimensions of the Trainers' Positive Perception Scale According to the Variable of Gender Variable

	Gender	n	$\overline{X}$	ss	sd	t	p -value
Positive Perception of Self	Male	139	12,4173	1.18505	244	1,251	,212
	Female	107	12,2150	1.34605			
Positive Perception of Human Nature	Male	139	10.7698	2,58288	244	-1,989	,045
	Female	107	11,4019	2,31834			

*p<.05

In Table 4, whether the mean scores of the trainers' positive perception scale sub-dimensions and the total differ according to the gender variable was examined using the t-test. As a result of the examination, the mean score of positive perception about human nature of male participants was $\bar{X}$= 10.77, while the mean score of women was $\bar{X}$= 11.40, and a statistically significant difference was found between women and men in favor of women in terms of positive perception scores about human nature (*t:-1.989 p<0.05*).

Table 5: F-Test Results Regarding the Sub-Dimensions of Positive Perception According to the Variable of Working Time of Trainers

		n	$\overline{X}$	ss	sd	F	p -value	
Positive Perception of Self	0-3 Years	151	12,2715	1,30094	243	,412	,663	-
	4-7 Years	56	12.4286	1,09307				
	8-11 Years	39	12,4103	1,33215				
Positive Perception of Human Nature	0-3 Years	151	10.7285	2,73723	243	3,261	,040	1-2
	4-7 Years	56	11.6071	1,81588				
	8-11 Years	39	11.4615	2.11319				

*p<.05

In Table 5, whether the mean score of the trainers' positive perception scale sub-dimensions and the total differs according to the variable of working time was examined with the F test. As a result of the examination; While the mean score of positive perception about human nature of the participants between 0-3 years is $\bar{X}$= 10.73, the mean score of positive perception about the nature of the participants between 4-7 years is $\bar{X}$= 11.61 and the mean score of the participants who are between 8-11 years of age is $\bar{X}$= 10.73. While the mean positive perception score was $\bar{X}$= 11.46, a statistically significant difference was found between the participants with 0-3 years and 4-7 years of experience in terms of positive perception scores regarding human nature (F:3,261 p<0.05).

Table 6: T-test results on Positive Perception Sub-Dimensions of Trainers According to the Variable of Doing Sports

		n	$\overline{X}$	ss	sd	t	p -value
Positive Perception of Self	Yes	199	12,4623	1.18805	244	3,487	,001
	No	47	11.7660	1,40206			
Positive Perception of Human Nature	Yes	199	11,1407	2,50258	244	1,247	,213
	No	47	10.6383	2.39951			

*p<.05

In Table 6, whether the trainers' positive perception scale sub-dimensions and mean scores of the total differ according to the variable of doing sports was examined by t-test. As a result of the examination, the positive perception score average of the participants who do sports was $\bar{X}$= 12.46, while the mean score of those who did not do sports was $\bar{X}$= 11.77, and there is a statistically significant difference between the participants who do sports and those who do not in terms of positive perception scores regarding self. (*t:3,487 p<0.05*).

Table 7: Mann-Whitney U Test Results on Total and Sub-Dimensions of Positive Perception According to the Variable of Doing Sports of Trainers

		n	Rank Average	Rank Sum	Z	p
Positive Perception of Past Time	Yes	199	132.51	26370,00	-4,144	,000
	No	47	85.34	4011,00		
Total	Yes	199	132.86	26438.50	-4,252	,000
	No	47	83.88	3942.50		

* p<.05

As it can be understood from the table, as a result of the non -parametric Mann Whitney-U test, which was performed to determine whether the scores of the trainers' positive perception scale positive perception of the past time sub-dimension differ significantly according to the variable of not doing sports, there was a statistically significant difference between the groups in favor of the group doing sports. There was a significant difference at the p<0.05 level.

In non -parametric Mann Whitney-U test, which was conducted to determine whether the scores of the trainers from the total dimension of the positive perception scale differ significantly according to the variable of whether or not to do sports, a statistically significant difference at the p<0.05 level was found between the groups in favor of the group doing sports.

Table 8: Kruskal-Wallis H Test Results on Positive Perception Sub-Dimensions According to the Variable of Frequency of Doing Sports of Trainers

		n	Average rank	sd	Mean	p	Difference
Positive Perception of Past Time	1 Day per Week	40	86.23	3	18,990	,000	1-3
	2 days in a week	69	115.35				2-3
	3 days a week and +	90	141.63				
	none	47	132.47				
Total	1 Day per Week	40	90.66	3	11,942	,008	1-3
	2 days in a week	69	121.28				
	3 days a week and +	90	136.21				
	none	47	130,37				

* p<.05

As can be seen from the table, as a result of Kruskal Wallis-H, which was performed to determine whether the positive perception scale mean scores for the past time show a significant difference according to the variable of frequency of doing sports, the difference between the mean scores of the frequency of doing sports groups was found to be statistically significant (x2=18,990; sd =3;p<0.05). After this process, complementary comparison techniques were used to determine which groups resulted from the significant difference determined after Kruskal Wallis-H. Independent Samples Test, which is a special test technique used for this purpose, was applied. As a result of the analyzes, it was determined that the difference was in favor of the participants who did sports 3 days a week between those who did sports 1 day a week, 2 days a week and 3 days a week.

As a result of Kruskal Wallis-H, which was done to determine whether the total size mean score of the positive perception scale differs significantly according to the variable of frequency of doing sports, the difference between the mean scores of the frequency of doing sports groups was found to be statistically significant (x2=11.94; sd =3; p< 0.05). As a result of the analysis, it was determined that the difference was in favor of the participants who did sports 3 days a week between those who did not do sports 1 day a week, 2 days a week and 3 days a week.

4. Discussion and Conclusion

Total and sub-dimension (Positive Perception of Self, Positive Perception of Human Nature, and Positive Perception of Past Time) of the trainers participating in the study were examined. As a result of this examination, it was concluded that the positive perception scale total and sub-dimension levels of the participants included in the study were at high levels.

While there was no significant difference in terms of age and living place of the participants participating in the research, a statistically significant difference was found in terms of gender, working time, and duration of doing sports.

According to this; It has been concluded that female participants from the trainers participating in the research have more positive perceptions of human nature than male participants. It can be said that this is because they are mothers and they value aesthetic concerns, love, communication and beauty much more than men.

It was concluded that the participants with a working period of 4-7 years had more positive perceptions about the nature of human beings than the participants with a working period of 0-3 years. From this point of view, it can be said that experience has an important effect on human life.

According to the trainers' doing sports variable, it was concluded that the participants who do sports have more positive perceptions of self, positive perceptions of the past and total positive perception levels compared to the participants who do not do sports. It can be said that the reason for this is that sports have a positive effect on people's lives, as in everything else.

According to the variable of the frequency of doing sports of the trainers, it was concluded that the participants who do sports 3 days a week have more positive perceptions of the past and total positive perception levels than the participants who do sports 2 and 1 days a week. Therefore, the frequency of doing sports plays an important role in terms of positive perception.

The results of the current study are considered in terms of the positive perception levels of the trainers according to some variables; it is understood that while some studies support the current study, some studies do not support it.

In the study conducted by Temel et al., (2019) to determine the positive perception levels of the athletes, they concluded that the positive perception levels of the athletes were above the medium level.

When the study conducted by Dinç (2018) was examined, it was understood that there was no significant difference between the age variable and positive perception levels, although the participants were not athletes.

Considering the results of very few studies, in terms of general psychological well-being levels, and when evaluated together with the findings obtained from the current study; it is understood that some studies support the current study, but some studies do not support it.

5. Suggestions

In this section, suggestions developed according to the results of the research and the experiences gained by the researcher are given.
The correlation or the effect of the positive perception levels of the trainers who are training in various branches can be examined.

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The Implications of Indoctrination on Children's Creativity: Perception and Analysis of the Collaboration between Teachers and Parents in Semarang City, Central Java, Indonesia

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Abstract
The purpose of this research was to analyze the relationship between indoctrination and children's creativity. It was conducted qualitatively using the phenomenological approach for a period of 6 months. The samples used include 26 teachers, 118 children, and 80 parents while data were collected through in-depth interviews, observation, and documentation and analyzed using data reduction, data display, and conclusion drawing or verification. The results showed that children's creativity had a relationship with indoctrination and practice displayed.

Keywords: Children's Creativity, Indoctrination, Practice

1. Introduction

1.1. Identification of Problems

Children need trust and opportunity to be comfortable in expressing themselves during the learning process and this comfort serves as the capital, basis, and strength for their academic and non-academic readiness (O'Farrellya, et al., 2018). However, these attributes are often lacking in children despite their usefulness in the learning process which allows them to be valued, cared for, and provided with different opportunities (Bleses, et al., 2021). This means there is an urgent need to support the growth and development of children (Rahmadina, 2021) in order to significantly influence the achievement of their educational goals, specifically concerning the development of creativity. This can be achieved by comprehensively monitoring their potentials and maximizing

their creativity through the efforts of all parties directly or indirectly involved in their lives (Bulotsky-Shearer, 2012).

The indoctrination of children usually limits their potential because the use of force to make them understand a concept can reduce their ability to acquire the required knowledge. This closes their mind and stops them from learning further (Wareham, 2019). However, children can develop creativity through positive responses from their surroundings and this means indoctrination without focusing on the potential can hamper the development of this creativity. This is associated with their high curiosity and the absence of space and opportunity to develop their creativity.

A previous research established a relationship between indoctrination and education (Ojong & Enyimba, 2013) with indoctrination reported to often used to provide information and knowledge but required to focus more on the character and potential of children. This is due to the fact that children normally become depressed when forced to learn and this will hinder the development of their creativity.

It is important for teachers and parents to always implement indoctrination based on examples (Croce, 2019) to attract attention and aid the understanding of children. This is necessary because children need concrete practice or evidence to develop creativity. Meanwhile, the provision of opportunities is a form of appreciation for children and this motivates them to continue working towards developing and improving their potential. This is the main purpose of education which is designed to ensure humans become humane individuals (Sholehuddin, 2018) and this means indoctrination needs to be balanced with examples during its implementation for children.

The use of play activities such as clapping is one of the foundations to develop the creativity of children due to its ability to enhance their cognition (Fauziddin & Mufarizuddin, 2018) and this can be further used to serve as the trigger point to develop other aspects. Moreover, the cognition of children who have received this "reference" can be easily strengthened through the examples provided by teachers and parents, thereby making it easy to develop creativity.

It is also important for teachers and parents to synergize towards creating collective awareness required to strengthen the development of creativity in children. Moreover, the urgency of education for these children finds its accentuation point in the collectivity between parents and teachers which is required to generally provide the space to continue improving their quality of education (Baharuddin, 2018). This is necessary to ensure the achievement of the milestone required to move to the next level of their education.

The learning process for children needs to focus on the context and dimensions of praxis (Wardi, 2013). This is important because the provision of only theory usually leads to inexperience. Therefore, there is a need for parents and teachers to provide examples in order to satisfy the curiosity of children in building the gap between reality and their experience. This is in line with findings of a previous research that the development of children's creativity is more efficient when it is strengthened by habituation and example (Zafi, 2017). Moreover, example was reported to have a significant role in achieving successful learning (Paramadita, Rifa'i, & Suminar, 2018) and developing creativity. This is due to its ability to motivate children to continue to be enthusiastic about learning and the development of their creative ability.

Teachers and parents need to provide space for dialogue when the practical example provided is not understood by children. This is considered important to develop their creativity even when an indoctrination process is implemented (Tan, 2011). The dialogue or communication also creates openness with their teachers and parents, thereby establishing trust which has a fundamental effect on the development of creativity.

There is a need for simultaneous and continuous efforts towards facilitating the high curiosity of children in order to ensure they do not become apathetic and inferior which can affect the optimal development of their sense of creativity. This means the implementation of indoctrination needs to involve dialogue, explanation, habituation, and provision of examples (Merry, 2018) to avoid distrust in their parents and teachers.

All the sources and tools associated with learning or education can be used to initiate indoctrination (Mutch, et al., 2018) but the process depends on the packaging abilities of teachers and parents. For example, an illustration can serve as a source of inspiration for children to continue learning and analyzing the things happening around them and this can be further used to develop and improve their creativity.

Indoctrination is also influenced by government policies (Diwana & Vartanova, 2020) as observed with the emphasis on the urgency of democratic education, religious moderation, or even subversion. This means parents and teachers need to work in line with these policies in selecting the appropriate indoctrination strategy that focuses on positive examples and habituation towards developing children's creativity. They also need to coordinate the response to the policies either through parenting activities or home visits.

Several methods can be used to develop creativity such as the synergy between teachers and parents as well as indoctrination with explanation and example. This is necessary because the implementation of indoctrination without good explanation, habituation, and example has the ability to create a pattern of brainwashing learning which can subsequently lead to one-way thinking and the willingness not to accept other people's opinions for children. This is further related to the characters of brainwashed bombers (Destiny, 2020). The interviews conducted with several parents in the nine schools studied in this research showed that none of them want their children to have one-way thinking, anti-criticism, closed-mindedness, or unstable emotions.

The collaboration of parents and teachers in the process of developing children's creativity is a very decisive factor. This is necessary because the explanations provided usually require children to analyze and this often aids their critical thinking ability and further provides an interesting impression (Hadley & Young, 2018) for them in the learning process. It is also pertinent to reiterate that children usually try to interpret surrounding events and this is a foothold in developing their creative ability.

It has been discovered that the involvement of parents in the education process has a significant influence on children's learning ability (Yulianti, Denessen, & Droop, 2019) and also assists teachers. This is observed from the fact that teachers only need to provide directions and brief explanations to parents on the activities to be conducted. This applies in their respective homes through active collaboration such that parents only need to reinforce the efforts of teachers when students are in their comfort zones.

Parents and teachers who are previously accustomed to or conducted indoctrination and children who already felt intimidated by this process need to participate in mentoring or project-based learning to "neutralize" the indoctrination (Khuana & Khuanai, 2017). This strategy can be used to develop the creativity of these children with feelings of pleasure and enthusiasm. Project-based learning is interesting because it places trust in children and allows them to develop their thoughts and imagination freely to ensure optimal enhancement of their creativity.

Indoctrination paralyzes the thinking ability of children (Tan, 2004) and makes them accept anything without reflection. Therefore, the use of examples strengthened by habituation, explanation, and mentoring is expected to serve as the reference material for children. Moreover, there can be stagnation or ineffectiveness in the efforts of teachers and parents to develop the creativity of children due to the limited space allowed by the indoctrination for exploration and freedom of thought (Merry, 2005). This means there is a need to determine the best method to ensure effective and maximal results which can be achieved through cooperation, collaboration, and synergy between teachers and parents.

A previous research also showed that indoctrination makes children behave such animals (Schillo, 1997) because it forces them to accept things without reasoning or asking questions. Meanwhile, developing creativity requires having the opportunity to change, elaborate, and understand certain concepts. It is important to note that it is difficult for children to develop when they are pressured or not allowed and trusted to be creative. This is the reason restricted children are usually introverts and not always motivated to develop.

It has also been reported that the display of relevant habits and provision of examples can be used in relating theory with experience and this is very important to the education process (Carr & Thésée, 2017). This is

associated with the ability of this strategy to provide practical experience to children instead of imagining the concepts related to the theories being taught and this further aids the development of their creativity.

The fundamental responsibility of parents is to ensure that the mental development of children is not disturbed (Tan, 2004) and this is the reason they need to be notified about the events or lessons learned by their children at school. This simply means that there is a need for cooperation between teachers and parents to ensure a smooth learning process and avoid mental disturbance and shock for children.

1.2. Evidence and Facts Supporting Research

Children were discovered not to be provided with the space and opportunity to develop their creativity by teachers during the first 2 months of analysis, interviews, and observations and this made them depressed and uncomfortable during the learning process. The same trend was observed at home with their parents discovered to be less responsive, thereby making children feel unappreciated. Moreover, teachers and parents often give instructions reinforced with demands and threats, and this makes children to be intimidated and sad despite their potential to be effective under an appropriate learning and mentoring pattern.

This kind of indoctrination has been reported to be occurring in several places with complex patterns (Taylor, 2016) with the most prevalent discovered to be the use of one-way information. Another method observed involves limiting the opportunity to ask questions or not explain learning materials in detail. This means indoctrination limits the ability of children to develop, specifically in relation to the aspect of creativity and this needs to be stopped through the implementation of appropriate methods of imparting knowledge.

It is important to note that it is difficult to avoid indoctrination but this does not be the reason for its discontinuation (Habl, 2017) in conveying knowledge and developing creativity. There is a need for teachers and parents to establish an open, trusting, and synergistic relationship to remove the depression and burden from children and assist them in becoming more confident and eager to learn and work.

The purpose of education is to ensure the continuous improvement of children and this means they need to be provided with the opportunity and trust required to continue developing their potential. This can be achieved through the implementation of indoctrination with explanation. A previous research explained indoctrination has the method often used in the military world which does not provide much space for the elaboration of information (Juan, Haass & Pierskalla, 2021). The method is certainly inappropriate to be applied in the education process, specifically for early childhood, and this means children should be given maximum space to continue learning as well as to become independent, confident, and willing to work. This is necessary because children are able to develop their creative abilities when they are given the opportunity.

1.3. Theoretical Framework

A developmental ecology approach from Urie Bronfenbrenner was applied in this research. The main argument is that children learn several things from their environment including the school, home, and places where they interact with their peers. According to Bronfenbrenner, children's development is influenced by microsystem, mesosystem, ecosystem, macrosystem, and chronosystem (Bronfenbrenner, 1979). The microsystem in this developmental ecology is a place where children live which includes the family (parents), school (teachers), peers, and play environment. The mesosystem is the relationship between several microsystems such as parents and teachers with the religious institutions in their environment. Meanwhile, the ecosystem is the involvement of experiences in the framework of environmental subsystems that do not have direct involvement but provide influence such as government policies. The macrosystem is a culture as well as a behavioral system that applies in society which is expected to influence the mindset and attitude of parents, teachers, and society with automatic effect on children, specifically in relation to their creativity. Furthermore, the chronosystem is a derivative of the macrosystem because it relates to the underlying structure, social developments, and other ongoing circumstances or events.

All these structures are interrelated in the process of early childhood development. For example, the family environment plays a role in the process of making children read and analyze events around them (Bronfenbrenner, 1986). The environment supports the pattern and development of children's creativity in line with the patterns formed by the environmental subsystem. One of the most important things in this ecological theory is that the assessment of children's development and creativity from any subsystem should be children-centered (Salsabila, 2018) and this means the focus of all learning activities is expected to be on children. Moreover, a friendly environment is defined as an environment that is inviting, comfortable, healthy, safe, supportive, challenging, and full of appreciation (Morisson, 2012).

The development of children's creativity is influenced by the environment, impulses, suggestions, social interactions, and stages of age. This means all these elements need to be considered in increasing and enhancing the creativity of children in early childhood. This can be achieved through certain programs or efforts with the family observed to have a primary role in the character and habit education of these children while the schools are the second educational environment (Teodorescu, 2008). However, the major problem is that all these efforts or programs are indoctrinating in nature and have the ability to cause confusion in early childhood experience when they are conducted without control. This is mainly due to the fact that indoctrination is associated with the influence and control of the mind and this limits the ability of children to develop their potential and creativity (Tan, 2011).

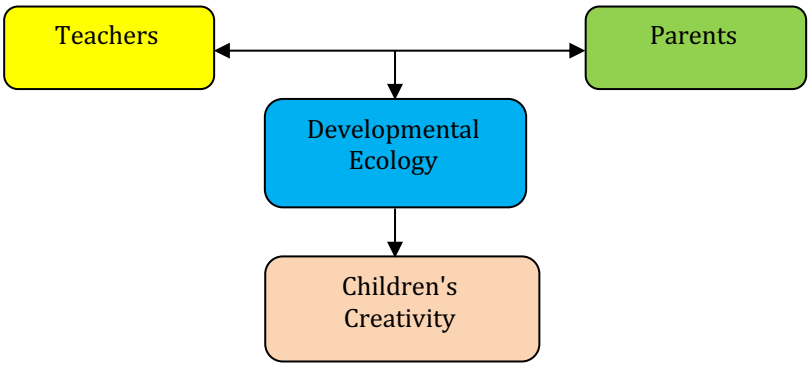

Figure 1: Theoretical Framework for the Development of Children's Creativity

1.4. Research Questions

The following research questions were developed based on the facts and dynamics:
a) What kind of creativity was developed?
b) What is the relationship between indoctrination and children's creativity?
c) What is the role of teachers and parents in children's creativity?

2. Method

2.1. Research Subjects and Their Characteristics

A total of 118 children, 26 teachers, and 80 parents were used as samples and they were interrelated using open and mutually reinforcing interactions.

2.2. Research Instruments

The instruments used include interviews and direct observation technically conducted independently and in groups.

2.3. Data Analysis

Data were analyzed through data reduction and display followed by conclusion and verification.

3. Result

3.1. Creativity Developed

The creativity observed to be developed by children in Semarang includes (1) *meronce* (arranging things using a piece of string) with the specified model, (2) making shapes with plasticine, and (3) coloring pictures.

3.2. Children's Response to the Indoctrination Provided

Children did not like all the activities provided both at school and home due to the attitudes of teachers and parents which involved providing directions without communicating with children first. This is indicated by the fact that only 12 out of 118 children were enthusiastic and only 2 of the 3 activities were conducted.

The experiences of children are in line with Bronfrenbenner's statements on microsystem, mesosystem, ecosystem, macrosystem, and chronosystem and this means teachers and parents need to observe the tendencies and characteristics of children while giving directions.

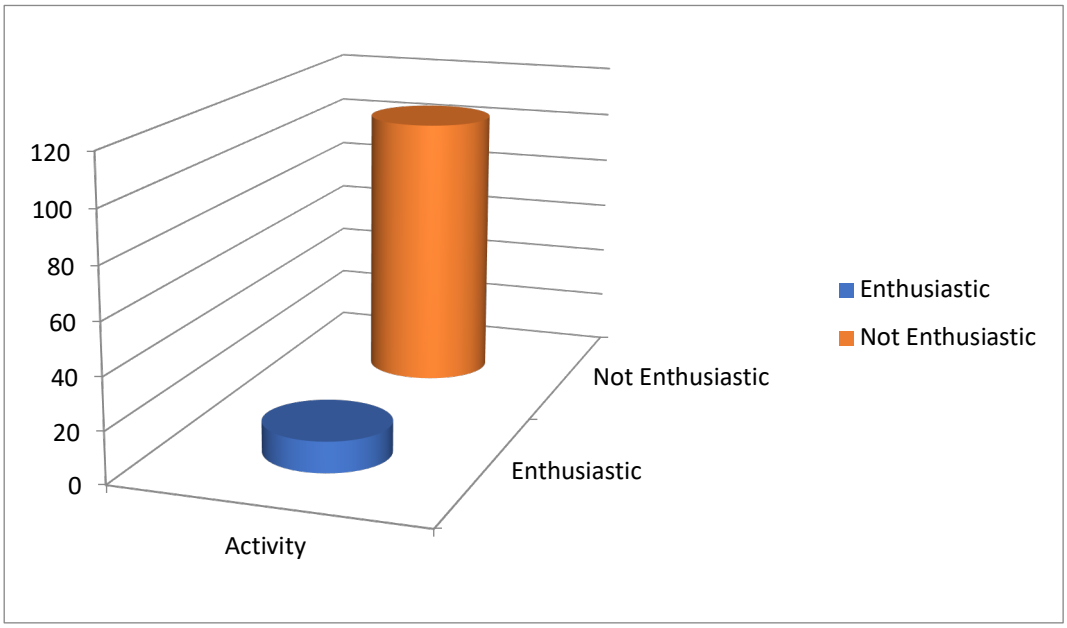

Figure 2: Graph of Activities Participated by Children

3.3. Collaboration between Teachers and Parents to Reinforce the Learning Process

The reduction in children's enthusiasm to participate in the learning process made 26 teachers and 80 parents coordinate and form a large group and they discovered that the source of the problem was the implementation of indoctrination in one direction. Therefore, they started illustrating the activities and divided the class into 3 groups according to the being creativity developed.

The first, second, and third groups consisted of 35, 35, and 36 teachers and parents, respectively, following children to perform the learning activities provided. They also communicated with children with full intimacy and in a relaxed mood and provided mutual support directly witnessed by children. This open communication and beautiful collaboration made children believe they were fully supported by their teachers and parents and this made them feel comfortable.

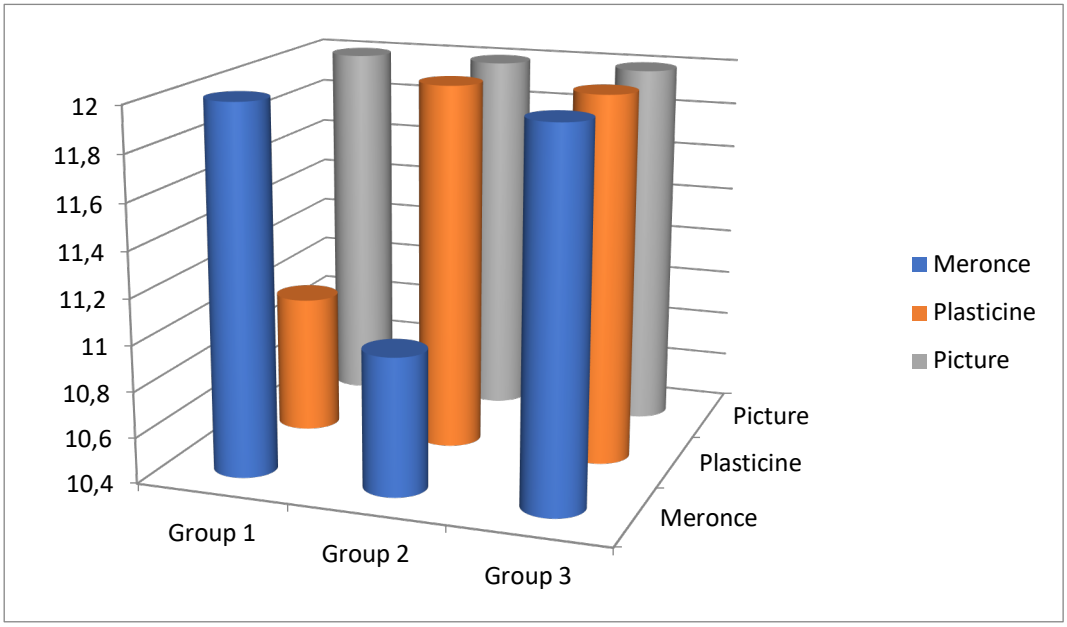

Figure 3: Groups Consisting of Teachers and Parents

3.4. Increasing children's creativity through example-based indoctrination

The findings showed that all 118 children were able to complete the activities with good results after teachers and parents collaborated to direct, mentor, and provide examples for them. Another incredible observation was that 110 children told their teachers and parents they have the ability to perform other activities such as the arrangement of decorations, putting puzzles together, and making simple shapes from blocks. The enthusiasm was observed both in the school and home and this is the first step in developing children's creativity through these activities.

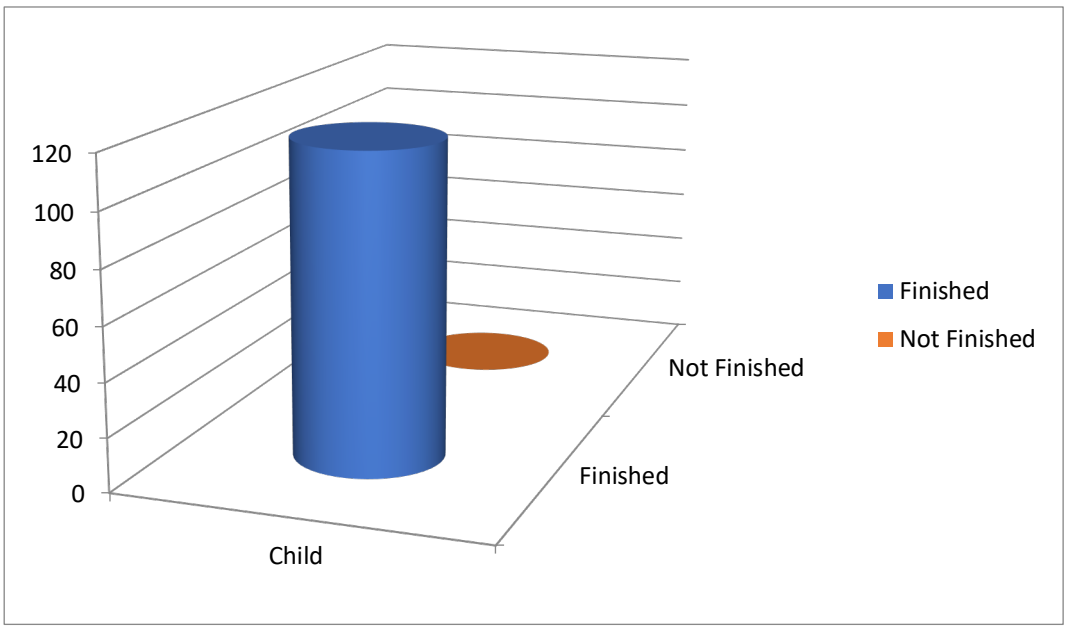

Figure 4: Increasing Children's Creativity in Performing Activities

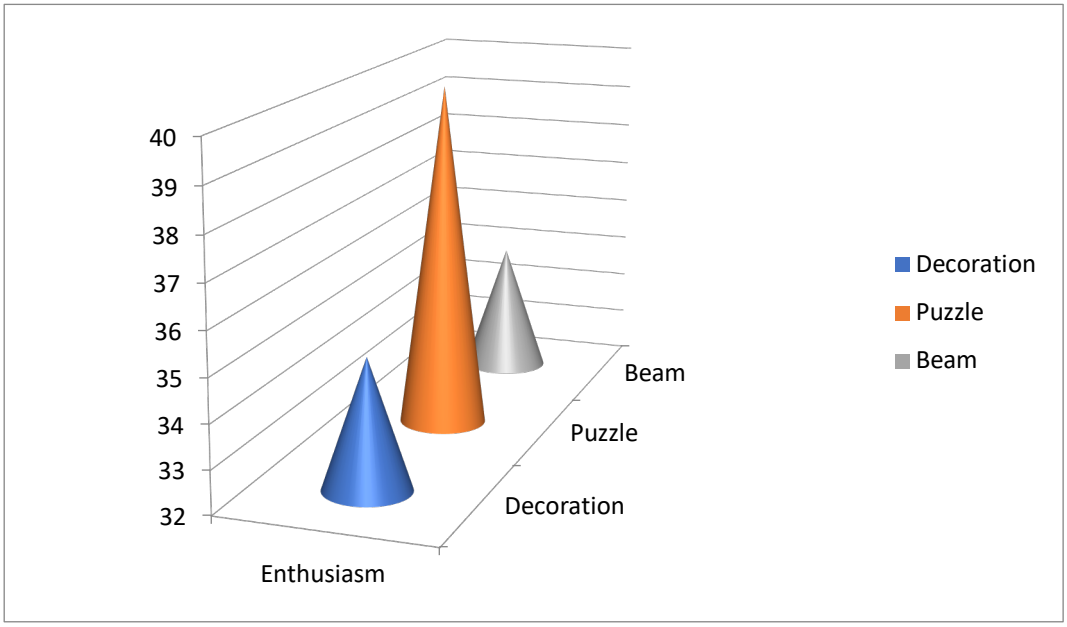

Figure 5: Children's Enthusiasm to Perform Other Activities

4. Discussion

The good interactions between parents and teachers were observed to have provided benefits to children in developing their creativity. This was indicated by the emotional presence in the form of the quality, open, and communicative interactions made with children (Burchinal, 2010). The effort to set an example also made the indoctrination to be fun and attractive to students. Moreover, it is important to give children assignments according to their character and potential in order to make the indoctrination more improved and interesting as well as to develop their creativity.

Children also need to be given the autonomy to perform things in their way (Frick, 2020) with teachers and parents providing assistance and guidance to effectively maintain their potential and create a foundation to make them creative. This is necessary because the provision of assistance was observed to have led to a positive attitude towards children and this is very important to their development (Utami, 2021). It is important to note that negative attitudes towards children such as not appreciating their efforts can limit their creativity.

The attitudes of parents also have an impact on the development of their children (Hoicka, 2016). The anger in parents can be imitated by children through the reflection of temperamental attitudes and the laziness in a parent can also be exhibited in children as indicated by their willingness to be served without any effort from them. Moreover, laziness at home has the ability to make children dependent on others and develop a habit of blaming others. The same trend also applies to teachers such that when they only order their students to do several things without providing an example and direct practice, resulting students have a high tendency to become lazy at completing such tasks.

The quality of teachers and parents and the relationships they build with children have a significant impact on children's development (Hernandez, 2017). This is due to the fact that children become more serious, intense, and focused attention when they have a good relationship with the trainers and this is manifested in their openness and responsiveness which are required in developing creativity.

The programs and activities designed also need to be directed towards allowing children to have the spirit and willingness to be creative and work according to their potential and character. Moreover, parents and teachers need to collaborate (Weiland, 2018) to ensure there is "learning" assistance at home using the same or similar models and strategies used by teachers at school. This collaboration can strengthen children's perception that everyone has the capacity to perform a task as indicated by the actions of their teachers and parents.

Children provided with opportunity and trust usually have the ability to continue making efforts towards learning and developing their creativity (Lea, 2014). The trust provides additional energy and this normally leads to extraordinary performance with teachers and parents required to only provide direction and assistance.

Teachers interested in the development of children's creativity are expected to make efforts towards strengthening the appropriate policies and this can be implemented through a collaboration with parents in order to ensure the same frequency in educating and assisting children. This is necessary because it has been reported that policies concerning learning patterns and systems normally influence learning activities (Vitiello, 2019) and this can be further enhanced through the attitude and professionalism of teachers and the quality of parents. Moreover, the ignorance of parents concerning the substance of the policies does not justify forcing children to develop particular creativity (Walker, 2011) because coercion usually leads to depression.

An environment prepared for learning needs to focus on ensuring the safety and comfort of children in order to ensure they are motivated to continue learning and developing their creativity. This is due to the fact that a comfortable environment is directly or indirectly a form of appreciation and support for children which motivates them to become creative in earnest. This is in line with previous findings that motivation and support normally aid the continuous development of quality (Wang, 2021) in creativity and other abilities such as mathematics, language, art, or social skills. Therefore, support from parents and teachers is very important for the continuous development of creativity for children.

The activities prepared by teachers and strengthened through a conducive environment increase the eagerness of children to learn. This means the implementation of indoctrination with role-playing activities balanced with supportive environmental conditions as well as the enjoyable and comfortable emotional conditions of other children can improve the process of extracting messages or lessons from these activities. This agrees with the opinion of White (2021) that children learn to understand and develop their knowledge when they are engaged in role-play (White, 2021). The explanations provided by teachers on the "role" played by children is only an addition because they are and have learned through these activities.

The consistent application of indoctrination combined with example, habituation, and sincerity serves as the foundation for children to learn several lessons from what they see, hear, and feel. The beauty of everything encountered becomes an additional reference in developing creativity. Moreover, role-playing activities allow children to be free and allow the role selected to be embedded in the course of their lives. This is observed to be supported by previous findings that consistent learning provides reinforcement for children to continue learning and working (Wijns, 2021) and this makes them happy and excited to be themselves as well as to develop their creativity.

5. Conclusion

Indoctrination has an adverse effect on the development and growth of children by making them stiff, depressed, and uncomfortable. However, it has the ability to motivate children towards developing their creativity when combined with good examples and supported by the collaboration between teachers and parents. This is necessary because teachers and parents are the closest parties to children and the positive impulses received interacting with them are expected to provide a strong basis and foothold in developing their creativity.

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Examination of Information and Communication Technologies Competencies of Teacher Candidates Studying at the Faculty of Sport Sciences

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Abstract
The aim of this study is to examine, in terms of some variables, the "Information and Communication Technology Competencies" regarding physical education teacher candidates studying in the Faculties of Sport Sciences, and to identify the problems for adapting themselves to the developing technologies and to present solutions in this age where information and communication technologies are changing rapidly, epigenetics, robots, cyborgs, nano technologies, metaverse, and virtual reality platforms are mentioned. A total of 432 male (n=206) and female (n=226) teacher candidates aged 12-18 participated in the research voluntarily. To collect data in the research, the "Information and Communication Technology Competencies Scale" which is adapted into Turkish by Gökçearslan et al. (2019) was used. Descriptive statistics were made for demographic variables in the analysis of the research data. The data acquired from the scale were analyzed using the IBM SPSS Statistics 26 program. When the scale scores were examined, there was no significant difference between male and female students in the dimension of using information and communication technologies for instructional design ($p>0.05$) in accordance with the gender variable of physical education teachers, whereas a difference was found in favor of girls ($X=3.34$) in the dimension of information and communication technology competency ($p<0.05$). Significant differences were detected between the sub-dimensions of the scale according to the teacher candidates' grades and the departments they studied ($p<0.05$). A difference in the information and communication technologies competency dimension was found in favor of the senior year Physical Education Teaching candidates. A significant difference was found in favor of those who have a personal computer ($x=3.41$) in accordance with the variable of owning a personal computer in the dimension of self-efficacy to use communication technologies for instructional design ($x=3.46$) and Information and Communication competencies. In line with that, it can be said that the variables of having a personal computer and gender of sports teacher candidates' are factors that affect ICT competencies, and the variable of having a personal computer is a factor that affects the self-efficacy of using Information technologies for instructional design.

Keywords: Teacher Candidate, Information and Communication Technology, Competence, Technology, Artificial Intelligence, Humanoid

1. Introduction

1.1 Introduce the Problem

Technologies that have an active role in accessing information are also used for communication purposes between individuals. Therefore, information technology and communication technology have been started to be used together and the concept of information and communication technologies, in short, the ICT has emerged. ICT can be defined as electronic resources and services such as computers, telecommunications, the internet, etc., used to transmit, process, create, disseminate, share, store and manage information (Jankowska, 2004).

Information technology, which is seen as a set of tools that enable the creation and dissemination of information, is increasing its effectiveness gradually and the use of these systems in different fields is becoming widespread. Computers and similar technologies that enable individuals to communicate with each other and enable both individual and mass communication, have, at every stage of social life, become the key elements of communication, especially for educators and students (Sime & Priestley, 2005; Erbas & Gumus, 2020). The reflections of these important developments and changes in the use of technology have been very effective in the field of education (Haznedar, 2012).

It is observed that, in today's age of technology, computers have important effects on people's learning and behavior (Martinovic & Zhang, 2012). Technical developments are progressing rapidly every day in our age, where computers and many other innovations and technologies will begin to take place in our daily lives, and technologies such as epigenetics, robots, artificial intelligence, android cyborg, humanoid, are being talked about. These rapid developments in our age affect all social structures including the education system (Usun, 2000).

Communication and communication tools between people have begun to show a wide variety with the development of humanity and technology (Gonen, 2015). Today, when teachers are seen as the primary change representatives in the education system, it can be said that tablets, computers, or at least mobile phones are among the most commonly owned technological devices. (Cakir Z. et al., 2021; Usluel et al., 2007). Among the main communication tools are computers, the internet, smartphones, and television (Eyidogan, 2009). As a result of the drastic change experienced with the introduction of computers into our lives, the Human-Computer interaction dimension has been added besides the Human-Human interaction. Human-Human interaction in education processes stops being a face-to-face interaction day by day and communication has started to take place effectively with computer platforms and internet technologies. (Cagiltay, 2016). Today, computer technologies and communication are intertwined with each other and have become a whole. Through ICT, by reaching common information in the fastest way, individuals have increased their ability to evaluate, review and correct this information in a short time, to consolidate new information with previous information, to interpret, brainstorm, and solve problems (Akkoyunlu & Kurbanoglu, 2004; Certel et al., 2011; Probert, 2009; Taylor, 2006).

During the covid 19 pandemic, which has been announced on a global scale and has both economic and deadly effects all over the world (Cakir, 2020), all educational institutions have switched to online education. During the online education period, all educators and students had to actively use the internet and information technologies. Besides critical thinking, which is one of the high-level thinking skills that should be found in today's information age people, the use of Internet information technologies and Information and communication technologies competency is important (Certel et al., 2011).

Systems containing education-specific large-scale software have brought radical changes for students and educators. Meanwhile, the related systems are used by people who will fulfill the functions requested from them, they have caused some educators to experience difficulties. Even though the students with smart phones and computers spend most of their time on the internet and social media, they have encountered many problems, especially from the internet while using online education software systems (Ceyhan & Cakir, 2021).
Individuals raised today should be equipped with the skills of reaching information, organizing information, assessing information, presenting information, and communicating, and likewise, the teachers who will educate them should be enabled to gain these skills as well (Akkoyunlu, 1995). Likewise, in order to become an

information society so that they do not fall behind the times, teacher candidates should be able to use information technologies effectively (Eyidoğan, 2009). Besides having a number of competencies like self-confidence, activeness, creative thinking, leadership, courage, and problem-solving skills, teacher candidates should be at the highest level of using information and communication technologies of the age and have the relevant competence (Sahin et al., 2011).

From this point forth on these thoughts and information, determining physical education teacher candidates' ICT competencies and comparing them in terms of branch and gender, daily internet usage time, grade and department variables constitute the aim of this study.

2. Method

2.1 The Aim of The Study

The aim of this study is to examine, in terms of some variables, the "Information and Communication Technology Competencies" for physical education and sports teacher candidates studying in Sports Sciences to detect the problems in adapting themselves to the developing technologies and to present solutions to the problems. On the other side, it is aimed to determine the effects of demographic characteristics like age, gender, grade, and department of teacher candidates on their information and communication technologies competencies.

2.2 Population and Sample of the Research

This study that was carried out for determining the information and communication technology competencies of teacher candidates studying at the undergraduate level in the field of Sports Sciences in the fall semester of the 2021-2022 academic year is in the descriptive research model. The descriptive research model aims to investigate the current situation on a particular subject and set it forth as to how it is. In this framework, the current situation is studied under its own conditions and as to how it is. It requires collecting data for testing the hypotheses about the current state of the studied subject or to find answers to questions. (Yildirim & Simsek, 1999). The sample of the research consists of female and male teacher candidates who are studying in the Faculties of Sport Sciences and voluntarily fill in the online or hardcopy scales according to their accessibility.

2.3 Data Collection Tool

As a data collection tool in the study, the "Information and Communication Technology Competencies Scale" developed for teacher candidates by Tondeur et al. (2017) and “Teacher Candidate Information and Communication Technology Competencies Scale,” which is a 5-point Likert type (1: Strongly Disagree-5: Strongly Agree) adapted into Turkish by Gokcearslan et al. (2019) were used (Gokcearslan et al., 2019; Tondeur et al., 2017). The scale used was used in this study without changing any of the items with the permission of the relevant authors.

The scale consists of a total of 19 items under two factors, with 11 items measuring the “Perception of teacher candidates' self-efficacy to support students' use of information technologies” (BITY-OK), and 8 items measuring the "Perception of self-efficacy in using information technologies in instructional design" (BITY-ÖT).

2.4 Analysis of Data

The data used in this study were collected using the questionnaire method and convenience sampling method. Participants included in the study were informed about the purpose, importance, and method of the research. Volunteer participants were informed that the data acquired would only be used for research purposes. Depending on their availability, the scale was applied to the participants online or in hardcopy. Since it is mandatory to fill in all the items, missing data was not encountered in the data set. All the data obtained were coded in a computer environment into the IBM SPSS 26 program. The scores obtained were scored separately with their sub-dimensions. For determining the assumption of normal distribution of the data, the Kolmogorov-Smirnov test was

used for the analysis of independent variables. The Cronbach Alpha reliability coefficient of the scale is .898 (Büyüköztürk et al., 2011). In case the coefficient is 0.7 or higher, the reliability of the scale is considered good. As a consequence of the results obtained, kurtosis and skewness values were also examined (Kiliç, 2016; Ozdamar, 2010;Buyukozturk, 2011; George & Mallery, 2010). As a result of the analysis, these values were found to be between -1.5 and +1.5. Therefore, it was determined that the assumption of normality was met (Tabachnick & Fidell, 2013). Parametric tests were used for the analysis and interpretation of the data. For this study, official approval was obtained from the Bayburt University Ethics Committee with the letter numbered 28.02.2022-E-51694156-050.99-58956/ 2022/36.

3. Findings

In this part of the study, the results of the analysis of the data obtained from the total scores of the "Teacher Candidate Information and Communication Technology Competence Scale (BITY-OK)" applied to the participants were interpreted in terms of some variables by putting them into tables.

3.1. Definitive Characteristics

Table 1: Frequency and Percentage Distributions of the Descriptive Characteristics of the Research Group

Değişkenler		***F***	**%**
Gender	Male	206	47,7
	Female	226	52,3
Departments	Physical Education Teaching	164	38,0
	Sport Management	142	32,9
	Coaching Education	79	18,3
	Recreation	47	10,9
Grades	1st Grade	64	14,8
	2nd Grade	119	27,5
	3rd Grade	150	34,7
	4th Grade	99	22,9
Do you have computer?	Yes	279	64,6
	No	153	35,4
Daily Internet Usage time?	Less Than 1 Hour	10	2,3
	Between 1-3 Hours	131	30,3
	4-6 Hour	200	46,3
	7 Hours and Above	91	21,1
	Total	**432**	

According to Table 1, 47.7% of the participants are male (n:206) and 52.3% are female (n:226). Participants are teacher candidates with 38.0% (n:164) of them being in the Physical Education Teaching department, 32.6% (n:142) of them being in the Sports Management department, 18.3% (n:79) of them being in the Coaching Education department, 10.9% (n:47) of them being in the Recreation Department. 14.8% of the participants (n:64) are 1st year, 27.5% (n:119) are 2nd year, 34.7% (n:150) are 3rd year, 22.9% (n:99) are 4th year students. 64.6% of the teacher candidates own a computer (n:279) and 35.4% do not (n:153). The daily internet usage frequency of teacher candidates is as follows: 2.3% (n:10) less than 1 hour, 30.3% (n:131) 1-3 hours, 46.3% (n:200) 4-6 hours, 21.1% (n:91) 7 hours or more.

The results of the t-test analysis performed for determining the statistical differences between the demographic characteristics of the sub-dimensions of the Information and Communication Technologies Competence Scale of the Physical Education and Sports Teacher Candidates are given in Table 2.

Table 2: Independent samples t-test results of physical education teacher candidates according to demographic

Variables		**Groups**	**N**	**X**	**ss**	**T-test**		
						t	***sd***	***p***
Teacher Candidate ICT competencies	Gender	Male	206	3,20	.706	-3.192	430	.002
		Female	226	3,34	.555			
	Do you have computer?	Yes	262	3,41	.605	4.456	430	.000*
		No	170	3,14	.604			
***(BİT-ÖT)	Sex	Male	206	3,24	.706	-3.085	430	.626
		Female	226	3,43	.583			
	Do you have computer?	Yes	262	3,46	.582	4.771	430	.000*
		No	172	3,16	.709			

** Significant difference at p<0.05 level*
*** Teacher Candidate ICT competencies*
**** Using Information and Communication Technologies for Instructional Design*

When it is examined whether there is a statistical difference between the sub-dimensions of the information and communication technologies competency scale of physical education and sports teacher candidates according to the gender variable, statistically significant differences were found in favor of women in sub-dimensions of ICT competencies (p<0.05). It can be said that, according to the results of the analysis, the ICT competency scores of women in ICT competency sub-dimension scores (x=3.34) and accordingly the gender variable is a factor affecting the ICT competency of teacher candidates studying in sports sciences. There was no statistically significant difference according to gender in the sub-dimension of using information and communication technologies for instructional design. (p>0.05). (Table 2)

Statistically significant differences were found in favor of the candidates who own a computer in the sub-dimensions of ICT competence and using information and communication technologies for instructional design (p<0.05). According to the results of the analysis, the scores of the candidates who own a computer in the ICT competency sub-dimension scores (x=3.41) have higher arithmetic averages when compared to the candidates who do not own a computer in the ICT-ÖT sub-dimension (x=3.46). In line with that, it can be said that the variable of having a computer of sports teacher candidates‘ is a factor that affects ICT competencies and the self-efficacy of using Information technologies for instructional design (Table 2).

The results of the one-way analysis of variance (ANOVA) carried out to determine whether there is a relationship between Information and Communication Technologies Competencies and the participants' department they study are given in Table 3.

Tablo 3: *ANOVA results of Information and Communication Technologies Competencies Scale Scores by Department of Physical Education Teacher Candidates*

	Departments	**N**	**X**	**Ss**	**Variance Source**	**KT**	**sd**	**KO**	**F**	**p**	**Significance**
Teacher Candidate ICT competencies	Physical Education -1	164	3,54	,480	**Between Groups**	22,267	3	7,422	20.677	.000*	1-2,3,4; 2-4; 3-4
	Sport Management-2	142	3,24	,720	**Within Groups**	153,640	428	,359			
	Coaching Education -3	79	3,25	,671	**Total**	175,907	431				

	Recreation -4	47	2,79	,404							
	Total	432	3,31	638							
**** BİT-ÖT*	Physical Education -1	164	3,72	,365	**Between Groups**	55,239	3	18.413	61.742	.000*	1-2,3,4; 2-4; 3-4
	Sport Management-2	142	3,19	,657	**Within Groups**	127,639	428	.293			
	Coaching Education -3	79	3,28	,670	**Total**	182,878	431				
	Recreation -4	47	2,57	,462							
	Total	432	3,34	,651							

** Significant difference at p<0.05 level*
*** Teacher Candidate ICT competencies*
**** Using Information and Communication Technologies for Instructional Design*

When Table 3 is examined, in the sub-dimension of Information and Communication Technologies Competencies (F=20.677; p<.0.05) and self-efficacy of using information and communication technologies for instructional design of teacher candidates studying in Sports Sciences, it is observed that there is a significant difference according to the departments of the candidates (F=61,742; p<.0.05).

According to the results of the Games-Howel test conducted to determine that the ICT Competencies Sub-dimension of the participant individuals differ according to the departments they are studying, it was detected that the scores of the candidates studying in the Department of Physical Education Teaching (X=3.54) were higher than the scores of the candidates in the departments of Sports Management (X=3.24), Coaching Education (X=3.25) and Recreation (X=2.79). The scores of the candidates in the Sports Management department (X=3.24) and the candidates studying in the coaching department (X=3.24) were determined to be higher than the scores of the candidates in the recreation department (X=3.79) and that the department variable has a positive effect on the ICT competency level.

According to the results of the Games-Howel test conducted to determine that the Self-Efficacy to Use Information and Communication Technologies for Instructional Design Sub-dimension of the participant individuals differ according to the departments they are studying, it was detected that the scores of the candidates studying in the Department of Physical Education Teaching (X=3.72) were higher than the scores of the candidates in the departments of Sports Management (X=3.19), Coaching Education (X=3.28) and Recreation (X=2.57). The scores of the candidates in the Sports Management department (X=3.19) and the candidates studying in the coaching department (X=3.28) were determined to be higher than the scores of the candidates in the recreation department (X=2.57) and that the variable of the department has a positive effect on the Self-Efficacy of Using Information Technologies for Instructional Design.

The results of the one-way analysis of variance (ANOVA) carried out to determine whether there is a relationship between Information and Communication Technologies Competencies and the participants' grade they study are given in Table 4.

Table 4: ANOVA results of Information and Communication Technologies Competencies Scale Scores by Grade variable of Physical Education Teacher Candidates

	Variables	**N**	**X**	**Ss**	**Variance Source**	**KT**	**sd**	**KO**	**F**	**P**	**Significance**
Teacher Candidate ICT	1st Grade	64	3,22	.729	**Between Groups**	5,332	3	1,777	4,46	.004*	4-2,3
	2nd Grade	119	3,21	.831	**Within Groups**	170,575	428	.399			
	3rd Grade	150	3,28	.459	**Total**	175,907	431				

**	4th Grade	99	3,50	.496							
	Total	432	3,31	.638							
BİT-ÖT***	1st Grade	64	3,25	.866	**Between Groups**	7,103	3	2,368	5,765	.001*	4-2,3
	2st Grade	119	3,21	.835	**Within Groups**	175,775	428	.411			
	3rd Grade	150	3,34	.480	**Total**	182,878	431				
	4st Grade	99	3,56	.342							
	Total	432	3,34	.651							

** Significant difference at p<0.05 level*
*** Teacher Candidate ICT competencies*
**** Using Information and Communication Technologies for Instructional Design*

When Table 4 is examined, in the sub-dimension of Information and Communication Technologies Competencies (F=4.46; p<.0.05) and self-efficacy of using information and communication technologies for instructional design of teacher candidates studying in Sports Sciences, it is observed that there is a significant difference according to the grade variable of the candidates (F=5.765; p<.0.05).

According to the results of the Games-Howel test conducted to determine that the ICT Competencies Sub-dimension of the participant individuals differ according to the departments they are studying, it was determined that the scores of the 4th year teacher candidates (X=3.50) were higher than the scores of the 2nd year (X=3.21) and 3rd year (X=3.28) candidates and that the grade variable had a positive effect on the ICT competency level. According to the results of the Games-Howel test conducted to determine that the Self-Efficacy to Use Information and Communication Technologies for Instructional Design Sub-dimension of the participant individuals differ according to the grades they are studying, it was determined that the scores of the 4th year teacher candidates (X=3.56) were higher than the scores of the 2nd year (X=3.21) and 3rd year (X=3.34) candidates and that the grade variable had a positive effect on the self-efficacy to use information technologies for instructional design.

The results of the one-way analysis of variance (ANOVA) carried out to determine whether there is a relationship between Information and Communication Technologies Competencies and the participants' daily internet usage times are given in Table 5.

Table 5: ANOVA results of Information and Communication Technologies Competencies Scale Scores according to Daily Internet Usage time variable of teacher candidates studying in Sports Sciences

	Departments	**N**	**X**	**Ss**	**Variance Source**	**KT**	**sd**	**KO**	**F**	**p**	**Significance**
Teacher Candidate ICT competencies	Less Than 1 Hour (1)	10	3,16	.583	**Betwen Groups**	31,303	3	10.434	30.883	.000*	3-2; 4-2,3;
	Between 1-3 Hours (2)	131	3,05	.661	**Within Groups**	144,605	428	.338			
	Between 4-6 Hours (3)	200	3,40	.401	**Total**	175.907	431				
	7 Hours and Above (4)	91	3,74	.608							
	Total	432	3,31	.638							
*BİT-ÖT****	Less Than 1 Hour (1)	10	3,23	.611	**Betwen Groups**	47.537	3	15.846	50.110	.000*	3-2; 4-1,2,3;
	Between 1-3 Hours (2)	131	3,06	.661	**Within Groups**	135.341	428	.316			
	Between 4-6 Hours (3)	200	3,37	.425	**Total**	182.878	431				
	7 Hours and	91	3,93	.486							

Above (4)			
Total	432	3,34	.651

** Significant difference at p<0.05 level*
*** Teacher Candidate ICT competencies*
**** Using Information and Communication Technologies for Instructional Design*

When Table 5 is examined, in the sub-dimension of Information and Communication Technologies Competencies (F=30.883; p<.0.05) and self-efficacy of using information and communication technologies for instructional design of teacher candidates studying in Sports Sciences, it is observed that there is a significant difference according to the daily internet usage of the candidates (F=50,110; p<.0.05).

According to the results of the Games-Howel test, which was conducted to determine that the ICT Competencies Sub-dimension of the participant individuals differ according to the daily internet usage variable of the physical education teacher candidates, it was determined that the scores of the candidates who use the internet for 7 hours or more (X=3.74) are higher than the scores of the candidates who use the internet for 1-3 Hours (X=3.05) and 4-6 Hours (X=3.40) and that daily internet usage variable has a positive effect on the level of ICT competency.

According to the results of the Games-Howel test, which was conducted to determine that the Self-Efficacy to Use Information and Communication Technologies for Instructional Design Sub-dimension of the participant individuals differ according to the daily internet usage variable of the physical education teacher candidates, it was determined that the scores of the candidates who use the internet for 7 hours or more (X=3.93) are higher than the scores of the candidates who use the internet for 1-3 Hours (X=3.06) and 4-6 Hours (X=3.37) and that daily internet usage variable has a positive effect on the level of Self-Efficacy to Use Information and Communication Technologies for Instructional Design.

4. Discussion and Result

In the research, there was no significant difference between male and female students in the dimension of using information and communication technologies for instructional design in accordance with the gender variable of candidate physical education teachers, whereas a difference was found in favor of girls in the dimension of information and communication technology competency.

Significant differences were detected between the sub-dimensions of the scale according to the Physical Education teacher candidates' grades and the departments they studied. A difference in the information and communication technologies competency dimension was found in favor of the senior year Physical Education Teaching candidates. In order to design a good and quality educational environment, a comprehensive student analysis should be done first (Khan & Joshi, 2006).

A significant difference was found in favor of those who have a computer in accordance with the variable of owning a personal computer in the dimension of self-efficacy to use communication technologies for instructional design and Information and Communication competencies. The ICT competency of the candidates who do not own a computer was not found to be as high as those who own one. This shows that they are not sufficient in this regard. Here, it becomes more meaningful for the candidates who have a computer to have the skills to repeat and use the information they have learned in technology-supported courses. For instance, just as it is important for a surgeon to be familiar with the technological tools used while operating, a computer engineer to use software or an architect to use the software or technological equipment used in drawings, a physical education teacher candidate should be able to prepare technology-containing materials and be able to use technological tools. A well-equipped physical education teacher should also be able to use physical performance measurement devices, sports software, and technological tools effectively.
In the research, it was detected that the candidates' having a daily computer and the excess of internet usage time contributes to the experience of using the computer. The teacher candidate, who has comprehended the instructional methods suitable for the subject content with the support of computers and the internet, and uses these methods together with technology, offers their students a very rich and interactive learning environment. For

developing the computer and information technology skills of teacher candidates, active teachers should have a high level of information communication skills. Teacher candidates who learn to use technological applications and strategies related to sports have the opportunity to increase their knowledge and develop their skills.

When examined in the literature, information and communication technologies have been an important subject that is widely studied by researchers. On the basis of the research, it is observed that both students' and teachers' information and communication technologies self-efficacy and attitudes and computer literacy skills are examined in relation to information and communication technologies. The level of using information technology of teacher candidates and their competency in benefiting from developing technologies have been examined by current research. Information and Communication Technology skills of teacher candidates are one of the factors that affect their students' desire to learn (Bursal & Yigit, 2012; Dincer & Sahinkayasi, 2011; Fatma & Ozdener, 2008; Papastergiou et al., 2011; Tor & Erden, 2004).

As a result, the effective use of technology affects the learning method positively. One of the factors affecting candidate teachers' ICT skills is the experience of computer usage. It appears that they improve their ICT skills by using computers and the internet with the frequency of internet use.

ICT courses should be mandatory in all departments and necessary studies can be carried out to help other courses and ensure their integration in this age where information and communication technologies change rapidly, epigenetics, robots, cyborgs, nano technologies, metaverse, virtual reality exercises are spoken. It is important to measure and assess the ICT skill levels of students, teachers, and prospective teachers from time to time about ICT. Nevertheless, in order for these suggestions to be an important step for successful and effective teachers of the future, it is of great importance that they are converted into practice. ICT competence level can be acquired by applying studies similar to this study to large sample groups in different branches in different universities.

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Influences on Teachers' Use of the Prescribed Language of Instruction: Evidence from Four Language Groups in the Philippines

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Abstract
In 2009 the Philippines introduced a mother tongue-based multilingual education language policy requiring the "mother tongue" as the language of instruction (LOI) in kindergarten through grade 3. Using teacher classroom language data collected from four LOI groups in 2019, we compared the frequency of teachers' use of the target LOI in different contexts, including urban versus rural classrooms, classrooms with relatively homogeneous student language backgrounds versus more heterogeneous classrooms, and classrooms with materials in the target language versus classrooms without. We also examined language usage against characteristics of the teacher populations, including language background, years of experience, training, and beliefs about the best language for initial literacy. The results strongly suggest that the most influential levers for increasing teacher usage of a designated LOI in these contexts are ensuring that teachers are assigned to schools where the LOI matches their own first language and providing teaching and learning materials in the target LOI, especially teacher's guides. These two factors were more strongly and more consistently correlated with teacher use of the LOI than all other variables examined. The linguistic homogeneity of the student population also showed a statistically significant though lower impact on teacher language usage.

Keywords: Language Policy, Language of Instruction, Mother Tongue-Based Multilingual Education, Teacher Practice

1. Introduction

Home to approximately 105 million people and 183 living languages (Eberhard et al., 2019), the Philippines' dense multilingualism is a rich sociocultural asset but presents logistical challenges in the selection of languages for governing. Filipino, derived from the indigenous language Tagalog, is enshrined by the 1987 Constitution as the "national" language and, along with English, as the "official" language for "purposes of communication and instruction" (1987 Constitution, Article 14 [6, 7]). However, for decades, even as Filipino and English were the languages of instruction (LOI) at school, the Philippines Department of Education (DepEd) experimented with

various models of mother tongue-based instruction.[1] The results of these and other international studies (Dutcher, 1995; Baker, 2001; Benson, 2002) have generally supported the use of the learners' "mother tongue," or first home language (L1), as "the most effective way to bridge learning in all subject areas including the development of future languages" (Ocampo et al., 2006, p. v).

In 2009 DepEd issued Order No. 74, "Institutionalizing Mother Tongue-Based Multilingual Education (MTB-MLE)," prescribing the use of the learners' L1 for improving learning outcomes. By the 2014–2015 school year, all public schools were expected to use the learners' L1 as the primary LOI in kindergarten through grade 3, except in classes where Filipino and English are taught as a second and third language (L2 and L3). Schools are to designate which language to use as the school LOI in accordance with a set of guidelines that prioritize maximizing the match between the LOI and the home language spoken by the majority of students. Then, in addition to other supportive measures, schools are to hire teachers who are proficient in teaching in the designated LOI and provide quality teaching and learning materials (TLMs) in this language. DepEd recognizes that local conditions vary considerably from one school to the next. In anticipation, the policy outlines different strategies for different contexts to accomplish the overarching goal of providing each child the opportunity to build a strong academic foundation through the medium of a familiar language.

In this paper, we present the results of secondary analyses conducted on teacher classroom language data collected from four different school-LOI groups located across four regions in the Philippines in 2019. These data highlight commonalities and differences in how MTB-MLE policy implementation interacts with local contextual factors. These insights can be informative to education stakeholders wanting to refine and maximize the effectiveness and uptake of multilingual education policy in their own contexts.

1.1 Literature Review

The Philippines was one of the first countries in Asia to enact an MTB-MLE policy following long-term advocacy and evidence from pilot projects. Since the policy took effect, several studies have been undertaken to monitor its implementation and effects. For example, Alberto, Gabinete, and Rañola's (2016) study of Hiligaynon teachers; Medilo, Jr.'s (2016) study of Southern Leyte teachers; Aliñab, Prudente, and Aguja's (2018) study of grade 3 mathematics teachers; and De Los Reyes' (2018) study of grade 3 English as a second language classrooms, among others, have all lent evidence that using the students' first language as the LOI is beneficial for both teachers and students.

However, policy implementation has not been without its challenges. Across multiple studies teachers have reported difficulty with teaching language skills such as speaking, listening, reading, writing, grammar, and vocabulary (Alberto et al,, 2016; Aliñab et al., 2018; Medilo, Jr., 2016; Metila et al., 2016). In some instances, the teachers were not themselves fluent speakers of the school LOI, or spoke a different dialect of it, or lacked training to use it for instruction (Alberto et al., 2016; Lartec et al., 2014). Furthermore, many studies from different language contexts in the Philippines have highlighted the lack of quality TLMs in the LOI (Alberto et al,, 2016; Lartec et al., 2014; Medilo, Jr., 2016; Estremera, 2017; Eslit, 2017). Schools in linguistically diverse contexts face an even greater number of challenges, beginning with the selection of the LOI.

Teachers' attitudes and beliefs also influence their implementation of policy. In Burton's (2013) study, teachers reported both satisfaction with students' increased understanding when learning in their L1 as well as worries about delaying students' learning in English. Burton noted that teachers "overtly supported the policy in terms of complying with the requirements, yet covert resistance was observed in their words and actions" (Burton, 2013, p. v). Medilo, Jr. (2016) found that while teachers in Southern Leyte perceived that the policy made them more globally competitive, they still considered "English as a preferred language and symbol of intellectual and

[1] For example, these include the First Iloilo Experiment (1948–1954), the Cebu Experiment (pre-1960s), the Antique Experiment (1952), the First Rizal Experiment (1953–1959), another Rizal experiment (1960–1966), the First Language Component Bridging Program Pilot Project in Ifugao (1986–1993), the Lubuagan Multilingual Education Program (1998–), the Lingua Franca Project (1999–2001), the Culture-Responsive Curriculum for Indigenous People–Third Elementary Education Project (2003–2007), the Double Exposure in Mathematics Initiative of Region IV-B (2004–2007), and others.

material superiority" (p. 72). Parba's (2018) study of teacher attitudes also revealed that teachers were initially antagonistic toward the policy, but that their attitude gradually shifted as they realized the learning benefits of L1 instruction. However, Parba notes that the English-only ideology "has continued to challenge the legitimacy and value of MTB-MLE" (p. 27).

1.2 Theoretical Framework

This study is framed using Spolsky's (2007) theory of language policy. Language usage entails a continuous series of choices about which language variety (i.e., language, dialect, register, style, etc.) to use at any given moment. Spolsky's theory seeks "to account for the regular choices made by individual speakers" (p. 1) through three inter-related components: language practices, language beliefs (or ideology), and language management. *Language practices* are "the observable behaviors and choices—what people actually do" (p. 2), which are constrained first and foremost by language proficiency; that is, speakers can only use the language varieties found in their linguistic repertoires. *Language beliefs or ideology* include the value assigned to one language variety over another, as well as beliefs about how children learn language, which languages children should learn and learn in, and what age they should transition from one language to another, among other things. Language ideology also encompasses whether one considers multilingualism an asset or a de-stabilizing force in society, whether one prioritizes individual differentiation or group unity, and how one anticipates the consequences for conforming to versus diverging from an official language policy. *Language management* refers to an authority's ability to mandate language usage. Such management will interact with pressures from the other two components, and conflicts among the different levels of management are common (p. 8).

In this study, Spolsky's management component is represented most saliently by the national MTB-MLE policy, though it also includes other social and political forces, as well as leadership at different levels in the education system.[2] While the Philippines education system is highly centralized with a top-down management of policy decisions, implementation is context-sensitive. Teachers vary in their proficiency, experience, training, and beliefs. Schools vary in the availability of material resources for teaching and learning in the chosen LOI. Communities vary in their linguistic heterogeneity. Spolsky recognized that the school domain comprises especially complex interactions among a number of different actors (e.g., teachers, students, administrators, parents), each bringing with them their own set of proficiencies, ideologies, and relationships to the management. Nonetheless, in the classroom behind closed doors, it is the teachers who are the "final arbiters of [education] language policy implementation" (Menken, 2008, p. 5), wielding the power of choice in their classroom language usage on a daily basis. This study focuses on how teachers' classroom language practice is influenced and constrained by their own proficiency and material resources, as well as by the language ideology and language management in their context

In addition, we examine the teachers' practice through the lenses of *appropriation* and *satisficing*. Spolsky was generally pessimistic about the ability of language policy management to successfully impose its desired implementation and achieve its intended results. According to Johnson & and Johnson (2014):

> Once a policy has been created and put into motion, it is open to diverse interpretations …. [H]ow a policy is appropriated may or may not reflect the macro-level intent. This view emphasizes how individuals exert agency to shape policy decisions to particular contextual demands. (p. 223)

Some theorists trace the disconnect between policy and practice to the concept of satisficing, where actors make the best decisions they can in an environment characterized by limited knowledge and control (Hoy et al., 2013; Ralaingita & du Plessis, 2019). In reality, those charged with implementing a given policy on the ground rarely operate under optimal conditions. Rather than casting the teachers as "good" or "bad" implementers of the MTB-MLE policy, we both recognize their agency in interpreting and executing the policy and presume that their

[2] Some of the schools in the sample were located in what is now the BARMM, which was ratified in January-February 2019, just as data collection was taking place. The establishment of the BARMM paved the way for more education authority to be devolved from the national government, and language policy may eventually shift in this region. However, at the time of data collection, and as of this writing, the national MTB-MLE policy was in effect across all the regions in the study.

actions reflect what they deem to be the best course of action within the possibilities and constraints of their own circumstances.

1.3 Research Questions

This study sought to answer the following questions:

1. How did the language policy conditions and implementation in these four language group contexts differ on average?
2. Which factors within each language group, and overall, influenced the frequency of teacher usage of the school LOI in class?
3. What does the teachers' language usage in each of their contexts reveal about how they were appropriating the MTB-MLE policy and satisficing in their implementation of it?

2. Materials and Methods

The data for this analysis come from a larger study conducted in 2019 under the U.S. Agency for International Development- (USAID-) funded All Children Reading–Philippines project. The section below summarizes the original sample and data collection methodology, but readers are advised to refer to the full report for details (Harden et al., 2020).

2.1 Sample

The original study was conducted across four regions: the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), Region IX, Region X, and Region XII. The sample comprised a total of 160 schools, 40 with each of four languages–Bahasa Sug, Chavacano, Magindanawn, or Mëranaw[3]–as the designated LOI. These language groups were chosen to provide implementation data from diverse contexts to inform an upcoming curriculum review by DepEd as well as to identify areas for potential donor support. In each school, one classroom per grade from kindergarten through grade 3 was observed, and in each classroom, five different 30-minute lesson periods were observed (mother tongue, Filipino, English, mathematics, and social studies or science). For this analysis we excluded the Filipino and English lessons where the school LOI was not expected to be used, leaving a total of 2,142 lesson observations. Additionally, one teacher per class was interviewed, for a total of 638 teacher interviews.

As described in detail in Harden et al. (2020), the sample methodology followed a three-stage random sample of schools, classrooms, and students. Schools were first separated by language group. Schools were then sorted by region, division, and combined grade 2 and grade 3 enrollment. A total of 160 schools were selected (40 for each language group) with probability proportional to the combined grade 2 and 3 enrollment. For each selected school, two replacement schools were automatically selected in case the originally selected school did not meet the requirements as defined by the population criteria. The replacement schools were selected to best represent the originally selected school with regard to location (region and division) and enrollment. Within each selected school, one classroom for each grade was randomly selected with equal probability.

2.2 Instruments

Data were collected using the following instruments:

1. A *classroom observation protocol,* in which a trained observer recorded which language the teacher was using every 2 minutes for each 30-minute lesson period.
2. A *classroom inventory* of the materials available in the classroom and the languages they were written in. This instrument also surveyed the students' home languages.

[3] The authors recognize that many alternative language names and spellings exist in the Philippines. Those used here were in use by DepEd at the time of writing and do not reflect any preference by the authors.

3. A *teacher interview,* an orally administered questionnaire on the teacher's background, comfort levels in language usage, and language attitudes and beliefs.

2.3 Training and Data Collection

Sixty-five experienced data collectors were selected by DepEd and trained on the use of the instruments from January 28 through 31, 2019. Data collection took place from February 17 through March 7, 2019, during the fourth quarter of the 2018–2019 school year.

2.4 Model Construction

Following the theoretical framework, five main constructs of language practice and beliefs were identified as constraints on the teachers' language choices in the classroom: the teacher's general language proficiency, the teacher's language proficiency for teaching, the availability of teaching and learning resources in the school LOI, the students' language proficiency, and the teacher's beliefs about the LOI. Variables reflecting each of these categories were identified from the teacher interview and classroom inventory tools. Given that this was secondary analysis on an existing data set, the variables available were constrained by the original study; in particular, items related to teacher beliefs and attitudes were very limited. Correlation analysis was conducted on the variables within the same category to identify which variables should be retained for regression modeling (Table 1). In addition, control variables were included to account for the grade of the classroom and the urban or rural designation of the barangay where the school was located. Finally, linear regression models were constructed using the selected variables for the four language groups overall and for each language group individually. These models and all pre-analyses were weighted using the sample weights derived during sample selection.

Table 1: Variable inclusion in the regression model

	Construct	Variable	Inclusion or Reason for Omission from Model
Practice	Student language proficiency	Percentage of students in classroom whose primary home language matches the LOI	Included
	Teacher general language proficiency	Teacher L1 matches the LOI	Included
		Teacher's most frequent home language matches the LOI	Omitted due to high correlation with teacher L1–LOI match
	Teacher language proficiency for teaching	Teacher comfort using LOI	Included
		Teacher ease speaking the LOI both informally and for teaching	Omitted due to correlation with teacher comfort using LOI
		Teacher ease reading in the LOI	
		Teacher ease writing in the LOI	
		Teaching training to teach literacy in the LOI	Included
		Teacher years of teaching experience using the LOI	Included
	Availability of TLMs	Teacher has teacher's guide in the LOI	Included
		Students have textbook in the LOI	Included
Beliefs	Teacher beliefs about their students' ability in the LOI	Teacher believes that their students can understand them "very well" in the LOI	Included
	Teacher beliefs about the best language for first literacy	Teacher believes that their students should learn to read first in the school LOI	Included

	Construct	Variable	Inclusion or Reason for Omission from Model
	Teacher beliefs about relative importance of the school LOI	Teacher believes that the school LOI was the most important language for their students to know	Omitted due to correlation with teacher belief about language for first literacy
Controls	Additional factors that may influence teacher's use of the mother tongue in the classroom	Urban/rural classification[a]	Included
		Grade	Included

[a] This classification was taken from the Philippines Statistical Authority (2021) based on the barangay where the school was located.

3. Results

3.1 How did the language policy conditions and implementation in these four language group contexts differ on average?

While DepEd sets the language policy at the national level (i.e., Spolsky's management element), practice and beliefs vary considerably by locality. As shown in Table 2, these four language groups present a study in contrasts. As a reminder, the expected practice according to the national policy is that the language selected by the school as the LOI should be used as the primary medium of instruction in all the subject areas except L2 Filipino and L3 English language classes.[4] The data showed that of the four groups, teachers in the Chavacano-LOI schools used their school LOI in class the most frequently—91% of the time (Table 2). Magindanawn-LOI school teachers used the school LOI the least—only 50% of the time—relying heavily on Filipino instead. In comparison, Bahasa Sug- and Mëranaw-LOI teachers both used their respective school LOI 81% of the time.

For contextual differences, the Chavacano- and Bahasa Sug-LOI schools were predominantly urban, while Mëranaw- and Magindanawn-LOI schools were predominantly rural. The linguistic profiles of the students in Chavacano-LOI classrooms were the most heterogeneous, with only 66% of the students reporting Chavacano as their most frequent home language, compared to the most homogeneous Mëranaw-LOI classrooms, where 97% of the students reported the same for Mëranaw. However, urbanicity did not align perfectly with heterogeneity; the Bahasa Sug-LOI school sample, with greater urbanicity, also had higher student linguistic homogeneity in the LOI (88%) than its more rural counterpart in Magindanawn-LOI schools, whose linguistic homogeneity was at only 78%.

The degree of match between the teachers' personal L1 and the school LOI also varied widely, ranging from a high of 97% in the Mëranaw-LOI schools to a low of 56% in the Magindanawn-LOI schools. Teachers' comfort levels in using the LOI for teaching were lower and less variable, but their relative levels generally tracked with the percent of native speakers. Chavacano-LOI teachers had the highest rates of having received training for teaching literacy in the LOI at 58%, compared to a low of only 29% of teachers in Bahasa Sug-LOI schools. Mëranaw-LOI teachers had the most years of experience teaching in the LOI (6.7 years on average), while Magindanawn had the least (3.8).[5]

TLM availability showed the least variability among the groups; it was very low across the board, with no more than 25% of teachers in any group having a teacher's guide in the LOI for the given subject, and no more than 15% of classes having student textbooks in the LOI.

[4] Outside of the L2 Filipino and L3 English subject classes (which were excluded from this analysis), the policy tightly constrains teachers' use of any LOI other than the designated LOI to when "academic language (i.e., terminologies) are in English" (Philippines Department of Education, 2019, p. 127), and this concession applies only to grade 3. The policy guidelines state that "the teacher should consistently use the [school LOI] as the [medium of teaching and learning]; translation is not advisable unless this forms part of the learning objectives and is used as a teaching strategy in bridging" (p. 126).

[5] At the time of data collection, the policy was in its seventh year of national implementation.

As for teacher beliefs, on average only about half of the teachers stated that they agreed with the policy that students should learn to read first in their school's LOI. The Bahasa Sug- and Mëranaw-LOI teachers had the highest rates of agreement, though still at only 60% and 58% respectively, and Magindanawn the lowest at 37% (Table 2).

Table 2: Variability in the variables of interest

Construct	Variable	Chavacano	Bahasa Sug	Mëranaw	Maginda-nawn	Overall
Teacher's use of the school LOI	Mean percentage of class observation timepoints when teacher used the school LOI	91%	81%	81%	50%	72%
Urban/rural classification	Percentage of schools located in an urban area	76%	58%	3%	12%	41%
Students' language proficiency	Mean percentage of students in classroom whose primary home language matched the LOI	66%	88%	97%	78%	84%
Teacher's general language proficiency	Mean percentage of teachers whose L1 matched the LOI	71%	67%	97%	56%	74%
Teacher's language proficiency for teaching	Mean percentage of teachers who felt "very comfortable" using the LOI	52%	44%	60%	43%	50%
	Mean percentage of teachers who had received training to teach literacy in the LOI	58%	29%	36%	31%	41%
	Mean number of teachers' years of teaching experience using the LOI as LOI	4.8 years	4.1 years	6.7 years	3.8 years	5.0 years
TLM availability	Mean percentage of teachers who had a teacher's guide for the subject written in the LOI	25%	24%	18%	20%	22%
	Mean percentage of classes in which students had a textbook for the subject written in the LOI	15%	14%	14%	7%	13%
Teacher's beliefs about the school LOI	Mean percentage of teachers who believed that their students could understand them "very well" in the LOI	39%	46%	63%	47%	48%
	Mean percentage of teachers who believed that their students should learn to read first in the school LOI	51%	60%	58%	37%	52%

3.2 Which factors in each language group, and overall, influenced the frequency of teacher usage of the school-designated LOI in class?

3.2.1 Chavacano

The Chavacano-LOI sample stood out for its high urbanicity (76%) and low linguistic homogeneity in the student population (66%) (Table 2). The majority of Chavacano-LOI schools in this sample were located in the highly urbanized Zamboanga City in Region IX. Zamboanga City is home to at least eight language groups, but for political reasons in 2012 the mayor issued an executive order decreeing the exclusive use of Chavacano as the LOI in the early primary grades regardless of the students' L1, under the reasoning that the use of different LOIs in different schools would be socially divisive (Natividad, 2014). In our theoretical framework, this is a case of local management overriding national management, fueled by differences in language ideology and local politics, and it explains the high student language heterogeneity in the Chavacano-LOI classrooms. Not surprisingly, given this heterogeneity, only 39% of the teachers believed their students could understand them well in Chavacano, the lowest rate of the four groups.

As shown in Table 2, in addition to high urbanicity and low student linguistic homogeneity, Chavacano-LOI teachers had the highest rates of training to teach literacy in the school LOI and the highest rate of TLM provisioning (though still low). For the remaining variables, however, they were close to the overall average of the four groups in the study.

Given some of these contextual characteristics, especially the low linguistic homogeneity, it is perhaps surprising that Chavacano-LOI teachers nonetheless used their school LOI in class more frequently than any other group in the study, 91% of the time, in high conformity to the policy. In the regression model, two variables showed a statistically significant association with these teachers' Chavacano usage: the teacher's personal L1–LOI match and the degree of student linguistic homogeneity (Table 3). Specifically, teachers whose L1 was Chavacano used Chavacano on average for 9% more of the time than did teachers whose L1 was not Chavacano (p=0.005). Also, for every 10 percentage point increase in the number of students with Chavacano as their home language, the teachers used Chavacano on average for just 2% more of the time (p=0.021). While both associations were statistically significant, the results suggest that the Chavacano teachers' own L1 had a much larger influence on their use of Chavacano in the classroom than did the linguistic backgrounds of their students. None of the other variables examined was statistically significant in the Chavacano group.

Table 3: Regression output for Chavacano-LOI teachers' frequency of use of Chavacano in class

Variable		*n*	Beta	*P*-value
Percentage of students present with Chavacano as their most frequent home language		571	0.180	0.021*
Teacher's L1 was Chavacano	No	176	0.000	
	Yes	395	8.980	0.005**
Teacher felt "very comfortable" using Chavacano as LOI	No	275	0.000	
	Yes	296	3.660	0.095
Teacher received training to teach reading in Chavacano	No	226	0.000	
	Yes	345	-0.790	0.766
Teacher's years of experience teaching using Chavacano as LOI		571	-0.470	0.147
Teacher had a teacher's guide for that subject in Chavacano	No	428	0.000	
	Yes	143	2.030	0.162
Students had a textbook for that subject in Chavacano	No	484	0.000	
	Yes	87	-2.410	0.420
Teacher believed that their students could understand them "very well" in Chavacano	No	350	0.000	
	Yes	221	-2.040	0.331
Teacher believed that their students should learn to read first in Chavacano	No	278	0.000	
	Yes	293	3.160	0.147

Variable		*n*	Beta	*P*-value
School was located in rural area	No	442	0.000	
	Yes	129	2.840	0.109
Grade level	Kindergarten (reference)	201	0.000	
	Grade 1	121	-0.620	0.870
	Grade 2	120	-3.940	0.147
	Grade 3	129	2.390	0.511

Note. *=significant at $p<0.05$; **=significant at $p<0.01$.

3.2.2 Bahasa Sug

In contrast to the Chavacano sample, the Bahasa Sug-LOI schools could be characterized as both predominantly urban (58%) and linguistically homogeneous (88%). The schools in the sample were located in multiple provinces and cities in BARMM and Region IX. As shown in Table 2, for most of the teacher variables examined, Bahasa Sug-LOI teachers fell slightly below the average of the four groups. One exception is that they reported the highest rate of personal belief that their students should learn to read first in the school LOI (60%).

In practice, Bahasa Sug-LOI teachers used Bahasa Sug in class 81% of the time. In the regression model, of all variables examined, only one showed a statistically significant association with the teachers' Bahasa Sug usage: the availability of a teacher's guide written in Bahasa Sug (Table 4). That is, teachers with a teacher's guide in Bahasa Sug used the language for 19% more of the time than did teachers without this resource (p=0.000).

Table 4: Regression output for Bahasa Sug-LOI teachers' frequency of use of Bahasa Sug in class

Variable		*n*	Beta	*P*-value
Percentage of students present with Bahasa Sug as their most frequent home language		534	0.010	0.857
Teacher's L1 was Bahasa Sug	No	142	0.000	
	Yes	392	9.170	0.147
Teacher felt "very comfortable" using Bahasa Sug as LOI	No	288	0.000	
	Yes	246	9.260	0.077
Teacher received training to teach reading in Bahasa Sug	No	359	0.000	
	Yes	175	4.220	0.412
Teacher's number of years of experience teaching using Bahasa Sug as LOI		534	0.120	0.805
Teacher had a teacher's guide for that subject in Bahasa Sug	No	413	0.000	
	Yes	121	18.910	0.000***
Students had a textbook for that subject in Bahasa Sug	No	457	0.000	
	Yes	77	4.680	0.437
Teacher believed that their students could understand them "very well" in Bahasa Sug	No	285	0.000	
	Yes	249	6.880	0.191
Teacher believed that their students should learn to read first in Bahasa Sug	No	225	0.000	
	Yes	309	5.290	0.369
School was located in rural area	No	339	0.000	
	Yes	195	-0.960	0.867
Grade level	Kindergarten (reference)	166	0.000	
	Grade 1	121	-4.350	0.423
	Grade 2	121	-0.760	0.904
	Grade 3	126	-1.000	0.868

Note. ***=significant at $p<0.001$.

3.2.3 Mëranaw

Located in the Lanao del Norte province in Region X and Lanao del Sur province in BARMM, the Mëranaw-LOI sample was characterized by extremes in both rurality (97%) and linguistic homogeneity, with 97% of both teachers and students speaking Mëranaw as their L1. These characteristics coincided, not surprisingly, with a relatively high rate of teachers feeling "very comfortable" teaching in Mëranaw and believing that their students could understand them well when they did, as well as believing that Mëranaw should be the first language of literacy for their students (Table 2). Mëranaw-LOI teachers also had the most years of experience teaching in the LOI but were below average in the percent having received training to teach literacy in it. They were the least likely to possess a teacher's guide written in the LOI.

Mëranaw-LOI teachers used Mëranaw in class 81% of the time. Regression analysis showed that their usage was influenced by grade level and the availability of material resources in Mëranaw (Table 5). That is, compared to kindergarten teachers, grade 1 to grade 3 teachers used Mëranaw for 14% to 26% less of the time with each subsequent grade level (p=0.000-0.001). In classrooms equipped with TLMs written in Mëranaw, teachers used Mëranaw for about 14% more of the time than did teachers in classrooms without TLMs (p=0.000). The data also show a relationship between the teacher's Mëranaw usage and the teacher L1–LOI match, as well as with the rurality of the school; however, the sample size of non-Mëranaw L1 teachers and non-rural schools was so small that these relationships should be interpreted with caution.

Table 5: Regression output for Mëranaw-LOI teachers' frequency of use of Mëranaw in class

Variable		*n*	Beta	*P*-value
Percentage of students present with Mëranaw as their most frequent home language		514	-0.090	0.209
Teacher's L1 was Mëranaw	No	15	0.000	0.009**
	Yes	499	21.300	
Teacher felt "very comfortable" using Mëranaw as LOI	No	218	0.000	0.226
	Yes	296	-2.810	
Teacher received training to teach reading in Mëranaw	No	327	0.000	0.226
	Yes	187	4.200	
Teacher's number of years of experience teaching using Mëranaw as LOI		514	-0.360	0.133
Teacher had a teacher's guide for that subject in Mëranaw	No	415	0.000	0.000***
	Yes	99	13.970	
Students had a textbook for that subject in Mëranaw	No	444	0.000	0.000***
	Yes	70	13.430	
Teacher believed that students could understand them "very well" in Mëranaw	No	204	0.000	0.678
	Yes	310	-1.240	
Teacher believed that their students should learn to read first in Mëranaw	No	204	0.000	0.778
	Yes	310	1.180	
School was located in rural area	No	14	0.000	0.004**
	Yes	500	-9.210	
Grade level	Kindergarten (reference)	162	0.000	
	Grade 1	118	-13.500	0.001**
	Grade 2	114	-17.880	0.000***
	Grade 3	120	-26.000	0.001**

Note. **=significant at p<0.01; ***=significant at p<0.001.

3.2.4 Magindanawn

The Magindanawn-LOI sample was characterized by high rurality (88%) and moderate student homogeneity

(78%). The schools in this sample were located in the Maguindanao and Sultan Kudarat provinces in BARMM, and the Cotabato province in Region XII. Compared to the teachers in the other groups, the Magindanawn-LOI teachers reported exceptionally low language proficiency in the LOI; only 56% considered Magindanawn their L1, and only 43% felt "very comfortable" using Magindanawn for teaching. They also had the lowest number of years of experience teaching in the LOI, the second lowest level of training, the lowest support for the LOI as the best language for initial literacy for their students, and the lowest availability of student textbooks in the LOI (Table 2). However, the linguistic homogeneity of the Magindanawn school students, and likewise their teachers' belief in their students' ability to understand them in Magindanawn, were both close to average.

Not surprisingly, given the compounding of conditions not amenable to the use of Magindanawn in class, Magindanawn teachers only used it 50% of the time, far less than their counterparts in the other groups used their respective LOIs. Regression analysis revealed that the L1–LOI match and the availability of a teacher's guide in Magindanawn had a statistically significant relationship with the teachers' usage of Magindanawn (Table 6). Teachers with Magindanawn as their L1 used it for 34% more of the time than did teachers with other L1s (p=0.000). Similarly, teachers who had a teacher's guide in Magindanawn used the language for 24% more of the time than those who did not (p=0.000). Finally, similar to results in the Chavacano group, on average every 10 percentage point increase in the number of L1 Magindanawn students corresponded with a 2% increase in the amount of time the teachers used Magindanawn in class (p=0.039).

Table 6: Regression output for Magindanawn-LOI teachers' frequency of use of Magindanawn in class

Variable		*n*	Beta	*P*-value
Percentage of students present with Magindanawn as their most frequent home language		490	0.180	0.039*
Teacher's L1 was Magindanawn	No	209	0.000	0.000***
	Yes	281	33.640	
Teacher felt "very comfortable" using Magindanawn as LOI	No	268	0.000	0.343
	Yes	222	7.480	
Teacher received training to teach reading in Magindanawn	No	317	0.000	0.595
	Yes	173	-3.170	
Teacher's number of years of experience teaching using Magindanawn as LOI		490	0.300	0.467
Teacher had a teacher's guide for that subject in Magindanawn	No	388	0.000	0.000***
	Yes	102	23.710	
Students had a textbook for that subject in Magindanawn	No	458	0.000	0.168
	Yes	32	11.000	
Teacher believed that their students could understand them "very well" in Magindanawn	No	252	0.000	0.829
	Yes	238	1.290	
Teacher believed that their students should learn to read first in Magindanawn	No	303	0.000	0.846
	Yes	187	1.040	
School was located in rural area	No	77	0.000	0.243
	Yes	413	-6.600	
Grade level	Kindergarten (reference)	133	0.000	
	Grade 1	119	-5.540	0.461
	Grade 2	114	-18.130	0.017*
	Grade 3	124	-12.540	0.116

Note. *=significant at p<0.05; ***=significant at p<0.001.

3.2.5 Overall

Running the same regression model on the aggregated data, and controlling for all of these factors, we observed a statistically significant difference between language groups in the percentage of time teachers used the school

LOI in class (Table 7). That is, compared to teachers in the Bahasa Sug group, teachers in the Chavacano group used their LOI on average for 12% more of the time, and Magindanawn teachers for 22% less. These results suggest the presence of other latent variables not accounted for in this regression model that would further differentiate the language groups. For example, local norms related to language ideology, accountability, or general language practices could also be contributing to these differences in language usage between the language groups in ways that the data were not able to capture.

Despite these differences, some significant influences are apparent in the aggregated model. First, the single largest factor in teachers' language usage in the classroom is the teacher L1–LOI match. On average, across all four language groups, teachers with an L1 that matched their school's LOI used the LOI for 26% more of the time than did teachers without an L1–LOI match (p=0.000). In contrast, the teacher's self-reported comfort level in the LOI showed no association with their usage of it, neither in the overall model nor in any single group.

Second, on average the presence of a teacher's guide written in the LOI was associated with a 16% increase in the teacher's use of the LOI (p=0.000), and student textbooks with an increase of 7% (p=0.007).

Third, for every 10 percentage point increase in the number of students who spoke the school LOI as their most frequent home language, teachers used the LOI on average for 2% more of the time (p=0.002). These results suggest that while the linguistic makeup of the class showed some relationship with the teachers' practices, it was a much weaker influence than the teachers' own L1 and the availability of TLM in the LOI. Moreover, the actual rate of student linguistic homogeneity appeared to be more influential than the teachers' subjective judgments about their students' ability to understand them.

The overall model also showed that teachers generally decreased their use of the LOI in favor of Filipino and English as the students progressed through the grades; that is, grade 1 teachers used it less than kindergarten teachers, and grade 2 and grade 3 teachers less than grade 1.

The following factors did not show any statistically significant relationship to the teachers' language practices in either the overall model or any individual group: the teachers' self-reported comfort level teaching in the LOI, the teachers' belief about their students' ability to understand them in the LOI, whether the teacher had received training to teach literacy in the LOI, the teachers' number of years of experience teaching in the LOI, the teachers' belief about whether their students should learn to read first in the LOI, and (except for Mëranaw) whether the school was in an urban or rural setting.

Table 7: Regression output for teachers' frequency of use of the LOI in class (overall)

Variable		*n*	Beta	*P*-value
Bahasa Sug LOI (reference)		534	0.000	
Chavacano LOI		571	12.380	0.000***
Magindanawn LOI		490	-21.900	0.000***
Mëranaw LOI		514	-5.990	0.108
Percentage of students present with the school LOI as their most frequent home language		2109	0.160	0.002**
Teacher's L1 was the school LOI	No	542	0.000	0.000***
	Yes	1567	25.720	
Teacher felt "very comfortable" using the LOI	No	1049	0.000	0.278
	Yes	1060	2.670	
Teacher received training to teach reading in the LOI	No	1229	0.000	0.659
	Yes	880	1.040	
Teacher's number of years of experience teaching in the LOI		2109	0.030	0.898
Teacher had a teacher's guide for that subject in the LOI	No	1644	0.000	0.000***
	Yes	465	15.620	
Students had a textbook for that subject in the	No	1843	0.000	0.007**

LOI	Yes	266	6.730	
Teacher believed that students could understand them "very well" in the LOI	No	1091	0.000	
	Yes	1018	0.680	0.797
Teacher believed that their students should learn to read first in the school LOI	No	1010	0.000	
	Yes	1099	3.230	0.178
School was located in rural area	No	872	0.000	
	Yes	1237	-3.050	0.251
Grade level	Kindergarten (reference)	662	0.000	
	Grade 1	479	-8.930	0.002**
	Grade 2	469	-14.020	0.000***
	Grade 3	499	-13.300	0.002**

Note. **=significant at $p<0.01$; ***=significant at $p<0.001$.

4. Discussion

What does the teachers' language usage in each of their contexts reveal about how they were appropriating MTB-MLE policy and satisficing in their implementation of it?

The teachers' language practices in these case studies gave evidence for the following.

Language proficiency and, secondarily, TLMs mattered. Spolsky identified language proficiency as the first constraint on language choice; if one does not know a language, one simply cannot use it. The strong association in the data between the teachers' L1–LOI match and their use of the LOI lends evidence to the critical role of teacher language proficiency in LOI policy implementation. We recognize that teachers can be multilingual and speak languages other than their L1 comfortably; they can also be native speakers of a language yet feel underequipped to use it for teaching. It is interesting therefore to note that while the teachers' L1–LOI match had such a significant association with their LOI usage across the board, their self-reported comfort level in the LOI did not. It could be that their L1 status was simply a better indicator of their actual proficiency than was their subjective self-judgment, at least in response to the wording of that particular item on the questionnaire,[6] and/or possibly that their social identification with the LOI ethnolinguistic group encouraged greater appropriation of a policy promoting that language.

In addition, TLM resources serve as an indirect support to language proficiency, providing teachers with the academic language that they need for the specialized domain of school, something that none of the teachers learned in their own experience at school as children, before these languages were used as LOIs.

The Magindanawn-LOI teachers demonstrate this most vividly. They had the lowest usage of the LOI, but also the lowest rate of L1–LOI match, as well as, like everyone else, low TLM provisioning. Low proficiency therefore constrained the teachers' ability to use the LOI even if they wanted to. In the absence of these essential inputs, the Magindanawn teachers showed evidence of satisficing by doing the next best thing, which in their case, meant reverting to the national language, Filipino. Note that while the teacher's L1–LOI match and the availability of a teacher's guide in the LOI were generally influential variables across all the groups, they were the most influential on this group of teachers, whose fundamental ability to implement was much more precarious.

The Mëranaw-LOI teachers also demonstrated the importance of the TLMs. While their use of their LOI in class was relatively high, it could have been even higher (as the Chavacano group demonstrated). Although the teachers were almost all native speakers of the LOI, they may have still lacked ease with the subject-specific

[6] The question was: "How comfortable do you feel teaching using [the school LOI] as the medium of instruction?" to which the teacher chose a response from "Very comfortable," "Somewhat comfortable," "Somewhat uncomfortable," or "Very uncomfortable."

academic terminologies. Unfortunately, they had the lowest rate of possession of a teacher's guide in the LOI, but those who did have a guide used Mëranaw on average for 14% more of the time, and the presence of student textbooks showed a similar association. In contrast to the other groups, Mëranaw teachers were working in conditions generally more conducive to policy implementation (e.g., high teacher L1–LOI match, high student homogeneity, supportive language ideology, etc.), yet even so, the low availability of TLMs acted as a constraint on their classroom practice. When lacking academic resources in the LOI, they may have satisficed by reverting to Filipino or English.

The students' language proficiency mattered too, but much less so than the teachers'. Overall, the greater the percentage of students who spoke the school LOI as their most frequent home language, the more their teachers used the LOI in class. However, the Chavacano example demonstrates the limitations of this association. Local political conditions and language ideology resulted in relatively high student linguistic heterogeneity in the Chavacano-LOI schools. While the data showed that the Chavacano teachers did react somewhat to their students' linguistic backgrounds, the heterogeneity did not prevent them from using Chavacano in high conformity to policy overall, in fact at the highest rate of all the groups. In other words, the Chavacano teachers demonstrated a high rate of appropriation of the Chavacano-LOI policy despite the linguistic heterogeneity of their environment. One takeaway is that the students' linguistic profiles are far from absolute determinants in teachers' ability or willingness to use a given LOI, and, for better or worse, high teacher LOI usage is possible even in linguistically heterogeneous classrooms.

Teachers' language usage was somewhat sensitive to the grade level of the students. In the overall model, teachers generally increased their use of Filipino and English in class as the students progressed through the grades. It may be that as part of the teachers' appropriation of the policy, they see the need to prepare their students for the impending transition to Filipino and English LOI, slated for grade 4. Another possible explanation is that as the subject matters increase in complexity, in the absence of academic resources in the LOI, teachers satisfice by relying more on resources in Filipino and English.

The influence of language ideology on practice was complex. On average only half of the teachers personally agreed with the policy that their students should learn to read first in the LOI. Yet their actual execution of the policy was much higher, and their personal beliefs did not track in any statistically identifiable way with their execution. Even their beliefs about their students' ability to understand them did not appear to hold any significant sway over their own language choices. The data suggested that for the teachers in this study, other beliefs and values not captured in these data were more influential than the ones captured. Other influential beliefs could include a more nuanced view of the pros and cons of teaching in the school LOI than the questionnaire allowed, the teachers' sense of professional duty to adhere to policy, social norms and expectations about what constitutes acceptable classroom practice, and the anticipated consequences associated with conformity versus divergence.

5. Conclusion

These case studies illustrate how teachers working under different conditions implemented LOI policy differently. Despite these differences, some common influences emerge in the data. Teacher language proficiency, and secondarily, material resources in the target language appear to have acted as the foremost influences on teacher language usage. Regardless of context, the better the teachers were equipped in L1 proficiency and/or resources in the LOI, the more they used the LOI. These two factors outweighed all other variables examined in this study, including the students' language backgrounds and the teacher's training, years of experience, and beliefs about the best language for initial literacy. The results of this study suggest that if education stakeholders in these and similar contexts want to increase teacher usage of a designated LOI, the most influential levers at their disposal are ensuring that teachers are assigned to schools where the LOI matches their L1, as well as providing TLMs for each subject written in the target LOI.

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Learning Loss Problems of Students Based on the Teachers and Parents' Perspectives as the *Tri Sentra Pendidikan* Actors During Online Learning

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Abstract
Tri Sentra Pendidikan has faced challenges during the pandemic. Teachers and parents as actors in the *Tri Sentra Pendidikan* or Three Centers of Education were close to the problem of learning loss during the pandemic. The limitations of learning dared to cause teachers and students to experience obstacles in the process of conveying and receiving learning knowledge. Parents could not be fully present in the learning process at home with the complexity of home activities that have changed since the pandemic situation. Qualitative research with a phenomenological approach was conducted on eight informants consisting of four teachers and four parents from various regions in Indonesia. The research results indicated that teachers and parents, and character education, were significant to note because of the link between learning loss and the development of children's character. Teachers and parents must ensure the effective use of technology for learning used by children in addition to the technological mastering skills by current students. It was because children's technological skills could be a solution to minimize learning loss if the practice or used as directed by teachers and parents who were actively paying attention and controlling. Teachers and parents, as actors in the *Tri Sentra Pendidikan,* must know the students' characteristics to determine the right strategy for the development of student education.

Keywords: Learning, Students, *Tri Sentra Pendidikan*, Online Learning

1. Introduction

The development of the COVID-19 pandemic has had a significant effect on the health, economy, and education sectors globally. Based on data from the *Central Bureau of Statistics* (BPS) in 2020, the pandemic has affected the economic condition of the people in Indonesia by 2.07 percent (Badan Pusat Statistik, 2020) Furthermore, other data from the Central Bureau of Statistics (BPS) showed that the open unemployment rate in Indonesia in 2021 in February was recorded to have increased by 06.26 percent. (Badan Pusat Statistik, 2021) The decline in various economic indicators could impact the condition of education in Indonesia during the pandemic.

Problems faced by educational actors ranged from families, teachers, students, and the community. The high unemployment rate and the increasing economic downturn affected the parents' ability to provide learning facilities for their children, especially on the *online* learning system that relied heavily on technology and the internet. If these two components cannot be met, the children's learning process will be disrupted, so their learning achievement is not optimal. It will result in groups in the vulnerable category who have been left behind in the quality of their education due to difficult economic conditions so that children's education will be set aside to pay for their daily lives (Santosa, 2020) Additionally, such conditions can result in students not understanding the material being taught because they cannot follow the learning process optimally.

The challenge faced by students was being in intense competition in the era of demographic bonuses. Another problem faced by teachers and students was that they must adapt to various communication and information technology innovations to achieve educational goals (Yuhastina et al., 2020) It was also inseparable from the parents' busyness at work, so they did not have enough time to monitor their children's learning progress (Sukarman, 2020) In this case, education actors as social system units need to collaborate to minimize various problems that occur during online learning.

Long before the educational situation worsened during the current pandemic, historically, education in Indonesia, in general, has had a *Tri Sentra Pendidikan* or Three Centers of Education approach conveyed by Ki Hajar Dewantara, which was an educational concept which sees that children have a learning environment that can be the center of education and is vital for their development, namely the family environment, school environment, and community environment (Dewantara, 2013) However, the *Tri Sentra Pendidikan* concept encountered challenges during the pandemic. One of the challenges was the implementation of *Community Activity Restrictions* (PPKM) and significant changes in the learning process, which were carried out in offline schools but had to be done online at home.

Various impacts are feared to lead to a situation that could result in a *lost generation* because children cannot study in school and carry out social activities as before. *Lost generation* occurs due to *learning loss* or *loss of learning quality* in implementing the online learning system. It happens because the teachers find it difficult to directly monitor the development of their students in the implementation process, both in cognitive, psychomotor, or character development. Much research revealed that the implementation of online learning was only to abort obligations. One of them was evidenced by the fact that teachers often give excessive assignments without explaining the material concept (Kuncoro, 2020) In addition, there were even students who were not present when distance learning took place because the network did not support it, or it could also be caused by students who felt bored with an ineffective learning system (Hakim & Azis, 2021). Other research has also revealed that all students might not understand the core material delivered online. Students will understand based on their point of view because their understanding is less comprehensive (Asmuni, 2020) It means that it can be said that the lost generation caused by online learning that does not work well will result in learning loss and have a bad effect on student learning development.

Loss of knowledge and skills experience academic setbacks due to differences or prolonged gaps in the educational process. Even though various technologies support online learning, gaps still lead to less effective learning at home (Andriani et al., 2021) As time went by, online learning was considered less effective for most students, which has resulted in *Learning Loss*. Mentoring is needed intensely in various learning ecosystems, in this case, between educational actors.

It means that synergy and cooperation from various parties, especially the *Tri Sentra Pendidikan*, are needed through a good strategy so that the condition of Indonesia's education can quickly improve. Hence, the orientation of superior human resources and advanced Indonesia in 2045 can be achieved. Therefore, based on the various problems that have been presented, this research had a novelty and objective in providing an overview of the student learning loss problems based on the teachers' and parents' perspectives when learning online in Indonesia.

1.1 Theoretical Framework

The psychoanalytic theory approach proposed by Sigmund Freud was considered appropriate to explore the research focus. The psychoanalytic theory developed by Sigmund Freud is a theory that seeks to explain the nature and development of the human personality. This theory emphasizes internal elements such as motivation and emotions that can affect the development of the human personality, namely when conflicts occur from these psychological aspects, which generally occur in children or at an early age (Helaludin & Syahrul, 2019). Like the *learning loss* experienced by students, the problems they experience while carrying out online learning lead to aspects of decreasing learning motivation and increasing emotions in these students.

A decrease in motivation can occur due to a lack of interaction, attention, and direct guidance from both teachers and parents of students. Furthermore, the implementation of psychoanalytic theory in the world of education is divided into six matters relating to the *learning loss* experienced by students due to online learning, including the concept of anxiety, the educational process based on multiple intelligences, the psychoanalytic concept, which states that humans are creatures with basic needs and desires, students' aggressiveness, gaps due to differences of each student's background, as well as the students' creativity. Education in the concept of psychoanalysis refers to all actions taken by adults, experts or non-experts, teachers, and parents to form the students' behavior in their growth period through desired ways (Sukaesih et al., 2022) Through education, a person will compete and motivate him to be the best in all his life aspects.

The educational objectives based on psychoanalytic analysis, among others, provide direction to educators and students about what they want to achieve, actions or activities carried out, and the progress students achieved (Helaludin & Syahrul, 2019). The relationship between psychoanalysis and education is very complex, meaning that psychoanalysis has undergone many developments and enriched the level of behavior in the educational relationship (Conia & Sofiyanti, 2021). It is highly correlated with the *Tri Sentra Pendidikan,* which emphasizes that the education centers for children consist of the family, school, and community environment.

2. Method

The research method was qualitative with a phenomenological approach. Semi-structured interviews were conducted with parents of students from various economic and professional backgrounds, the school through teachers, as members of the community unit to see the complexity of the *learning loss* problem.

The interview questions given focused on the complexity of the experiences of *Tri Sentra Pendidikan* actors in minimizing the occurrence of *learning loss* in students. Primary data obtained by the researcher using a semi-structured interview procedure provided an opportunity for the informants to describe the experiences in depth by always guiding the interview procedure and process (Creswell & Poth, 2016).

The primary informants consisted of four teachers and four parents. The complexity of the different backgrounds of each informant was under the research objective, namely to get perspectives on the *Tri Sentra Pendidikan* actors' experiences in minimizing learning loss. All interviews were recorded based on the informants' consent. Furthermore, the researcher checked the recordings repeatedly to ensure the authenticity of the information or data provided by the informants when transcribing the results of the interviews.

The data analysis technique was narrative analysis which focused on the text that explained the story of the informants about a phenomenon being studied by going through three stages, namely data reduction, data presentation, and conclusion drawing. These stages were done to see the various problems and challenges to overcome *learning loss* based on the teachers' and parents' perspectives so that verified conclusions could be drawn.

The interview excerpts presented in this article represented the various data obtained. Not all of the results were comprehensive. Only interview excerpts were considered critical data. The other data were described in the narrative of the research results and discussion analysis.

3. Results

The results showed that various limitations of online learning caused both teachers and students to experience obstacles in the process of conveying and receiving learning knowledge. The limitations were the quality of the transfer of knowledge process that could not be maximized, causing learning loss in students. The difficulties experienced by some students were believed to be due to boredom, fatigue, internet connection problems, facilities, and various other things that hindered online learning. It made students less active and not enthusiastic about participating in learning practices at home.

Online learning that could not be maximized then presented its challenges for teachers in creating effective learning to achieve learning goals. Online learning with various forms of limitations caused various problems faced by both teachers and students, even parents and schools. The informant said that the obstacles faced caused learning achievement to be not optimal due to obstacles in long-distance communication resulting in teachers not being able to control student activities. Hence, it had implications for students to be lazy to participate in online learning.

Distance learning that could not be maximized caused material delivery not to reach the target. One of the informants, who was also a teacher at a public school in Surakarta City, said that the school, together with homeroom teachers and teachers, has collaborated to deal with this problem by communicating through students' parents and following up by conducting home visits if needed. The informants mentioned that distance learning was convenient for delivering more explicit material. Simplification of learning could be in tasks that did not burden students. There were various perspectives from teachers and parents related to the learning loss problems experienced by high school and junior high school students.

3.1 The Challenge of Strengthening Character Education was Important to Overcome Learning Loss

School closures are carried out in response to the pandemic situation, and the learning process must be carried out online with all the problems in the family environment. It gave the potential for teachers to have difficulty seeing children's development. The vulnerable situation was that the children did not get the maximum attention from the teachers regarding the learning development. It impacts the occurrence of *Learning Loss* initiated by the sparse character education given to children. It was conveyed by one of the teacher informants who taught at a senior high school in Jepara Regency (Interviewee 1):

> *"Learning Loss could happen to anything, especially in character. Due to distance learning, (teachers) could not do character education directly for students. Many obstacles arose during the implementation of study from home or distance learning. Schools sometimes did not know for sure what the actual physical and social conditions of the students were because we (the teacher) met only through tools through technology. We (teachers) did not understand the real situation or condition of the students."* - Interviewee 1.

It should be noted that the potential for *learning loss* did not only occur when children learned independently when *studying from home*, but face-to-face learning has occurred before the pandemic. Limited face-to-face learning with an inappropriate learning strategy approach also caused it. However, the pandemic has exacerbated the *learning loss* experienced in the educational environment. It meant the cooperation of various parties was vital to prepare students to be released from *learning loss* situations.

Schools must immediately identify the circumstances and conditions of learning loss in various learning situations individually and in groups (*face-to-face learning, distance learning, blended learning, etc*.). It must be done considering that students will face an open and dynamic educational competition situation. The following is a statement from a teacher informant who taught in senior high school in Musi Banyuasin Regency (Interviewee 2) and from a senior high school teacher informant in Karanganyar Regency (Interviewee 3):

"*Learning loss occurred in almost all aspects, both cognitive, skill, character, and social. Sure, it was not in all students, but most of the students, for example, for the cognitive and skill aspects, which I said above. About the characters, the students' temperament was not well controlled. About social concerns, there was very little concern, etc*." - Interviewee 2.

"The problem was related to distance learning. Teachers could not control students' activities in learning optimally because distance communication was deep. Not all students were maximal in understanding the material and assignments given by the teacher," -Interviewee 3.

It can be seen that the problem of learning loss was very complex from the experience felt by the informants as teachers. Cognitive problems, skills, character, and even social relationships become a single problem students face when learning online during a pandemic. Communication barriers became one of the obstacles when students tried to follow task instructions or understand the knowledge provided by the teacher.

3.2 Parents' difficulties and solutions in monitoring their children's learning process when learning online

Parents had difficulty giving the leading role as educators in the home environment. Assistance from parents tended to be unaware that students needed their attention, motivation, and support. Concerning cognitive, if the learning ecosystem situation in the home environment has been created well, students could develop positive independent learning. The following are some of the problems and solutions presented by one of the informants from the students' parents from Pekalongan Regency:

"Sometimes, I found it difficult because the understanding of parents and children was different. Therefore, parents should browse google when having trouble understanding children's learning material. It was different when at school. Some teachers explained and understood the material clearly. In addition, parents were also busy with homework and office work so that it was certainly not optimal to master their children's learning materials" -Interviewee 6.

Parents said that the understanding between them and their children was different. In this case, it could represent a tendency for the distance between generations. In addition to the busyness of parents at home due to various work obligations, parents must understand children's learning materials if needed because the presence, participation, and role of parents as children's learning partners when learning was needed to support children's confidence. A student's parent conveyed another thing as the informant who came from Surakarta City:

"Everyone must know about children. They could not focus on learning. They must play a lot. It was also impossible that children only learned, they must play a lot." -Interviewee 8.

One of the parent informants from Surakarta City said that when online learning was carried out, children were easily distracted from their learning focus. It was due to the children's inability to set priorities and the parents' inability to monitor children during learning. Disturbances could occur from various things, such as dependence on access to various information or entertainment contained in smartphones. The following problems were conveyed by one of the students' parents from Sukoharjo Regency:

"If it was online, there was an opportunity to ask a friend. There was difficulty communicating with each other. In school, there was a teacher. So, children must be happy with online learning" -Interviewee 7.

Children will contact colleagues if they find it challenging to learn the material. It proved that there was a tendency that children as independent students when learning online at home still be very dependent on peers when studying online. Home conditions with their respective problems could also be a different obstacle for students. They could cause *Learning Loss*, where students cannot focus on the explanation of the material from the teacher.

The research results also showed a *Learning Loss* process due to problems with internet connections which significantly interfered with students' focus on understanding the learning material, both delivered by the teacher

and other friends during presentations when studying from home. In addition, students could also feel *Learning Loss* due to the lack of interaction and socialization with friends and the intensity of communication with the teacher, which was felt to be very minimal in duration.

4. Discussion

Teachers and parents, as actors in the *Tri Sentra Pendidikan,* must know the characteristics to determine the right strategy for the educational development of students. In this case, the priority of educational attainment must have strengthened in terms of character or attitude in various conditions. The success of a child's learning process does not depend on educational institutions. However, there is also the effect of the family, which is one of the educational centers that play an essential role in determining children's achievements (Nurbaiti et al., 2021) However, it should be noted that online learning has advantages that other learning models do not have.

Online learning has the flexibility of space and time. Students can follow the learning that is done anywhere and anytime. Students can explore the needs of knowledge, skills, competencies freely. With flexible learning, students can manage their own study time. A conducive learning atmosphere that uses varied learning methods and styles effectively overcomes student boredom (Elihami & Ibrahim, 2019) Not all learning can be transferred in an online learning environment (Pilkington, 2018). However, if learning loss is not immediately addressed, it will affect the level of student anxiety. It is related to psychoanalytic theory, where the educational process must be based on an awareness of the importance of education that students must undergo amid a pandemic situation.

In connection with the finding that students tend to take advantage of their free time when studying and are at risk of becoming one of the inhibiting factors for learning quality, it seems that it is part of the rationalization process and a reaction to student boredom in the online learning process that is followed daily. Before the pandemic, students were greatly helped by the social conditions of peer-to-peer learning classes, but during the pandemic, students were required to be independent. One of the teacher's strategies to motivate students to study at home is to publish student work (Fadlilah, 2020). A good rationalization process found in this research was when students had the awareness to take advantage of the communication platform for ensuring their understanding of the knowledge being studied with their peers and subject teachers.

Students can avoid learning loss in a *Tri Sentra Pendidikan* environment that supports each other as the foundation for multiple intelligences. With a psychoanalytic approach, students still have to get input and direction from various points of view in self-development, especially in the online learning process, namely with teachers and parents.

In this case, parents play a role in guiding students' attitudes and skills, as well as academically. Parental assistance is significant in online learning because it affects children's awareness of maintaining good learning habits. In this context, the role of parents is always vital to accompany the online learning process (Rahmania et al., 2021). Not optimal mentoring makes children unconsciously free to do bad things to themselves during the learning process, such as lazing around. The form of the parent's role is a form of the teacher's role at school, such as providing motivation in everything, being a happy friend for learning, helping in solving problems and difficulties faced by children while studying, and developing children's self-confidence (Gusmaniarti & Suweleh, 2019; Lilawati, 2020) Parents need to form a disciplined attitude in children because, during online learning, children's play and study time tend to be messy. Familiarizing children by setting a good example is a role that parents can play when the education situation is centered from home (Lase et al., 2021) Character education is the creation of a school environment that helps students in developing ethics, responsibility through models, and teaching good character through universal values (Berkowitz, 2021). Therefore, parents have a role to be role models for children, outside the role of teachers during the learning process (Erzad, 2018). Ki Hajar Dewantara said that all places could be used as places of learning, meaning that the potential of a home or family can be the development of student independence.
It is necessary to strengthen the collaboration of *Tri Sentra Pendidikan* that can help students learn in various situations. The formation of personality must still be considered by parents when children study at home so that students are aware of the primary purpose of a quality learning process. It is vital for forming the children's

personalities (Wahidin, 2019) The sustainability of future learning must be close to the needs of generations. The proximity of students to technology opens up opportunities that online learning is one of the options for developing learning that must be responded to sustainably. An adaptive curriculum can facilitate students' skills in the 21st century. A curriculum can be implemented in schools, homes, and the wider community. The educational approach must refer to technology, namely from the digitalization of education. In this case, education through the digitalization of education provides an opportunity for the community as one of the actors in the *Tri Sentra Pendidikan* to play an essential role in minimizing learning loss.

5. Conclusion

Learning loss was not a new problem, and it could happen to all people from various backgrounds in social, economic, geographical situations, etc. *Learning loss* during a pandemic could worsen if students could not make the best use of their time even though facilities and infrastructure were available. *Learning loss* could also worsen when students lack attention, external support, and self-motivation. Thus, it could be understood that learning loss was a complex problem and could be analyzed from various points of view. One of them was the characteristic of the millennial generation who have experienced an online learning event. Simplification and adjustment of the learning process must always be adapted to the needs of generations.

It was done to ensure that the community was ready to face the next crisis in education. Right on target policies were essential, and school problems must be addressed immediately. The main recommendation is that digital platforms and utilizing an effective digital environment must also be used in teaching in classrooms or schools. Second, education providers and schools must continue to update digital tools and infrastructure. In addition, the *Tri Sentra Pendidikan* environment requires a socio-emotional skill approach through fortitude, curiosity, resilience, emotional regulation, and social competence of students, teachers, and principals to support active participation and welfare of educational actors. Teachers, parents, and the community need to develop a learning ecosystem in the tri center of education by adjusting the learning situation, modifying learning practices, target achievement results, to adjusting the curriculum according to the economic, social, and geographical needs of the local culture so that *learning loss* can be minimized.

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