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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 $\bar{x} = 15.12 \pm SD = 1.05$, $n = 133$ 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 (Dagdemiir & 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 $\bar{x} = 15.12 \pm SD = 1.05$, $n = 133$ 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 24 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	\bar{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	\bar{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	\bar{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= ,12 F(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; Uluşık, 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 (Balçı, 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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