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Implementation of Inclusive Education in Ghanaian Colleges of Education: Factors that Influence the Tutors' Perception

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Abstract

The study aimed to explore the perception of tutors of colleges of Education (CoE) towards the implementation of inclusive education in the Ashanti Region of Ghana as it exists at the time of the study and to examine whether their demographic profile like Gender, Age, Professional level, and working experience influenced their perceptions. The research made use of a quantitative method design. The study used 88 college tutors from a population of 133 College tutors in three colleges of education in the Ashanti Region of Ghana. A convenient sampling technique aided the researchers in selecting the CoE, while a simple random sampling technique was used to select the study participants. A self-designed semi-structured questionnaire was used as a primary data collection instrument. The data were subjected to frequency counts involving a simple percentage technique using themes and comments from the questionnaire and Multiple Regression. The respondents believed that implementing inclusive education at the CoE would bring many benefits, such as improving the social and academic skills of students with disabilities. However, respondents feared that inclusive education at the CoE would not benefit them as well as students with disabilities as a result of lack of funding and resources, limited classroom space and instructional materials, and the fact that it will increase the workload of the tutors. Again, the study revealed that except for tutors' working experience, which has a significant contribution to influencing their perceptions towards the inclusion of students with disabilities at the CoE, factors like gender, age, and professional levels are not good moderating tools to predict college tutors' perceptions on the inclusion of students with disabilities in CoE. Recommendations from the study involved Affiliate Universities liaising with the Ghana Tertiary Education Commission (GTEC) to organise workshops and seminars for the regular tutors at the colleges to equip them with the necessary skills required to engage students with disabilities in the regular CoE.

Keywords: Inclusive Education, Implementation, Colleges of Education, Ghana, Tutors, Perceptions

1. Introduction

Crusading for the education of children with disabilities alongside their abled counterparts in a regular classroom traces its origins to the United Nations Conference on Inclusive Education held in Thailand in 1990 (United Nations Educational, Scientific and Cultural Organization [UNESCO], 1994). This conference advocated for the education of students with disabilities in schools located in their communities (Anthony, 2011). There have been

a series of campaigns afterwards and upon realising the benefits of inclusive education to all children, especially those with disabilities (Mariga, McConkey, & Myezwa, 2014). Many countries across the globe, such as Australia, the United Kingdom, Canada, the United States of America, and Malaysia, have joined the crusading train and have passed legislation and policies to promote inclusive education (Emmers, Baeyens, & Petry, 2019; Engelbrecht & Savolainen, 2018; Specht et al., 2016).

Furthermore, international legislation and policies have equally influenced countries, including India (Sharma & Deppeler, 2005), Hong Kong (Lee, Yeung, Tracey, & Barker, 2015), Saudi Arabia (Alnahdi, 2019), and sub-Saharan countries. A critical look at Africa (Nketsia, 2018; Pather, 2019) shows that Ghana (Opoku, Rayner, Pedersen, & Cuskelly, 2019), Nigeria (Brydges & Mkandawire, 2018), Kenya (Odongo & Davidson, 2016) and South Africa have currently developed inclusive education policies and implemented them either on a pilot basis or in whole (Engelbrecht & Savolainen, 2018).

It is pertinent to note that through the Ghana Education Service, the Ministry of Education started implementing the inclusive education policy in September 2015. Records have it that in the 2003/04 academic year, the Government of Ghana, with the Special Education Division (SPED) and Voluntary Service overseas (VSO-UK), started inclusive education as a pilot project in 10 districts in three regions, namely, the Central, Greater Accra, and Eastern regions. In all, 60 schools were selected for the pilot program. Out of the 60 schools, 24 (40%) were selected from the four districts in the Greater Accra region; 20 (33%) from three districts in the Central region; and 16 (27%) from the four districts in the Eastern region (Opoku, Agbenyega, Mprah, Mckenzie & Badu, 2017). Inclusive schools were categorised into three: inclusive government schools; United Nations Children's Fund [UNICEF] inclusive schools; and United Nations Educational, Scientific and Cultural Organization [UNESCO] inclusive schools. Funds were beseeched from UNICEF and UNESCO in the 2011 and 2012 fiscal years, extending the programme to cover Ashanti, Brong Ahafo, Northern, Upper East, Upper West, and Volta regions (Opoku et al., 2017). In September 2019, the piloted program was rolled over to all levels of education in all sixteen regions in the country.

Regarding the benefits of inclusive education to all children on their academic and social development, there are some common assumptions that inclusive education would result in higher teacher-child ratios and that teachers trained in special education would promote better academic outcomes in segregated special schools or classes (Lee, 2013). By contrast, several research studies show that students with disabilities who are educated in mainstream educational settings demonstrate better social, academic, and vocational outcomes when compared to children who are educated in segregated settings (Opoku, Badu, Amponteng, & Agyei-Okyere, 2015; Claiborne et al. 2013; Hehir et al. 2016). Research provides evidence for better outcomes in reading, writing, and mathematics (Graaf et al., 2013; Kliwer, 2008; Peetsma et al., 2001). Children who experience disabilities and are included in the mainstream have been found to score higher on achievement tests and perform closer to the grade average than those in non-inclusive settings (Vakil et al., 2009; Jordan et al., 2010).

Furthermore, there is strong evidence that inclusive education is a prerequisite for the social inclusion of people with disabilities during and after school graduation (Kefallinou et al., 2020). There is also evidence of a strong positive link between inclusive education and social inclusion in education, employment, and life in the community (European Agency 2018a). Additionally, inclusive education stimulates learning in that more time is spent on academic learning in mainstream schools than in segregated settings (Graaf et al., 2013; Kliwer, 2008). Children who are included in mainstream schools have more excellent prospects of engaging at higher academic levels and achieving better outcomes than those in segregated schools (Finke et al., 2009; Fox et al., 2004; Giangreco et al., 1993; Jordan et al., 2009; Jordan et al., 2010).

Again, children who do not have disabilities benefit academically from inclusive education with equal or better academic outcomes than children participating in non-inclusive settings (Dessemontet & Bless, 2013; Farrell, Dyson, Polat, Hutcheson, & Gallannaugh, 2007; Odom et al., 2011; Purdue et al., 2001). All children in inclusive settings appear to receive higher quality instruction better suited to individual needs, mainly through small group work (Jordan et al., 2009). Furthermore, inclusive teachers engage all children in higher-order thinking, questioning, and dialogical interactions than non-inclusive teachers (Jordan et al., 2010).

Notwithstanding the effort put in by stakeholders in education to expunge the boundaries that separate special education from regular education (Daniel & King, 1997; Lee, 2013; Opoku, Badu, Amponteng, & Agyei-Okyere, 2015), inclusive education practice in Ghana appears to be affected by several challenges (Agbenyega, 2007; Mprah, Dwomoh, Owusu, & Ampratwum, 2016; Mitchell, 2017). Among the challenges identified were: inaccessible physical space, the sensitive transition of students with disabilities during their first weeks of attendance (Morina, 2017); lack of awareness, preparation, commitment, and collaboration (Mitiku et al., 2014; Kefallinou et al., 2020); lack of funding and resources, limited classroom space, inadequate instructional materials, and the fact that it will increase the teachers' workload (Mitchell, 2017). The most significant challenge antagonising inclusive education seems to be teachers' perception of students with disabilities (Opoku et al. 2017). On factors that influence teachers' perceptions of the inclusion of students with disabilities in regular classrooms, the findings of similar studies (Deku, 2017; Aldosari, 2022) revealed that the age, position, experience, and professional qualification of teachers do not influence their perceptions. However, studies conducted by Shin et al. (2019) show that teachers' teaching experiences directly relate to their perceptions of the inclusion of students with disabilities in regular classrooms.

Successful implementation of any inclusive policy mainly depends on educators' being optimistic about it (Avramidis et al., 2008; Lopez-Gavira et al., 2021); they should therefore be supported and trained to adopt different teaching methods and strategies to support diverse students within a classroom context (Ashman, 2015). How prepared tutors of colleges of education are to welcome and support the full implementation of inclusive education programmes in their various colleges is, therefore, a test case for successful inclusion and a great concern of this study. Also, there is a little local empirical study on the influence of college of education tutors' demographic profiles like gender, age, professional level, and working experience on their perceptions about inclusive education in Ghanaian colleges of education, as most of the previous studies tend to focus on developed countries other than developing countries like Ghana. This, therefore, brings about the existence of a knowledge gap in the literature. In light of this background, the present study sought to investigate the perceptions of tutors of colleges of education in some selected colleges of education and the influence of their demographic profile on the implementation of inclusive education in colleges of education in Ghana.

1.1. The Purpose of the Study

The study sought to explore the perceptions of tutors of colleges of education towards the implementation of inclusive education in some selected colleges of education in the Ashanti region of Ghana and to examine whether their background profile factors like gender, age, professional level, and working experience influence their perceptions.

1.2. The Objectives of the Study

The following objectives guided the study:

1. To examine the perceptions of tutors of COE on the benefits of inclusive education.
2. To evaluate the inherent challenges of COE in the Ashanti region of Ghana.
3. To analyse the factors influencing college of education tutors' perceptions of implementing inclusive education at the selected colleges of Education.

1.3. Research Questions

The following research questions/hypothesis guided the study:

1. What benefits are associated with the implementation of inclusive education to college tutors and students with and without special needs education?
2. What are the practical challenges faced by tutors of the selected colleges of Education in Ghana about Inclusive Education?

1.4. Research Hypothesis

Ho: There is no statistically significant difference between CoE tutors' demographic profile (Gender, Age, Professional level, and working experience) and their perceptions of inclusive education for students with disabilities at the colleges of education.

2. Methodology

2.1. Research Design

The study employed a descriptive survey design to gather data. The design dealt with finding out the perception of tutors of CoE on the implementation of inclusive education in the colleges of Education in the Ashanti region as it exists at the time of the study. The descriptive survey design helped the researcher to use a questionnaire, which represents a vital instrument for gathering data for a study. Frankel and Wallen (2004) note that a descriptive survey allows many individuals to ask the same set of questions by mail, telephone or in person. It is also advantageous because it has the potential to provide much information from a large sample of individuals. This method also enables a researcher to make inferences and generalise findings from the sample to the population (Best & Kahn, 1995). The descriptive survey was further considered the most appropriate design for conducting this study since it deals with things as they currently are (Creswell, 2013). Creswell further explained that a descriptive survey describes the population's perceptions, attitudes, behaviours or characteristics. It also can provide much information that will be gathered from the respondents.

2.2. Population

According to Seidu (2007), the population in research refers to the totality of objects or individuals regarding which inferences are to be made in a sampling study. The study is about the perceptions of tutors of colleges of education in some selected colleges of education on the implementation of inclusive education in Ghanaian colleges of education and the influence of their demographic profile (gender, age, professional level, and working experience) on their perceptions. In line with this study, the population consisted of college tutors in three selected colleges of education in the Ashanti region of Ghana. Therefore, the target population for the study consisted of 133 tutors.

2.3. Sample and Sampling Techniques

The sample size for the study was calculated based on the sample size determination guidelines of Yamane. To select an appropriate sample size, Yamane (1967) developed a simple formula suggesting that the appropriate sample size could vary for various large population sizes. According to Yamane, the sampling size can be calculated at a 95% confidence level by using this formula:

$$n = \left(\frac{N}{1+N(e)^2} \right)$$

Where n = sample size,

N= Number of the statistical population

e = margin of error, i.e., 0.05

Based on the formula, the sample consisted of 88 college tutors. A stratified sampling technique was used to select respondents to ensure that males and females were fairly represented.

Table 1: Sample Distribution of Participants by College

College	Total Number of college-tutors	college-%	Estimated Number of college tutors selected	Actual respondents (college tutors)
Offinso	47	35	30	30
St. Louis	46	35	30	30
Mamtech	40	30	28	28
Total	133	100	88	88

Author's source (2021)

Table 1 shows a proportional sample distribution for various colleges of education.

2.4. The instrument for data collection

The study used a questionnaire to gather data to answer the research questions. As the researcher desires to collect data on the perceptions of tutors of colleges of education toward inclusive education and the influence of the demographic profile on their perceptions, a self-constructed Likert-type scale questionnaire was developed to collect data using the research questions raised to guide the study. The questionnaire consisted of 10 close-ended questions. The five Likert-type scales ranged from "strongly agree" (SA), "agree" (A), "neutral" (N), "disagree" (D) and "strongly disagree" (SD). For ease of analysis and discussion, the five Likert scales were crafted into two main groups: strongly agreed and agreed as "agreed" and strongly disagreed and disagreed as "disagreed." The questionnaires were appropriate here because all the respondents were literate. The questionnaires were administered to the study participants. Before that, the researchers discussed the contents and distributed them to the respondents later. There was a return rate of 100% (hundred percent).

2.5. Validity of Instruments

The validity of an instrument is used to determine if an instrument measures what it is intended to measure. In developing and evaluating or measuring instruments, validity is the most critical factor to consider (Ary et al., 2002). To validate the questionnaire, draft copies were given to two senior lecturers in the Special Education department, who read through and made all the necessary corrections to ensure face validity. After that review, the drafted questionnaire was sent to an experienced English lecturer for further review before pre-testing the instrument.

2.6. Reliability of instruments

One of the most commonly used indicators of internal consistency is Cronbach's alpha coefficient. For most social science research, according to Hair, Black, Babin & Anderson (2010) and Straub, Boudreau, & Gefen (2004), the Cronbach alpha coefficient of a scale should be 0.7 or above. In the current study, the Cronbach alpha coefficient for the instrument was 0.805. This indicates that the research instrument has high reliability.

2.7. Data Collection Procedure for Data Collection

The procedure for data collection is about techniques for physically obtaining data to be analysed in a research study (Johnson & Christensen, 2008). The questionnaire was used for the study. Fraekel and Wallen (1993) assert that questionnaires administered personally to groups help establish bonds, save time, and allow one to explain the purpose and the points that are not clear to respondents. Creswell (2014) also maintains that respecting the site where the research takes place and gaining permission before entering a site is very important in research. Letters were sent to the respective heads of departments of the respondents, stating the aims and purpose of the study and the need for the participants to give their consent and cooperation; the researcher subsequently assured them of confidentiality. Additionally, they were assured that all the pieces of information they provided would be used for

the intended purpose. These are the most important ethical issues when conducting a survey (Kelley, Clark, Brown & Sitzia 2003).

2.8. Analysis of Data from Questionnaire

The data were analysed using appropriate descriptive statistics, allowing the researcher to use numerical values to represent scores in the sample. According to Creswell (2014), descriptive statistics are appropriate because they allow the researcher to use numbers and provide the researcher with data that allows for inferences on the population and directions for answering the research questions. The returned questionnaires were coded for analysis to answer the research questions and test the hypothesis. An item-by-item analysis of the data was conducted. The percentage of the total sample responding to each question was presented.

The research hypothesis was analysed using multiple regression. The data were presented according to the responses and or views of the respondents. Numerical scores were assigned to them to indicate a possible relationship between the respondents' responses and their frequency. The scores assigned to the responses were analysed using frequency counts and percentages. This allowed the researcher to access data and interpret results for the statistical analysis provided.

3. Presentation of Results and Discussion of Findings

This section of the study analyses data gathered from the respondents on the perception of tutors of colleges of education towards the implementation of inclusive education in the Ashanti region and the influence of their demographic profile on their perceptions. The analysis is presented according to the two main research questions and one hypothesis to guide the study.

Table 2: Gender distribution of the respondents (College Tutors)

	Frequency	Percentage
Male	54	61.4
Female	34	38.6
Total	88	100.0

Source: Fieldwork, 2021

Table 2 depicts the sex distribution of the sampled respondents (tutors) of the various Colleges of Education selected for the study. The table shows that there were more male respondents than females. The table suggests that a few of the respondents totaling 34(38.6%), were females, whilst the remaining 54(61.4%) were males.

Table 3: Age Distribution of the Respondents (Tutors)

Age group	Frequency	Percentage
Below 35 Years	3	3.4
35 – 39 Years	21	23.9
40 – 44 Years	23	26.1
45 – 49 Years	23	26.1
50 – 54 Years	14	16
55 – 59 Years	4	4.5
Total	88	100.0

Source: Fieldwork, 2021

Table 3 shows the age distribution of the respondents. Age of 35 years 3(3.4%) and found to be teaching in the selected COE. Table 3 indicates that most respondents are between 40 – 44 (26.1%) and 45 – 49 (26.1%). Only 3.4% of the respondents are below 35 years.

Table 4: Professional Level of Respondents

Certification	Frequency	Percentage
First Degree	4	4.5
Second Degree	79	89.8
Third Degree	5	5.7
Total	88	100.0

Source: Fieldwork, 2021

Table 4 shows the professional level of the respondents sampled for the study. It reveals that a total of 79 (89.8%) respondents have second degrees, 5 (5.7%) of the respondents were third-degree holders, and 4 (4.5%) had first-degree certifications. It can be concluded that a more significant number of second-degree holders worked as tutors at the sampled colleges of education.

Table 5: Working Experience

No. of years taught	Frequency	Percentage
1 – 5 Years	4	4.5
6 – 10 Years	15	17.0
11 – 15 Years	22	25.0
16 – 20 Years	27	30.7
21 Years and Above	20	22.8
Total	88	100.0

Source: Fieldwork, 2021

Table 5 shows the years of teaching experience of the respondents sampled for the study. The table shows that 4 (4.5%) had a working experience ranging from 1 – 5 years, 15 (17.0%) had a working experience from 6 – 10 years, 22 (25.0 %) had between 11 – 15 years working experience whilst the majority of respondents 27 (30.7%) had their experience ranging from 16 – 20. Also, 20 (22.8%) respondents had working experience above 21 years. This indicates a higher level of experienced respondents of 27 (30.7%) ranging between 16 – 20 years.

Research Question 1: What benefits are associated with implementing inclusive Education at CoE?

Table 6: Tutor's responses to the Benefits of Inclusive Education

No	Item	Agree	Neutral	Disagree	Total				
		F %	F %	F %		%			
1	Students with special needs improve their social skills when placed in a regular classroom	72	81.8	5	5.7	11	12.5	88	(100)
2	I hope the implementation of inclusive education at the CoE will be beneficial to me as a teacher	79	89.8	4	4.5	5	5.7	88	(100)
3	I believe the implementation of inclusive education at the CoE will improve the academic skills of students with disabilities	77	87.5	5	5.7	6	6.8	88	(100)

4	Generally, inclusive education is not only beneficial to students with disabilities but for teachers as well	80	91.0	4	4.5	4	4.5	88	(100)
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Source: Fieldwork, 2021

Table 6 shows that the majority of the respondents, 72 (81.8%), accept that students with special needs improve their social skills when placed in a regular classroom. However, 11 (12.5%) of the respondents disagreed, whilst only 5 (5.7%) were neutral. Again, most of the respondents, 79 (89.8%), agreed that the implementation of inclusive education at the COE would be beneficial to them as tutors, whilst five (5.7%) disagreed, with the least number of respondents, 4 (4.5%), opting for neutral grounds.

They believe that implementing inclusive education at the COE will improve the academic skills of students with disabilities attracted 77 (87.5%) respondents, while 6 (6.8%) disagreed. In general, an encouraging number of 80 (91.0%) respondents agreed that inclusive education is beneficial to students with disabilities and tutors, and 4 (4.5%) respondents disagreed.

Research Question 2: What are the inherent challenges faced by tutors of colleges of education in the Ashanti region of Ghana regarding the implementation of inclusive Education in CoEs?

Table 7: Tutors' Responses to Challenges to Inclusive Education

No	Item	Agree F %	Neutral F %	Disagree F %	Total %				
5	Competing policies in the Ghanaian educational setting pose a challenge to my practice of inclusion of students with disabilities	58	65.9	10	11.4	20	22.7	88	(100)
6	A lack of funding and resources poses a challenge to my practice of inclusion of students with disabilities	72	81.8	6	6.8	10	11.4	88	(100)
7	Placing students with special needs in a regular COE classroom will consume too much of an already overworked teacher's attention	42	47.7	11	12.5	35	39.8	88	(100)
8	Classroom space and instructional materials pose a challenge to my practice of inclusion of students with disabilities	69	78.5	2	2.2	17	19.3	88	(100)
9	I do not have the necessary knowledge, skills, attitudes and positive perception of inclusive education and this is a challenge	26	29.5	7	8.0	55	62.5	88	(100)
10	Inadequate teacher training poses a challenge to my practice of inclusion of students with disabilities	46	51.2	8	9.1	34	38.7	88	(100)

Source: Fieldwork, 2021

Table 7 illustrates the responses of the college tutors to their perceived challenges in inclusive education. Of the total response of 88, 58 (65.9%) were of the view that competing policies in the Ghanaian educational setting posed a challenge to their practice of inclusion of students with disabilities; however, 20 (22.47%) of them disagreed, with only 10 (11.4%) being neutral to the statement. A considerable number of the respondents, 72 (81.8%), agree that a lack of funding and resources would challenge their practice of including students with disabilities. The least number of 6 (6.8%) neither agreed nor disagreed, whilst 10 (11.4%) respondents disagreed with the statement.

Also, college tutors' responses to "placing students with special needs in a regular CoE classroom consuming too much of an already overworked tutors' attention" received 42 (47.7%) agreements, 11 (12.5%) neutral, and 35 (39.8%) disagreements to the statement. A total of 69 (78.5%) agreed that classroom space and instructional materials pose a challenge to their practice of inclusion of students with disabilities, with only 2 (2.2%) being neutral, whilst 17 (19.3%) of them disagreed with the statement. Here, the pattern of the responses suggests that respondents believe placing students with special needs in a regular COE classroom would burden them owing to

their classroom space and the availability of instructional materials to teach them. This finding confirms an earlier one (Morina,2017), which found that teachers often find it challenging to work with a large class of students with and without disabilities. Again, as to whether tutors at the selected colleges of education had the necessary knowledge, skills and attitudes, and positive perceptions about inclusive education, 26(29.5%) said they did not have, whilst the majority, 55 (62.5%) said they had with only 7(8.0%) being neutral. These responses indicate that tutors in those selected colleges of education had the needed knowledge, skills, attitudes, and positive perceptions and were prepared to implement inclusive education in their various colleges. Again, the majority of the college tutors, 46(51.2%), feared that inadequate teacher training would pose a challenge to their practice of inclusion of students with disabilities, whilst 34(38.7%) disagreed with 8(9.1%) of the respondent being indecisive.

3.1. Research Hypothesis

Ho: There is no statistically significant difference between CoE tutors' demographic profiles, professional level, and working experience and their perceptions of inclusive education for students with disabilities at the colleges of education.

Table 8: Model Analysis Summary

	Model R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.628^a	.395	.289	.30322

- Predictors: (Constant), Gender, Age, Professional Level, and Work Experience
- Dependent Variable: Inclusive Education of Children with Disabilities.

Table 9: Summary of Analysis of Variance (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.498	4	.375	4.074	.011 ^b
1 Residual	2.299	25	.092		
Total	3.797	29			

- Dependent Variable: Inclusion of students with disability
- Predictors: (Constant), Gender, Age, Professional Level, Working Experience
F (4,25) = 4.047, P<0.05

Table 10: Regression Co-efficient Analysis of the Model

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.392	1.006		1.383	.179
1 Gender	-.145	.182	-.127	-.795	.434
Age	-.051	.106	-.103	-.478	.637
Professional Level	-.140	.349	-.069	-.401	.692
Working Experience	.455	.139	.667	3.281	.003

Dependent variable: teachers' perceptions towards the inclusion of students with disabilities.

3.2. Discussions of the key findings of the study

The study aimed to explore CoE tutors' perceptions of the implementation of inclusive education at the CoEs. A total of 88 tutors were selected from three different CoE, namely Mampong College of Education, Offinso College of Education and Saint Louis College of Education. The researcher used random sampling technique to draw the samples. Two (2) research questions and one hypothesis were raised and analysed.

Research question one sought to evaluate the college tutors' perception about the benefits associated with implementation of inclusive education in colleges of education. The study revealed that, most respondents have the believe that implementing inclusive Education at the CoE will bring many benefits. Such benefits include: improving the social and academic skills of such students with disabilities (Kefallinou et al.,2020), developing individual strengths and gifts with high and appropriate expectations for each child. Again, in Inclusive Education, parents are involved in their wards' education. It also helps the special Needs child to foster a school culture of respect and belonging, gives them opportunities to learn about, and accept individual differences. Apart from Inclusive education helping to lessening the impact of harassment and bullying, it develops friendships with a wide variety of other children. The pattern of the responses depicts that majority of the respondents agreed that inclusive education is beneficial to children with disabilities, their non-disabled counterparts, as well as college tutors as well. This finding is in line with an earlier finding identified by ((Opoku, Badu, Amponteng, &Agyei-Okyere, 2015; Claiborne et el. 2013; Hehir et al., 2016; Alima et al., 2017) that all children benefit from inclusive education, including their teachers.

Research question two was to examine the inherent challenges faced by tutors of colleges of education in the implementation of IE in CoE in the Ashanti region of Ghana. Here, most of the respondents responded that including students with disabilities at the COE would pose many challenges. Some of their perceived challenges included placing students with special needs in a regular CoE classroom would consume much of the already overworked tutors' attention and inadequate training, lack of funding and resources, competing policies in the Ghanaian educational setting, limited classroom space and instructional materials, etc. were significant issues of concern. The trend of the responses implies that even though majority of the college tutors believed that IE in CoE is beneficial they feared its implementation would not be helpful to them and the students with disabilities if those identified challenges were not addressed (Mitiku et al., 2014; Kefallinou et al., 2020; Mitchell, 2017).

Lastly, the hypothesis was to examine whether there was statistically significant difference between CoEs tutors' demographic profiles and their perceptions of inclusion of students with disabilities in Ghanaian colleges of education. To achieve the above purpose, a correlation analysis was conducted. The results of the model summary (table 8) found a correlation coefficient of **.628**. This shows a strong correlation among some of the various constructs. This also means that the relationship between the constructs is very close and can explain the dependent variable. R-squared measures the goodness of the explanatory variables in explaining the variations in the factors contributing to college of education tutors' perception towards inclusive education. As clearly described in the table, the adjusted R² value for the regression model was **0.395**. This indicates that the explanatory variables, gender, age range, professional level, and work experience in this study explain about **39.5%** of the variation in the factors contributing to teachers' perceptions toward inclusive education of students with disabilities. The model did not include the remaining 60.5% of the variation in the factors contributing to teachers' perceptions toward inclusive education of students with disabilities. Therefore, (gender, age, professional level, and working experience) are suitable explanatory variables influencing teachers' perceptions toward inclusive education of students with disabilities.

Again, an ANOVA test was conducted to ascertain whether the correlation between the dependent and the independent variables were statistically significant or not. The analysis in Table 9 shows that the Sig. Value 0.05 is greater than the calculated **Sig.** value of 0.011 thus $F(4,25) = 4.047, P < 0.05$. It reflects a statistically significant correlation between the dependent and independent variables at a 1.1% significant level. This means the explanatory variables (gender, age, professional level and working experience) greatly influence teachers' perceptions toward inclusive education of students with disabilities. It does not mean that all these factors taken from the various models have an equally significant correlation to the inclusion of students with disabilities.

A Regression co-efficient Analysis was also conducted to ascertain the specific relationship between the dependent and the independent variables. Results from the analysis in table 10 reveal a negative relationship between gender, age, and professional level towards the inclusion of children with disabilities. This is to say that, holding other variables constant, gender will have a -14.5% influence, age will have a 5% influence, and professional level will also have a 14.4% influence on inclusive education. Hence, gender, age, and professional-level variables cannot explain the dependent variable.

According to the **Sig.** Value of working experience, 0.455, which is above 1.6, will have a 45.5% influence on the dependent variable. This means that working experience greatly influences CoE Teachers' perception of the inclusion of students with disabilities. This study revelation contravenes similar studies by (Deku, 2017; Aldosari, 2022.), which revealed that teachers' age, position, gender, teaching experience, and professional qualification do not influence their perceptions but confirms a similar study conducted by Shin et al. (2019).

4. Conclusion

This study's primary purpose was to ascertain CoE tutors' perceptions of the implementation of inclusive education in three selected colleges of Education in Ghana and to examine whether their demographic profiles influence their perceptions. The results indicate that inclusion has many benefits based on the primary data collected from college tutors from the three colleges. However, respondents are unwilling to teach in an inclusive classroom due to a lack of funding and resources, competing policies in the Ghanaian educational setting, and limited classroom space and instructional materials. The study participants indicated that placing special-needs students in a regular CoE classroom would overburden them. Inadequate knowledge and skills in handling students with special and inadequate training were the significant issues of concern.

5. Recommendations

The following recommendations were made based on the findings of the study:

- Affiliate Universities should liaise with the Ghana Tertiary Education Commission (GTEC) to organise workshops and seminars for the regular tutors at the colleges to equip them with the necessary skills required to engage students with disabilities in the regular CoE.
- The government and other education stakeholders must provide specialised equipment and related services to all colleges to strengthen their service delivery.

6. Suggestions for further study

A comparative study of the responses of college tutors across at least two regions could produce more in-depth views on the perceptions of college tutors on inclusive education at the COE. This study was limited to only three COE in the Ashanti region of Ghana. Further studies could be extended to other regions to solicit CoE tutors and parents of students with disabilities views towards inclusive education at the COE.

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