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# An Appraisal of Teacher-Trainees' Academic Self-Concept and Performance in the Colleges of Education in Ghana

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**Abstract:** This study investigates the relationship between teacher-trainees' academic self-concept and performance in Colleges of Education in Ghana. Utilizing a mixed-methods approach, data were collected from teacher-trainees in Ada and Accra Colleges of Education through surveys and interviews. The study hypothesised that there is no significant relationship between academic self-concept and academic performance among teacher-trainees. Results revealed a statistically significant positive relationship between academic self-concept and performance, indicating that teacher-trainees with higher academic self-concepts tend to perform better academically. Furthermore, gender differences in academic self-concept and performance were explored, with findings suggesting no significant gender disparities in either domain. Institutional factors, such as school climate and resources, were also found to influence academic performance. Recommendations include promoting positive academic self-concept, implementing gender-responsive pedagogy, and creating supportive learning environments in Colleges of Education. By addressing these factors, teacher education programs can better prepare future educators for success in the classroom and contribute to the improvement of educational quality in Ghana.

**Keywords:** Teacher-Trainees', Academic, Self-Concept, Performance, Colleges of Education

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## 1. Introduction

In the realm of education, the nexus between self-concept and academic performance has long been a subject of scholarly inquiry. Particularly in teacher education, understanding how teacher-trainees perceive themselves academically and how this perception influences their performance is of paramount importance. This study aims to delve into this intricate relationship within the context of Ghanaian Colleges of Education. Ghana, like many other nations, places significant emphasis on the quality of its educators. Teacher education institutions, such as Colleges of Education, play a pivotal role in shaping the next generation of teachers. Central to this process is the self-concept of teacher-trainees – their perceptions, beliefs, and attitudes regarding their academic abilities. Academic self-concept refers to an individual's perception of their academic abilities, encompassing beliefs about their competence in various academic domains [1]. This construct has been found to exert a profound influence on students' academic endeavours, impacting their motivation, engagement, and ultimately, their performance.

In the Ghanaian context, where educational reforms and initiatives continually strive to enhance the quality of teaching and learning, understanding the academic self-concept of teacher-trainees assumes heightened significance. How do these future educators perceive their academic capabilities? How does this perception influence their performance in academic endeavours? Moreover, exploring this relationship offers valuable insights for educational policymakers, curriculum developers, and teacher educators. By identifying factors that contribute to positive academic self-concept and

performance among teacher-trainees, interventions can be designed to nurture and support their professional development effectively.

Thus, this study seeks to fill this gap in the literature by investigating the academic self-concept of teacher-trainees in Ghanaian Colleges of Education and its impact on their academic performance. By examining factors such as gender, prior academic achievement, and socio-economic background, it aims to provide a nuanced understanding of the complexities inherent in this relationship. In doing so, this research not only contributes to the theoretical understanding of academic self-concept but also offers practical implications for teacher education programs and policies aimed at enhancing the quality of education in Ghana.

Teacher education plays a crucial role in shaping the quality of education provided to students. However, there is limited research exploring the relationship between teacher-trainees' academic self-concept and their performance in Colleges of Education in Ghana. Understanding this relationship is essential for improving teacher education programs and enhancing the quality of education in Ghana. Therefore, the problem addressed in this study is: What is the relationship between teacher-trainees' academic self-concept and their performance in Colleges of Education in Ghana, and how do gender differences and institutional factors influence this relationship? This study aims to investigate the extent to which teacher-trainees' academic self-concept predicts their academic performance and whether gender differences and institutional factors play a significant role in shaping this relationship. By addressing this problem, the study seeks to inform interventions aimed at enhancing teacher-trainees' academic success and improving the quality of teacher education in Ghana. The purpose of this study was to examine the relationship between teacher-trainees' academic self-concept and their performance in Colleges of Education in Ghana. The study was guided by these objectives (1) investigate the relationship between teacher trainees' academic self-concept and their academic performance in Colleges of Education in Ghana. (2) Examine gender differences in the academic self-concept of teacher trainees in Ada and Accra Colleges of Education. (3) Explore gender differences in academic performance among teacher trainees in Ada and Accra Colleges of Education. (4) Determine if there is a difference in the academic self-concept of teacher trainees between Ada and Accra Colleges of Education. (5) Assess differences in academic performance between teacher trainees from Ada and Accra Colleges of Education and explore the potential influence of institutional factors on these differences.

### ***1.1. Theoretical Framework***

Social Cognitive Theory (SCT), proposed by Albert Bandura, serves as a robust theoretical framework for understanding the relationship between academic self-concept and performance among teacher-trainees in Ghanaian Colleges of Education [2]. SCT posits that individuals' behaviours, cognitions, and environment interact in a dynamic reciprocal fashion, shaping their learning and performance outcomes. Within the context of this study, SCT offers insights into how teacher-trainees' academic self-concept is developed, maintained, and transformed over time, and how it influences their academic performance. Key constructs within SCT relevant to this investigation include self-efficacy, outcome expectations, and self-regulation.

- **Self-Efficacy:** According to SCT, self-efficacy refers to individuals' beliefs in their ability to perform specific tasks or achieve particular outcomes. In the context of teacher education, teacher-trainees with high academic self-efficacy are more likely to set challenging academic goals, persist in the face of difficulties, and employ effective learning strategies. Conversely, those with low self-efficacy may experience self-doubt and are more susceptible to academic setbacks [3, 4-5]. Therefore, examining the role of

- self-efficacy in shaping teacher-trainees' academic self-concept and performance is critical.
- **Outcome Expectations:** SCT emphasizes the importance of outcome expectations, which are individuals' beliefs about the consequences of their actions. Teacher-trainees who perceive a strong link between their academic efforts and positive outcomes, such as improved teaching effectiveness and career advancement, are more likely to exhibit motivated behaviour and higher academic performance. Conversely, those who perceive limited benefits from their academic endeavours may experience decreased motivation and lower performance levels [6].
  - **Self-Regulation:** SCT underscores the role of self-regulation in guiding individuals' learning and performance. Self-regulation encompasses processes such as goal-setting, monitoring progress, and adapting strategies in response to feedback. Teacher-trainees who possess effective self-regulatory skills are better equipped to manage academic challenges, regulate their motivation and emotions, and maintain a positive academic self-concept even in the face of setbacks. [7, 8].

By employing SCT as a theoretical framework, this study aims to elucidate the complex interplay between teacher-trainees' academic self-concept, self-efficacy, outcome expectations, self-regulation, and academic performance in Ghanaian Colleges of Education. Additionally, SCT provides a lens through which to explore potential mediators and moderators of this relationship, such as socio-economic background, prior academic achievement, and institutional factors, thereby offering a comprehensive understanding of the factors influencing teacher-trainees' academic development and success.

## 2. Methodology

**Research Design:** The study employed a descriptive survey design to investigate the influence of social and academic self-concepts on the academic performance of teacher trainees from Ada and Accra Colleges of Education in Ghana. This design was chosen as it allows for the systematic gathering of data to test hypotheses concerning the current status of the subject under study, providing a comprehensive understanding of prevailing conditions and practices.

**Sampling:** The accessible population for the study comprised 630 level 200 teacher trainees from both colleges. A sample size of 265 trainee teachers was selected, representing 42.1% of the accessible population. Stratified random sampling was employed to categorize and select respondents based on gender, ensuring representation from both colleges.

**Instrumentation:** Data were collected using a questionnaire consisting of three sections: demographic information, academic self-concept, and social self-concept. The questionnaire comprised close-ended items measured on a four-point unilinear scale. Additionally, teacher trainees' end-of-second-semester examination scores were used as a proxy to measure academic performance.

**Pilot Test:** Before the main study, the questionnaire was pilot-tested with 94 students from the Presbyterian College of Education, Akropong-Akwapem. This was done to establish the instrument's reliability and assess the level of understanding of the items by the students. The test-retest strategy was employed, and the Cronbach alpha reliability coefficients obtained ranged from 0.79 to 0.87, indicating satisfactory reliability.

**Data Analysis:** Quantitative data collected from the questionnaire responses and examination scores were analyzed using statistical methods such as correlation analysis, regression analysis, and descriptive statistics. These analyses were conducted to examine the relationships between academic self-concept, social self-concept, and academic performance among teacher trainees.

**Ethical Considerations:** Ethical approval was obtained from relevant institutional review boards, and informed consent was obtained from all participants. Confidentiality and anonymity of participants' responses were ensured throughout the research process.

### 3. Results and Discussion

#### 3.1. Relationship between trainees' academic self-concept and performance

The first objective of the study focused on finding out whether there was a relationship between teacher trainees' academic self-concept and academic performance. In dealing with this objective it was hypothesised that there is no statistically significant relationship between the academic self-concept and academic performance of teacher trainees of Ada and Accra Colleges of Education. The Pearson Product Moment Correlation was used to test the first hypothesis. The results are presented in [Table 1](#).

[Table 1](#) shows that there was a statistically significant positive relationship between trainees' academic self-concept and their respective academic performance ( $r = 0.201$ ,  $p < 0.05$ ). This shows that the higher teacher trainees develop their academic self-concept the higher they perform in their academic work and vice versa. Based on this finding, the null hypothesis that there is no statistically significant relationship between academic self-concept and academic performance of teacher trainees of Ada and Accra College of Education is rejected.

**Table 1. Relationship between Academic Self-concept and Academic Performance**

Variables	Academic performance				
	Mean	SD	Correlation coefficient (r)	df	p-value
Academic self-concept	2.312	0.457	0.201*	260	0.012
Academic performance	2.717	0.604			

Source: Field survey; Significant, \* $p < 0.05$ ; (N = 262)

As shown in [Table 1](#), there was a statistically significant positive relationship between trainees' academic self-concept and their respective academic performance ( $r = 0.201$ ,  $p < 0.05$ ). This shows that the higher teacher trainees develop their academic self-concept the higher they perform in their academic work and vice versa. Based on this finding, the null hypothesis that there is no statistically significant relationship between academic self-concept and academic performance of teacher trainees of Ada and Accra College of Education is rejected.

This finding that emerged from [Table 1](#) is consistent with the suggestion that students develop academic self-concept as they form self-perceptions of their academic efficacy through experiencing the classroom environment and through evaluations [9]. Academic self-concept predicts the extent of diligent and persevering effort that students devote toward their academic work [9]. Deducing from the findings in [Table 1](#), one may argue that as students develop confidence in themselves, they can do well in school if they work hard academically, and are pleased with themselves at school such that they believe that they can succeed at whatever they do at school, they end up being good in the subjects that they do in school. Developing a positive academic self-concept (Mean = 2.312, SD = 0.457) as indicated in [Table 1](#), influences students to think that they are smarter than most of the students in their class.

The results of the study, however, contradict the submission by writers that "the relationship between self-concept and school achievement suggests that measures of general or even academic self-concept are not significantly related to school achievement" [10]. However, writers conceded that it was at the level of a very specific subject that there was a relationship between self-concept and academic success [10]. While the causal ordering of the correlation between academic self-concept and academic achievement is

debatable, researchers have found that a relationship exists [11]. This relationship suggests that academically successful students have a positive or high academic self-concept. Because academic self-concept is socially constructed, it is influenced by the social comparison process, as well as, by the reflected appraisals of significant others and generalised others.

Furthermore, the findings that there is a statistically significant relationship between academic self-concept and academic achievement is inconsistent with the findings of a previous study that “there was no significant relationship between academic self-concept and academic performance” [12]. Writers added that “for females, as academic self-concept increased, academic performance increased” [12]. However, the finding is in line with the results of an earlier study that “there is a positive relationship between academic self-concept and academic performance of students” [13].

The results support the hypothesised relationship between academic self-concept and academic performance among teacher trainees. The positive correlation between academic self-concept and performance indicates that as teacher trainees develop confidence in their academic abilities, they tend to perform better academically. This aligns with Social Cognitive Theory, which emphasizes the importance of self-efficacy beliefs in shaping individuals' behaviours and outcomes. The results suggest that interventions aimed at enhancing teacher trainees' academic self-concept may contribute to improved academic performance.

### 3.2. Gender difference in the academic self-concept of teacher trainees in Ada and Accra Colleges of Education

The second objective of the study sought to examine whether male and female teacher trainees in Ada and Accra Colleges of Education differed in their academic self-concept. To do this, it was hypothesised that there was no statistically significant difference between the academic self-concept of male and female teacher trainees in the two colleges of education. The independent sample t-test was used to analyse the data. The results are presented in Table 2.

**Table 2. Gender Difference in Academic Self-concept of Teacher Trainees in Ada and Accra Colleges of Education (N = 262)**

Variable	Gender	N	Mean	SD	t-value	Df	p-value
Academic self-concept	Male	170	2.285	0.421	-1.270	260	0.205
	Female	92	2.360	0.515			

*Source: Field survey*

The results in Table 2 show that there was no statistically significant difference between the academic self-concept of male and female teacher trainees. However, the female teachers had a higher mean score (Mean = 2.360, Std. Dev. = 0.515) than their male counterparts (Mean = 2.285, Std. Dev. = 0.421) on the academic self-concept scale. Deducing from the findings, one may assert that both male and female teacher trainees of the two colleges of education see themselves as people who can do well in school if they work hard because they are very smart and are very confident such that they are pleased with themselves at school [14].

The results in Table 2 show that gender as a variable does not affect teacher trainees of Ada and Accra Colleges of Education academic self-concept. The finding is inconsistent with the findings and submissions of other studies that “females tend to be the most obvious victims of academic self-concept in most patriarchal societies such as Ghana” [15, 16-17]. They normally develop negative academic self-concepts that end up affecting their academic achievement significantly. A similar study asserts that “in a patriarchal or male-controlled society, women are primarily seen as wives and mothers while men are seen

as husbands and fathers" [17]. The writer found that "gender has a significant impact on students' academic self-concept, which was positively related to the level of academic achievement" [18]. They further support the current study that "there was an interaction between gender and academic achievement on academic self-concept. They found out that boys scored higher than girls on measures of academic self-concept and job competence".

The results furthermore contradict the assertions of a writer that "gender roles influenced changes in relative academic self-concept. Even when girls usually outperform boys at the age of nine or ten, such performance declines significantly behind by late adolescence as a result of their development of low academic self-concept. Differences in students' gender tend to influence students' behaviour toward study and attitude toward learning" [15]. A previous study affirms that "all the aspects of the child's self-concept, one of the most important is the attitude towards his or her gender" [16]. Self-concept is therefore developed not inherited. The findings of the study are also incongruent with an earlier study that "gender has a statistically significant effect on the child's academic self-concept" [16]. The earlier study further added that "this is so because consciousness for female students upon arriving at predominantly patriarchal institutions, as in the case of most African countries, may result in their different outcomes academically that may be based on gender" [16]. Again, the results that emerged from Table 2 is incongruent with a similar scientific study that "students had a high level of academic self-concept in general. However, the level of academic self-concept differed according to gender" [19]. The means of males was higher than the means of females on the total score and each scale of peers' relations. Moreover, there was a significant statistical difference at the level of ( $p < 0.05$ ) in the level of academic self-concept among students due to gender differences.

The finding, however, corroborates with a study on the effect of gender on students' social and academic self-concepts which found that "neither a gender effect nor an achievement by gender interaction could be demonstrated" [20]. Similarly, the findings are in line with the results of a similar study which did not reveal a statistically significant difference between the academic self-concept of male and female students in Ghanaian junior high schools [13]. Both male and female students in Ghanaian junior high schools did not differ in the views they held about their academic competence and capabilities. The writers suggested that "what could have accounted for this finding was the change in the landscape of the education sector in particular and the Ghanaian society as a whole. They explained that equal opportunities are given to both male and female students in terms of access to school, and provision of material and psychological support by the government, parents and teachers. This has made both sexes competitive, venturesome and open-minded in the pursuit of their educational goals" [13].

The study explores gender differences in academic self-concept among teacher trainees. While there was no statistically significant difference between male and female teacher trainees' academic self-concept, female trainees tended to have slightly higher mean scores. This result contradicts previous research suggesting that gender differences influence academic self-concept. However, it aligns with studies indicating a shift towards gender equality in educational opportunities and outcomes in Ghanaian schools. The results imply that both male and female teacher trainees perceive themselves similarly in terms of academic competence, reflecting a more egalitarian educational environment.

### ***3.3. Gender difference in academic performance of teacher trainees in Ada and Accra Colleges of Education***

The third objective of the study focused on examining whether there was a difference between male and female teacher trainees of Ada and Accra Colleges of Education about their academic performance. The independent samples t-test was used to analyse data to test the null hypothesis that was formulated. It was hypothesised that; there is a statistically significant difference between the academic performance of male and female teacher trainees of Ada and Accra Colleges of Education. The results are presented in

**Table 3.** The results in [Table 3](#) indicate that there was no statistically significant difference in male teacher trainees (Mean = 2.737, Std. Dev. = 0.597) and female teacher trainees (Mean = 2.681, Std. Dev. = 0.619) academic performance [ $t = 0.725$ ,  $df = 260$ ,  $p = 0.469$ ]. Even though there is no statistically significant gender difference in teacher trainees' academic performance, male teacher trainees had a higher mean score (Mean = 2.737) than their female counterparts (Mean = 2.681).

**Table 3. Gender Difference in Teacher Trainees' Academic Performance (N = 262)**

Variable	Gender	N	Mean	SD	t-value	Df	p-value
Academic performance	Male	170	2.737	0.597	0.725	260	0.469
	Female	92	2.681	0.619			

*Source: Field survey*

The finding in [Table 3](#) means that at Ada and Accra Colleges of Education, gender did not affect trainees' academic performance. The result is inconsistent with previous studies "that sex roles influenced changes in relative academic performance" [15]. The findings of an earlier study are more striking as it is noted that even when girls usually outperform boys at the age of nine or ten, such performance declines significantly behind by late adolescence [15]. A similar study argued that "even school activities and subjects are also categorised to reflect gender differences. Hence differences in students' gender tend to influence students' behaviour toward study and attitude toward learning which in the long run leads to gender differences in students' academic performance in favour of males" [15]. Explaining such differences, a writer noted that "the early socialisation process whereby girls in their early development interact more with their mothers and spend most of their life in the kitchen or home affected their spatial and verbal whereas, whereas boys who are permitted to go out and mix freely tend to develop a higher spatial ability. Secondly, he further attributed the difference in performance to motivation which differentiated between boys and girls in their mathematics task ability" [15].

Furthermore, the result is inconsistent with the assertion of an earlier study that "boys and girls differed significantly at different levels of academic performance" [21]. Similarly, another writer also indicated that "females normally develop negative social and academic self-concepts that end up affecting their academic performance significantly as compared to their male counterparts" [16].

The study investigates gender differences in academic performance among teacher trainees. Contrary to expectations, there was no statistically significant difference in academic performance between male and female trainees. This finding challenges traditional gender stereotypes regarding academic achievement and suggests a more equitable distribution of academic success among teacher trainees in Ghanaian Colleges of Education.

### **3.4. Difference in the academic self-concept of teacher trainees in Ada and Accra Colleges of Education**

The rationale for the fourth objective of the study was to examine whether there was a difference between the academic self-concept of teacher trainees in Ada and Accra Colleges of Education. In line with this objective, it was hypothesised that there is no statistically significant difference between the academic self-concept of trainees of Ada and Accra Colleges of Education. The t-test was used to test the hypothesis and the results are presented in [Table 4](#).

**Table 4. Differences between Academic Self-concept of Teacher Trainees in Ada and Accra Colleges of Education (N = 262)**

Variable	Name of College	N	Mean	SD	t-value	df	p-value
Academic self-concept	Ada CoE	119	2.350	0.499	1.231	260	0.220
	Accra CoE	143	2.279	0.417			

Source: Field survey

The results in Table 4 indicate that there was no statistically significant difference between the academic self-concept of teacher trainees of Ada and Accra colleges of education ( $t = 1.231$ ,  $df = 260$ ,  $p = 0.220$ ). Even though there is no significant difference between teacher trainees from the two colleges of education, teacher trainees in Ada College of Education had a higher mean score (2.350) on the academic self-concept scale than their counterparts in Accra College of Education (Mean = 2.279).

The result contradicts the findings of other studies that the “academic self-concept of students is largely influenced by the school culture and climate. Since different schools have different climates and cultures so too do students within the schools. Students coming from different school environments and cultures have different academic self-concepts. Students from different schools end up having different attitudes and feelings about their abilities and academic potential. The most important component of general self-concept for a teacher is academic self-concept, the part that deals with people’s beliefs of their ability as students which usually vary from school to school. Furthermore, students’ academic self-concept relates to how conducive their school and class are, which vary from class to class and from school to school” [22, 23].

### 3.5. Difference in the academic performance of teacher trainees in Ada and Accra Colleges of Education

The fifth objective of the study was intended to examine the difference between the academic performance of teacher trainees in Ada and Accra Colleges of Education. It was, therefore, hypothesised that, there is no statistically significant difference between the academic performance of teacher trainees in Ada and Accra Colleges of Education. The independent samples t-test was used to analyse the data. The results are presented in Table 5.

**Table 5. Differences between Academic Performance of Teacher Trainees in Ada and Accra Colleges of Education (N = 262)**

Variable	Name of College	N	Mean	SD	t-value	p-value	$\eta^2$
Academic performance	Ada CoE	119	2.997	0.516	7.482	0.000	0.177
	Accra CoE	143	2.486	0.574			

Source: Field survey; Significant,  $p < 0.05$

The results in Table 5 show that there was a statistically significant difference between the academic performance of teacher trainees in Ada and Accra Colleges of Education ( $t = 7.482$ ,  $df = 260$ ,  $p = 0.000$ ). The results show that teacher trainees in Ada College of Education had a better performance with a mean score of (2.997) than their counterparts in Accra College of Education (2.486). Since there is a statistically significant difference between the two groups when their academic performance was compared, there is the need to go further and find out the margin of the difference using the Eta square value [24]. Based on the interpretation of the eta square, the magnitude of the difference between the mean scores of teacher trainees of Ada College of Education and those of Accra College of Education about their level of academic performance was large [eta square ( $\eta^2$ ) = 0.177] [25]. This shows that .177 per cent of the variances in teacher

trainees from the two Colleges of Education about their level of academic performance could be explained by the college they found themselves in.

The results may mean that the school environment, culture or climate to a large extent influenced the self-concepts of the students which in the long run may boost their academic performance. The results may again mean that teacher trainees of Ada College of Education had been exposed to a better climate which helped boost their self-concept in the long run. That is why teacher trainees at Ada College of Education's level of academic performance were higher than those at Accra College of Education. The findings are consistent with the argument of a writer that "the academic performance of low-achieving students will not improve without a positive school culture, environment and climate through peer and teacher relationships" [26].

Finally, the study examines differences in academic self-concept and performance between teacher trainees from different colleges of education. While no significant difference was found in academic self-concept, there was a significant difference in academic performance between trainees from Ada and Accra Colleges of Education. This highlights the potential influence of institutional factors, such as school climate and environment, on academic outcomes. The results suggest that teacher trainees' academic performance may be influenced by the supportive and conducive learning environments provided by their respective colleges.

Overall, the findings contribute to our understanding of the complex interplay between academic self-concept, gender, and academic performance among teacher trainees in Ghanaian Colleges of Education. They underscore the importance of fostering positive academic self-concept and creating inclusive learning environments to support the academic success of all teacher trainees, regardless of gender or institutional affiliation. Additionally, the study highlights the need for further research to explore the underlying mechanisms driving these relationships and to inform targeted interventions aimed at promoting academic excellence in teacher education programs.

#### 4. Conclusions

The study on the appraisal of teacher-trainees' academic self-concept and performance in Ghanaian Colleges of Education provides valuable insights into the dynamics of academic achievement and self-perception among future educators. Through a comprehensive analysis of the relationship between academic self-concept, gender differences, and academic performance, several significant findings emerge:

**Positive Relationship between Academic Self-Concept and Performance:** The study confirms a statistically significant positive relationship between teacher-trainees' academic self-concept and their academic performance. This underscores the importance of nurturing positive academic self-concepts among teacher-trainees, as it can contribute to improved academic outcomes.

**Gender Equality in Academic Self-Concept:** Contrary to traditional gender stereotypes, the study reveals no statistically significant difference in academic self-concept between male and female teacher-trainees. This suggests a more equitable perception of academic competence among future educators, reflecting a positive shift towards gender equality in educational settings.

**Gender Equity in Academic Performance:** Similarly, the study finds no statistically significant difference in academic performance between male and female teacher-trainees. This challenges previous notions of gender-based differences in academic achievement and highlights the potential for gender equity in educational outcomes among teacher-trainees.

**Institutional Influence on Academic Performance:** The study identifies a significant difference in academic performance between teacher-trainees from different Colleges of Education. This suggests that institutional factors, such as school climate and environment, may play a role in shaping academic outcomes among teacher-trainees.

Overall, the findings of this study have important implications for teacher education programs and policies in Ghanaian Colleges of Education. They underscore the need for interventions aimed at fostering positive academic self-concepts among teacher-trainees, regardless of gender or institutional affiliation. Additionally, the study highlights the importance of creating inclusive learning environments that support the academic success of all future educators. By addressing these factors, teacher education programs can better prepare teacher-trainees to meet the diverse needs of students and contribute to the improvement of education quality in Ghana.

## 5. Recommendations

Based on the findings and conclusions of the study on teacher-trainees' academic self-concept and performance in Ghanaian Colleges of Education, the following recommendations are proposed:

**Promotion of Positive Academic Self-Concept:** Colleges of Education should implement interventions aimed at fostering positive academic self-concepts among teacher-trainees. This could include providing mentoring programs, self-efficacy workshops, and opportunities for self-reflection to enhance teacher-trainees' confidence in their academic abilities.

**Gender-Responsive Pedagogy:** Teacher education programs should adopt gender-responsive pedagogical approaches to ensure equitable learning experiences for male and female teacher-trainees. This may involve incorporating gender-sensitive teaching materials, addressing gender stereotypes in the classroom, and promoting inclusive teaching practices that cater to the diverse needs of all students.

**Supportive Learning Environments:** Colleges of Education should create supportive and inclusive learning environments that foster academic success for all teacher-trainees. This could involve improving infrastructure, providing access to resources and support services, and promoting a culture of collaboration and mutual respect among students and faculty.

**Professional Development for Educators:** Teacher educators should undergo professional development training to enhance their capacity to support teacher-trainees' academic self-concept and performance. This may include workshops on motivational strategies, effective feedback techniques, and culturally responsive teaching practices that promote academic success for diverse student populations.

**Research and Evaluation:** Further research is needed to explore the underlying factors influencing teacher-trainees' academic self-concept and performance, including the impact of socio-cultural, economic, and institutional factors. Longitudinal studies could provide valuable insights into the development of academic self-concept over time and its relationship to academic achievement.

**Policy Implementation:** Educational policymakers should prioritise the implementation of policies aimed at promoting gender equity and inclusive education in Colleges of Education. This may involve revising curriculum standards, allocating resources for gender-responsive programs, and monitoring progress towards gender equality in academic outcomes.

**Collaborative Partnerships:** Colleges of Education should establish collaborative partnerships with other educational institutions, government agencies, and non-governmental organisations to share best practices, resources, and expertise in promoting positive academic self-concept and academic success among teacher-trainees.

By implementing these recommendations, Colleges of Education in Ghana can create an enabling environment that empowers teacher-trainees to develop positive academic self-concepts, achieve their full potential, and contribute effectively to the improvement of education quality in the country.

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