

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume VIII Issue IIIS May 2024 | Special Issue on Education

The Influence of Mattering and a Sense of Belonging on Students' GPA: A Case Study of Colleges of Education in the Volti Zone, Ghana

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DOI: https://dx.doi.org/10.47772/IJRISS.2024.803105S

Received: 14 May 2024; Accepted: 25 May 2024; Published: 28 June 2024

ABSTRACT

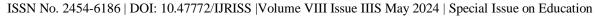
The quest into what influences student performance is a perennial endeavour in educational settings. Among the multitude of variables under investigation, the notions of significance and a feeling of inclusion have gained increasing attention for their potential impact on academic achievement. This research looked at the impact of mattering and sense of belonging on students' GPA. Using case studies from Volti Zone in Ghana, and the quantitative research design, data were gathered from 522 teacher trainees utilizing validated scales. The results of the bivariate regression analysis revealed that each individual construct of mattering and sense of belonging influences students' GPA, with mattering (β = .104; t = .716; p = .045) and sense of belonging (β = .052; t = .065; p = .003). Similarly, the multivariate regression results revealed that both constructs combined influence students' GPA, with mattering (β = .024; t = .918; p = .043) and sense of belonging (β = .017; t = .578; p = .035). The research findings indicate that the levels of mattering and sense of belonging significantly correlate with teacher trainees' GPA, with increased levels of both factors corresponding to higher academic performance. In essence, greater feelings of significance and belongingness are associated with improved GPA outcomes among teacher trainees in Ghana.

Keywords: Mattering, sense of belonging, GPA, regression analysis

INTRODUCTION

In educational settings, the quest into what influences student performance is a perennial endeavor. Among the multitude of variables under investigation, the notions of significance and a feeling of inclusion have gained increasing attention for their potential impact on academic achievement. A person's sense of belonging is their experience of being approved, cherished, and welcomed into a specific group or society, whereas mattering is their belief that they are important and appreciated by others. Both of these constructs are deeply intertwined with students' psychosocial well-being and academic outcomes.

Mattering provides a sense of individual relevance, personal connection, and societal approval, which are essential psychological resources for human flourishing (Davishahl & Alqudah, 2020; Flett, 2022). It is a fundamental psychological desire that is felt as being valued and adding worth (Prilleltensky, 2019). A person who has the feeling of mattering believes that they are valuable to others (Rosenberg & McCullough, 1981; Schlossberg, 1989). Adapting Schlossberg's (1989) definition of mattering, Davis et al. (2020) explained mattering as "being noticed, cared for, needed, appreciated, and not over-looked". People who have a strong feeling of mattering frequently believe that others are aware of them and that they concern about their desires, ideas, activities, and future (Paputsakis, 2010). In his study on mattering, Flett (2018)





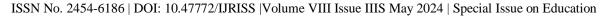
discovered that having a sense of belonging and recognition as person with particular and distinctive personality is also a key component of mattering.

The classroom setting is seen as a social ecosystem, and learning there is seen as a process that is governed by social structures (Zhao et al., 2019). How friendly the school atmosphere and its societal relationships are, influence a student's sense of inclusion (Strayhorn, 2019; Walton, & Cohen, 2011). Feeling of Belonging refers to how much a learner feels completely welcomed and assimilated into the general intellectual and social environments of their college (Museus & Maramba, 2010). In Peacock et al. (2020)'s study, participants held varying opinions about what constitutes a feeling of inclusion, including that it is the "feeling" of being a member of a society, joining a group of students who share similar objective, and interacting with educational resources, other students, and instructors. The feeling of acceptance, worth, and inclusion a student feels toward their classmates or other members of the school community is measured by sense of belonging. Strayhorn (2019) characterized belonging as the perception of societal assistance on campus, a sense of closeness, and experience of mattering or being significant to the college environment or individuals on campus, such as educators, workers, and colleagues. The sense of belonging indices measure how connected learners feel to the larger school environment (Durand, 2018).

Academic achievement in any educational setting depends on a feeling of belonging (Strayhorn, 2019; Bowskill et al., 2022). In view of this, Maslow (1962) and Strayhorn (2019) argue that fulfilling a college student's need for belonging precedes higher-order needs like knowledge and self-actualization (Strayhorn, 2019). Therefore, without a feeling of connectedness within the educational setting, it is impossible to gain insights or competence (Knekta et al., 2020). A learner's feeling of inclusion is now crucial for fostering inclusive and fair learning environments (Hilliger et al., 2022) and a crucial societal and an emotional requirement for college students (Singh, 2018). An institution can influence a learner's feeling of inclusion by providing deliberate and appropriate academic assistance (Perez, 2020). Basically, learners who believe they belong will probably have a more favorable and fruitful learning experience (Durand, 2018). Research indicates that a positive sense of belonging is associated with increased educational engagement, motivation, and overall satisfaction (Walton & Cohen, 2011). The interactions a learner has with their peers, instructors, family, and the larger community all have a role in how they feel like they belong (Centre for Education Statistics and Evaluation, 2020).

Although mattering and sense of belonging have been extensively studied, this research is motivated by two significant limitations in existing scholarship. Firstly, there exists a notable bias towards research conducted in Western industrialized countries, with Africa and other regions receiving disproportionately less scientific attention. This bias undermines the inclusivity and generalizability of findings, potentially overlooking cultural nuances and variations in academic contexts. Secondly, while the influence of these two constructs on academic achievement, specifically GPA, has been studied independently, there is a notable absence of research combining both factors. Researchers have examined each construct in isolation, offering insights into their individual effects on GPA. However, the lack of studies integrating both constructs leaves a gap in understanding the cumulative impact on academic performance. This investigation can unveil the synergistic effects or interactions between these factors that may shape students' academic outcomes.

Understanding the influence of mattering and sense of belonging on students' GPA holds significant implications for educational institutions and policymakers. By identifying the factors that contribute to academic success, educators can design interventions and support mechanisms aimed at fostering a more inclusive and supportive learning environment. Moreover, recognizing the importance of mattering and belonging can inform institutional practices that promote student engagement, retention, and overall well-being. Therefore, investigating the connection between mattering, sense of belonging, and GPA is not only academically enriching but also holds practical relevance for enhancing student outcomes and promoting educational equity. Finally, by addressing the gap in research between advanced and emerging countries, the





research seeks to broaden the geographical scope of inquiry and foster a more inclusive understanding of these constructs' impact on academic achievement across diverse cultural settings. Through this lens, the study aims to contribute to a more globally representative body of knowledge in educational research.

RELATED LITERATURE

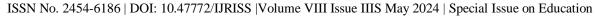
Educational achievement of learners is frequently determined by how well they achieve predicated on traditional academic criteria, such as their grade point average (GPA), retention, and curricular progression (Latopolski, 2018). Studies looking into the connection between mattering, a sense of belonging, and academic outcomes has yielded mixed findings. Some studies have found positive associations between mattering, belongingness, and students' scholarly success (Chavous et al., 2003; Goodenow, 1993). For instance, Chavous et al. (2003) revealed that African-American students who perceived themselves as mattering to their university community demonstrated increased rates of participation and performance in the classroom. Similarly, Goodenow (1993) demonstrated that learners who had a high feeling of community at school were inclined to have higher GPAs. Furthermore, studies by Walton and Cohen (2007) and Goodenow (1993) have demonstrated that students who feel a strong feeling of inclusion in their academic environment exhibit greater magnitudes of academic engagement, persistence, and ultimately, better educational performance. Moreover, research by Schlossberg (1989) and Brannon and Walton (2013) highlights the significance of mattering in fostering students' academic success, indicating that feelings of mattering are favorably linked to academic self-efficacy and motivation.

Recent empirical studies have provided further insights into the correlation between mattering, feeling of inclusion, and GPA. These results highlight the consistent and significant role of mattering and feeling of inclusion in predicting academic achievement among students. Cook et al.'s (2018) longitudinal study underscores the enduring impact of perceived mattering on academic achievement, emphasizing its influence beyond demographic and academic variables. Similarly, Mayhew et al.'s (2016) research underscores the robust association between students' "sense of belonging" and GPA, emphasizing the significance of fostering a supportive campus environment. Swanson et al.'s (2021) longitudinal research further strengthens these associations by demonstrating the positive correlation between perceived importance to the campus and GPA outcomes over a three-year period. When combined, these studies offer compelling proof of the critical function of mattering and sense of belonging in shaping students' academic trajectories and underscore the importance of cultivating a supportive and inclusive educational environment.

However, other studies have failed to find significant relationships between these constructs and academic performance (Hausmann et al., 2007; Hurtado & Carter, 1997). For example, Hausmann et al. (2007) found no direct relationship between mattering and GPA among college students. Similarly, Hurtado and Carter (1997) did not find a favorable linkage between students' "sense of belonging" and their academic achievement. In a study of 149 college students, Schriver and Kulynych (2021) revealed that mattering metrics did not correlate to student results. Despite efforts to explore these relationships, findings have been inconclusive or inconsistent across different contexts. These findings suggest that while mattering and belongingness may be important psychosocial factors, their direct impact on academic outcomes remains unclear or may be influenced by other variables. These inconsistent findings underscore the complexity of the mattering-achievement link and highlight the need for this investigation.

Conceptual Framework

The conceptual framework examined the influence of mattering and feeling of inclusion on learner's educational output (GPA). In this research, the investigators initially determined the individual effects of mattering and sense of belonging on students' GPA. After that both constructs were regressed on the outcome (students' GPA) to determine their influence on the outcome. The figure below illustrates the





conceptual framework that undergirds the investigation and the linkage between the independent variables (mattering, sense of belonging) and the outcome variable (GPA).

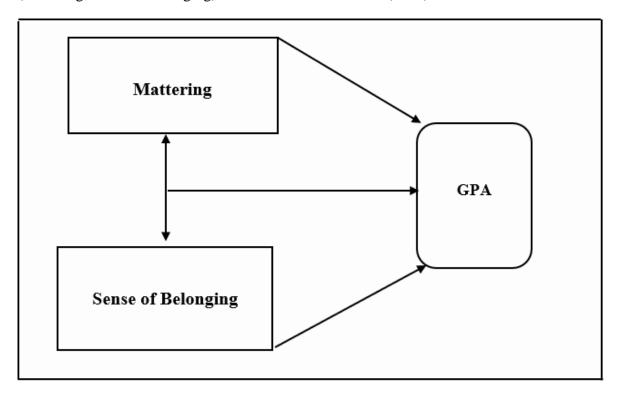


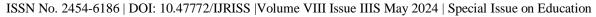
Figure 1: Conceptual framework showing the linkage between mattering and sense of belonging and students' GPA. Source: The authors (2023)

Theoretical Frameworks

The investigators adopted the mattering and marginality, Maslow's hierarchy of needs and sense of belonging models to provide a thorough comprehension of influence of mattering and sense of belonging students' educational achievement (GPA). The "theory of mattering and marginality", alongside the sense of belonging model and Maslow's hierarchy of needs, offer essential frameworks for understanding students' experiences in educational settings. These theories highlight the importance of fostering a feeling of value, inclusion, and meeting basic human needs for student engagement, persistence, and academic success. Their relevance lies in guiding research and informing educational practices aimed at creating inclusive, supportive, and conducive learning environments for all students. These principles drive the development of strategies that empower educators to embrace diversity and address barriers to learning effectively.

Theory of Mattering and Marginality

The Theory of Mattering, developed by Schlossberg (1989), offers valuable insights into the dynamics of belonging and significance within educational contexts, particularly in higher education. Schlossberg's theory, stemming from Astin's (1984) involvement model, emphasizes the pivotal role of student engagement and interpersonal relationships in fostering a profound sense of value and belonging among individuals. According to the theory, marginality arises when individuals experience a sense of displacement or feeling out of place, leading to feelings of insignificance or uncertainty regarding their sense of belonging. Schlossberg aptly highlights that marginalization is often a transient state, and individuals can transition from the margins to a state of mattering through meaningful experiences and relationships. This transition underscores the importance of creating inclusive and supportive environments within educational institutions, where students can actively engage with their peers, instructors, and the broader academic community. As Schlossberg posits, fostering environments where learners feel valued is crucial for





enhancing learner persistence and engagement throughout their college experiences (Schlossberg, 1989).

Furthermore, while the Theory of Mattering was initially formulated for adult populations, its adaptation and application within higher education contexts have yielded profound implications. By informing research on minority students' perspectives, the theory sheds light on the nuanced dynamics of mattering and marginality within diverse student populations. Understanding these dynamics among teacher trainees, for instance, can provide valuable insights for institutional policymakers seeking to promote inclusion and support within higher education settings. Schlossberg's Theory of Mattering holds significant relevance to various aspects of student success and well-being within higher education, including academic achievement. Research has shown that students who perceive increased sense of belonging tend to demonstrate heightened degrees of involvement or participation, satisfaction, and ultimately, academic performance, including GPA (Fisher et al., 2018). Therefore, institutions that prioritize creating inclusive and supportive environments stand to positively influence variables like students' feeling of inclusion and, consequently, their GPA.

Maslow Hierarchy of Needs

Maslow's Hierarchy of Needs, proposed in 1954, recognized "belonging" as a fundamental human need. It gained significance for college student achievement in recent years (Cole et al., 2020). Maslow suggested five basic needs arranged in a hierarchy, with love and belonging placed third (Slaten et al., 2016). These needs progress linearly, starting from physiological and safety requirements. According to Maslow (1954), love and belonging needs will materialize only after emotional and security requirements have been met and before pursuing self-worth and self-actualization (Chen, 2021). People can concentrate on addressing their desire for affection and belonging once their physiological and safety demands have been addressed. In order to satisfy that urge and advance on the road to realizing one's greatest capabilities, regardless of what that might entail, one needs close friendships, intimate links with others, and a sense of belonging.

Maslow's notion of belongingness and mattering share many similarities (Chen, 2021; Perez, 2020). The relevance of this model to the study is that as teacher trainees' students go through the hierarchy of academic achievements, their sense of belonging to the college campuses must be satisfied before any other topmost achievements are accomplished. The parallel between Maslow's social needs and the notion of mattering is evident: both address the intrinsic human desire for interpersonal connections and recognition. By establishing social connections and fostering a sense of mattering, individuals can ascend Maslow's hierarchy, moving towards achieving their potential. By integrating these two perspectives, scholars and professionals can acquire a more holistic knowledge of human behavior and design interventions that enhance individuals' sense of mattering, thereby promoting their well-being and personal growth.

Sense of Belonging Model

Strayhorn's (2019) model identifies seven key components of belonging: it's a fundamental human need, a primary motivator influencing action, contextually determined, involves feeling valued by others, influenced by individual personalities, leads to success and satisfaction, and requires ongoing fulfillment. This model parallels Maslow's hierarchy, with belongingness following basic needs and preceding self-actualization. In higher education, students' needs progress in a similar sequence, impacting their behaviors and decisions. Fulfilling the need for belonging fosters involvement and higher-order desires like creativity and knowledge-seeking. The researchers define students' sense of community in college as perceived social support, interconnectedness, and significance within the college community and society. Fulfilling this need is crucial before involvement-related desires can manifest effectively (Strayhorn, 2019). Strayhorn Sense of Belonging Model occupies a prominent place within mattering studies, offering a comprehensive framework for understanding the intricate dynamics of belonging in educational contexts. By acknowledging the interplay of fit, value, and trust, the model provides vital information on the elements that influence

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume VIII Issue IIIS May 2024 | Special Issue on Education

individuals' perceptions of significance and worth within their social environments.

METHODOLOGY

Study Area

Volta Region is one of the sixteen administrative regions in Ghana, with Ho as its capital. The region is bordered by Republic of Togo in the West and the Lake Volta in the East. The region divided into 25 administrative districts, contains a variety of ethnic and linguistic groupings, including the "Ewe, Guan, and Akan peoples. The researcher considered various factors and motivations to choose the Volti zone in the Volta region as a study area. First of all, The Volta region has unique characteristics, phenomena, or problems that align with the research objectives. Again, the availability of numerous Colleges of Education is another reason why the researcher chose the area. It is a place where comprehensive and reliable data is accessible, allowing the researcher to conduct a thorough investigation and draw meaningful conclusions. By focusing on such areas, the researcher can make original contributions to the field and fill gaps in knowledge of teacher trainees experience on the campus environment. The study area is easily accessible by the researcher which makes it manageable with the resources available and adhere to ethical guidelines.

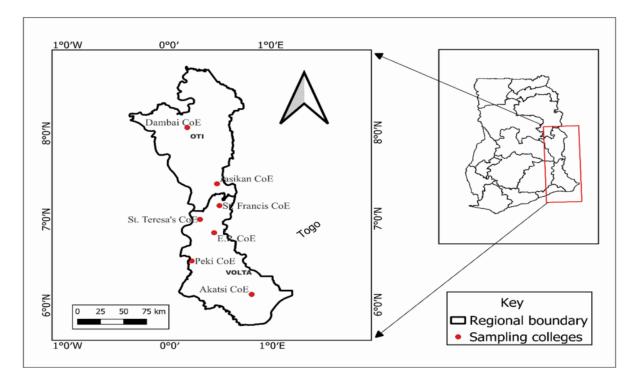
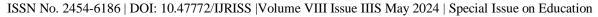


Figure 2: Map of the study area showing the sampling colleges of education in Volti Zone

Research Design

To further elucidate the connection between mattering, a sense of belonging, and students' GPA, the current study employed a quantitative research design. This research design enabled a rigorous examination of the linkage between mattering, a sense of belonging, and students' GPA. Despite criticisms levelled against the quantitative research design such as, often based on pre-determined variables and procedures, which may not allow for flexibility or adaptation, using surveys, questionnaires, or other standardized measures that do not allow for participants to fully express their experiences or perspectives (Sukamolson, 2007), the investigators considered this design useful because of its statistical testing (Mohajan, 2020), allowing for replication of the study by other researchers to validate the findings (McLeod, 2019). Again, the use of statistical techniques in quantitative research allows for a precise estimation of the effect of variables on





outcomes, making it possible to make more accurate predictions (Stanley & Jarrell, 2005).

Sampling Procedure

A diverse sample of teacher trainees enrolled across multiple academic programs was recruited to ensure representation across different educational contexts. In all, 522 teacher trainees from varied programs were drawn from seven teacher training colleges in Ghana, utilizing the proportionate stratified sampling approach. This was achieved by splitting the population into homogenous groupings (strata) and subset drawn from each stratum. In this study, each of the seven colleges of education formed a stratum from which sample was drawn from. This sampling method increased the precision and representativeness of the sample by ensuring that each stratum (college) was proportionally represented in the subset, and also enabled the comparison between different population subsets, providing insights into the relationship between variables of interest (Sharma, 2017).

Data Collection Procedure

Validated scales were utilized to assess participants' levels of mattering and belongingness, providing robust measures for analysis. The study adopted the Hoffmann, Richmond, Morrow, and Salomone's (2002-2003) Revised "Sense of Belonging Instrument". Additionally, GPA data was sourced from students. Data were gathered between May and June 2023, and lasted for one-and-half months. This was one week after informed consent form was approved. The date was agreed between the researchers and the authorities of the institutions to conveniently administer the survey to the respondents, without compromising the students' learning hours. The researchers carefully adhered to the ethics of social research, thus, ensuring the anonymity of the respondent by removing any information that revealed the identity of the respondents in the questionnaire. The GPA questionnaire item was categorized in ranges to encourage respondents to give a candid response.

Data Processing and Analysis

The meticulous process of ensuring data accuracy began with a comprehensive cross-check of the questionnaires, addressing all necessary corrections prior to entry into statistical software. To maintain data integrity, each completed questionnaire was serialized, mitigating the risk of duplicate entries during the data entry phase. Subsequently, the curated data was entered into IBM SPSS, a robust statistical software, facilitating systematic and efficient evaluation. The constituent scales of both constructs were combined, each to form a composite scale, and then regressed on students' GPA. The emphasis on inferential statistics, particularly, simple and multivariate linear regressions provided a greater comprehension of the association within data. The analysis of information collected from respondents was not only thorough but also insightful, allowing for nuanced interpretations. To enhance clarity, the findings were meticulously organized and presented in tables, offering a visual representation for a more accessible and comprehensive grasp of the research outcomes.

RESULTS

Respondents' Background Information

Table 1 illustrates respondents' background information. Concerning gender, 44.3% were males whiles 55.7% were females. The data shows that majority of females were polled than males. The age distribution demonstrates a significant majority of the respondents in the categories of 20-24, and 25-29 with 41.6% and 38.7% respectively. The rest were within the ages of < 20, 30-34, and 35 and above with 2.5%, 14.4%, and 2.9% respectively. Regarding the institution, the majority polled were found in St. Francis College of Education with 22.2%, 15.3% were from Peki Government College of Education, 14.8% were from Dambai

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume VIII Issue IIIS May 2024 | Special Issue on Education

College of Education, 13.0% were from E. P. College of Education, 12.6% were polled from Akatsi College of Education, 11.7% were form Jasikan College of Education, and the lowest was occupied by St. Teresa's College of Education with 10.3%.

Table 1: Respondents' Background Information

Variable	Category	Frequency (N)	Percentage (%)
Gender	Male	231	44.3
	Female	291	55.7
	Total	522	100

Variable	Category	Frequency (N)	Percentage (%)
Age	< 20	13	2.5
	20-24	217	41.6
	25-29	202	38.7
	30-34	75	14.4
	35 and above	15	2.9
	Total	522	100

Variable	Category	Frequency (N)	Percentage (%)
Institution (College)	St. Francis CoE	116	22.2
	Akatsi CoE	66	12.6
	Government CoE (Peki)	80	15.3
	Dambai CoE	77	14.8
	Jasikan CoE	61	11.7
	St. Teresa's CoE	54	10.3
	E. P. CoE	68	13.0
	Total	522	100

Source: Field Survey (2023)

Influence of Mattering and Sense of Belonging on Students' GPA

The multivariate regression analysis was carried out to determine the association and statistical significance of the influence of college mattering and sense of belonging on students' GPA. It should be emphasised that the predictive analysis's coefficients are given special attention. A statistical significance was tested at a threshold of 0.05. The general regression model utilized follows the structure:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where;

Y = Students' GPA



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 β_0 = Constant

 β_1 = Co-efficient of College Mattering

 $X_1 = College mattering$

 β_2 = Co-efficient of Sense of Belonging

 X_2 = College Sense of Belonging

 $\varepsilon = \text{error term}$

Influence of Mattering on GPA

Table 2 presents the bivariate results of the influence of college mattering on teacher trainees' GPA. The analysis indicates that the unstandardized beta weight of 0.104 of college mattering is statistically significant with p < 0.05.

Table 2: Mattering on Students' GPA							
Model		Unstandardized Coefficients		Standardized Coefficients	т	C:~	
Mode	61	В	Std. Error	Beta	1	Sig.	
	(Constant)	3.947	.463		8.533	.000	
	College Mattering	.104	.006	.031	716	.045	
a. Dependent Variable: Students' GPA							

Source: Field Survey (2022)

Influence of Sense of belonging on GPA

A bivariate regression was performed between college sense of belonging and trainees' Grade Point Average. Table 3 below indicates that unstandardized beta weight of 0.052 was statistically significant with p < 0.05. This means that as high sense of belonging increases the GPA of teacher trainee students by 0.052.

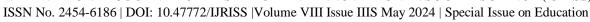
Table 3: Sense of Belonging on Students' GPA								
Model		Unstandardized Coefficients S		Standardized Coefficients	т	Sig.		
		В	Std. Error	Beta	1	Sig.		
	(Constant)	3.592	.419		8.567	.000		
	Sense of Belonging	.052	.005	.023	.065	.003		

a. Dependent Variable: Students' GPA

Source: Field Survey (2023)

Multivariate Regression Analysis

Here, a multiple linear regression was performed with two independent variables (mattering and sense of belonging) and students' GPA as outcome variable. The results obtained from the multivariate regression analysis is presented below. Table 4 shows significance of the coefficients of the predictors on the outcome. It is clear from Table 4 that both mattering and sense of belonging had unstandardized coefficients that were





statistically significant (p < .05).

Table 4: Mattering and Sense of Belonging on Students' GPA								
Model		Unstandardized Coefficients		Standardized Coefficients	т	Sig.		
		В	Std. Error	Beta	1	oig.		
	(Constant)	3.839	.499		7.700	.000		
	Sense of Belonging	.024	.097	.031	.578	.043		
	College Mattering	.017	.078	.049	918	.035		
a. Dependent Variable: Students' GPA								

Source: Field Survey (2023)

DISCUSSION

In analyzing the results within the frameworks of mattering and marginality, sense of belonging, and Maslow's hierarchy of needs, it becomes evident how intertwined psychological constructs shape students' educational experiences. Understanding the interplay between these frameworks provides valuable insights into students' perceptions of value, belonging, and personal fulfillment within the educational landscape.

Educational achievement of learners is frequently determined by how well they achieve predicated on traditional academic criteria, such as their grade point average (GPA), retention, and curricular progression (Latopolski, 2018). From the bivariate analysis, it was observed that college mattering was positively related with students' GPA. The findings suggest that students' perception of mattering significantly influences their academic achievement, particularly their GPA. As students feel a stronger sense of mattering to their college or university, they are more likely to be motivated to excel in their studies, leading to higher GPA scores. This is so because students will be driven to take their studies seriously. This aligns with previous research, such as Swanson et al.'s (2021) longitudinal study, which also found a positive correlation between mattering and academic performance. Essentially, a strong feeling of mattering to the campus environment enhances students' overall well-being and contributes to their academic success, while a lack of such feelings may negatively impact their GPA. Therefore, fostering a sense of mattering among students could be an important factor in promoting academic excellence and student success. This involves prioritizing initiatives that promote student inclusion, recognition, and support in college campus to contribute significantly to creating a conducive atmosphere for learning and achievement.

Furthermore, sense of belonging also predicts students' (GPA) according to the regression results, which reinforces other empirical studies. For instance, Chavous et al. (2003) discovered that African American students who perceived themselves as mattering to their university community demonstrated higher degrees of engagement and achievement in the classroom. Likewise, Goodenow (1993) demonstrated that learners experiencing a profound feeling of school belonging tended to achieve higher GPAs. Similarly, studies by Walton and Cohen (2007) and Goodenow (1993) have demonstrated that learners who feel a strong feeling of inclusion in their academic surrounding exhibit greater degrees of academic engagement, persistence, and ultimately, better academic performance.

Cook et al.'s (2018) longitudinal research reported that perceived mattering significantly predicted academic attainment over a period, with controlled demographic and academic factors.

Similarly, Mayhew et al.'s (2016) study revealed that students' feeling of belonging was a robust determinant of GPA, with higher levels of belonging associated with better academic performance. The present research's results mean having a high feeling of belonging in campus environment predicts teacher



ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume VIII Issue IIIS May 2024 | Special Issue on Education

trainees' GPAs in the colleges of education in Ghana. This underscores the significance of nurturing a strong sense of inclusion within academic institutions, particularly among teacher trainees. In other words, the findings suggest that when learners feel valued and integrated into their academic community, they are more inclined to participate or involve actively in their studies and achieve higher GPAs. The consistent support from previous empirical studies reinforces the significance of mattering and belongingness in academic success across various student populations.

CONCLUSION AND IMPLICATIONS

In understanding the dynamics of academic achievement, particularly within higher education settings, researchers have increasingly recognized the pivotal role of students' perception of significance and feeling of inclusion. The investigation delves into the intricate relationship between these psychological constructs and academic success, with a specific focus on their impact on students' grade point average (GPA). Results from the investigation reinforce the relevance of students' perception of "mattering and sense of belonging" in predicting academic achievement, especially their GPA. The bivariate analysis revealed a positive relationship between college mattering and GPA, indicating that as students experience an intense feeling of mattering in their educational institution, likely will they excel academically. This confirms the reported studies, underscoring the relevance of fostering a supportive and inclusive campus environment to promote student success. Moreover, the regression results further emphasized the predictive power of sense of belonging on students' GPA, corroborating findings from previous studies across different student populations.

The implications of these findings are profound for educational institutions, particularly colleges of education in Ghana and beyond. It is imperative for institutions to prioritize initiatives that nurture a feeling of mattering and belonging among students. This may involve implementing programs and policies aimed at fostering inclusivity, recognition, and support within the campus environment. By creating a conducive atmosphere where students feel valued, connected, and supported, institutions can significantly enhance student engagement and academic performance. Furthermore, the implications extend to teacher training programs, highlighting the significance of nurturing a higher feeling of inclusion among teacher trainees. As future educators, their academic success not only reflects their personal achievements but also impacts the quality of education they will provide to their future students. Ultimately, these results emphasize the need for educational institutions to prioritize initiatives that cultivate a supportive and inclusive environment to enhance the academic performance of teacher trainees and, by extension, improve educational outcomes.

FUNDING

The authors receive no funding for the conduct and publication of this work.

DATA AVAILABILITY STATEMENT

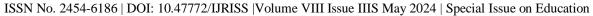
The data associated with this study are those presented in the paper.

DISCLOSURE STATEMENT

The authors declare no potential conflict of interest.

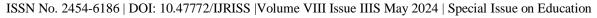
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