

EVALUATING THE PREDICTIVE INFLUENCE OF PERCEIVED SOCIAL SUPPORT AND ACADEMIC ENGAGEMENT ON ACADEMIC ACHIEVEMENT AMONG FORM TWO STUDENTS IN GABORONE CITY, BOTSWANA

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Abstract

Purpose of Study: The study investigated the relative predictive weight of perceived social support and student academic engagement on academic achievement among form two students in Gaborone City, Botswana.

Problem Statement: Education is considered the foundation of success, with secondary education serving as a bridge to vocational and higher learning. The administration of Botswana has invested heavily in the education sector over the years. However, despite these major investments, students' academic achievement has remained stubbornly low, especially in public secondary schools in the South East Region. This study was founded on Bronfenbrenner's Ecological Systems Theory and Albert Bandura's Social Cognitive Theory.

Methodology: A correlational research design was employed and target population of 3713 form two students spread across the 8 secondary schools in the Gaborone City Botswana. Purposive sampling, stratified sampling and simple random sampling techniques were used to select the study sample size of 397 respondents. The analysis was conducted using the SPSS software Version 26 where descriptive statistics, Pearson's Product Moment Correlation Coefficient, linear regression were used.

Result: The findings showed that perceived social support and academic engagement significantly predicted academic achievement, $F(2,381) = 11.17, p < .001$, explaining 11% of the variance ($R^2 = .11$). Perceived social support ($\beta = .24, p = .001$) was a stronger predictor than academic engagement ($\beta = .15, p = .036$).

Recommendation: Policymakers and school administrators should consider developing and implementing comprehensive policies and programs that address both the social-emotional and academic needs of students, providing resources for family and community engagement.

Keywords: *Perceived Social Support, Academic Engagement, Academic Achievement, Form Two Students, Gaborone City, Botswana.*

INTRODUCTION

Success is usually attributed to education world over (Abubakar et al., 2017). Scholars around the globe have emphasized the need for a more robust approach to achieving the desired results because worldwide secondary education is the optimal higher learning that prepares one for vocational training or university education. Considering its significance, policymakers and educational stakeholders worldwide administer scholarly tests regularly to determine whether learners attain what is expected of them to be successful in a profession. Nonetheless, assessments such as these demonstrate that students from diverse countries appear to learn some skills but not sufficient to be competitive in today's globalized and digital economy. For the reasons above that academic achievement has continued to be an issue of concern in both policy formulation and research. In the USA for instance, a report on the conditions of education, 2022, indicates that only 22% of students in the 12th grade performed above the capped National Education Report (NAEP, 2023) proficiency levels. Further, the report points towards low completion rates in high school students. The high school diploma adjusted cohort graduation rate (ACGR) was 86% and much lower in Science, Technology and Mathematics (STEM) courses and minority groups. For instance, the percentage of students who had completed calculus in 2019 was only 16%.

In various countries in Europe, academic achievement among students has shown mixed trends, but there are concerns over declining performance in some areas. For example, the Programme for International Student Assessment (PISA) report of 2018 shows that countries like Estonia have excelled in science, math, and reading, while others like Finland have seen a decline in these subjects (Organization for Economic Cooperation and Development [OECD], 2019). Various issues are cited to have brought down educational development in the nations, which entail reduced investment in education, teacher shortages, and a rise in mental health issues among students (Toyon, 2023). Additionally, changes in curricula and teaching methods, often due to political decisions, have been linked to inconsistencies in educational outcomes (Täht et al., 2023).

Learning levels in Africa are significantly below OECD averages, as evidenced by results of international assessment programs. Youths in Africa encounter significant barriers to employment due to high levels of unemployment and underemployment in the formal sector, prompting many to seek employment in the informal sector. The only two North African countries to participate in the evaluation that focused on identifying the trend by which sciences and Mathematics improved were Egypt and Morocco. Both countries were placed towards the bottom of the rankings.

The accomplishment of students who are at junior secondary schools in Ghana has been on a downward trend since 2009. Their overall performance in the Basic Education Certificate Examination fell from 62.16% in 2009 to 50.21% in 2010 and further to 46.93 per cent in 2011 (West African Examination Council [WAEC] 2012). The general pattern is similar at Gomoa Manso schools. In this case, no candidate had a grade above 6 in the 2010 BECE, and only 9 achieved a cumulative grade of 11 - 30. In 2011, of the thirty-four students presented for the BECE; none had a score of 6-10, ten had a score of 11-20, and the other had a score of 21 or higher. Moreover, the 2020 WAEC results indicated that the performance of JHS students in Ghana declined compared to the previous year. Out of the 531,705 candidates who sat for the exams, 64.31% obtained grades between A1 and C6, which is a decrease from the 2019 figure of 65.71%.

The decline in academic achievements of students in Ghana has been attributed to various factors such as inadequate infrastructure, insufficient teaching and learning materials, lack of qualified teachers, and socio-economic factors.

Stakeholders in Nigeria have expressed worry about the growing trend of poor academic achievement of students across all levels of education. As Usman and Madudili (2019) opine, the primary concern appears to have narrowed down to the value of the procedure of teaching, the efficacy of school management, and learners' indifferent disposition toward their studies as a consequence of distractions that impede learning. Since gaining independence from British rule in 1966, Botswana has prioritized the advancement of its education system. This commitment is reflected in two major policy initiatives: the 1977 *Education for Kagisano* policy and the 1994 *Revised National Policy on Education*. These frameworks have been instrumental at ensuring the educational development in the country is shaped and sustained for many years. Additional initiatives include collaboration with organizations from the United Kingdom and United States, and others to enhance the overall quality of education in Botswana. However, achievement among secondary school students has, at an alarming rate, been on a downward trend. In 2019 only 40.3% of students acquired a C grade and above. While the figure increase in 2020 to 51.2%, there was a radical decline to 30.45% in 2021.

Emotional sustenance involves the provision of affect, empathy, and listening whereas informational assistance refers to relaying advice, guidance, and expertise to aid problem-solving. Lastly, instrumental aid involving tangible help with material needs or tasks. Each of these serves a critical function from fortifying mental health to enabling coping and are associated with augmented wellness outcomes. Understanding the complexity of social support enables detailed investigations into how different social relationships impact health, especially within the context of a student's social environment. Yasin and Dzulkifli (2021) point out that it is frequently examined by analyzing social integration, which shows the manner by which students engage socially.

Students have gained a lot with regard school results through the support they get socially. According to An et al. (2022), students with heightened degrees of psychological welfare and more favorable feelings fared better academically, which resulted in better performance on standardized examinations. This type of support is benefiting to academic achievements since it enhances psychological well-being and increases the involvement of students (Suwinyattichaiorn & Johnson, 2022; Tayfur & Ulupinar, 2016; Yasin & Dzulkifli, 2021). However, research on the relationship has, across literature, yielded inconsistent findings (Erdem & Kaya, 2021). In Asian cultures, like China, social support was established to be significantly linked to positive academic outcomes (Fang et al., 2020). The support offered by institutions socially is able to improve their ability to adapt to academics, thus, improving outcomes of students in European cultures (San & Guo., 2022). In a Ghanaian sample, a study by Anak and Abdullah (2023a) found that the support offered to students socially and academic outcomes correlate. These studies underscore the complex interplay between social support and scholarly achievement across different contexts.

Further, student learning outcomes are predominantly shaped by their proactive involvement in academic tasks. This involvement is known as academic engagement and integrates aspects that involve emotion, work that involves socializing, communication, and metacognition. Rather than being a standalone occurrence, it represents a multifaceted interaction of these elements (Eveland, 2020). Academic engagement is the act of enticing students to engage in intensive thinking

activities such as examining and comprehending ideas, justifying processes, and getting to know what they mean. Also, the engagement involves working together with students and teachers socially, including the exchange of experiences, knowledge, viewpoints, and support (Amerstorfer & Freiin, 2021). The Social cognitive theory offers the mechanisms in which learning occurs in the social context where three components interact to influence the manner by which students engage academically and achieve academically (Perkman et al., 2021). Delving into the complexity of the variable, affective, cognitive, and behavioral engagement have been fronted (Alonso-Tapia et al., 2023). Cognitive engagement, the mental investment towards understanding and tackling academic tasks, whilst behavioral engagement, the visible tactics employed in the learning. Lastly, affective engagement, the emotional responses, such as interest or pleasure, triggered by learning encounters, together form the facets of academic engagement.

Although the majority of the literature established academic engagement to be positively related to academics, inconsistencies exist in the literature regarding the link between academic engagement and educational outcomes. Some studies posit a positive correlation (Lei et al., 2018), while others challenge this view (Perkman et al., 2021). These inconsistencies are argued to be due to variations in study designs, methodologies, and sample characteristics. Research indicates that female students tend to experience elevated degrees of perceived social support from those who pass knowledge to them when associated with their male counterparts (Mai et al., 2020). This stronger sense of support has been linked to greater academic engagement, which in turn enhances their motivation, persistence, and participation in class activities (Wang & Eccles, 2019). These outcomes highlight the importance of encouraging supportive interactions that students encounter when they socialize with their teachers and by themselves, as such relationships can make the students involved themselves in academics better and lead to success for all learners, regardless of gender (Wentzel, 2019).

STATEMENT OF THE PROBLEM

The administration of Botswana has invested heavily in the education sector over the years. For example, in 2019 alone, education received approximately 20% of the total national budget (Budget Speech, 2019). However, despite these major investments, students' academic achievement has remained stubbornly low, especially in public secondary schools in the South East Region. Statistics show that only 25.75% of students in 2019 scored above a D grade on national exams the minimum requirement for transitioning to senior secondary school which is the pathway to university. In 2019 the number dropped to 20.9%, and 19.8% in 2021 and eventually 18.2% in 2022. This sustained pattern of academic underachievement has severely limited students' prospects for continuing into higher education. Consequently, the country struggles with a deficit of skilled workers equipped with the competencies to excel in the modern job market and contribute to economic progress. Persistently low achievement and transition rates may also disenfranchise youth and potentially lead some to antisocial behaviors or crime.

While considerable research in Western cultures has linked academic engagement and social support to achievement, findings remain inconsistent across contexts. Additionally, most studies have focused on universities, elementary schools, or colleges, with very few examining secondary schools. Given the alarming multi-year trends of underachievement in Botswana secondary schools specifically, a further context-specific investigation was needed to establish the variables linked to the poor academic achievement. Understanding dynamics in this sociocultural setting

may help inform targeted interventions to reverse current patterns of low achievement and stalled advancement to secondary school education.

RESEARCH OBJECTIVE

Find out the relative predictive weight of perceived social support and academic engagement on academic achievement.

RESEARCH HYPOTHESIS

H_a: There is substantial prediction model of academic attainment from perceived social support and academic engagement among form two students in Gaborone City, Botswana.

SIGNIFICANCE OF THE STUDY

It is envisioned that findings of the study can assist different people involved in the education of students to ensure they realize high performance. Results may guide learners in honing study strategies and habits most strongly tied to achievement. For teachers, the study may illuminate instructional approaches and avenues to optimize academic engagement among students. The data on social support can similarly inform school counselors on leveraging interpersonal dynamics to bolster learning and performance. Parents also stand to benefit from evidence-based recommendations on supporting children's educational pursuits at home for maximal impact. At the systemic level, findings may highlight program, curricular or policy changes needed to target areas promoting versus inhibiting achievement locally. Moreover, this research is envisioned to make notable contributions to the scholarly literature by addressing knowledge gaps that exist in Botswana educational context.

THEORETICAL FRAMEWORK

This study was founded on Bronfenbrenner's (1979) Ecological Systems Theory and Social Cognitive Theory (SCT) by Bandura (1962).

Ecological Systems Theory

This theory was founded by Bronfenbrenner (1979). Bronfenbrenner represented children's interactions with the environments they are in, including people in their local and direct settings such as home and school. Their interactions within these contexts, and the larger economic and cultural divides. Variations between and within countries can create resource disparities among families, schoolmates, schools, and students, impacting learning opportunities and eventual achievement. Strong supporting linkages between microsystems, according to Bronfenbrenner, are likely to optimize development. This theory stresses a paradigm shift away from focusing on students' negative qualities or short-comings and toward focusing on their strengths. The interaction between a person and their surroundings is bidirectional. As a result, secondary school students both influenced and are impacted by their environment, and their activities can be aided or hindered by their surroundings. Success of students is enhanced when they socialize with others positively and are supported by caring adults. The theory discusses the significance of environmental and social elements in affecting growth and behaviour (Howarth et al., 2023). Friendships and interactions formed by pupils with their peers and teachers in school are important components of a caring social environment. This is also related to effective family involvement, favourable teacher attitudes, and collaborative practices (Knowles, 2023). These relationships are bidirectional: the way children behave to others in their microsystem influences how these people

treat them. Berger et al. (2022) used this theory in their studies where they found that the social support that people perceive to receive significantly relates with academic achievement.

Bronfenbrenner's theory is important at comprehending the role the support people receive socially can influence academic achievement. The microsystem, which is the child's closest setting, such as home and school, plays an important part in his or her development (Soenens, 2017). If a child's parents or guardians are actively involved in the school where the child attends, this promotes the child's capacity for growth. According to Ates (2021), emotional support is vital in developing favourable learning outcomes. Emotional support from family members is advantageous to academic achievements because it fosters the feeling of good welfare and makes students engage more academically. Furthermore, support students receive socially makes them effectively learn and succeed in their academics. The framework elucidates a comprehensive explanation for comprehending the role of social support in learning. It underscores the importance of various environmental systems and their interconnectedness to shape a person's development and behaviour. The theory can be instrumental to devise strategies to enhance social support systems for students, thereby improving their academic performance.

Social Cognitive Theory, SCT

Social Cognitive Theory was developed by Bandura (1962). The theory states that people learn when they socially interact and it is modulated by cognitive, behavioural, and affective aspects (Jhangiani & Tarry, 2022). According to SCT, human behaviour is shaped by the individual, the environment, and the behaviour itself (Bussey & Bandura, 1999). These three factors interact with each other to create a continuous feedback loop; for example, a student who observes their peers receiving praise for participating in class may be more likely to engage in classroom discussions themselves, which in turn may lead to further positive feedback and reinforcement (Bandura, 2002). Engagement of students cognitively entails the efforts they put mentally so they understand and solve academic tasks. Behavioral engagement involves the actions or practices students adopt in their learning process. Affective engagement describes students' emotional responses, such as interest or enjoyment, towards their learning experiences (Amerstorfer et al., 2021).

Touching on the engagement students experience affectively, SCT suggests that several personal attributes interplay to influence a student's engagement with their academic work (Zhu et al., 2021). For example, the belief of students in their capability to succeed academically, their level of interest in the subject matter, and their motivation to learn can all impact their engagement. Additionally, environmental factors such as the value of the instruction they get, the degree of support and encouragement from teachers and peers, and the availability of resources can also influence a student's affective engagement (Burke & Mancuso, 2012). Social Cognitive Theory (SCT) also suggests learning of actions is through a combination of personal, environmental, and behavioral factors. In the context of student behavioral engagement, this means that students may observe and imitate the behaviour of their peers or teachers when it comes to academic work.

Navarro et al. (2019) explain that cognitive processes such as attention, memory, and motivation are important at determining the manner by which students engage with academic work. With regard to student cognitive engagement, SCT suggests that several personal factors influence how students process and engage with academic content. For example, a student's prior knowledge and beliefs about a subject, their level of interest and motivation to learn, and their cognitive Skills and strategies can all impact their cognitive engagement (Bowden et al., 2021).

Furthermore, SCT highlights the important work that believing in one-self or believing that students would be successful in doing tasks does towards achieving academically. According to Bandura (1986), four factors determine self-efficacy: mastery experiences (i.e., past triumphs and setbacks), vicarious experiences (i.e., encountering others), social persuasion (i.e., the input of others), and physiological and emotional responses (i.e., mood and physical sensations). Application of SCT in different environments such as education, classroom, and online learning has been evident (Bandura, 1969). In online learning, instructors can use SCT to design interactive and engaging learning environments that foster social interaction, provide feedback, and promote self-efficacy.

With regard to students achieving academically, SCT suggests that these three components; cognitive affective and behavioral interact to influence the manner by which students engage academically and achieve academically (Doménech-Betoret et al., 2017). For instance, efficacious learners (a cognitive factor) have more likelihood of engaging academically, leading to better academic performance. Similarly, positive emotions (an affective factor) towards learning can enhance cognitive engagement, thereby improving academic achievement (Zimmerman, 1990). Thus, SCT brings to forth a deep strategy of comprehending the association between cognitive, behavioural, and affective factors in shaping academic engagement and achievement. The two theories offer a complimentary perspective in explaining academic achievement by focusing on the immediate social as well as personal factors linked to learning. This provides insights into why students' achievement levels may differ as a function of the environmental forces that shape students' experiences.

EMPIRICAL REVIEW

Literature on the relative prediction of academic achievement by student's levels of perceived social support and school engagement has been rather rare. This calls for a study of the same. Blaze (2019) undertook a study focusing on the effects of several forms of psychological support from the people they interact with; and self-beliefs on a student's scholarly attainment in a university sample at Adelaide University, Australia. The study indicated that the variables under investigation, academic attainment, support perceived to be offered socially, and belief in one-self, greatly related. The study posits that socially supported students exhibit greater self-efficacy, intrinsic motivation, and mastery orientation. These boost engagement behaviors like class participation, time spent on academic tasks, and active study strategies. In turn, increased engagement leads to higher course grades, test scores, subject matter comprehension, and long-term retention. The degree by which students engage in learning as well as their level of satisfaction with the kind of support they provide, was positively linked to academic accomplishment. This is attributed to the fact that social support has been established as a stress reduction strategy. It also determines the way students cope with circumstances. However, the partial correlational analysis found that there is no key association between self-beliefs and level of social support people perceive in relation to students' academic accomplishments except for students' intelligence. The area of the undertaking of the research was in Adelaide, Australia, making generalization of the findings not likely in otherwise places. Particularly in culturally distinct regions like Botswana, factors like familial expectations, societal norms, and cultural views on education could significantly influence the dynamics of perceived social support and engagement in Botswana.

Rueger et al. (2018) undertook an inquiry on elementary school pupils to establish the association that exists between supposed support people get socially, academic engagement and GPA scores of students. The collection of data involved established Likert scale self-report measures where recruitment of students in grades six through eight was done on a sample of 246 using simple random sampling. Bivariate correlational analyses indicated that both engagement in learning, and social support were associated, significantly, with students' incremental learning outcomes. However, while the study reviewed the relationship between the variables under research, it did not analyze the variables' joint prediction. In the current study, a prediction equation of the above-mentioned independent variables towards academic achievement was undertaken. This therefore warranted the need for a study that examines the relative prediction the two variables exhibit towards educational accomplishment.

A longitudinal research by Wang and Eccles (2022) sought to establish the impact of support perceived to be received socially has on three facets of academic engagement. The study used a sample of 752 American students between 7th and 11th grade. Data was collected using self-report instruments. Multiple regression analyses established that when students in middle school perceive to receive support socially from significant other, they engage effectively cognitively, behaviorally, and emotionally in academics three years later in high school. Their work was especially valuable for modeling the mediating roles of motivation, self-beliefs, and bonding to school in transmitting social support's effects on engagement. This work has been extended by that of Wentzel et al. (2021) where, controlling for prior performance and motivation, they found friends provided supports that increased motivation and effort, which then raised academic achievement, elucidating the mechanistic process from social embeddedness to learning outcomes. Whilst these studies study the relationships among the variables, it still remains unclear the mechanisms in which support accorded socially as well as engagement academically relate to scholarly achievement. Therefore, the research herein sought to examine the gap.

In South Africa, Chiweshe (2020) undertook a study to investigate the problems students from other countries face in a selected university. The study used a purposive sample of 22 former and current students. Thematic analyses established that the students faced challenges with engagement in their studies due to language barrier and reduced socialization. This was linked to their reduced ability of seek for academic help a reduced support from peers and lecturers. The study however used a qualitative approach to research generalization of the findings not applicable to wider populations especially those that do not resemble the case study. There is therefore a need to engage the study quantitatively to enable the findings to be generalizable.

RESEARCH METHODOLOGY

A correlational research design was implemented by the research. The approach, according to Seeram (2019), is a potentially useful avenue for identifying likely causal relationships which can then be further investigated through experimental methods. The correlational design was suited for the study since the study primarily aims to investigate the relationships between the support students perceive to receive with their engagement academically and achievement academically. This study was conducted in high schools in Botswana's South East Region, largely urban and culturally diverse, where students may struggle with belonging and rely on social support. Academic performance has been consistently low, with over 18–26% of students in recent years scoring only a D grade or less, limiting transition to senior secondary and university. Limited

empirical evidence exists in Botswana on the role of perceived social support and academic engagement in achievement, despite mixed findings from other contexts.

Every public secondary school in the area under study were targeted for the study. The study was biased toward form two students. According to the *Secondary Education Stats Brief 2023*, the total population of form two students is 3713 and is spread across the 8 secondary schools in the region. As Xia et al. (2022) explain, in the initial two years of secondary schools, social dynamics start to change, and students often struggle to find a place within existing social groups. Gaborone City form two secondary school students were purposively sampled on the rationale that, given their attributes, they are likely to give appropriately meaningful information relating to the variables (Bakkalbasioglu, 2020). To determine the participating schools on whether boarding or day and proportionately on gender, stratified random sampling was used. Finally, simple random sampling was utilized for selection of students from the identified schools using a lottery system. The sample size was computed following the formula suggested by Yamane (1967): $n = N / (1 + Ne^2)$ where n is the expected sample size, N , is the intended population of study in this case 3213 and e is the error margin which has been set to .05. From the foregoing;

$$n = 3713 / [1 + 3713 * .05^2]$$

$$n = 361 + (10\% \text{ to cater for respondent misconduct and non-response})$$

$$n = 397$$

The study used an adapted MSPSS to measure the level of support students perceive to receive socially. According to *SocialWorkersToolbox.com* the tool is in the public domain and is made up of 12 items on a seven – point Likert scale. Items assess the perceived support offered socially from noteworthy others, family and friends. In a recent research on a Nigerian sample, the scale was found to have a reliability of $\alpha = .97$ (Ibigbami et al., 2022). Scoring involved the summation of all items to yield a total score ranging between 7 and 84. A score above 63 will indicate that students' perception on the support they receive socially is high. Interpretability improvement of the scores will be realized by transforming added scores into average scores (Braun & Von Davier, 2017).

To gauge the level of student's engagement academically, the study adapted CEI. The tool is in the public domain (Wang et al., 2014b). Items are spread across domains; affective, behavioral and cognitive engagement. The initial study established the reliability of the tool as its Cronbach's α ranged from .82 to .90 for the individual subscales. Scoring involved reversing negative items and summing up all items to yield a general score. Students' engagement cognitively was taken to be high by scores that exceeded the mean by one standard deviation, while those one standard deviation below the mean were considered to reflect low cognitive engagement. To assess the students' academic achievement levels, the end-of-term-one examination results 2024 were used. Since the examination is summative and tests all subjects, it was assumed to be a reliable measure of academic achievement. Transformation of the results was done to Z scores and later to T scores before analyses for even comparison across schools.

H_0 : There is no significant prediction equation of learners' academic achievement on perceived social support and academic engagement on (Multiple Regression).

FINDINGS AND DISCUSSION

Out of 397 questionnaires distributed across seven schools in Gaborone, 384 were retained after cleaning, giving a high response rate of 96.7%. The return rates were consistent across genders, with 96.6% for girls and 96.3% for boys. Demographic results revealed that girls (52.60%) had a slightly higher representation compared to boys (47.40%), reflecting the gender parity index in favor of girls. The overall mean age of students was 14.85 years ($SD = 0.85$) with a range of seven years, consistent with the expected secondary school age in Botswana. The age distribution was positively skewed ($Sk = 1.79$), indicating that most students were younger than the mean, though skewness and kurtosis values fell within acceptable limits for normality. Further analysis showed boys had a marginally higher average age ($M = 14.91$, $SD = 0.81$) with a wider range of six years compared to girls ($M = 14.78$, $SD = 0.45$, Range = 2). By school category, students in boarding schools ($M = 14.98$, $SD = 0.82$) were older on average than those in day and boarding schools ($M = 14.90$, $SD = 0.83$) and day schools ($M = 14.76$, $SD = 0.45$), with day schools showing the narrowest age range of two years.

Prediction of Academic Achievement from Perceived Social Support and Academic Engagement

Testing of the regression assumptions, testing of the hypothesis, and discussion of findings was done.

Assumption Testing

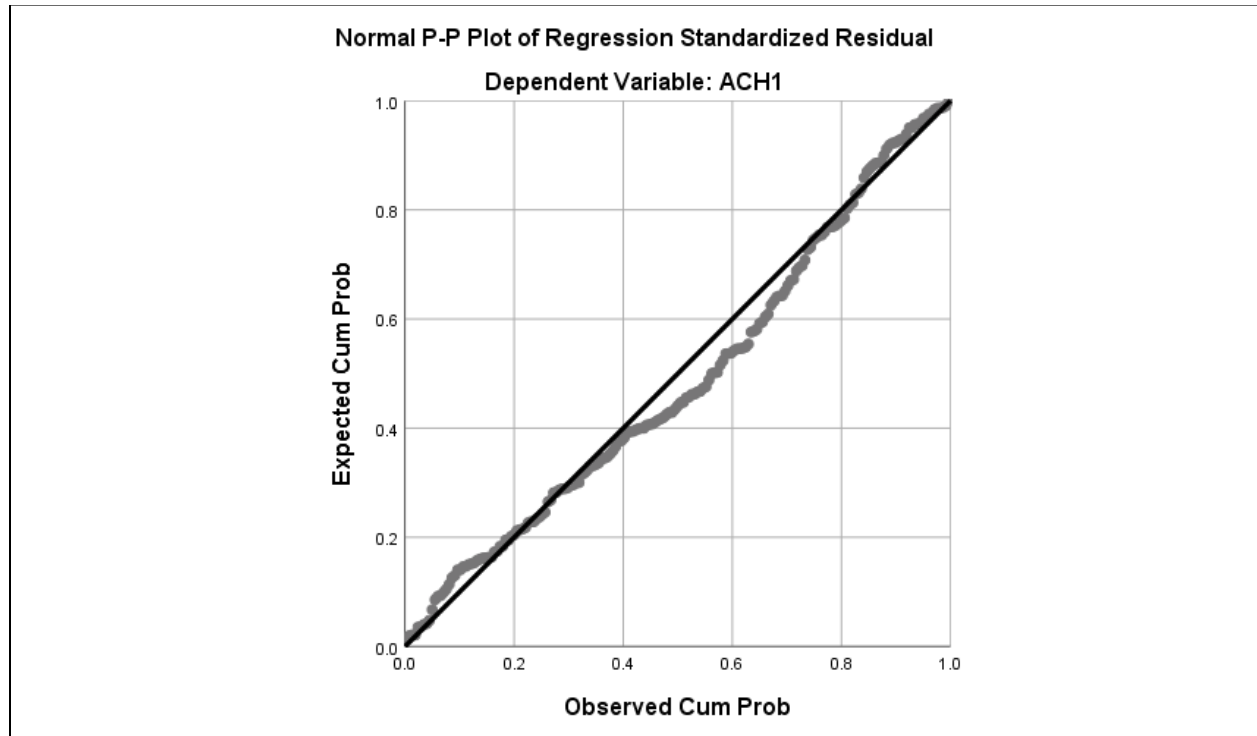
A correlation matrix was constructed to evaluate the possibility of multicollinearity among the variables. Correlations above 0.70 are generally considered indicative of high multicollinearity between variables (Leiby & Ahner, 2023). Additionally, tolerance and VIF values were utilized to further assess multicollinearity. VIF values greater than 1 and tolerance values approaching 0 signify high correlations, suggesting the presence of multicollinearity. The correlations among constructs as well as the VIF and tolerance values are outlined in Table 1.

Table 1:

Test for Multicollinearity

Variable	1	2	3	Tolerance	VIF
Perceived Social Support	-			.882	1.134
Academic Engagement	.34*	-		.882	1.134
Academic Achievement	.29**	.24*			

The correlation matrix on Table 1 shows that the relationships among the variables ranged between $r = .24$ for the relationship between academic engagement and academic achievement and .29 for that between academic engagement and perceived psychosocial support. The correlations were below the upper threshold for multicollinearity to be present. Further, the tolerance values for all variables are above 0.8 whereas the VIF values are all below 2 (perceived social support = 1.134, academic engagement = 1.134), which are well within the acceptable range and indicates the absence of concerning multicollinearity among the variables. Having ascertained that there was no multicollinearity, a normality probability plot was generated to assess the linearity of the distribution. Wachs (2023) points that if the plot closely follows a straight line, it indicates that the data is normally distributed. The normal probability plot is provided in Figure 1.

Figure 1.*The Normal Probability Plot*

The presence of an approximately straight line in the normal probability plot in Figure 4.3 illustrates a normally distributed variable data.

Hypothesis Testing

To investigate the combined influence of perceived social support and academic engagement on students' academic achievement, a regression model was developed. Table 4.25 is the model summary, which outlines the predictive capacity of these variables on academic achievement scores.

Table 2*Model Summary of the Prediction of Academic Achievement*

<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>SEE</i>
.32 ^a	.11	.10	16.52

Note. ^a = Predictors (Constant) Perceived Social Support and Academic Engagement

As denoted in Table 2, the overall prediction of academic achievement from the two variables yielded an R^2 of .11, which is an indication that the shift of students' achievement academically by 11% can be due to the support they perceive to receive socially and their engagement academically. The significance of this model is outlined in Table 3.

Table 3*Significance of the Model*

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig</i>
Regression	6095.08	2	3047.54	11.17	.000
Residual	51834.99	381	272.82		
Total	57930.07	383			

Note. ^a = Predictors (Constant) Predictors: Perceived Social Support and Academic Engagement.

Table 3 shows that the prediction model of academic achievement from the two variables was statistically significant, $F(2,381) = 11.17$, $p < .001$ which then led to the rejection of null hypothesis and thus it was observed that perceived social support and academic engagement combined, significantly predicted students' academic achievement. The relative contribution of each variable was thereafter assessed. Findings are highlighted on Table 4.

Table 3*Regression Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients		<i>t</i>	<i>Sig</i>
	β	<i>SE</i>	β			
(Constant)	14.98	6.13			2.45	.015
PSS	3.25	1.00	0.24		3.25	.001
AE	2.33	1.11	0.15		2.11	.036

Note. *SE* = Standard Error; *PSS* = Perceived Social Support; *AE* = Academic Engagement

Table 4 indicates that perceived social support ($\beta = 0.24$, $p < .001$) was the better predictor of academic achievement as compared to academic engagement ($\beta = 0.15$, $p < .05$). From these, we can deduce the prediction equation of academic achievement to be as follows.

$$\hat{Y} = 14.98 + 3.24(\text{Perceived Social Support}) + 2.33(\text{Academic Engagement})$$

Analyses revealed that the two variables significantly predicted academic achievement. The prediction model was however weak accounting for only 11% of the change in students' academic achievement. Of the two variables, perceived social support was a better predictor as compared to academic engagement. A study by Blaze (2019) involving 1,267 university students at Adelaide University, USA, posited out that socially supported students exhibit greater self-efficacy, intrinsic motivation, and mastery orientation. These boost engagement behaviors like class participation, time spent on academic tasks, and active study strategies. In turn, increased engagement leads to higher course grades, test scores, subject matter comprehension, and long-term retention.

Furthermore, the findings of the current study are consistent with those by Rueger et al. (2018) involving 246 sixth through eighth graders. Although the sample significantly varied from the current study's population, social support was nonetheless established to serve as a buffer against the detrimental effects of stress and anxiety on academic performance (Lee & Goldstein, 2016). Students who perceive a strong support system are more likely to cope effectively with academic pressures and maintain a positive mental state conducive to learning and achievement. Social

support can provide instrumental assistance, such as access to resources, guidance, and mentorship, which can directly enhance academic engagement (Malecki & Demaray, 2020). For example, students with supportive parents or peers may receive help with homework, study strategies, or navigating academic systems.

Additionally, the findings of this study are in support of those by Wang and Eccles (2022), which sought to examine the effect of social support on students' engagement, both affectively, behaviorally, and cognitively. In their study, social support was linked with increased engagement in the classroom, which translated to increased achievement and better learning outcomes. Social support acts as an avenue for guidance and mentorship, where support from teachers, parents, and peers can foster engagement and, consequently, academic achievement.

However, there is a contradiction between this study's findings and that by Lee and Lee (2018) involving 523 South Korean high school students, which found no significant relationship between perceived social support and academic achievement. The authors speculated that cultural factors, such as the emphasis on academic competition and the perception of social support as a given rather than a valuable resource, might have contributed to the lack of significant findings.

While the prediction model in the present study accounted for a relatively small proportion of variance in academic achievement, it is important to note that academic achievement is a complex and multifaceted phenomenon influenced by individual characteristics, family background, educational resources, and the learning environment (Muijs et al., 2022). Therefore, the modest predictive power of perceived social support and academic engagement is not surprising, as these variables represent only a subset of the numerous factors that contribute to academic achievement.

CONCLUSION

The study established that both perceived collective care and educational engagement significantly predicted academic achievement accounting for a marginal change in achievement. Therefore, interventions aimed at improving academic achievement may be more effective when they adopt a holistic approach, incorporating targeted strategies to enhance both social support systems and academic engagement levels.

RECOMMENDATION

Perceived social support and academic engagement significantly predicted academic achievement. Policymakers and school administrators should consider developing and implementing comprehensive policies and programs that address both the social-emotional and academic needs of students, providing resources for family and community engagement, promoting extracurricular activities and student organizations, and offering academic support services such as mentoring, and study Skills workshops.

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