

Relationship Between Psychological Capital and Academic Achievement among Form Three Students in Imenti South Sub-County, Meru County

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ABSTRACT

Academic achievement in Kenya is a critical driver to both national development and individual student's career growth. Despite this crucial role, students in Imenti South Sub-County, Meru County, have continued to register comparatively low academic performance. This persistent underachievement limits their access to socio-economic opportunities which adversely affects their contributions to national development. Previous studies have underscored the significant role of learners' internal capacities, particularly psychological capital (PsyCap), in managing academic demands and enhancing positive academic outcomes, including higher grades. However, empirical evidence linking PsyCap to academic achievement in Meru County remains limited. Therefore, the present study sought to address this gap by examining the relationship between psychological capital and academic achievement. The study was grounded on psychological capital theory. This association was examined using correlational research design, with 2,692 Form Three students enrolled in public secondary schools in Imenti South Sub-County, Meru County, in 2025 being the target. To assess the psychological capital, School Psychological Capital Questionnaire was used. The sample comprised 348 students selected from 17 schools through a combination of purposive, stratified and simple random sampling. The results established that the global psychological capital levels were relatively high among students ($M = 56.87$, $SD = 11.63$), with notable variation across its components. Optimism recorded the highest mean ($M = 16.52$, $SD = 2.70$), followed by resilience ($M = 16.03$, $SD = 2.16$), while self-efficacy had the lowest, though still elevated, mean ($M = 15.20$, $SD = 2.65$). The PsyCAP had a significant positive correlation with academic achievement ($r(345) = .58$, $p < .01$). These results suggest that higher levels of psychological capital are associated with better academic performance among the students. Therefore, schools should prioritize enhancing students' psychological capital by integrating activities that strengthen hope, optimism, resilience, and self-efficacy, as these resources are strongly linked to higher academic achievement.

Keywords: Psychological Capital, Academic achievement, secondary school students

INTRODUCTION

Academic achievement is widely acknowledged as a foundational outcome of formal education and a critical determinant of future opportunities, economic participation, and personal development (Slåtten et al., 2021). In competitive educational and labor markets, performance in school often serves as a key metric for evaluating an individual's capabilities and potential for success (Ndonye et al., 2024). Beyond the attainment of grades, academic success equips learners with essential life skills, including problem-solving, critical thinking, teamwork, and time management. It also reinforces learners' self-confidence and motivation for lifelong learning (Engin, 2020; Ogutha, 2022). Conversely, poor academic performance can contribute to psychosocial distress among learners, limit access to higher education and competitive employment. This potentially leads to larger societal challenges such as inequality and diminished socio-economic productivity (Engin, 2020; Hazan & Miller, 2019).

Despite its recognized importance, poor academic achievement remains a pressing concern across diverse global contexts. In Brazil, a significant proportion of primary and secondary learners repeat grades at least once, reflecting systemic challenges in maintaining consistent achievement (Fidelis et al., 2021). Comparable patterns are observed in China, where substandard academic performance has been linked to high dropout rates and below-average completion of basic education (Yu et al., 2022). These researchers highlighted deficits in cognition and self-management capabilities as key contributing factors. Across Africa, similar trends persist, including in Nigeria, where three-quarters of candidates fail to attain the minimum benchmark for core subjects in national examinations (Anierobi et al., 2023). In Eritrea, nearly 70% of high school learners fall short of basic academic success thresholds (Gebregergis et al., 2024). In Ghana and Ethiopia, research likewise identifies intrinsic learners' factors and structural challenges as contributors to sustained underachievement (Mahama et al., 2023; Tadese et al., 2022).

In the Kenyan context, national examination outcomes reveal a persistent pattern of below-average performance. Data from the Kenya National Examinations Council (2023) indicate that a majority of students continue to score in the lower grade brackets, with only a minority attaining the minimum requirements for university admission. Such outcomes have implications for students' competitive positioning relative to peers nationally and for broader aspirations related to economic participation and social mobility. Within Meru County, national examinations reflect similar concerns. Only two schools ranked among the national top performance bracket in 2022, and aggregate mean scores for 2023 and 2024 remained below average (Meru County Directorate of Education, 2024). Sub-County assessment further highlights the challenge in Imenti South, where long-established schools and substantial student populations have not translated into higher academic achievement. In support to this, data from 2015 to 2020 indicate mean performance significantly lower than neighboring sub-counties (Meru County Directorate of Education, 2024). These trends underscore the need to investigate underlying factors that may support or inhibit academic success in this context.

Within educational psychology, there is growing interest in understanding how students' internal capacities relate to academic outcomes. A central idea emerging in this literature is psychological capital, defined as an individual's positive psychological state, characterized by self-efficacy, hope, optimism, and resilience (Onivehu, 2020). Self-efficacy reflects learners' confidence in their ability to perform tasks successfully, hope signifies goal-directed determination and strategic planning, optimism represents positive expectations for future outcomes, and resilience stands for the capacity to recover from setbacks and sustain effort toward achievement (Hazan & Miller, 2019; Ndongye et al., 2024). These constructs are conceptualized as resources that learners can develop and leverage to navigate academic demands and pursue success.

Existing studies within and beyond Africa support the importance of psychological capital to academic achievement. In Kenya, research by Ndongye et al. (2024) found that hope, resilience, and optimism significantly contributed to positive differences in secondary school academic outcomes. Resilience has also been identified as a key determinant of student persistence amid rigorous academic challenges (Ogutha, 2022). Similarly, studies in Nigeria demonstrate positive connections between psychological dimensions and academic performance, further affirming the potential of PsyCap as a predictor of students' academic performance (Onivehu, 2020). Few local researchers have investigated how variables such as learning environment and academic expectations relate to students' learning outcomes without much attention on PsyCap (Kabira et al., 2025). Given ongoing concerns about academic performance at local levels, including Meru County and Imenti South Sub-County in particular, investigating psychological capital offers a promising avenue for understanding and ultimately improving student achievement outcomes. This is because strengthening the psychological resources of learners may provide a mechanism through which students can better manage academic challenges, enhance motivation, and realize higher levels of academic success. Examining these relationships in the Kenyan secondary school context therefore holds both theoretical and practical importance, contributing to a deeper understanding of how positive psychological capacities support educational attainment.

Theoretical Foundation

Psychological Capital theory by Luthan and Youssef (2001) provides a useful framework for understanding students' academic functioning. According to this theory, individuals possess positive psychological resources that influence and sustain their motivation toward achievement of goals. These psychological capacities enhance

individual performance by promoting persistence, adaptive coping, and confidence in task completion. Therefore, in the current study, it was theoretically assumed that students with higher levels of psychological capital would demonstrate better academic achievement because they are better equipped to manage academic demands and setbacks. This theoretical expectation was upheld in the present study's results which revealed a significant positive relationship between PsyCap and academic achievement. This further supports the argument that psychological capital serves as an important internal resource for improving students' academic performance in secondary school academic settings.

LITERATURE REVIEW

Psychological capital (PsyCap) is increasingly recognized as a key predictor of academic success. For instance, Carmona-Halty et al. (2022) studied 404 Chilean students using the Academic Psychological Capital Scale and GPA. They reported that all PsyCap dimensions positively correlated with academic performance, with self-efficacy as the strongest predictor and resilience the least. Similarly, Adil et al. (2020) examined 300 university students in Pakistan and found that PsyCap sub-scales explained 47% of variance in academic achievement. Self-efficacy formed a core factor that reinforced other PsyCap dimensions. These studies highlight PsyCap's potential, though differences related to contexts limit generalizing findings to Kenyan secondary schools.

In Africa, evidence also supports PsyCap as a critical academic resource. Onivehu (2020) investigated 180 Nigerian university students and found that hope was the most influential predictor, while self-efficacy contributed less. The findings suggest that psychological strengths can significantly shape learning outcomes. However, the focus on higher education limits the applicability to secondary school learners, a gap that informed the current research.

In Kenya, emerging studies have examined PsyCap in secondary schools. Ndonge et al. (2024) studied 2,488 students in Mombasa County. Using the Psychological Capital Questionnaire and school academic records, the study found that PsyCap accounted for 36% of variance in academic achievement, with self-efficacy as the strongest predictor. Kelly and Ireri (2022) examined resilience and self-efficacy among 1,500 students in Trans-Nzoia County. Resilience showed a strong positive correlation with academic performance, while self-efficacy had a moderate effect. Muthui et al. (2023) in Kitui County found that resilience correlated most strongly with achievement, followed by optimism and hope. These studies indicate that PsyCap components may influence academic outcomes differently and that regional variations calls for further exploration, hence the reason for conducting the current study.

Despite these positive associations, the relationship between PsyCap and academic performance is not universally consistent. Luthans et al. (2019) studied 354 U.S. undergraduates and reported that PsyCap's effect became weak and insignificant after controlling for prior academic performance and socioeconomic background. Zhang and Chen (2021) examined 412 Chinese secondary students and found that only resilience marginally predicted achievement, while hope, optimism, and self-efficacy were not significant. They attributed the findings to an exam-driven system that may limit the effect of internal psychological resources. Such inconsistencies suggest that cultural, structural, and contextual factors can moderate PsyCap's influence on academic outcomes.

The aforementioned literature demonstrates that PsyCap can enhance academic achievement. Most studies, however, focus on higher education or specific PsyCap components. In Kenya, research on secondary school students is limited, particularly in counties such as Meru. Therefore, examining the role of all PsyCap dimensions among secondary learners can provide valuable evidence for interventions aimed at strengthening students' psychological resources and improving academic performance.

METHODOLOGY

This section outlines the methodology used to investigate the relationship between psychological capital and academic achievement. It highlights the research design, study participants, location, sampling procedures, data collection instruments, and data analysis techniques.

Research Design

This study employed a correlational research design to examine the relationship between psychological capital and students' academic achievement. This design was selected because the researcher's interest was to collect data on both variables without applying any manipulation. Then the data was to be used to determine statistical relationships among variables and hypothesis testing (Creswell & Creswell, 2018; Schweigert, 2021).

Participants of the Study

A sample of 348 students (183 girls and 165 boys) was drawn from a target population of 2,692 Form Three students in public secondary schools in Imenti South Sub-County, with the sample size determined using Yamane's (1973) formula. The formula was chosen owing to its wide application to ensure statistically representative samples in educational research. Purposive sampling was first used to identify the study area and participants, justified by the sub-county's historically low academic performance in national exams (Mulisa, 2022). Then stratified and proportionate sampling to ensure representation across schools and gender (Saunders et al., 2009). Finally, simple random sampling was used to select individual students, giving them an equal chance of inclusion (Gupta & Gupta, 2022).

Location of the Study

The study was conducted in Imenti South Sub-County, Meru County, Kenya. This area was chosen for its low KCSE performance despite having 70 long-established public secondary schools. Between 2018 and 2024, mean scores ranged from 2.8 (D) to 3.15 (D+). Low achievement limits students' competitiveness for tertiary education and is linked to weak school culture, low student confidence, and socio-economic challenges (Bagine, 2022; Mutege, 2021). These persistent gaps highlight the need to investigate how psychological capital may relate to academic achievement in this location.

Data Collection Procedures

Data were collected using the School Psychological Capital Questionnaire and a pro forma of students' examination results. The researcher coordinated with school administrators to schedule the activity, and students completed the questionnaires within 30–35 minutes. After completion, all responses were collected. Academic results for English, Kiswahili, and Mathematics were obtained from school records and recorded using the pro forma for standardization and analysis.

Data Analysis Procedures

Data preparation involved coding, screening, and removal of incomplete or inconsistent entries before analysis in SPSS (Version 29.0). Summary measures such as frequencies and percentages described the sample characteristics and the study variables. Hypothesis testing was conducted at $p \leq .05$. Specifically, Pearson's Product Moment Correlation Coefficient was applied to test H_{01} , that there is no significant relationship between psychological capital and academic achievement.

RESULTS OF THE STUDY

This study's objective aimed to examine the relationship between psychological capital and academic achievement. The analysis began with a review of the descriptive statistics for psychological capital scores as summarized in Table 1.

Table 1. Descriptive Statistics of Psychological Capital Scores

	N	Range	Min	Max	Mean	SD	Skewness	Kurtosis
PCS	345	27.00	80.00	53.00	56.87	11.63	-.45	-.56
TPCR	345	12.00	8.00	20.00	16.03	2.16	-.19	-.14
TPCSE	345	14.00	6.00	20.00	15.20	2.65	-.44	.19

TPCO	345	16.00	4.00	20.00	16.52	2.70	-1.07	1.76
TPCH	344	14.00	6.00	20.00	16.92	2.51	-1.19	2.241

Note. PCS = Psychological Capital Scores; PCSE = Psychological Capital Self-Efficacy; TPCO = Psychological Capital Optimism; TPCH = Psychological Capital Hope; TPCR = Psychological Capital Resilience.

As shown in Table 1, students reported moderate to high levels of psychological capital ($M = 56.87$, $SD = 11.63$). Among the sub-scales, hope was highest ($M = 16.92$, $SD = 2.51$), indicating strong goal-directed motivation, followed by optimism ($M = 16.52$, $SD = 2.70$), which implied positive expectations for future outcomes. Resilience showed moderately high levels ($M = 16.03$, $SD = 2.16$) with a balanced distribution, while self-efficacy was slightly lower ($M = 15.20$, $SD = 2.65$) but still notable. Negative skewness across most sub-scales indicates that many students scored above average, particularly in hope and optimism, which may support better academic outcomes.

Following this, academic achievement scores were analyzed to provide key descriptive indicators, including range, mean, standard deviation, skewness, and kurtosis. First, to standardize comparisons across schools, raw scores were converted to Z scores. Secondly they were transformed into T scores as indicated in Table 2.

Table 2 Descriptive Analysis of Academic Achievement Scores

	N	Range	Min.	Max.	Mean	SD	Skewness	Kurtosis
T-score	345	51.52	27.39	78.91	50.99	10.42	0.06	-0.10

Note. N = sample size; M = mean; SD = standard deviation; Min. = minimum; Max. = maximum.

It is clear from the Table 2 that students' T scores ranged from 27.39 to 78.91, with a mean of 50.99 ($SD = 10.42$). The distribution was approximately symmetrical (skewness = 0.06) and slightly flatter than normal (kurtosis = -0.10), suggesting balanced performance without outlier scores. These results imply that, on average, students demonstrated moderate academic achievement, with relatively even variation across the sample.

Hypothesis Testing

To understand how Psycap was related to academic achievement, the H_{01} which stated that there is no significant relationship between psychological capital and academic achievement was advanced and tested using Pearson Correlation as shown in Table 3.

Table 3 Pearson Correlations Between Psychological Capital Scores and Academic Achievement

variable	1.	2.	3.	4.	5.	6.
1. Psychological capital scores	-					
2. Self-efficacy		-				
3. Optimism			-			
4. Hope				-		
5. Resilience					-	
6. Academic Achievement (Tscore)	.58**	.17*	-.05	.13*	.03	-

Note. N = 345; $p^* < .05$; $p^{**} < .01$ (two-tailed).

The Pearson correlation analysis in Table 3 show that psychological capital was positively and significantly associated with academic achievement ($r = .58$, $p < .01$). This indicated that higher psychological resources are generally linked to better academic performance. Consequently, the null hypothesis of no relationship between psychological capital and academic achievement was rejected.

When examined individually, most components of Psychological Capital demonstrated weak associations with academic achievement. Among these, only self-efficacy ($r = .17$, $p = .04$) and hope ($r = .13$, $p = .03$) showed statistically significant positive relationships. Resilience exhibited a positive but non-significant association with

academic achievement ($r = .03$, $p = .49$). In contrast, optimism showed an unexpected negative, though non-significant, relationship with academic achievement ($r = -.05$, $p = .41$). This suggests that the strength of psychological capital in influencing academic achievement of students may lie in the integrated functioning of its dimensions rather than in isolated psychological resources. This indicates the multidimensional nature of PsyCap.

DISCUSSION OF THE RESULTS

The findings of this study revealed a significant positive moderate correlation between overall psychological capital (PsyCap) and academic achievement ($r = .58$, $p < .01$). Self-efficacy and hope had a significant positive correlation with students' academic achievement. This indicates that these psychological resources are relevant in enhancing students' academic success. This extends the theoretical relevance of PsyCap to adolescent learning contexts and contributes contextual evidence from Kenya, where empirical studies on PsyCap and academic achievement remain limited.

These results are consistent with international research. For example, Carmona-Halty et al. (2022) found that all PsyCap subscales significantly correlated with academic performance, with self-efficacy as the strongest predictor. Similarly, Adil et al. (2020) reported that PsyCap collectively accounted for 47% of the variance in academic achievement, highlighting the critical role of self-efficacy, while Onivehu (2020) identified hope as a key determinant of student outcomes.

Regionally, the findings align with Kenyan studies. Ndonge et al. (2024) showed PsyCap predicted academic achievement in Mombasa County, particularly through self-efficacy, whereas Kelly and Ileri (2022) found resilience and self-efficacy were significant in Trans-Nzoia County. Muthui et al. (2023) observed positive correlations between resilience, optimism, hope, and academic scores in Kitui County. Differences in which PsyCap dimensions are most influential may reflect contextual, educational, and sample variations across studies.

The findings also support the broader theoretical proposition that psychological capital is a vital personal resource that facilitates academic success. Students with higher PsyCap are more likely to exhibit adaptive academic behaviors, persevere through challenges, and achieve better outcomes, reinforcing the importance of promoting psychological resources alongside cognitive development in educational settings.

Unexpectedly, optimism showed a negative, though non-significant, relationship with academic achievement. This finding may reflect contextual variation on how the certain psychological capital resources may contribute differently to academic achievement. In the current study, the results show that optimism alone may not directly predict performance unless paired with other variables that needs further investigation.

Contrary to the present finding, Chaudhary and Narad (2022) found a significant positive relationship between optimism and academic achievement among adolescents, suggesting that students with higher optimism tend to exhibit better academic outcomes. However, the negative and non-significant relationship observed in the current study may indicate that the influence of optimism on academic achievement varies across contexts and may depend on the presence of other psychological or environmental factors.

CONCLUSION

The study found a clear association between psychological capital and academic achievement. Therefore, a conclusion is made that students with higher PsyCap characterized by self-efficacy, resilience, hope, and optimism perform better academically. This indicates that strengthening these psychological resources can help students overcome challenges and stay focused on their goals.

Consequently, schools should implement programs and guidance strategies that nurture PsyCap. Students should also practice goal setting, positive self-reflection, seeking academic support, and maintaining constructive attitudes to enhance their academic outcomes.

LIMITATION AND RECOMMENDATIONS

This study has some limitations. One, the sample came from one region, specifically Meru, so the findings may not apply to Counties and contexts. Future studies should include other counties to capture cultural and institutional differences. The study used self-report questionnaires, which may introduce bias. Therefore, use of mixed methods, such as interviews or focus groups, could give deeper insights. The correlational design limits causal conclusions which calls for future research to use different designs. Only psychological capital was studied as a predictor of academic achievement, hence other factors should be considered.

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