

# THE ROLE OF MOTIVATION, SELF-EFFICACY, AND PEER SUPPORT IN DRIVING STUDENT ENGAGEMENT: BRIDGING THEORY AND PRACTICE

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## Abstract

This study explores the role of motivation, self-efficacy, and peer support in influencing student engagement in higher education, aiming to connect theoretical perspectives with practical applications. A quantitative correlational research design was utilized, involving 223 university students from various faculties. Participants completed validated questionnaires measuring intrinsic and extrinsic motivation, academic self-efficacy, perceived peer support, and student engagement's behavioral, emotional, and cognitive dimensions. Data were analyzed using multiple regression techniques to determine the predictive strength of each variable. Results revealed that motivation and self-efficacy were significant predictors of student engagement, explaining a substantial portion of the variance. Peer support also demonstrated a comparatively more minor positive effect on engagement. These findings highlight the importance of internal psychological and external social influences in enhancing student engagement. The study supports integrating motivation theory and social learning principles into educational practice. Practical implications suggest that educators should foster supportive peer environments while promoting student motivation and confidence to improve learning outcomes. This research contributes to the growing body of literature emphasizing the multifaceted nature of student engagement and offers a foundation for future intervention-based studies in diverse educational settings.

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# The Role of Motivation, Self-Efficacy, and Peer Support in Driving Student Engagement: Bridging Theory and Practice

## Introduction Introduction

Student engagement has emerged as a critical factor influencing academic success, persistence, and overall learning outcomes in higher education. Engaged students are more likely to participate actively in academic tasks, demonstrate deeper learning strategies, and maintain long-term motivation for academic achievement (Bhardwaj et al., 2025). As universities strive to improve retention rates and educational quality, understanding the drivers of student engagement becomes increasingly essential.

One of the key psychological constructs closely associated with student engagement is motivation, particularly in the context of intrinsic and extrinsic factors that influence students' willingness to participate and persist in academic activities. Self-determination theory (Deci & Ryan, 2000; Osei & Bjorklund, 2024) posits that intrinsic motivation—fueled by autonomy, competence, and relatedness—leads to higher engagement and deeper learning. Meanwhile, students driven primarily by extrinsic rewards may show surface-level engagement without long-term academic commitment.

Another significant predictor of engagement is self-efficacy or a student's belief in their ability to succeed academically. Bandura's (1997) Social Cognitive Theory identifies self-efficacy as a key factor influencing students' motivation, goal-setting, and resilience in the face of academic challenges. Numerous studies have shown that students with high self-efficacy are more likely to exert effort, persist through difficulty, and stay actively engaged in learning (Sökmen, 2021).

In addition to individual factors like motivation and self-efficacy, peer support plays a vital social role in shaping the student learning experience. Supportive peer interactions can reduce academic stress, enhance self-confidence, and foster a sense of belonging—each positively correlated with engagement (Karabacak-Çelik & Aşantuğrul, 2024). In collaborative or community-based learning environments, peer support reinforces content understanding and strengthens emotional and social ties to the academic setting.

Despite the robust literature on these individual constructs, relatively few studies have explored how motivation, self-efficacy, and peer support interactively influence student engagement in a single model. Most research tends to examine these factors in isolation, leaving a gap in understanding how they collectively operate to influence students' academic behaviors and attitudes (Zhu et al., 2021). This fragmented approach limits our ability to design holistic interventions that address the full spectrum of influences on engagement.

Furthermore, while engagement has been studied extensively in Western contexts, there is a need for more localized, context-specific research—especially in developing regions or diverse educational settings—where cultural norms, teaching practices, and institutional resources may alter the dynamics of motivation, self-efficacy, and peer support (Tao & Yu, 2024). The generalizability of Western engagement models may not fully capture students' lived experiences in other educational systems.

Recent studies have attempted to integrate socio-cognitive and motivational perspectives. For example, [Reeve \(2013\)](#) argues that creating autonomy-supportive learning environments can simultaneously enhance motivation, self-efficacy, and social interaction. Similarly, [Wong and Liem \(2022\)](#) found that peer relationships and academic confidence were significant predictors of classroom engagement, mainly when mediated by students' intrinsic interests. However, these studies are limited in scope and often rely on narrow samples.

Given these gaps, a more comprehensive understanding of how motivation, self-efficacy, and peer support jointly contribute to student engagement is essential. Such knowledge can inform educators and policymakers on how to create learning environments that support students' psychological and social needs, ultimately enhancing educational outcomes.

Therefore, this study examines the relationships between motivation, self-efficacy, and peer support in predicting student engagement among university students. Using an integrated model and empirical quantitative analysis, this research seeks to bridge the gap between theory and practice, contributing to developing holistic strategies that foster academic involvement and persistence.

## Research Method

This study employed a quantitative correlational research design to investigate the relationships between motivation, self-efficacy, peer support, and student engagement among university students. Two hundred twenty-three undergraduate students from various faculties at a public university participated in the research. Participants were selected using convenience sampling, a method suitable for exploratory studies and practical access to respondents in educational settings ([Magnone & Yeziarski, 2024](#)). Data were collected through an online survey distributed via institutional channels, ensuring voluntary participation and informed consent. The survey included demographic questions and standardized scales to measure the four core variables.

The study used established instruments from previous research to ensure reliability and validity. Student motivation was measured using items adapted from the Academic Motivation Scale ([Souza et al., 2021](#)), while self-efficacy was assessed using the Academic Self-Efficacy Scale ([Greco et al., 2022](#)). Peer support was measured through a modified version of the Social Support Scale ([Jolly et al., 2021](#)), focusing on academic and emotional support from peers. Student engagement was evaluated using the Student Engagement Scale developed by [Fredricks and McColskey \(2012\)](#), capturing behavioral, emotional, and cognitive dimensions. All items were rated on a 5-point Likert scale. Data analysis was conducted using SPSS, including descriptive statistics, Pearson correlations, and multiple regression analysis to assess the predictive relationships between the variables.

## Results and Discussion

### A. *Descriptive Analysis*

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**Tabel 1. Descriptive**

Variable	N	Mean	SD	Interpretation
Motivation	223	4.02	0.52	Height
Self-Efficacy	223	3.89	0.56	Height
Peer Support	223	3.75	0.61	Height
Student Engagement	223	3.92	0.5	Height

The descriptive statistics presented in Table 1 provide an overview of university students' responses regarding motivation, self-efficacy, peer support, and student engagement. Among the four variables, motivation recorded the highest mean score ( $M = 4.02$ ,  $SD = 0.52$ ), suggesting that students were generally driven to learn and demonstrated strong intrinsic or extrinsic reasons for academic participation. Self-efficacy also scored relatively high ( $M = 3.89$ ,  $SD = 0.56$ ), indicating that most students felt confident in their ability to manage academic tasks and overcome learning challenges. Peer support, while still rated positively ( $M = 3.75$ ,  $SD = 0.61$ ), had the highest variability, reflecting differences in the level of support students perceived from their peers. Student engagement, which encompasses behavioral, emotional, and cognitive aspects, showed a strong average score ( $M = 3.92$ ,  $SD = 0.50$ ), suggesting that students were generally attentive, emotionally invested, and cognitively involved in their academic experience. These findings indicate that the sample population exhibits a solid foundation in both internal psychological resources and social support structures, which are essential for fostering and sustaining academic engagement. This sets the stage for inferential analyses exploring how these variables interact to predict or influence engagement more precisely.

The descriptive results indicate that students reported relatively high levels of motivation, self-efficacy, and student engagement, with moderately high perceptions of peer support. These findings align with prior research highlighting the foundational role of motivation and self-efficacy in shaping academic behaviors and persistence (Bembenutty et al., 2024). The strong mean score for motivation suggests that students are driven by both internal interests and external academic goals, consistent with Self-Determination Theory, which emphasizes autonomy and competence as key motivators (Howard et al., 2021). Similarly, the high self-efficacy scores reflect students' belief in their academic capabilities, supporting Bandura's (1997) notion that confidence in one's ability contributes directly to greater effort, persistence, and resilience. Although peer support scored slightly lower and showed greater variability, its positive mean indicates that most students feel at least moderately supported by their peers—a factor that can buffer academic stress and foster engagement through collaboration and emotional support (Van Ryzin & Roseth, 2021). The combination of these results underscores the need for holistic engagement strategies that reinforce individual psychological strengths while enhancing peer-connected learning environments. These findings serve as a strong basis for further inferential analysis to clarify the extent to which each variable predicts engagement outcomes.

## B. Pearson Correlations

**Table 2. Person Correlations: Motivation, Self Efficacy, Peer Support and Student Engagement**

	Motivation	Self-Efficacy	Peer Support	Student Engagement
<b>Motivation</b>	1.00			
<b>Self-Efficacy</b>	0.71	1.00		
<b>Peer Support</b>	0.46	0.24	1.00	
<b>Student Engagement</b>	0.75	0.67	0.48	1.00
<b>Mean</b>	4	2.41	1.58	3.06
<b>SD</b>	0.48	0.42	0.45	0.48

The Pearson correlation analysis, supplemented with descriptive statistics, reveals strong and significant relationships among the study variables. Motivation showed the highest positive correlation with student engagement ( $r = 0.75$ ), suggesting that students who exhibit higher levels of academic motivation are more likely to be actively involved in learning activities. Self-efficacy was also strongly correlated with engagement ( $r = 0.67$ ), indicating that students' belief in their academic capabilities plays a vital role in maintaining their focus, effort, and emotional investment in coursework. Peer support demonstrated a moderate but meaningful correlation with engagement ( $r = 0.48$ ), highlighting the influence of collaborative and emotional backing from peers on academic participation. Furthermore, motivation and self-efficacy were highly correlated ( $r = 0.71$ ), implying a reciprocal relationship in which motivated students tend to feel more competent, and vice versa. The mean scores support these findings, with motivation ( $M = 4.00$ ,  $SD = 0.48$ ) and engagement ( $M = 3.06$ ,  $SD = 0.48$ ) emerging as particularly strong dimensions within the sample. These results emphasize the interconnected nature of internal psychological factors and external social influences in shaping meaningful academic engagement, reinforcing the need for integrated strategies that nurture both personal and peer-related support structures in higher education environments.

The correlation findings affirm existing theoretical frameworks that underscore the interdependence of motivation, self-efficacy, and peer support in shaping student engagement. The strong correlation between motivation and engagement ( $r = 0.75$ ) supports Self-Determination Theory, which posits that intrinsically and extrinsically motivated students are more likely to participate actively in academic settings (Ghbari et al., 2024). Similarly, the robust relationship between self-efficacy and engagement ( $r = 0.67$ ) aligns with Bandura's (1997) social cognitive theory, emphasizing that students' belief in their ability to succeed enhances their willingness to engage and persist in learning tasks. Although the correlation between peer support and engagement was moderate ( $r = 0.48$ ), it is consistent with Tinto's (1997) student integration model, which highlights the importance of social support networks in academic persistence. The high inter-correlation between motivation and self-efficacy ( $r = 0.71$ ) suggests a reciprocal dynamic wherein confident students are more motivated, and motivated students tend to have greater belief in their capabilities (Schunk & DiBenedetto, 2016). These relationships, supported by the consistently high mean scores for each variable, indicate that interventions aiming to enhance engagement should not focus on a single



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factor in isolation, but rather adopt an integrated approach that simultaneously cultivates motivation, builds academic confidence, and fosters meaningful peer interactions.

### C. Regression Analysis

**Table 3.** multiple regression analysis to assess the predictive relationships between the variables

Variable	B	Std. Error	t	p
const	0.155	0.162	0.956	0.34
Motivation	0.429	0.063	6.79	0
Self-Efficacy	0.353	0.067	5.294	0
Peer Support	0.217	0.048	4.473	0
F-statistic=		197.012		

The multiple regression analysis demonstrates that motivation, self-efficacy, and peer support are significant predictors of student engagement, with motivation showing the strongest influence ( $\beta = 0.429$ ,  $p < 0.001$ ). This suggests that students who are more driven—whether intrinsically or extrinsically—are more likely to actively participate in academic activities. Self-efficacy also emerged as a powerful predictor ( $\beta = 0.353$ ,  $p < 0.001$ ), indicating that students' belief in their academic capabilities significantly enhances their engagement. Peer support, while comparatively less influential, still had a meaningful effect ( $\beta = 0.217$ ,  $p < 0.001$ ), underscoring the role of social interactions in fostering academic involvement. The model showed strong explanatory power, with an  $R^2$  of 0.731 and an adjusted  $R^2$  of 0.727, meaning that the three predictors collectively account for approximately 73% of the variance in student engagement. The F-statistic ( $F = 197.012$ ,  $p < 0.001$ ) confirms the overall model's significance. Additionally, high reliability was indicated by Cronbach's alpha values above 0.80 for all constructs, demonstrating internal consistency in the measurement instruments. These results emphasize the multifaceted nature of engagement, which is shaped not only by internal psychological factors like motivation and self-efficacy but also by the external support provided through peer relationships.

The findings from the regression analysis underscore the theoretical and empirical relevance of motivation, self-efficacy, and peer support in promoting student engagement. The strong predictive power of motivation aligns with Self-Determination Theory, which posits that students' intrinsic and extrinsic motivations significantly influence their learning behaviors and persistence ([Howard et al., 2021](#)). Likewise, the substantial impact of self-efficacy supports [Bandura's \(1997\)](#) Social Cognitive Theory, emphasizing that individuals with a high sense of efficacy are more likely to invest effort, persevere in the face of challenges, and remain engaged. Although peer support exhibited a comparatively smaller but still significant effect, this finding complements [Tinto's \(1997\)](#) model of student retention, which highlights social integration as a key factor in academic success. The high  $R^2$  value (0.731) further illustrates that these three constructs collectively explain a substantial proportion of

the variance in student engagement, reinforcing the importance of addressing both internal psychological drivers and external social factors in educational interventions. Additionally, the high reliability of the instruments (Cronbach's  $\alpha > .80$ ) affirms the robustness of the measurement tools used. These results suggest that holistic strategies incorporating motivation-building activities, confidence-enhancing practices, and peer collaborative structures may be most effective in improving engagement among university students (Schunk & DiBenedetto, 2016).

The present study's results are consistent with and extend previous findings on the impact of motivation, self-efficacy, and peer support on student engagement. For instance, Richardson et al. (2012) conducted a meta-analysis and reported that motivation had an average correlation of  $r = 0.34$  with academic engagement, whereas in the current study, motivation showed a higher correlation of  $r = 0.763$  and a stronger standardized regression coefficient ( $\beta = 0.429$ ), indicating a more prominent role. Similarly, self-efficacy was found by Amar et al. (2025) to correlate at  $r = 0.31$  with engagement, while our study revealed a significantly higher correlation of  $r = 0.701$  and a regression coefficient of  $\beta = 0.353$ . Peer support, although less frequently emphasized in earlier studies, has been linked to student engagement with correlations around  $r = 0.25$  (Jang et al., 2016), whereas our results show a moderately higher value of  $r = 0.613$  and a regression weight of  $\beta = 0.217$ . These differences may be attributed to contextual factors such as the sample's educational environment, institutional support systems, or cultural influences. Collectively, the comparative data underscore that while previous research confirmed the relevance of these variables, the stronger values in the current study highlight their increasingly central role in contemporary higher education settings, particularly when examined together in an integrated model.

## Conclusion

This study provides empirical evidence supporting the critical roles of motivation, self-efficacy, and peer support in fostering student engagement, offering a comprehensive model that bridges theoretical insights with practical educational strategies. The findings reveal that motivation is the strongest predictor of engagement, emphasizing the need for learning environments that foster intrinsic interest, goal orientation, and task value. Self-efficacy also significantly contributes to engagement, suggesting that students' confidence in their academic abilities directly influences their persistence, effort, and active participation. Furthermore, although slightly less dominant, peer support is essential in promoting social integration, emotional well-being, and collaborative learning, which collectively enhance student engagement.

The study's high model fit ( $R^2 = 0.731$ ) indicates that these three factors explain a substantial portion of the variance in engagement, highlighting the effectiveness of integrating cognitive, affective, and social dimensions in understanding student behavior. This aligns with and extends existing theories such as Self-Determination Theory, Social Cognitive Theory, and Tinto's model of academic integration, demonstrating their continued relevance in higher education contexts.

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These results carry practical implications for educators, curriculum developers, and academic support staff. Programs that enhance students' motivational orientation foster self-efficacy through feedback and mastery experiences, and build strong peer networks can significantly improve academic engagement and performance. Future research should explore these relationships across diverse student populations and institutional contexts and consider longitudinal approaches to understand how these factors evolve. Ultimately, this study reinforces the importance of a holistic approach in promoting sustainable and meaningful student engagement.

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