

Socio-Motivational Relationships, Academic Self-Efficacy, and Academic Achievement of Junior High School Students: A Structural Equation Modeling Approach

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ABSTRACT

This study examines the intricate relationship between socio-motivational factors, academic self-efficacy, and academic achievement among junior high school students. Grounded in Bandura's Social-Cognitive Theory and Deci and Ryan's Self-Determination Theory, the research explores how relationships with peers and teachers influence students' academic self-beliefs and outcomes. A total population sample of 332 junior high school students from a public school in Claveria West District, Misamis Oriental, participated in the study. Data were collected using validated instruments: The Relationship and Motivation Scales (REMO-P), The Academic Self-Efficacy Scale for Filipino Junior High School Students (ASES-FJHS), and final grade averages. Using Structural Equation Modeling (SEM), the findings revealed that socio-motivational relationships significantly influence academic self-efficacy ($\beta = 0.71, p < .001$), while their direct effect on academic achievement was not statistically significant ($\beta = 0.13, p = .065$). However, academic self-efficacy strongly predicted academic achievement ($\beta = 0.85, p < .001$) and was found to fully mediate the relationship between socio-motivational relationships and academic success, explaining 89.1% of the variance in achievement. The final model demonstrated excellent fit indices ($p = .239, CFI = 1.000, RMSEA = 0.000, SRMR = 0.028$), confirming the strength of the mediation pathway. These results underscore the key role of academic self-efficacy as a mediator and highlight the importance of fostering positive socio-motivational relationships to enhance students' academic confidence and performance.

Keywords: Academic Self-Efficacy, Socio-Motivational Relationships, Academic Achievement

INTRODUCTION

A range of psychological and social factors, including motivation, self-confidence, and learning behavior, influences students' academic success. Among these, relationships with peers and teachers play a pivotal role in fostering a sense of belonging, engagement, and academic self-efficacy (Scales et al., 2020). Academic self-efficacy—the belief in one's ability to succeed in academic tasks—has been widely recognized as a key determinant of learning outcomes and persistence (Bandura, 1997). Recent studies have consistently highlighted the significant role that motivation, self-belief, and attitude play in shaping students' academic performance, with the importance of a supportive school environment emerging as a common theme (İnce, 2023).

The quality of relationships with peers and teachers can significantly enhance students' self-efficacy and overall academic engagement (Benlahcene et al., 2024). Positive teacher-student relationships, in particular, contribute to emotional well-being and foster a sense of belonging, which in turn improves academic achievement (Allen et al., 2021). Additionally, studies suggest that teachers are more influential than peers in motivating students academically, though students' reactions vary by gender—girls are more affected by negative teacher relationships, while boys are more sensitive to peer influences (Wu et al., 2022). Teachers who provide emotional support and encouragement help create a school climate that fosters motivation and academic growth (Scales et al., 2020).

In the context of the Philippines, academic performance concerns, particularly in subjects like reading, mathematics, and science, underscore the need for further investigation into how school relationships impact student learning. The Philippines ranked among the lowest in these areas in both the 2018 and 2022 PISA assessments (OECD, 2019; 2023), highlighting the need to strengthen peer and teacher support systems. Research suggests that while positive peer relationships foster collaboration and persistence, negative peer influences—such as distractions and peer pressure—can impede academic progress (Deci & Ryan, 2020). In junior high school students, peer relationships have been found to significantly influence academic achievement by shaping motivation and learning engagement (Shao et al., 2024). Likewise, teacher support plays a critical role in boosting student confidence, but limitations such as large class sizes and heavy workloads in the Philippine public-school system can hinder teachers' ability to offer individualized support (Cahapay, 2021). This distinction is important because challenges such as underperformance in PISA, resource constraints, and large class sizes are uniquely pressing in the Philippine setting, whereas global literature often emphasizes technological integration, cultural diversity, and policy-driven reforms.

Moreover, academic self-efficacy plays a crucial role in students' engagement with challenging subjects such as mathematics and science. Meng and Zhang (2023) demonstrate that self-efficacy not only improves academic engagement but directly enhances academic performance. However, many Filipino students struggle with self-doubt, which impedes their persistence and effort in school (İnce, 2023). Research suggests that personal strengths, such as hope and gratitude, positively influence academic confidence (Datu & Mateo, 2020). While the link between self-efficacy and academic outcomes is well-established globally, its role in mediating the relationship between socio-motivational factors and academic achievement remains underexplored in the Philippine context. Understanding this connection can provide valuable insights into how to bolster students' confidence and motivation to succeed academically.

While numerous studies have explored the role of motivation in academic success, there is limited research in the Philippines on how students' socio-motivational relationships in school, their academic self-efficacy, and academic achievement are interconnected. This study seeks to address this gap by developing and validating a model that explains how relationships with peers and teachers influence students' academic self-efficacy and, subsequently, their academic performance. Using Structural Equation Modeling (SEM), this research aims to offer a clearer understanding of these relationships and provide insights for improving support systems that enhance student learning outcomes.

Theoretical Framework:

This study is grounded in social-cognitive theory (Bandura, 1986), which posits that individuals' beliefs in their capabilities (self-efficacy) are shaped by social interactions and environmental influences. In the context of education, school socio-motivational relationships include peer support and teacher encouragement. Research suggests that students who receive positive reinforcement from peers and teachers tend to develop stronger confidence in their academic abilities, leading to higher academic engagement and performance.

Furthermore, Self-Determination Theory (Deci & Ryan, 2000) highlights the importance of social interactions in fostering intrinsic motivation, which influences academic achievement. Several studies have found that students with higher academic self-efficacy exhibit greater perseverance, effort, and achievement in school (Schunk & DiBenedetto, 2021).

Present Study

This study hypothesizes that students' socio-motivational relationships in school have a direct influence on both academic self-efficacy and academic achievement. Additionally, academic self-efficacy is expected to mediate the relationship between socio-motivational relationships and academic achievement.

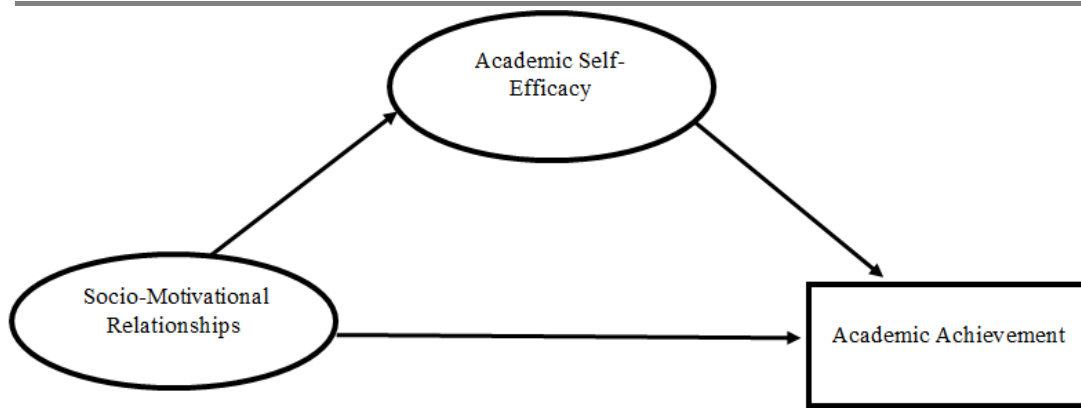


Figure 1. Hypothesized Model of the Research

Research Questions:

1. What is the respondents' level of socio-motivational relationships in terms of:
 - 1.1 Peers as positive motivators;
 - 1.2 Peers as Negative Motivators;
 - 1.3 Individual Learning Behavior;
 - 1.4 Teachers as positive motivators; and
 - 1.5 Teachers as positive motivators?
2. What is the respondents' level of academic self-efficacy in terms of:
 - 2.1 Perceived control;
 - 2.2 Competence;
 - 2.3 Persistence; and
 - 2.4 Self-regulated Learning?
3. What is the respondents' level of academic achievement?
4. What model would best fit the structure of Junior High School students' socio-motivational relationships, Academic Self-Efficacy, and Academic Achievement?
5. Do Junior High School students' socio-motivational relationships influence their academic achievement?
6. Do Junior High School students' socio-motivational relationships influence their academic self-efficacy?
7. Does academic self-efficacy mediate the relationship between Junior High School students' socio-motivational relationships and academic achievement?

Hypotheses:

H₁: Junior High School students' socio-motivational relationships directly influence their academic achievement.

H₂: Junior High School students' socio-motivational relationships directly influence their academic self-efficacy.

H₃: Academic self-efficacy mediates the relationship between the Junior High School students' socio-motivational relationships and academic achievement.

METHODOLOGY

Research Model

The study employed a descriptive-causal design and utilized Structural Equation Modeling (SEM) to analyze the relationships among key study variables and assess the mediation model. Specifically, it examined the role of academic self-efficacy as a mediator in the relationship between socio-motivational relationships and academic achievement among Junior High School students.

Research Participants and Data Gathering Procedure

The total population sampling method was employed in this study. According to Sekaran and Bougie (2013), total population sampling is a purposive sampling technique that involves examining an entire population that shares a specific set of characteristics. In this case, a sample of 332 Junior High School students enrolled in the School Year 2024-2025 at a Junior High School in Claveria West District, Division of Misamis Oriental, was selected to ensure comprehensive data collection from all eligible students. This approach was chosen to capture the full range of variations in socio-motivational relationships, academic self-efficacy, and academic achievement, thereby enhancing the accuracy and representativeness of the findings.

Data were gathered using a manual pen-and-paper survey to ensure accessibility and maximize participation. Students were provided with printed survey forms and given clear instructions on how to complete them. Prior to survey administration, parental consent was secured with the assistance of their class advisers, ensuring ethical research practices and adherence to school policies.

The sample consisted of 189 males (56.9%) and 143 females (43.1%). The sample was further categorized by grade level: 92 students (27.7%) from Grade 7, 87 students (26.2%) from Grade 8, 81 students (24.4%) from Grade 9, and 72 students (21.7%) from Grade 10.

Research Instrument

This study used an adopted survey tool, and data were collected by employing a Demographic form, Socio-Motivational Relationship Scale, Academic Self-Efficacy Scale, and Academic Achievement assessment, which was based on their cumulative grade point average for the School Year 2024-2025. This section provides further details and explanations regarding the specific aspects of these scales:

Relationship and Motivation Scales (REMO-P). The study utilized the Philippine Version of the Relationship and Motivation Scales (REMO-P), a validated instrument developed by Raufelder, Hoferichter, and Francisco (2016) to assess students' perceptions of peers and teachers as sources of academic motivation. The REMO-P consists of two main scales: the Peer-REMO-P, which measures peers as positive or negative motivators and individual learning behavior, and the Teacher-REMO-P, which assesses teachers as positive or negative motivators. This 4-point Likert Scale has an internal consistency value ranging from .67 to .88; the scale demonstrated strong reliability, while factorial, construct, and criterion validity confirmed its effectiveness in measuring socio-motivational influences. Confirmatory factor analysis (CFA) results showed a good model fit, reinforcing its suitability for academic research.

Academic Self-efficacy Scale for Filipino Junior High School Students. The study used the Academic Self-Efficacy Scale for Filipino Junior High School Students (ASES-FJHS) developed by Dullas (2018), which is designed to measure students' self-beliefs in their ability to perform academic tasks. The 4-point Likert Scale was constructed based on Classical Test Theory and underwent a rigorous validation process, involving consultation with experts and content validation by four expert judges, resulting in a high Content Validation Ratio (CVI = 0.87). The final form of the scale consists of 62 items across four key domains: Perceived Control, Competence, Persistence, and Self-Regulated Learning. Reliability was assessed using various methods, including Cronbach's Alpha (0.95) and split-half reliability (Spearman-Brown Coefficient = 0.86),

indicating high internal consistency. Convergent and concurrent validity tests showed strong correlations, confirming that the ASES is a valid and reliable measure for assessing academic self-efficacy in Filipino junior high school students.

For the adoption of these two research instruments, this study ensured that proper permission was obtained before their use. Requests for approval were formally submitted via email to the respective authors, ensuring compliance with ethical standards and securing the necessary consent to utilize the instruments in the research.

Table 1. Summary of Key Instruments Properties

Instrument	Purpose	Reliability / Validity
REMO-P (Philippine Version)	Assesses peer/teacher motivational influence	$\alpha=.67-.88$; CFA confirmed a good fit
ASES-FJHS	Measures the academic self-efficacy of Filipino JHS students	$\alpha=.95$; CVI=.87; strong convergent validity

Academic Achievement. For measuring academic achievement, this study utilized the final average grade of students, which was calculated based on their grades from the First to Fourth Quarter across eight subjects during the School Year 2024-2025. This comprehensive approach ensures that the academic performance of students is assessed over a full academic year, providing a reliable indicator of their overall achievement in multiple subject areas.

This was measured using the DepEd K to 12 grading scale, which categorizes student performance into five levels: Outstanding (90–100), Very Satisfactory (85–89), Satisfactory (80–84), Fairly Satisfactory (75–79), and Did Not Meet Expectations (Below 75).

Data Analysis

The statistical analysis for this study was conducted using JASP v.0.19.3 and AMOS v.21. Descriptive statistics were first computed to summarize the characteristics of the variables under investigation. Structural equation modeling (SEM) was then utilized to examine the relationship between socio-motivational relationships and academic achievement among Junior High School students, while also exploring the potential mediating effect of academic self-efficacy on this relationship.

Ethical Considerations

This study followed ethical research principles to ensure the rights and well-being of all participants. Parental consent and student assent were obtained before data collection, allowing participants to voluntarily take part in the study with a clear understanding of its purpose and procedures. Confidentiality and anonymity were strictly maintained by coding responses and securely storing data, ensuring that individual identities remained protected. Since the study involved only self-report surveys, the risk to participants was minimal, but they were given the option to skip any questions that made them uncomfortable. To uphold academic integrity, proper permissions were secured before adopting research instruments, ensuring compliance with ethical and intellectual property guidelines. Additionally, all data collection, analysis, and reporting were conducted transparently, without fabrication or bias. By adhering to these ethical safeguards, the study maintained high ethical standards and protected the rights of all participants.

RESULTS

This section presents an analysis and interpretation of the collected data, which has been organized and displayed in tables corresponding to the specific research questions.

What is the respondents' level of socio-motivational relationships?

The analysis of respondents' socio-motivational relationships, as shown in Table 2, indicates an overall mean score of 2.94 (SD = 0.32), which falls within the "Moderately High" category. This suggests that respondents generally perceive socio-motivational relationships as having a positive influence on their academic experiences. Among the domains, Peers as Positive Motivators (M = 3.06, SD = 0.51) and Teachers as Positive Motivators (M = 3.10, SD = 0.53) received moderately high ratings, indicating that both peers and teachers contribute to fostering academic motivation. However, Peers as Negative Motivators (M = 3.10, SD = 0.58) also scored moderately high, suggesting that while peers provide positive support, they may also exert negative influences, such as distractions or peer pressure.

Meanwhile, Individual Learning Behavior (M = 2.64, SD = 0.76) falls within the same moderately high range, indicating that students demonstrate self-directed learning behaviors, although the relatively higher standard deviation suggests variability among respondents. Additionally, Teachers as Negative Motivators (M = 2.79, SD = 0.50) also received a moderately high rating, implying that some students may experience discouraging or demotivating interactions with their teachers. Overall, the findings highlight the significant role of both peers and teachers in shaping students' academic motivation, with both positive and negative influences present in the learning environment.

Table 2. Summary of the Mean Distribution of the Respondents' Socio-Motivational Relationships

Socio-Motivational Relationships	Mean	SD	Description	Interpretation
Peers as Positive Motivators (PPM)	3.06	.51	Agree	Moderately High
Peers as Negative Motivators (PNM)	3.10	.58	Agree	Moderately High
Individual Learning Behavior (ILB)	2.64	.76	Agree	Moderately High
Teachers as Positive Motivators (TPM)	3.10	.53	Agree	Moderately High
Teachers as Negative Motivators (TNM)	2.79	.50	Agree	Moderately High
Overall	2.94	.32	Agree	Moderately High

Legend: 1.00 – 1.75: Low, 1.76 – 2.50: Moderately Low, 2.56 – 3.25: Moderately High, 3.26 – 4.00: High

What is the respondents' level of academic self-efficacy?

The analysis of respondents' academic self-efficacy, as presented in Table 3, reveals an overall mean score of 2.89 (SD = 0.45), which falls within the "Moderately High" category. This suggests that respondents generally perceive themselves as having a moderate level of confidence in their ability to regulate their learning, persist through challenges, and exercise control over their academic performance.

Among the specific domains, Persistence (M = 2.98, SD = 0.57) received the highest mean score, indicating that students generally believe they can continue working toward academic goals despite difficulties. Self-Regulated Learning (M = 2.94, SD = 0.53) and Perceived Control (M = 2.88, SD = 0.52) were also rated moderately high, suggesting that respondents feel a certain degree of autonomy in managing their learning and academic tasks. Meanwhile, Competence (M = 2.77, SD = 0.64) had the lowest mean score among the domains, implying that while students generally agree that they are capable, some may have reservations about their academic abilities.

Overall, the findings indicate that while respondents demonstrate moderate confidence in their academic self-efficacy, there may still be areas for improvement, particularly in strengthening their sense of competence and control over their learning outcomes.

Table 3. Summary of the Mean Distribution of the Respondents' Academic Self-Efficacy

Academic Self-Efficacy	Mean	SD	Description	Interpretation
Perceived Control (PC)	2.88	.52	Agree	Moderately High
Competence (C)	2.77	.64	Agree	Moderately High
Persistence (P)	2.98	.57	Agree	Moderately High
Self-Regulated Learning (SRL)	2.94	.53	Agree	Moderately High
Overall	2.89	.45	Agree	Moderately High

Legend: 1.00 – 1.75: Low, 1.76 – 2.50: Moderately Low, 2.56 – 3.25: Moderately High, 3.26 – 4.00: High

What is the respondents' level of academic achievement?

The respondents' academic achievement levels were assessed based on their average grades across different grade levels. Table 4 presents a summary of the mean distribution of academic achievement among Junior High School students.

The results indicate that students across all grade levels demonstrated a Very Satisfactory level of academic performance, with mean scores ranging from 85.04 (Grade 7) to 86.70 (Grade 9). The overall mean score was 85.88, which falls within the Very Satisfactory category according to the grading scale used. These findings suggest that students generally perform well in their academic coursework, achieving competencies that meet or exceed expectations (Department of Education, 2016).

Table 4. Summary of the Mean Distribution of the Respondents' Level of Academic Achievement

Grade Level	Mean	Description
Grade 7	85.04	Very Satisfactory
Grade 8	86.54	Very Satisfactory
Grade 9	86.70	Very Satisfactory
Grade 10	85.25	Very Satisfactory
Overall	85.88	Very Satisfactory

Legend: Below 75: Did Not Meet Expectation; 75-79: Fairly Satisfactory; 80-84: Satisfactory; 85-89: Very Satisfactory; 90-100: Outstanding

What model would best fit the structure of Junior High School students' socio-motivational relationships, Academic Self-Efficacy, and Academic Achievement?

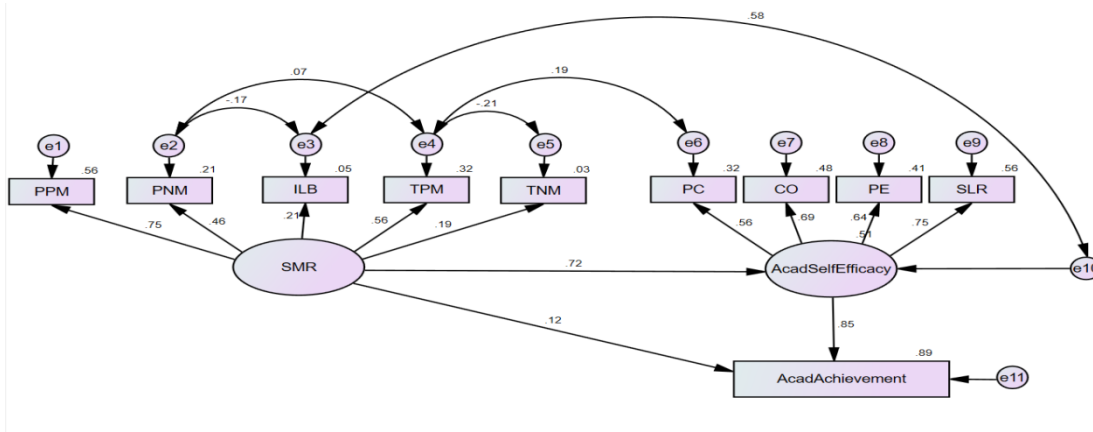


Figure 2. Final Model of the Research

This final model represents a structural equation model (SEM) examining the relationships among socio-motivational relationships (SMR), academic self-efficacy, and academic achievement, showing a strong correlation with the data, as evidenced by the positive fit indices presented in Table 5.

Table 5. Goodness of Fit Measures of the Structural Equation Final Model

	X ²	df	X ² /df	p	GFI	AGFI	NFI	IFI	TLI	CFI	SRMR	RSMEA
<i>Critical Value</i>		>0	<3	>.05	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	<.05	<.05
Model	32.907	28	1.175	.239	.981	.963	.971	.996	.993	.996	.0298	.023

The final model in this research, represented by a structural equation model (SEM), examines the relationships between socio-motivational relationships (SMR), academic self-efficacy, and academic achievement. The model shows a good fit with the data, as evidenced by the fit indices presented in Table 5.

Other fit indices, such as the Goodness of Fit Index (GFI) of .981, Adjusted Goodness of Fit Index (AGFI) of .963, and Normed Fit Index (NFI) of .971, all surpass the recommended cutoff of .90, suggesting that the model fits the data well (Hair et al., 2010). The Comparative Fit Index (CFI) of .996 and Incremental Fit Index (IFI) of .996, which are both close to 1, further indicate a strong model fit. Additionally, the Root Mean Square Residual (SRMR) value of .0298 and the Root Mean Square Error of Approximation (RMSEA) value of .023, both of which are less than the critical value of .05.

The positive model fit indices suggest that the final SEM model adequately represents the relationships among socio-motivational relationships, academic self-efficacy, and academic achievement, providing reliable insights for understanding the factors that contribute to academic success.

Do Junior High School students' socio-motivational relationships influence their academic achievement?

The results in Table 6 show that socio-motivational relationships have a positive but relatively weak influence on academic achievement in Junior High School students. The standardized direct effect coefficient ($\beta = .124$) suggests that socio-motivational relationships contribute to about 12.4% of students' academic achievement variation. However, the p-value of .065 is just above the conventional threshold of significance ($p < .05$), indicating that this effect is not statistically significant at the 5% level, though it may be considered marginally significant (Kline, 2015).

This indicates that the hypothesis stating that socio-motivational relationships directly influence their academic achievement is not supported.

Table 6. Influence of Junior High School Students' Socio-Motivational Relationships on Their Academic Achievement

Standardized Direct Effect	β coefficient	<i>p</i> -value
SMR à AcadAchievement	.12	.065 ^{NS}

Note: ^{NS} – Not Significant, SMR – Socio-Motivational Relationships

Do Junior High School students' socio-motivational relationships influence their academic self-efficacy?

Based on the results presented in Table 7, the standardized direct effect of socio-motivational relationships on academic self-efficacy is $\beta = 0.72$, and the *p*-value is <0.001 . This indicates a statistically significant positive relationship between socio-motivational relationships and academic self-efficacy, meaning that higher levels of positive socio-motivational relationships (such as supportive interactions with peers and teachers) are strongly associated with higher academic self-efficacy among junior high school students.

The results support the hypothesis that socio-motivational relationships directly influence academic self-efficacy.

Table 7. Influence of Junior High School Students' Socio-Motivational Relationships on Their Academic Self-Efficacy

Standardized Direct Effect	β coefficient	<i>p</i> -value
SMR à AcadSelf-Efficacy	.72	0.001***

Note: *** $p < .001$, SMR – Socio-Motivational Relationships

Does academic self-efficacy mediate the relationship between Junior High School students' socio-motivational relationships and academic achievement?

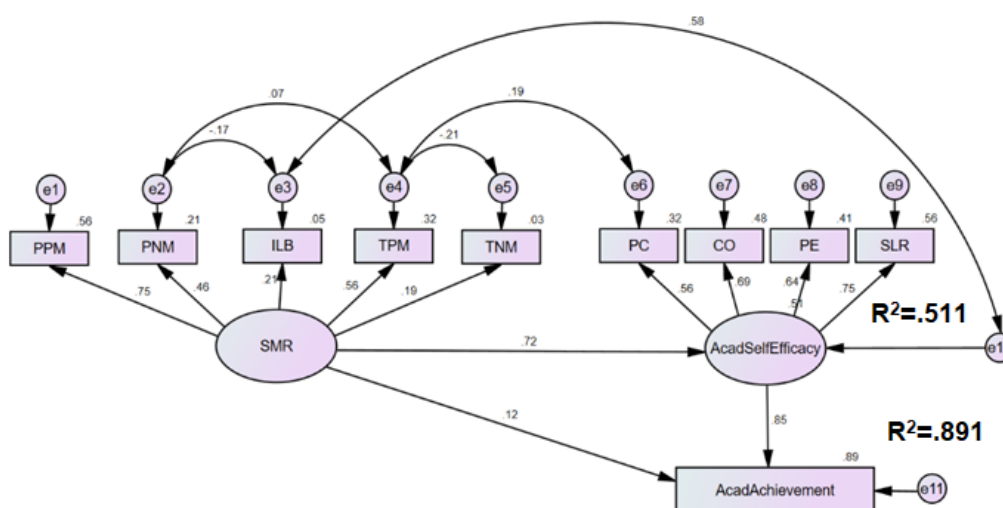


Figure 3. Mediating Effect of Academic Self-Efficacy

Upon examining the R^2 values presented in Figure 3, 51.1% of the variance in academic self-efficacy can be explained by the socio-motivational relationships based on the. Then, 89.1% of the variance in academic achievement can be explained by the combined influence of socio-motivational relationships and academic self-efficacy. The β coefficient indicates that there is a strong statistically significant positive relationship between socio-motivational relationships and academic self-efficacy ($\beta = .72$, $p < .001$). Additionally, Figure 3 reveals that there is also a strong positive relationship between academic self-efficacy and academic

achievement ($\beta=.85$, $p<.001$). However, it can be noted that the relationship between socio-motivational relationships and academic achievement is not statistically significant ($\beta=.12$, $p=.065$).

Figure 3 illustrates that the influence of socio-motivational relationships on academic achievement increases significantly from 0.51 to 0.89, as determined by structural equation modeling. This increase occurs when academic self-efficacy is introduced as a mediator in the relationship between socio-motivational relationships and academic achievement.

To determine the significance of the indirect effects of **full mediation** observed in the model, the mediation analysis was performed by using the direct and indirect effects based on bootstrap procedures (1000 samples) and bias-corrected bootstrap confidence interval (95%), see Table 8.

Table 8. Bootstrapping Results for Mediating Effect of Academic Self-Efficacy on the Relationship Between Socio-Motivational Relationships and Academic Achievement

Indirect Effect	Bootstrap Coefficient	SE	95% Confidence Interval		R ²	p
			Lower	Upper		
SMR→ASE→AcadA	.609	.096	.472	.820	.891	.002**

Note: ** $p<.01$, SMR – Socio-Motivational Relationships, ASE – Academic Self-Efficacy, AcadA – Academic Achievement, SE – Standard Error

The results support the hypothesis, which posits that academic self-efficacy mediates the relationship between socio-motivational relationships and academic achievement.

DISCUSSION AND CONCLUSION

This study examined the relationships among socio-motivational relationships, academic self-efficacy, and academic achievement in Junior High School students, providing insights into how these factors interact within the learning environment.

Findings suggest that students generally perceive their socio-motivational relationships as moderately high, as experienced in school. Peers and teachers play crucial roles in shaping students' motivation, both positively and negatively. Supportive teacher-student relationships foster academic engagement and emotional well-being, reinforcing previous research that highlights the importance of teacher encouragement in student motivation (Benlahcene et al., 2024). Conversely, peer distractions and negative teacher behaviors can undermine academic focus, aligning with studies that emphasize the dual nature of socio-motivational influences in school settings (İnce, 2023). These findings further support Deci and Ryan's (2000) Self-Determination Theory, which underscores the role of social interactions in developing intrinsic motivation, competence, and relatedness.

Regarding academic self-efficacy, students report moderately high confidence in their academic abilities, particularly in persistence and self-regulation. This aligns with research indicating that students with higher self-efficacy are more likely to exert effort and persist in challenging academic tasks (Meng & Zhang, 2023). However, some students still struggle with perceived competence, suggesting a need for targeted interventions to enhance their confidence. Research has shown that positive reinforcement from teachers and structured peer support significantly improve students' academic self-efficacy, leading to better engagement and learning outcomes (Datu & Mateo, 2020).

The analysis of academic achievement revealed that most students perform at a "Very Satisfactory" level, indicating that they generally meet or exceed academic expectations. While socio-motivational relationships significantly influence academic self-efficacy, their direct impact on academic achievement was weak and not statistically significant.

Notably, the final model of the study confirmed that academic self-efficacy plays a key mediating role in the relationship between socio-motivational relationships and academic achievement. The findings indicate a full mediation effect, as socio-motivational relationships do not exert a direct influence on the academic achievement of junior high school students, but instead impact it indirectly through academic self-efficacy.

These results align with Bandura's (1986) Social-Cognitive Theory, which emphasizes that self-efficacy, shaped through social interactions, plays a key role in academic success. The mediating role of academic self-efficacy in the relationship between socio-motivational factors and academic achievement was confirmed, supporting research that highlights the importance of self-belief in driving student performance (Shao et al., 2024). The bootstrap analysis further reinforced this mediation effect, indicating that while social relationships contribute to student confidence, it is ultimately self-efficacy that translates this support into academic success.

This study shows that while good relationships with peers and teachers help boost students' motivation and confidence, they do not directly improve academic performance. Instead, academic self-efficacy, the students' belief in their ability to succeed, plays a key role. It fully explains how socio-motivational relationships influence academic achievement, meaning these relationships affect performance only through their impact on self-efficacy.

Given these findings, schools should implement strategies to strengthen both socio-motivational relationships and self-efficacy. Teacher training programs focused on enhancing student motivation, peer mentoring initiatives, and classroom environments that promote self-confidence can help maximize academic success. Future research should explore additional moderating variables, such as school climate and socio-economic status, to further refine these relationships. Additionally, intervention-based studies could assess the effectiveness of programs designed to improve students' academic self-efficacy and overall learning outcomes.

Limitations Of The Study

This study has several limitations that may affect the interpretation of its findings. First, the sample was limited to 332 Junior High School students from a single secondary school in Claveria West District, Misamis Oriental, which restricts generalizability to other contexts where socio-cultural and educational conditions differ. Second, reliance on self-reported surveys may have introduced response bias, potentially inflating or deflating measures of motivation and self-efficacy and influencing the mediation effects observed in SEM. Third, external factors such as family support, socio-economic status, and school climate were not examined, leaving open the possibility that unmeasured variables influenced the relationships identified. Lastly, while SEM was appropriate for testing the hypothesized model, the use of alternative statistical techniques or additional variables might yield different insights.

Despite these constraints, the study contributes valuable evidence on the importance of socio-motivational relationships and academic self-efficacy, suggesting that future research should use more diverse samples, multiple data sources, and broader contextual measures.

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