

Self-Determination Motivation and Self-Efficacy as Determinants of Academic Engagement among Caregiving Students

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ABSTRACT

This study determined the influence of self-determination motivation and self-efficacy on the academic engagement of caregiving students at Lorenzo S. Sarmiento Sr. National High School. The main objective was to determine the levels of self-determination motivation, self-efficacy and academic engagement, examining the significant relationships between self-determination motivation, self-efficacy and academic engagement. Additionally, the study aimed to identify which domains of self-determination motivation and self-efficacy to learn might significantly influence academic engagement. A quantitative-correlational design was employed, involving 134 respondents from caregiving senior high school students in Lorenzo S. Sarmiento Sr. National High School. The statistical tools utilized included mean, Pearson r, and multiple regression analysis. The results indicated a high level of self-determination motivation among senior high school students in terms of autonomy, competence, and relatedness. Similarly, there was a high level of self-efficacy in terms of belief in personal ability and belief that ability grows with effort. Furthermore, the study revealed a high level of academic engagement in vigor, dedication and absorption. The findings also established a high correlation and significant relationship between self-determination motivation and academic engagement, as well as self-efficacy and academic engagement, leading to the rejection of the null hypothesis. All domains of self-determination motivation and self-efficacy significantly influenced academic engagement as perceived by caregiving senior high school students. Consequently, teachers might consider adapting strategies that enhance students' self-determination motivation and develop self-efficacy to nurture students' academic engagement. Implementing such methods aligned with the study findings would help students strengthen their self-determination motivation, enhance their self-efficacy, and cultivate deeper academic engagement for sustained excellence.

Keywords: Caregiving Strand, Self-Efficacy, Self-determination Motivation, Academic Engagement.

INTRODUCTION

Academic engagement was defined as the quality of effort or involvement that students devoted to academically and educationally purposeful activities (Karki et al., 2020). It had been identified as a significant concern among university students across multiple countries. Among U.S. university students, low academic engagement was closely associated with negative academic outcomes and intentions to withdraw from studies (Marôco et al., 2020). Similar concerns were reported in Vietnam, where many higher education students demonstrated low academic engagement and disengaged academic behaviors (Thanh Pham et al., 2022). In Indonesia, university students also experienced low levels of academic engagement, indicating that this issue persisted across diverse higher education contexts (Kotera & Riswani et al., 2022).

Self-determination referred to the ability of individuals to make choices and determine their own actions (Lopez-Garrido, 2023). Research conducted among senior high school students at the University of Cabuyao, Laguna revealed that higher levels of self-determination were associated with stronger classroom engagement, emphasizing how motivation drove active participation and persistence in learning (Ranoco, 2025). For instance,

findings from Antipolo City underscored the importance of fostering autonomy, competence, and relatedness in learning, as the fulfillment of these psychological needs increased students' likelihood of active engagement, persistence in the face of challenges, and improved academic outcomes (Tulinao & Bailey, 2024). Additionally, studies in Quezon City indicated that strong self-determination fueled intrinsic motivation and resilience, enabling students to set and achieve meaningful goals despite adversity (Dalida et al., 2025). In terms of academic engagement, students with higher self-determination were more likely to remain involved in academic tasks and participate actively in class, as their internal motivation supported sustained focus, effort, and willingness to engage in learning activities (Ranoco, 2025; Tulinao & Bailey, 2024).

Self-efficacy described learners' beliefs regarding their capacity to influence their own academic performance, including their perceived competence to succeed in educational tasks, self-regulate learning, persist in the face of challenges, and achieve desired outcomes (Basileo et al., 2024). In Cebu, studies among senior high school students at the University of San Carlos demonstrated that self-efficacy supported students' adaptation to online learning and enhanced their academic engagement (Blanco & Gagani et al., 2020). Similarly, research conducted in Bulacan revealed that students with higher self-efficacy felt more confident in their ability to learn, maintain motivation, and overcome setbacks, highlighting its role as a critical psychological resource that fostered persistence and determination (Ikprress, 2022).

In Claveria Districts, Misamis Oriental, findings indicated that teaching styles significantly influenced students' academic engagement, with lecture-based or non-interactive methods reducing vigor, dedication, and absorption in learning tasks (Quiblat & Ubayubay, 2025). Similarly, in the Division of Davao de Oro, many students demonstrated reduced vigor, dedication, and absorption in their academic work (Regie & Roie, 2025). In rural municipalities such as Mawab, academic engagement among students remained low, as many struggled to actively participate and immerse themselves in learning activities (Olabiyi et al., 2025). Likewise, in Lorenzo, Davao de Oro, some students exhibited challenges related to academic engagement, including diminished vigor, dedication, and absorption in learning tasks, which were significantly influenced by factors such as school climate and subjective well-being (Mag-aso et al., 2025).

Although existing literature in the Philippine context provided evidence on the individual roles of self-determination motivation, self-efficacy, and academic engagement, no study had yet examined these variables together within a single framework focused on learners. Prior research explored academic engagement in various regions and provinces, but none specifically investigated how self-determination motivation and self-efficacy jointly influenced academic engagement within the selected municipality and school setting. Furthermore, available studies tended to analyze these variables separately or in different populations, leaving a gap regarding their combined predictive relationship in the local educational context. Given the absence of research that simultaneously assessed these constructs within the specified locality, this study addressed a critical gap by examining how self-determination motivation and self-efficacy collectively contributed to students' academic engagement.

Research Objectives

1. To determine the level of self-determination motivation in Lorenzo S. Sarmiento Sr. National High School in terms of:

1.1 autonomy;

1.2 competence; and

1.3 relatedness.

2. To determine the level of self-efficacy in Lorenzo S. Sarmiento Sr. National High School in terms of:

2.1 belief in personal ability; and

2.2 belief that ability grows with efforts.

3. To determine the level of academic engagement in Lorenzo S. Sarmiento Sr. National High School in terms of:

3.1 vigor;

3.2 dedication; and

3.3 absorption.

4. To determine the significant relationship between self-determination motivation and academic engagement particularly in Senior High School students at Lorenzo S. Sarmiento Sr. National High School.

5. To determine the significant relationship between self-efficacy and academic engagement, particularly in Senior High School students in Lorenzo S. Sarmiento Sr. National High School.

6. To determine which of the domains in self-determination motivation influences academic engagement.

7. To determine which of the domains in self-efficacy influences academic engagement.

METHODOLOGY

This study employed a quantitative, non-experimental research design that used descriptive correlational techniques to describe the hypothetical existence of a relationship between the independent variables, self-determination motivation and self-efficacy, and the dependent variable, academic engagement, as well as to determine the direction and degree of that relationship if one exists. Since the purpose was to describe the condition of the situation as it existed at the time of the study and to investigate the factors influencing academic engagement, the descriptive correlational method was deemed appropriate. A correlational research design investigated relationships between variables without the researchers controlling or manipulating any of them.

A correlation reflected the strength and direction of the relationship between two or more variables (Creswell & Creswell, 2021). In correlation research, it involved collecting data in order to determine whether the degree of a relationship exists between two or more quantifiable variables (Johnson & Christensen, 2020).

This survey employed a quantitative approach using structured questionnaires to collect data from caregiving students in Lorenzo S. Sarmiento Sr. National High School. It measured the levels of self-determination motivation, self-efficacy, and academic engagement. The study aimed to analyze how these factors influenced students' capacity to balance caregiving responsibilities with academic demands, highlighting the challenges they encountered and the extent to which external support and personal confidence shaped their academic engagement.

Population and Sample

Stratified random sampling was employed in selecting the respondents for this study. The subjects included 134 caregiving students from Lorenzo S. Sarmiento Sr. National High School, all of whom were enrolled learners with caregiving responsibilities. These individuals were considered ideal respondents due to their roles as caregiving students, which directly related to the study's focus on examining self-determination motivation and self-efficacy as predictors of their academic engagement. Moreover, the study also employed stratified random sampling, allowing the researchers to obtain a sample population that represents the entire population to be studied, ensuring that each subgroup of interest is represented. The students were randomly selected from Caregiving students at Lorenzo S. Sarmiento Sr. National High School.

According to Kline (2005), a sample size of 100–200 respondents is considered medium. In the case of Lorenzo S. Sarmiento Sr. National High School, out of a population of 200 caregiving students, a random sample of 134 respondents was selected. The chosen number of caregiving students, 134, is deemed statistically significant for

representing the broader population of caregiving students. The sample size was computed using the Raosoft sample size calculator.

Statistical Tool

The following statistical tools were utilized for data analysis and interpretation.

Mean. This statistical tool was used to determine the level of self-determination motivation, self-efficacy and academic engagement of caregiving students in Lorenzo S. Sarmiento SR. National High School in Mawab, Davao de Oro.

Pearson(r). This statistical tool was employed to determine the significance of the relationship between self-determination motivation, self-efficacy, academic engagement of caregiving students in Lorenzo S. Sarmiento SR. National High School in Mawab, Davao de Oro.

Multiple Regression Analysis. This statistical tool was used to determine the influence of self-determination motivation, self-efficacy, academic engagement of caregiving students in Lorenzo S. Sarmiento Sr. National High School in Mawab, Davao de Oro.

RESULTS

Level of Self-determination Motivation

Shown in Table 1 are the mean scores for the indicators self-determination motivation among caregiving students in senior high school students in Lorenzo S. Sarmiento Senior National High School with an overall mean is 4.24 which is described as very high, with a standard deviation of 0.54. The high level could be attributed to the very high ratings the respondents gave in all indicators. This entails that the respondents' responses to the level of self-determination motivation are much positive in terms of autonomy, competence, and relatedness.

The cited overall mean score was the result obtained from the following computed mean scores from highest to lowest: 4.26 or high for competence with a standard deviation of 0.57; 4.25 or high for autonomy with a standard deviation of 0.65; 4.20 or high for relatedness with standard deviation of 0.66.

Table 1. Level of Self-determination Motivation

Indicators	Mean	SD	Descriptive Equivalent
Competence	4.26	0.57	Very High
Autonomy	4.25	0.65	Very High
Relatedness	4.20	0.64	Very High
Overall	4.24	0.54	Very High

Level of Self-efficacy

Shown in Table 2 are the mean scores for the indicators self-efficacy among caregiving students in senior high school students in Lorenzo S. Sarmiento Senior National High School with an overall mean score of 4.35, which is described as very high with a standard deviation of 0.49. The very high level could be attributed to the very high rating given by the respondents on most indicators in the items of belief that the ability grows with efforts and belief in personal ability.

The cited overall mean score was the result obtained from the following computed mean scores from highest to lowest: 4.38 or very high for belief that ability grows with efforts with a standard deviation of 0.52; 4.33 or very high for belief in personal ability with a standard deviation of 0.53.

Table 2. Level of Self-efficacy

Indicators	Mean	SD	Descriptive Equivalent
Belief that ability grows with efforts	4.38	0.52	Very High
Belief in personal ability	4.33	0.53	Very High
Overall	4.35	0.49	Very High

Level of Academic Engagement

Shown in Table 3 are the mean scores for the indicators academic engagement among caregiving students in senior high school students in Lorenzo S. Sarmiento Senior National High School with an overall mean is 4.26 described as very high, with a standard deviation of 0.56. The very high level could be attributed to the very high ratings the respondents gave in all indicators. This entails that the respondents' responses to the level of academic engagement are much positive in terms of vigor, dedication and absorption.

The cited overall mean score was the result obtained from the following computed mean scores from highest to lowest 4.38 or very high for dedication with a standard deviation of 0.54, 4.24 or very high for absorption with a standard deviation of 0.62, and 4.12 or high for vigor with a standard deviation of 0.69.

Table 3. Level of Academic Engagement

Indicators	Mean	SD	Descriptive Equivalent
Dedication	4.38	0.54	Very High
Absorption	4.24	0.52	Very High
Vigor	4.12	0.69	High
Overall	4.26	0.56	Very High

Significance of the Relationship between Self-determination Motivation and Academic Engagement

The Pearson's r value for the variables presented is 0.728, with a p-value of < .001, which indicates a strong positive correlation. The dependent variable in this study is academic engagement, while the independent variable is self-determination motivation. This suggests that the indicators of self-determination motivation are positively associated with students' level of academic engagement. Since the table shows that the probability level for self-determination motivation and academic engagement is < .001, which is lower than the significance level of 0.05, the null hypothesis stating that there is no significant relationship between self-determination motivation and academic engagement, is rejected.

Table 4. Significance of the Relationships Between Self-determination Motivation and Academic Engagement

	Pearson's r	p
Self-determination Motivation-Academic Engagement	0.728*	<.001

Significance of the Relationship Between Self-efficacy and Academic Engagement

The Pearson’s r value of the two variables is 0.76 with a p-value of < .001. The dependent variable is students’ academic engagement, and the independent variable is self-efficacy. This result suggests a strong positive correlation between self-efficacy and academic engagement.

It reveals that the overall result of the indicators in self-efficacy has a probability level of < .001, which is significantly lower than the significance level of 0.05. Therefore, the null hypothesis stating that there is no significant relationship between self-efficacy and academic engagement among students is rejected.

Table 5. Significance of the Relationships Between Self-efficacy and Academic Engagement

	Pearson’s r	p
Self-efficacy—Academic Engagement	0.76*	<.001

Significance of the Influence of the Domains of Teachers’ Attitude on Students’ Motivation

Using Multiple Regression Analysis, the data revealed that the influence of self-determination motivation on students’ academic engagement has an F-value of 65.88 with a corresponding p-value of < .001, which is statistically significant.

This means that self-determination motivation significantly influences the academic engagement of students in Lorenzo S. Sarmiento Sr. National High School, since the probability value is less than 0.05. The R squared value of 0.603 implies that 60.3% of students’ academic engagement is explained by the domains of self-determination motivation autonomy, competence, and relatedness while the remaining 39.7% is influenced by other factors not included in the study.

Table 6. Significance of the Influence of the Domains of Self-determination Motivation on Academic Engagement

Self-determination Motivation	Coefficients	t	p	Decision $\alpha=0.05$
Autonomy	-0.060*	-.901	0.369	H ₀ is not rejected
Competence	0.518*	6.056	<.001	H ₀ is rejected
Relatedness	0.320*	5.146	<.001	H ₀ is rejected
Dependent Variable: Academic Engagement				

*p<0.05 R=0.777 R²=0.603 F-ratio=65.88 p-value< .001

Significance of the Influence of the Domains of Self-efficacy on Academic Engagement

Presented in Table 7 is the regression analysis on the influence of self-efficacy on academic engagement among Senior High School students in Lorenzo S. Sarmiento Sr. National High School. The table shows a computed F-value of 94.52 and a corresponding p-value of <.001, indicating that self-efficacy significantly influences academic engagement since the probability value is less than the 0.05 level of significance. Therefore, the null hypothesis is rejected.

The coefficient of determination (R²) of 0.591 implies that 59.1% of the variation in academic engagement is explained by self-efficacy, particularly by beliefs that ability grows with effort and belief in personal ability. Meanwhile, the remaining 40.9% is attributed to other factors not included in the study.

Table 7. Significance of the Influence of the Domains of Self-efficacy on Academic Engagement

Self-efficacy	Coefficients	t	p	Decision $\alpha=0.05$
Belief that ability grows with efforts	0.037*	3.33	<.001	H ₀ is rejected
Belief in personal ability	0.561*	6.26	<.001	H ₀ is rejected
Dependent Variable: Academic Engagement				

* $p < 0.05$ $R=0.769$ $R^2=0.591$ $F\text{-value}=94.5$ $p\text{-value}=<0.001$

DISCUSSIONS

Level of Self-determination Motivation

The respondents' level of self-determination motivation in Lorenzo S. Sarmiento Sr. National High School is very high. This means that the overall level of self-determination motivation among the respondents was very high, indicating strong satisfaction of autonomy, competence, and relatedness. This finding is consistent with Self-Determination Theory, which explains that when these three psychological needs are fulfilled, individuals are more likely to demonstrate intrinsic motivation and positive engagement (Ryan & Deci, 2020; Reeve, 2021). In the same vein, previous studies emphasized that high self-determination is linked to persistence, well-being, and goal-directed behavior in academic settings (Howard et al., 2021; Vansteenkiste et al., 2020). Considering that emerging research also found strong correlations between self-determination and satisfaction, vitality, and emotional balance (Yang et al., 2025), the very high overall mean in this study suggests that respondents experience adaptive motivational functioning that supports their academic performance and psychological wellness.

Looking more closely at the indicators, competence obtained the highest mean, followed by autonomy, and relatedness, all interpreted as high. The prominence of competence implies that students perceive themselves as capable of effectively performing academic tasks, which aligns with findings that higher competence enhances resilience, self-regulation, and engagement (Zhang & Zhang, 2023; Rakoczy et al., 2021). Moreover, competence has been associated with stronger academic progress and confidence in handling complex responsibilities (Rahayu & Febriani, 2022). Similarly, the high level of autonomy supports earlier claims that when learners feel a sense of volition and personal control, they demonstrate greater initiative and sustained motivation (Ryan & Deci, 2020; Jang, 2021). As autonomy increases, so does academic engagement and well-being (Ibrahim, 2022), which further explains the strong motivational profile reflected in the findings.

Meanwhile, although relatedness ranked slightly lower than competence and autonomy, its high mean still indicates that respondents feel socially connected and supported within their learning environment. This result is in line with research suggesting that strong relatedness fosters confidence, participation, and emotional stability (Lam, 2021). Conversely, prior studies have shown that low relatedness is associated with disengagement and weaker academic outcomes (Dalida et al., 2025), which is not evident in the present findings. Taken together, the consistently high levels across all three dimensions support the assertion that higher self-determination corresponds to higher quality motivation and more favorable educational outcomes (Deci & Ryan, 2020; Aydin & Karakas, 2025). Therefore, the results suggest that the respondents' learning context effectively nurtures psychological need satisfaction, ultimately strengthening their overall self-determination motivation.

Level of Self-efficacy

The findings indicate that the overall level of self-efficacy among the respondents was very high, reflecting a strong sense of confidence in accomplishing academic tasks. This outcome is consistent with the concept of self-efficacy as an individual's belief in their capability to organize and perform actions necessary to attain specific goals (Usher & Pajares, 2020). Research has consistently demonstrated that students with elevated self-efficacy display greater perseverance, strategic effort, and active engagement in learning activities (Schunk &

DiBenedetto, 2020; Hwang et al., 2022). Given that self-efficacy also influences emotional regulation and adaptive learning strategies (Zhen et al., 2021; Zeng et al., 2023), the very high overall mean suggests that the respondents are likely to approach academic challenges with determination and confidence. Such a pattern supports prior findings that strong efficacy beliefs are linked to sustained academic motivation and success (Liu, 2021).

Examining the individual components, belief that ability grows with effort obtained the highest mean, followed by belief in personal ability, both described as very high. This ranking implies that students strongly endorse the idea that competence can be developed through persistence and appropriate strategies. Studies have shown that when learners adopt a growth-oriented belief, they are more inclined to regulate their effort and maintain confidence even during demanding tasks (Kim & Karr, 2023; Derakhshan, 2024). At the same time, a strong belief in personal ability reinforces goal commitment, metacognitive strategy use, and resilience in complex learning situations (Zimmerman, 2020; Artino & Jones, 2021). Because these two indicators are closely connected to adaptive learning behaviors, their very high levels suggest that respondents possess both confidence in their current abilities and conviction in their potential for improvement.

In contrast to studies reporting that low or moderate self-efficacy contributes to avoidance, inconsistent effort, and vulnerability to academic stress (Karimi & Sotoodeh, 2023; Le et al., 2022; Rahman, 2023), the present findings reflect a more favorable motivational condition. When belief in personal ability and effort-based growth are strongly held, learners are more likely to persist, engage deeply, and achieve better academic outcomes (Phan & Ngu, 2022; Yeng Ba et al., 2025). Consequently, the consistently very high ratings across both indicators suggest that the respondents are equipped with the confidence and mindset necessary to handle academic pressures effectively.

Level of Academic Engagement

The findings revealed that the overall level of academic engagement among the respondents was very high, indicating that students generally approached their academic tasks with strong energy, commitment, and immersion. This outcome aligns with the view that academic engagement reflects a positive and fulfilling psychological state characterized by vigor, dedication, and absorption (Ari-Gómez et al., 2023). When students are engaged at a high level, they tend to invest effort willingly, persist through difficulties, and perceive their studies as meaningful (Samson et al., 2021). Given that moderate to high engagement has been associated with improved performance and well-being (Flores & Castillo, 2020), the very high overall mean suggests that the respondents demonstrate a strong psychological connection to their learning tasks.

In terms of specific dimensions, dedication obtained the highest mean, followed by absorption, while vigor ranked slightly lower yet still high. The very high level of dedication indicates that students experience strong enthusiasm, purpose, and identification with their academic goals, which is consistent with findings that highly dedicated learners exhibit sustained commitment and persistence (Kim & Santos, 2021; Cruz & Medina, 2024). Research further shows that high dedication contributes positively to academic success and long-term motivation (Santos & Herrera, 2025). Alongside this, the very high absorption score suggests that respondents are deeply immersed and cognitively focused during learning activities, reflecting intense concentration and sustained mental involvement (Zhang & Qi, 2023). Such immersion supports better information processing and learning regulation (Zhen et al., 2021), reinforcing the strength of their engagement profile.

Although vigor recorded the lowest mean among the three indicators, its high level still signifies that students possess consistent energy and readiness to exert effort in academic tasks. High vigor has been linked to resilience, active participation, and effective coping with academic pressures (Hsu & Lin, 2021; Villar & Santos, 2025). By contrast, prior literature noted that low vigor, dedication, or absorption often results in disengagement and weakened performance (Ramos & David, 2021; Torres & Javier, 2024), which is not evident in the present findings. Taken together, the consistently elevated levels across dedication, absorption, and vigor indicate that the respondents are not merely compliant but are genuinely invested in their studies. This pattern suggests a learning environment that fosters enthusiasm, sustained focus, and meaningful participation, all of which are essential for academic achievement and long-term educational development.

Significance of the Relationship Between Self-determination Motivation and Academic Engagement

The result of the study revealed that there was a high relationship between students' self-determination motivation and their academic engagement. The computed R value indicated a high correlation between the two variables. This high correlation implies that as students' self-determination motivation increases, their academic engagement, in terms of dedication, absorption, and vigor, also increases. Similarly, the study by Alharfi and Alamer (2025) reveals a strong link between self-determination motivation and active participation in learning activities. It is very evident that students' intrinsic drive influences how engaged they are in academic tasks. Students who experience higher motivation are more likely to participate actively, focus deeply on their studies, and persist through challenges.

These findings emphasize the importance of fostering self-determination motivation in creating a positive and engaging learning environment. When students are internally motivated, it enhances their dedication, absorption, and vigor, leading to more effective engagement in academic activities. By incorporating strategies that support autonomy, competence, and relatedness, educators can strengthen students' motivation and overall academic engagement.

Significance of the Relationship Between Self-efficacy and Academic Engagement

The results of the study revealed a significant relationship between students' self-efficacy and their academic engagement. The computed R-value indicated a strong positive correlation between these two variables. This correlation suggests that as students' self-efficacy increases, their academic engagement also rises, enhancing dedication, absorption, and vigor in learning activities.

This statement is supported by Bandura (2020), who asserts that students' beliefs in their abilities directly influence their effort, persistence, and resilience in learning. Students with high self-efficacy are more likely to actively participate in tasks, set challenging goals, and maintain focus and motivation when facing academic challenges. Social cognitive theory also emphasizes that learners' perceptions of their capabilities shape how they approach, regulate, and persist in their learning activities.

In addition, Kim et al. (2023) found a strong relationship between self-efficacy and student engagement. Students who are confident in their ability to succeed tend to manage their learning more effectively, engage deeply with academic content, and maintain motivation across behavioral, cognitive, and emotional domains. This suggests that fostering self-efficacy in students can significantly enhance their overall academic engagement and performance.

Significance of the Influence of the Domains of Self-determination Motivation on Academic Engagement

The regression coefficient was used to test the significant influence of students' self-determination motivation on their academic engagement among Senior High School students. Using Multiple Regression in JASP Software, the data revealed that self-determination motivation has a significant influence on academic engagement. Approximately 60.30 percent of the students' academic engagement among Senior High School students at Lorenzo S. Sarmiento Sr. National High School is influenced by their self-determination motivation. The overall results indicate that students' motivation significantly predicts their level of dedication, absorption, and vigor in learning activities. Therefore, the significance level of the null hypothesis stating that self-determination motivation does not influence academic engagement except for autonomy, is rejected.

The findings of the study further support the notion that intrinsic motivation, competence, and relatedness plays a vital role in enhancing students' active participation, persistence, and emotional involvement in learning tasks. The study of Lopez et al. (2025) highlights that students who perceive higher self-determination motivation are more likely to engage in behavioral, cognitive, and emotional aspects of learning. When students feel autonomous, competent, and connected, they are more likely to take ownership of their learning, regulate their efforts, and maintain consistent engagement. This aligns with Self-Determination Theory, which posits that satisfying these psychological needs promotes sustained engagement and positive academic outcomes. By

fostering self-determination motivation, educators can enhance students' involvement, persistence, and overall success in academic settings.

Significance of the Influence of the Domains of Self-efficacy on Academic Engagement

The regression coefficient is used to test the significant influence of overall self-efficacy on students' academic engagement among Senior High School students. Using the Multiple Regression in JASP Software, the data reveal that the influence of self-efficacy on academic engagement among Senior High School students has a significant effect. Only 59.10 percent of the students' academic engagement at Lorenzo S. Sarmiento Sr. National High School is influenced by self-efficacy. The overall results of self-efficacy predict students' academic engagement. Therefore, the significance level of the hypothesis regarding self-efficacy and academic engagement among Senior High School students is rejected.

Students with high self-efficacy are more confident in their abilities to plan, monitor, and complete academic tasks successfully (Bandura, 2020). Such confidence enhances persistence and active participation in classroom activities, as well as emotional involvement in learning tasks. Task-specific confidence and resilience enable students to overcome setbacks and maintain engagement, while students lacking self-efficacy may struggle to sustain focus and motivation (Jiang & Li, 2024). Furthermore, supportive instructional strategies, constructive feedback, and collaborative peer interactions contribute to strengthening students' self-efficacy and overall engagement (Nguyen et al., 2024; Yang et al., 2025).

CONCLUSION

The study concludes that students demonstrate very high levels of self-determination motivation, indicating that their psychological needs for competence, autonomy, and relatedness are strongly fulfilled, which supports internal motivation, a sense of control over learning, and positive social connectedness within the academic environment. The findings also reveal a very high level of self-efficacy, reflected in students' strong belief that abilities can grow through effort and in their confidence to perform academic tasks successfully, enabling them to approach challenges with resilience, persistence, and optimism. Furthermore, students exhibit a very high level of academic engagement, as evidenced by strong dedication, deep absorption, and sustained vigor in learning activities. Contrary to the null hypothesis, the study confirms that self-determination motivation and self-efficacy significantly influence academic engagement, emphasizing that the fulfillment of psychological needs and the presence of strong self-beliefs play a crucial role in enhancing students' focus, commitment, and perseverance. Overall, the study affirms that learners who are both motivated and self-efficacious are more likely to be highly engaged academically, leading to more effective and meaningful learning experiences.

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