

# The Mediating Effect of Social Participation on the Relationship between Motivational Strategies and Student Engagement in School among College Students

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## ABSTRACT

Student engagement refers to the level of focus, curiosity, enthusiasm, optimism, and passion during learning or instruction is referred to as their level of student engagement. This study aims to investigate the mediating role of social participation on the relationship between motivational strategies and student engagement among college students. This study utilized quantitative, non-experimental descriptive correlational research design, and mediation analysis with 353 samples of college students. This study used stratified random sampling techniques. The statistical tools used in this study were mean, pearson r and path analysis. Data was collected from respondents using adapted survey instruments, which were verified for content validity. The study's findings demonstrated that social participation, motivational strategies and student engagement have a descriptive level of high. Furthermore, there was significant partial mediation between social participation, motivational strategies and student engagement. The connection between motivational strategies and student engagement in college was partially explained by the level of social participation. The result was that students who engage with their peers were more likely to participate in social activities. If students are motivated and engaged in general, they'll participate in even more social activities.

**Keywords** - motivational strategies, student engagement, social participation, college students, mediation analysis, Philippines.

## INTRODUCTION

Student engagement, a multifaceted concept encompassing emotional, behavioral, and cognitive elements, is crucial for creating a successful learning environment (Kahu, 2023). However, engagement in online and blended learning often declines due to mismatches between instructional design and student needs, insufficient meaningful interactions, and low student motivation (Johar et al, 2023). Additionally, student engagement in face-to-face classes frequently experience problems, such as lack of interest, passive learning trends, and distractions, which may limit students' active participation and academic success (Fredricks, et al 2019).

In Canada, there is a low student engagement, particularly among underrepresented groups like Indigenous students and from those low-income backgrounds because of limited access to technology, and other resources essential for active participation in learning is a significant concern (Yang, et al 2023). However, Germany has a particularly difficult time with student involvement in the since recent assessments show serious issues with students' emotional and social attachment to their education (Phillips, 2024).

In the Philippines specially in Mindoro, students struggle to participate in engagement because of limited resources (Masongsong, 2024). Additionally, in Tagum City keeping the students engaged is a challenge with many students feeling disconnected and unmotivated due to a lack of resources and support and expressing a desire for more interactive learning experiences and active participation opportunities (Torrejos, 2024).

Research shows a strong link between social participation and student engagement. Social participation, which involves students actively participating in peer relationships, extracurricular activities, and community-building efforts, has a favorable impact on their academic engagement and motivation. According to (Sá 2023), social participation improves student satisfaction and motivation, which is essential for long-term engagement. Additionally, motivational strategies can impact student engagement, while social participation can boost intrinsic motivation by fostering a sense of belonging and collaboration (Liu et al. 2024). However, the interaction of these elements, particularly the mediating effect of social participation, has not been thoroughly investigated. Although there are many studies about these three variables in international and national settings, the researchers were unable to find any studies that establish a connection between social participation and student engagement using motivational strategies as a mediating variable in the local setting. This study bridges the gap in existing research by examining the relationship between these variables within a specific regional context. The significant differences in focus and context across previous studies highlight the importance and urgency of conducting this research.

### Statement of the Problem

This study aimed to examine whether social participation mediated the relationship between motivational strategies and student engagement.

Specifically, this study sought to answer the following questions:

1. What is the level of motivational strategies in terms of:
  - 1.1 environmental control;
  - 1.2 self-consequating;
  - 1.3 interest enhancement;
  - 1.4 performance self-talk; and
  - 1.5 mastery self-talk?
2. What is the level of student engagement in terms of:
  - 2.1 affective engagement;
  - 2.2 behavioral engagement; and
  - 2.3 cognitive engagement?
3. What is the level of social participation in terms of:
  - 3.1 friendship/relationship subscale;
  - 3.2 contacts/interactions subscale;
  - 3.3 student's social self-perception subscale; and
  - 3.4 acceptance by classmates subscale?
4. Is there a significant relationship between:
  - 4.1 motivational strategies and student engagement?
  - 4.2 motivational strategies and social participation?
  - 4.3 Social participation and student engagement?

5. Is there a mediating effect of social participation on the relationship between motivational strategies and student engagement in school among college students?

**Hypotheses**

The following hypotheses were tested at/using a 0.05 level of significance.

1. There is no significant relationship between:
  - 1.1 Motivational Strategies and Student engagement;
  - 1.2 motivational strategies skills and social participation; and
  - 1.3 social Participation and Student engagement.
2. There is no significant mediating effect of social participation on the relationship between motivational strategies and student engagement in school among college students.

**Theoretical Framework**

This study was anchored on Social Cognitive Theory by Bandura (1960) which emphasizes the highlights and influence of observational learning, self- efficacy, and social interactions on motivation and behavior, and it examines how psychological, behavioral, and environmental factors interact to shape student engagement through reciprocal determinism, with social participation playing a crucial role in promoting positive outcomes. This theory was supported by (Parrish,2022) who propose that collaborative activities and group work foster involvement and motivation. Additionally, this study draws on the proposition by (Kamande & Mungara 2023), emphasizes that collaborative learning environments promote a sense of belonging, which is essential for sustaining student motivation and engagement.

**Conceptual Framework**

Presented in Figure 1 was the conceptual framework of the variables of the study. The independent variable of this study was motivational strategies with the following indicators: environmental control, self consequating, interest enhancement performance self-talk and mastery self-talk (Smith et al.,2017).

The dependent variable was the student engagement with the following indicators: affective Engagement (Liking for school), behavioral Engagement, cognitive Engagement, affective engagement (Liking and learning), and behavioral engagement (Extracurricular activities) (Lam et al., 2014). The mediating variable was the social participation with the following indicators: friendship/relationship subscale, Contacts/interactions subscale, Student’s social perception subscale, Acceptance by classmate’s subscale (Koster et al., 2014).

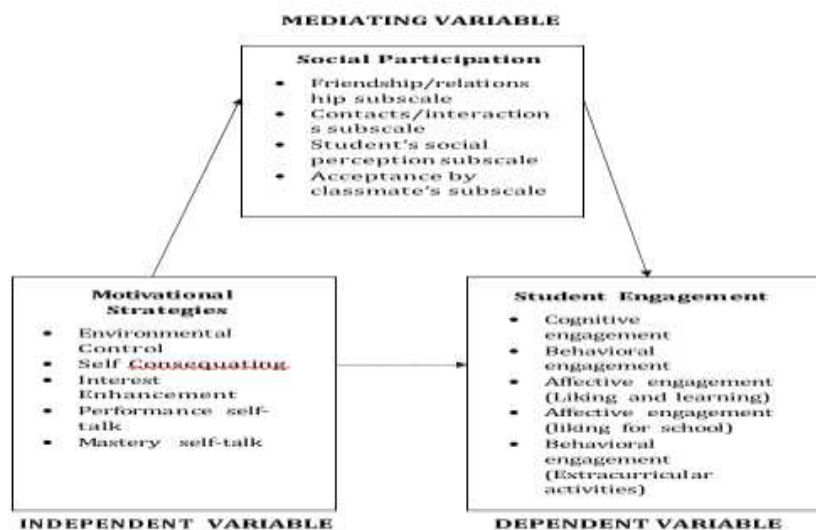


Figure 1. The Conceptual of the Study

## METHODOLOGY

### Research Design

This study utilized quantitative, non-experimental research, a cornerstone of scientific inquiry, involves collecting and analyzing numerical data to uncover patterns and test theories. Which is particularly valuable in social and natural sciences due to its ability to validate hypotheses using statistical methods (Sreekumar, 2023). This study also incorporated Descriptive research which aims to provide a comprehensive account of a subject without altering variables, focusing on "what," "where," "when," and "how" questions (Singh, 2024).

Moreover, Correlational research which explores relationships between variables without direct manipulation, providing insights for future research and practical applications (MSEd, 2023). Additionally, Mediation analysis examines how an independent variable (X) affects a dependent variable (Y) through a mediator (M), revealing the underlying mechanisms of their relationship. This method is widely used in various fields to understand complex causal relationships (Vo, et al. 2022).

The study used a strong research design that combines different methods to understand a specific topic. It used descriptive research to clearly describe the variable namely Social Participation, Motivational Strategies and Student Engagement. Non-experimental research to study real-world behaviors ethically, correlational research was used to identify relationships among social participation, motivational strategies and student engagement. Additionally, mediation analysis indicated that social participation would mediate the impact of motivational strategies on student engagement.

### Research Subject

The respondents of this study were 353 students, calculated through the Raosoft sample size calculator, from a total population of 4,325 students studying in local college in Santo Tomas, Province of Davao Del Norte. The respondents were selected through stratified random sampling techniques. According to Hayes et al (2022), Stratified sampling divides a population into subgroups based on shared characteristics, ensuring each subgroup is represented in the sample for more accurate analysis and valid conclusions.

**Table: 1 Frequency Distribution of Participant**

GROUP	POPULATION	SAMPLE SIZE	PERCENTAGE
A	1,343	110	31.16%
B	1,234	101	28.61%
C	826	67	18.99%
D	539	44	12.46%
E	306	25	7.08%
F	70	6	1.7%
Total Respondents	4,325	353	100%

### Research Instrument

The researchers used three (3) adapted survey questionnaires for both the independent variable, dependent variable and mediating variable. The questionnaires were validated by the panelists and an external lavatorial to test its validity.

**SOCIAL PARTICIPATION QUESTIONNAIRE.** This survey questionnaire was used to get the level of social participation, it was from the research study titled "Assessing Social Participation of Students with Special Needs in Inclusive Education" by Minnaert, (2011). The questionnaire consists of 24 items covering the following aspects: friendship/relationship subscale (5 items) Contacts/interactions subscale (9 items), Student's social self-perception subscale (5 items) and acceptance by classmates' subscale (5 items). Respondents assessed each item using a 5-point Likert scale, where 5 represented "Very High," 4 "High," 3 "Moderate," 2 "Low," and 1 "Very Low."

Range of Means	Descriptive Level	Interpretation
4.20- 5.00	Very High	Social Participation is very much observed.
3.40- 4.19	High	Social Participation is observed.
2.60- 3.39	Moderate	Social Participation is moderately observed.
1.80- 2.59	Low	Social Participation is less observed.
1.0- 1.79	Very Low	Social Participation is least observed.

MOTIVATIONAL STRATEGIES QUESTIONNAIRE. This survey questionnaire was used to get the level of motivational strategies, it was from the research study titled "Motivational strategies as mediator between motivational beliefs and engagement for learning" by Smit, et al (2012). The questionnaire consists of 21 items, environmental control (4 items), self consequating (5 items), interest enhancement (3 items), performance self-talk (4 items), and mastery self-talk (5 items). Respondents assessed each item using a 5-point Likert scale, where 5 represented "Very High," 4 "High," 3 "Moderate," 2 "Low," and 1 "Very Low."

Range of Means	Descriptive Level	Interpretation
4.20- 5.00	Very High	Motivational Strategies is very much evident.
3.40- 4.19	High	Motivational Strategies is evident.
2.60- 3.39	Moderate	Motivational Strategies is moderately evident.
1.80- 2.59	Low	Motivational Strategies is less evident.
1.0- 1.79	Very Low	Motivational Strategies is least evident.

STUDENT ENGAGEMENT QUESTIONNAIRE. This survey questionnaire was used to get the level Student Engagement, it was from the research study titled: Understanding and Measuring Student Engagement in School: The results of an international study from 12 countries by Lam, et al (2014). The questionnaire consists of 33 items covering the following aspects: Affective (9 items), Behavioral (12 items), Cognitive (12 items). Respondents assessed each item using a 5-point Likert scale, where 5 represented "Very High," 4 "High," 3 "Moderate," 2 "Low," and 1 "Very Low."

Range of Means	Descriptive Level	Interpretation
4.20- 5.00	Very High	Student Engagement is very much observed.
3.40- 4.19	High	Student Engagement is observed.
2.60- 3.39	Moderate	Student Engagement is moderately observed.
1.80- 2.59	Low	Student Engagement is less observed.
1.0- 1.79	Very Low	Student Engagement is least observed.

### Statistical Treatment Of Data

*Mean:* The meaning is the average of a set of numbers. It's calculated by adding up all the numbers and then dividing by the total number of numbers (Paulson, 2023). This was used to determine the level of Social Participation, Motivational Strategies and Student engagement.

*Pearson r*: A statistical method determines the strength and direction of the relationship between two continuous variables, and this text outlines the assumptions, steps, and interpretation of Pearson correlation analysis in SPSS and APA style (Attallah, 2024). This was used to determine the interrelationship between social participation, motivational strategies and student engagement in school among college students.

*Path Analysis*: Motivational techniques can enhance social integration and belonging by fostering connections, inspiring engagement, and creating opportunities for social interaction and relationship building, leading to improved well-being and overall satisfaction (Howley-Rouse, 2023). This was used to ascertain the mediating effect of social participation on the relationship between motivational strategies and student engagement in school among college students.

## RESULTS AND DISCUSSIONS

### Level of Motivational Strategies

The results for motivational strategies were presented, examined, and interpreted below. The outcome for motivational strategies level was presented in table 3. The mean scores ranged from 3.89 to 4.03 with an overall mean of 3.93 and a standard deviation of 0.69. This was described as high which means oftentimes manifested.

Moreover, the data gleaned that environmental control had the highest mean of 4.08 and described as oftentimes manifested. While the indicator with the lowest mean of 3.95 described also as high was the interest enhancement.

The overall finding suggests that the motivational strategies of the students was oftentimes manifested when it comes to their learning, assignment, and good grades. Therefore, motivational strategies were strong, students actively work to promote their own passion for academic success. This suggests that they were actively engaging in behaviors such as maintaining their environment and applying self-talk to improve their focus and motivation.

**Table 2**  
*Level of Motivational Strategies*

Indicator	Mean	SD	Descriptive Level
Environmental Control	4.08	0.64	High
Self Consequating	3.98	0.67	High
Interest Enhancement	3.95	0.74	High
Performance Self Talk	4.06	0.71	High
Mastery Self Talk	4.01	0.65	High
<b>Overall</b>	<b>4.02</b>	<b>0.69</b>	<b>High</b>

It conforms to the study of Chen et al, (2023) that motivational strategies have an important role in college students' social involvement, considering students with more motivation are more likely to engage in both academic and social activities. Furthermore, it supports the study of Cordia (2023) that motivational strategies fulfill an important role in improving student learning achievements through boosting determination and committing effort to learning activities.

### Level of Student Engagement

The results for the student engagement were presented in table 3. The mean ranging from 3.92 to 4.00 with an equivalent overall mean of 3.96 and a standard deviation of 0.63. This was described as high which means observed. Moreover, the data could be gleaned that affective engagement was the indicator with the highest means of 4.00 and described as observed. While, the indicator with the lowest means of 3.92 described also as high, was behavioral engagement.

The overall findings implied that the student engagement of the students was observed when it comes to their learning, expectations, ideas, and experiences towards studying. Therefore, students are strongly interested in their learning, expressing good emotions, actively processing knowledge, and participating in learning activities. This level of involvement indicates a strong connection to the subject being studied and a proactive attitude to their study.

**Table 3**  
*Level of Student Engagement*

Indicator	Mean	SD	Descriptive Level
Affective Engagement	4.00	0.61	High
Behavioral Engagement	3.92	0.65	High
Cognitive Engagement	3.96	0.63	High
<b>Overall</b>	<b>3.96</b>	<b>0.63</b>	<b>High</b>

It conforms to the study of Zajda, (2024) that motivation promotes persistence and effort in learning, while student engagement is strongly related to learning, determination, and successful academic achievement. Furthermore, it supports the study of Hari and Polly, (2024) that student engagement and motivation are essential qualities which impact a student's learning experience and overall achievement in higher education.

### Level of Social Participation

The results for academic commitment were presented in table 4. The mean ranging from 3.89 to 4.03 with an equivalent overall mean of 3.93 and a standard deviation of 0.73 This was described as high which means least observed. Moreover, the data gleaned that friendship/ relationship Subscale was the indicator with the highest mean of 4.03 and described as evident, While the indicator with the lowest means of 3.89 described also as high, was acceptance by classmate’s subscale.

The overall findings implied that the learners’ study habits were evident when it comes to their supportive group of friends, spending time with friends, encouragement and support, and were willing to help. Therefore, students with a high level of academic commitment actively engage in learning-related actions such as developing strong peer relationships and interacting with others. Positive relationships and self-perception encourage students' dedication to their studies.

**Table 4**  
*Level of Social Participation*

Indicator	Mean	SD	Descriptive Level
Friendship/Relationship Subscale	4.03	0.74	High
Contacts/Interactions Subscale	3.90	0.72	High
Student’s Social Self-Perception Subscale	3.90	0.74	High
Acceptance By Classmates Subscale	3.89	0.74	High
<b>Overall</b>	<b>3.93</b>	<b>0.73</b>	<b>High</b>

It conforms to the study of Hoernig et al., (2024) that student involvement in higher educational institutions referring to the encouragement, support, collaborative learning, and interaction between peers that students experience throughout their academic journey.

### Correlation between Motivational Strategies and Student Engagement

Showed in table 5.1 were the findings about the significance of the association between motivational strategies and student engagement with an overall calculated R-value of 0.750 and a p-value of <0.001, lower than the .05 which was the set level of significance of the study. Thus, the null hypothesis is rejected. Also, this shows that

motivational strategies were correlated with student engagement. This implies that the association of the variables got a positive, strong and significant correlation. Therefore, students who use motivating strategies were more engaged in their studies. This shows that actively encouraging oneself results in increased involvement and investment in academic activities.

**Table 5.1**

*Significance on the Relationship between motivational strategies and student engagement*

Variables Correlated	r	p-value	Decision on Ho	Decision on Relationship
Motivational strategies and student engagement	0.750**	<0.001	Rejected	Significant

It conforms to the study of Singh et al., (2022) that motivational strategies strengthen student engagement, with the greatest values observed in students who are motivated, aware of oneself, optimistic, and passionate about their future. Furthermore, it supports Aulia & Fitria (2023) that student motivation needs to exist for engagement, and interaction, in other words, improves student motivation, establishing an interaction that fosters continued engagement.

**Correlation between Motivational Strategies and Social Participation**

Showed in table 5.2 were the findings about the significance of the association between time management and learners’ study habits with an overall calculated R-value of 0.532 and a p-value of <0.001, lower than the .05 which was the set level of significance of the study. Thus, the null hypothesis was rejected. Also, this shows that motivational strategies were correlated with their social participation. This implies that the association of the variables got a positive, medium and significant correlation.

**Table 5.2**

*Significance on the Relationship between motivational strategies and social participation*

Variables Correlated	r	p-value	Decision on Ho	Decision on Relationship
motivational strategies and social participation	0.532**	<0.001	Rejected	Significant

It conforms to the study of Chen et al., (2023) that motivational strategies and social strategies showing that social support improves academic motivation and engagement. Furthermore, it supports Gingrich et al, (2023) that motivation is the most significant evidence of satisfaction with social relationships.

**Correlation between Social Participation and Student Engagement**

Showed in table 5.3 were the findings about the significance of the association between Learners’ Study Habits and Student Engagement with an overall calculated R-value of 0.659 and a p-value of <0.001, lower than the .05 which was the set level of significance of the study. Thus, the null hypothesis is rejected. Also, this shows that social participation was correlated with their student engagement. This implies that the association of the variables got a positive, strong and significant correlation.

**Table 5.3**

*Significance on the Relationship between social participation and student engagement*

<b>Variables Correlated</b>	<b>r</b>	<b>p-value</b>	<b>Decision on Ho</b>	<b>Decision on Relationship</b>
social participation and student engagement	0.659**	<0.001	Rejected	Significant

It conforms to the study of Vargas & Konishi (2021) that Studies indicate a significant correlation between social interaction and multiple aspects of student engagement, including academic involvement, motivation, and overall well-being. Furthermore, it supports Korobchynskyi & Berestenko (2023) that social participation enhances student achievement, strengthens school-community relationships, expands learning potential, increases retention of students, and maximizes educational confidence.

**Mediation Analysis of the Three Variables using Path Analysis**

Displayed in Figure 2 were the different steps taken in the path. The independent variable (IV) was Teaching Quality, the dependent variable (DV) was Student Work-Readiness, and the mediating variable (MV) was Perception of Interns.

Displayed in Figure 2 were the different steps taken in the path. The independent variable (IV) was Motivational strategies, the dependent variable (DV) was Student Engagement, and the mediating variable (MV) was Social Participation.

In Step 1, path C (IV and DV), the result yielded an estimate of .754 and a standard error (SE) of .035 with a p<value of 0.000, which is lower than the 0.05 level. This means there is a significant influence between motivational strategies and student engagement since the probability value is p<0.000. Thus, the null hypothesis of no significant relationship is therefore rejected.

In Step 2, which is path A (IV and MV), with the presence of mediating variable, the result yielded an estimate of .579 and a standard error (SE) of .049 it a p<value of 0.000, which is lower than the 0.05 level of significance. This means a significant influence exists between motivational strategies and social participation the probability value is p<0.000. Thus, the null hypothesis of no significant relationship is therefore rejected.

In Step 3, which is path B (MV and DV), with the presence of mediating variable, the result yielded an estimate of .335 and a standard error (SE) of .034 with a p<value of 0.000, which is lower than the 0.05 level of significance. This means a significant influence exists between teaching performance and student outcomes since the probability value is p<0.000. Thus, the null hypothesis of no significant relationship is therefore rejected.

In Step 4, which is path C', the combined influence of IV and MV on DV. It was revealed that Student Engagement (DV) regresses on Social Participation (MV) and Motivational Strategies (IV), which the result yielded an estimate of .560 and standard error (SE) of .037 with a p<value of 0.000, which is lower than the 0.05 level of significance. This means a significant influence exists between the three variables since the probability value is p<0.000. Thus, the null hypothesis of no significant relationship is therefore rejected.

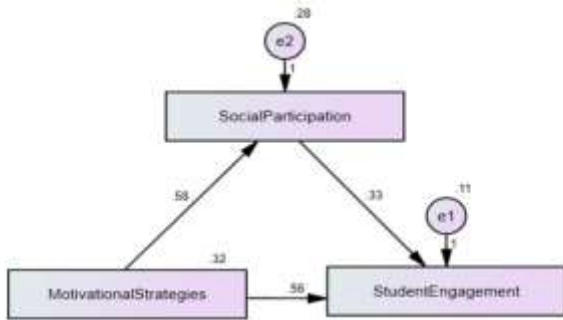
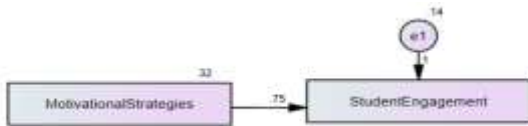


Figure 2: Path Diagram for Regression Model

Regression Weights: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P
Social Participation	<--- Motivational Strategies	.579	.049	11.776	***
Student Engagement	<--- Motivational Strategies	.560	.037	15.133	***
Student Engagement	<--- Social Participation	.335	.034	9.863	***



Regression Weights: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P
Student Engagement	<--- Motivational Strategies	.754	.035	21.294	***

### Partial Mediation.

Since the three steps (paths A, B, and C) are all significant, mediation analysis through path analysis is warranted to assess the significance of the mediation effect. Furthermore, as stated in step 4, the effect of motivational strategies and student engagement was even found to be reduced after being mediated by social participation. With this, since the regression coefficient is substantially reduced at step 4 but remains significant, partial mediation occurred since the effect was found to be significant with a  $p < 0.000$ .

The findings of the effect size computation in the mediation test between the three variables are shown in figure 2. The effect size indicates how much of the indirect path's effect on the student engagement can be attributed to motivational strategies. The beta of motivational strategies towards student engagement is .754, the total effect value. The beta of motivational strategies towards student engagement with a social participation included in the regression has a direct effect value of 0.560. The indirect effect value of 0.194 is the multiplied portion of the original correlation between motivational strategies to social participation, which is .579, and social participation to student engagement, which is .335.

The ratio index is computed by dividing the indirect effect by the total effect; in this case, 0.194 by 0.754 equals 0.257. About 25.7 percent of the total effect of motivational strategies towards student engagement goes through social participation. About 74.3 percent of the total effect is either direct or mediated by other variables not included in the model.

The result on the mediation analysis of social participation on the relationship between motivational strategies and student engagement conforms on Social Cognitive Theory by Bandura (1960), This approach highlights how students learn by observing others, believe in their own abilities, and interact socially, all of which drive their motivation and behavior. It explores how psychological, behavioral, and environmental factors influence student engagement through a dynamic interplay, where social participation is key to success. It also supported the idea of Parrish (2022), who propose that collaborative activities and group work foster involvement and motivation.

## SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

### SUMMARY OF FINDINGS

The major findings of the study were as follows:

1. The level of motivational strategies was described as “high” with an overall mean of 4.02 with a standard deviation of 0.69. The indicator that got the highest mean of 4.08 was "environmental control", by “self consequating” with the mean of 3.98 and the indicator that got the lowest mean of 3.95 was "interest enhancement "

2. The level of student engagement was described as " high," with an overall mean of 3.96 with a standard deviation of 0.63. The indicator that got the highest mean of 4.00 was “affective engagement” by "cognitive engagement" with the mean of 3.96 and the indicator that got the lowest mean of 3.92 was "behavioral engagement."

3. The level of social participation was described as " high," with an overall mean of 3.93 with a standard deviation of 0.73. The indicator that got the highest mean of 4.03 was “friendship/relationship subscale", by "contacts/interactions" with the mean of 3.90 and the indicator that got the lowest mean of 3.89 was "acceptance by classmates’ subscale".

4. The relationship between motivational strategies and student engagement proved to have a strong positive correlation, with an r-value of 0.750 and a p-value of  $<0.001$ , which was lower than the significance level of 0.05. This means that there is a significant relationship between motivational strategies and student engagement.

5. The relationship between motivational strategies and social participation showed a medium positive correlation, with an r- value of 0.532 and a p-value of  $<0.001$ , which was lower than the significance level of 0.05. This result led to the rejection of the null hypothesis, confirming a significant relationship between motivational strategies and social participation.

6. The relationship between social participation and student engagement exhibited a strong positive correlation, with an r- value of 0.659 and a p-value of  $<0.001$ , which was lower than the significance level of 0.05. This result indicated that the null hypothesis was rejected, confirming a significant relationship between social participation and consumer engagement.

7. The mediation analysis confirmed that social participation mediated the relationship between motivational strategies and student engagement. Path analysis revealed that 25.7% of the effect of time management on student engagement was mediated by learners’ study habits, while the remaining 74.3% was either direct or influenced by other factors not included in the study.

### Conclusions

Based on the findings of this study, the following statements were constructed:

1. The level of motivational strategies is revealed to be high, indicating that it is oftentimes manifested. The general conclusions that students' motivational strategies are observed in terms of learning, assignments, and good grades. Therefore, students are using effective learning techniques, and strengthening these approaches improved their educational outcomes.

2. The level of student engagement is high, determined as observed. Therefore, students’ expectations, ideas, and experiences drive their engagement, which in turn builds a positive and participatory learning environment.

3. The level of social participation is high, determined as oftentimes manifested. Therefore, the results show that students' teaching effectiveness is evaluated based on their supportive group of friends, spending time with friends, spending time with friends, and encouraging classmates and support.

4. A strong positive correlation exists between motivational strategies and student engagement. Based on the findings, Motivational strategies that promote teamwork, group projects, or peer support might boost participation. A sense of community and belonging that comes from student engagement can enhance the enjoyment and significance of learning.

5. A medium positive correlation exists between motivational strategies and social participation. The study's findings suggest that by encouraging a feeling of involvement, purpose, and belonging, motivational strategies have a direct impact on social participation. People are more inclined to actively participate in social situations when they feel motivated, whether through intrinsic interest, positive reinforcement, or organized teamwork. This fosters deeper bonds and a more involved community.

6. A strong positive correlation exists between social participation and student engagement. The study findings suggest that student engagement and social participation are strongly correlated, as students who actively participate in social activities typically exhibit higher levels of learning engagement. Peer interaction and group activities encourage motivation, a stronger sense of belonging, and a greater dedication to academic achievement.

7. The mediation analysis confirmed that social participation partially mediates the relationship between motivational strategies and student engagement. The findings suggest that social participation plays a major role in moderating the relationship between student engagement and motivating approaches. However social participation has been demonstrated to partially moderate the direct effects of motivational strategies on student engagement, indicating that encouraging social connections can increase the effectiveness of motivational techniques.

## Recommendations

Based on the findings, analysis, and conclusions drawn in this study, the following recommendations are outlined:

1. CHED may prioritize programs and initiatives that promote social connectivity and peer participation in higher education, particularly in areas that students value highly, such as developing strong friendships and meaningful peer relationships. Furthermore, CHED may fund research into innovative approaches to improving peer relationships and student involvement, particularly in low-rated areas such as fostering a greater sense of belonging and inclusion in the learning environment, as well as support for teacher training in inclusive environments.

2. School administrators were recommended to create more chances that build good peer relationships, such as organizing collaborative projects, social events, and peer mentorship programs areas where students indicated the highest levels of participation. To address areas with low levels of perceived acceptance, administrators should create inclusive policies and activities that foster a sense of belonging for all students, ensuring that everyone feels accepted and respected within the school community.

3. Educators were encouraged to foster strong friendships and meaningful connections among students, which resulted in the highest positive classroom dynamics. This environment becomes even stronger by fostering a sense of inclusion and ensuring that all students are welcomed and valued by their peers.

4. College students may actively focus, show empathy, support others, and form meaningful friendships—the areas where they have shown the most positive engagement in social and intellectual contexts. To further strengthen school communities, encouraging small acts of peer inclusion can help improve areas where acceptance was low, making everyone feel more welcome and supported.

5. College students whose regularly reflect on their attitudes and behaviors may have a better understanding of how these factors affect their capacity to build meaningful and lasting relationships, an area in which they demonstrated the highest levels of positive engagement. To improve peer inclusion and address areas where

sentiments of acceptance remained relatively low, it may be helpful to promote honest discussion and a spirit of respect.

6. Parents were able to annually evaluate their children's college experiences, particularly how they formed strong and supportive relationships with peers, an area where good experiences were strongest. This proactive involvement also helps to address areas where sentiments of peer inclusion may be poor, by providing immediate assistance which can be crucial to their mental health.

7. Future researchers may investigate the implementation of strategies to promote peer bonds, as students were the most positive experiences with developing supportive and meaningful relationships. At the same time, implementing activities that encourage higher peer inclusion, such as team-based learning and mentoring programs, can assist improve regions where emotions of acceptance were lacking.

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