Time Management and Academic Self- Efficacy: The Mediating Effect of Diversity of Strategy for Motivation and Learning

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INTRODUCTION

Academic self-efficacy, or a student's belief in their ability to succeed in academic tasks, often faces several problematic issues. One key challenge is that low self-efficacy can lead to avoidance behaviors, such as procrastination or lack of participation, which in turn reduce academic performance and reinforce negative self-perceptions. Social comparisons, unrealistic expectations, and pressure from peers, teachers, or family can also distort a student's confidence, either inflating or deflating it in unhelpful ways. Additionally, systemic barriers—such as limited access to quality education, resources, or support—can undermine self-efficacy, especially for marginalized or underrepresented students. These issues create a cycle where lack of confidence and underachievement feed into each other, making it difficult for students to build the resilience and motivation necessary for long-term academic success (Dong, Hassan, Hassan, Chen, & Guo, 2023).

Academic self-efficacy is critically important because it strongly influences students' motivation, learning strategies, and academic performance. When students believe in their ability to succeed, they are more likely to set challenging goals, persist through difficulties, and use effective problem-solving and study techniques. High self-efficacy also enhances emotional well-being, reducing anxiety and fear of failure. Moreover, it contributes to a positive academic identity, encouraging lifelong learning and personal growth. In essence, academic self-efficacy empowers students to take control of their education, which can significantly improve both their academic outcomes and overall confidence (Khawwaf, Mahdad, Gatfan, & Farhadi, 2024).

Time management is closely linked to the diversity of strategies for motivation and learning, as effective use of time allows students to explore, apply, and benefit from a range of learning techniques. When students manage their time well, they can allocate appropriate periods for different tasks—such as reviewing material, practicing skills, and engaging in active learning strategies like self-testing, group work, or elaborative questioning. This flexibility enables them to tailor their learning approaches to their personal preferences and motivational needs, which boosts engagement and academic success. Additionally, good time management reduces stress and cognitive overload, creating a mental environment more conducive to trying new motivational strategies, such as goal-setting, reward systems, or mindfulness. In this way, time management acts as a foundation that supports and enhances the use of diverse, adaptive strategies for effective motivation and learning (Zhang, Maeda, Newby, Cheng,& Xu, 2023).

The diversity of strategies for motivation and learning is strongly linked to academic self-efficacy, as using a variety of effective approaches can boost students' confidence in their ability to succeed. When learners experiment with and apply different strategies—such as goal-setting, self-reflection, collaborative learning, or active recall—they are more likely to find methods that work best for them. This success reinforces their belief in their academic capabilities, strengthening self-efficacy. Conversely, students with higher academic self-efficacy are more willing to try new strategies, persist through challenges, and adapt their learning methods when needed. This reciprocal relationship creates a positive cycle: diverse learning strategies enhance self-efficacy, and strong self-efficacy encourages continued exploration and refinement of motivational and learning techniques (Yu, Huang, He, Wang, & Zhang, 2022).

Time management and academic self-efficacy are closely interrelated, as the ability to effectively manage time enhances a student's confidence in handling academic tasks. When students create structured schedules, set priorities, and allocate time wisely, they experience greater control over their workload, which reduces stress and increases their belief in their academic abilities. This increased sense of control strengthens academic self-efficacy, as students begin to see themselves as capable and organized learners. Conversely, students with high academic self-efficacy are more likely to plan ahead, avoid procrastination, and use their time efficiently because they believe their efforts will lead to success. Together, time management and self-efficacy form a mutually reinforcing cycle that supports academic achievement and personal growth (Hayat, Shateri, Amini, & Shokrpour, 2020).

The relationship between time management and academic self-efficacy is significantly influenced by the diversity of strategies students use for motivation and learning (Jiang, & Attan, 2024). Effective time management provides students with the opportunity to engage in a wider range of learning strategies—such as goal-setting, self-monitoring, collaborative learning, and active recall—which, in turn, foster deeper understanding and academic success. In essence, students who manage their time well are better positioned to explore and apply diverse motivational and learning strategies, which then enhance their academic self-efficacy (Alesi, Giordano, Gentile, Roccella, Costanza, & Caci, 2024). This mediating effect

creates a powerful feedback loop where structured time use leads to strategic learning, which builds confidence and further improves academic performance (Jian, 2022).

While previous studies have independently examined the impact of time management and academic self-efficacy on student performance, limited research has explored the *mediating role* of diverse motivational and learning strategies in this relationship. Most existing literature treats learning strategies as static or uniform, rather than examining how a *variety* of strategies—adapted to individual needs—may influence the development of self-efficacy. Furthermore, there is a lack of empirical data on how time management enables or constrains the use of diverse strategies, particularly across different educational contexts, cultural backgrounds, or academic disciplines. This gap highlights the need for integrated studies that explore how time management facilitates the adoption of diverse learning and motivational strategies, and how these, in turn, mediate the development of academic self-efficacy (Bozgun, & Baytemir, 2021).

Addressing the connection between time management, academic self-efficacy, and the mediating role of diverse motivation and learning strategies is urgent, especially in today's fast-paced and increasingly demanding academic environments. Students are facing heightened pressure to perform while managing multiple responsibilities, often without adequate guidance on how to structure their learning effectively. The rise of online and hybrid learning further complicates this, requiring students to be more self-directed than ever before. Without clear insights into how time management and strategic learning diversity contribute to self-efficacy, educational institutions may miss key opportunities to support student success. Filling this research gap is essential for developing targeted interventions and academic support systems that can enhance student confidence, adaptability, and achievement in diverse and evolving learning contexts (Amoozegar, Abdelmagid, & Anjum, 2024).

The purpose of this study is to look into the time management and academic self- efficacy: the mediating effect of diversity of strategy for motivation and learning. Specifically, the study will seek to answers to the following questions. The first objective is to assess the level of time management in terms of *time planning, time attitudes, and time wasting, to determine the level of self-efficacy in terms of personal teaching efficacy, general teaching efficacy and professional knowledge efficacy* (Gibson & Dembo 1984) and to determine the level of motivations in terms of intrinsic motivation, identified motivation, introjected regulation, external regulation; and amotivation.

To determine the significant relationship between time management and diversity of strategy for motivation and diversity of strategy for motivation and academic self- efficacy and motivation and self-efficacy to find out the time management and academic self- efficacy: the mediating effect of diversity of strategy for motivation and learning. The following null hypotheses were treated at 0.05 level of significance There is no significant relationship between time management and self-efficacy and time management and motivation and motivation and self-efficacy to find out the mediating effect of self-efficacy on the relationship between time management and self-efficacy. Motivation has no significant mediating effect on the relationship between time management and self-efficacy.

In addition, at the significance level of 0.05, the following null hypotheses were investigated. There was no significant link between time management and self-efficacy and time management and motivation and motivation and self-efficacy to find out the mediating effect of self-efficacy on the relationship between time management and self-efficacy. Diversity of strategy for motivation and learning has no mediating effect on the relationship between time management and academic self- efficacy.

The study holds significant value for students' general development (SGD) as it explores how effective time management and strong academic self-efficacy contribute to a student's overall academic growth and personal success. By examining the mediating role of diverse motivational and learning strategies, the research provides deeper insight into how students can adapt and thrive in increasingly demanding educational environments. These findings can inform curriculum design, teaching methods, and student support programs that aim to cultivate lifelong learning skills, resilience, and independence — all crucial components of holistic student development on a global scale.

The social relevance of this study lies in its potential to improve the academic success and well-being of students, which in turn contributes to more productive, capable, and mentally resilient individuals in society. By highlighting how time management and academic self-efficacy are influenced by diverse motivational and learning strategies, the study addresses key challenges faced by students in managing stress, avoiding burnout, and staying engaged. Equipping students with these skills not only enhances their educational outcomes but also prepares them to be more responsible, self-regulated members of society, capable of lifelong learning and meaningful contribution in various social, economic, and cultural contexts.

The direct beneficiaries of this study are students, particularly those in secondary and higher education, who face academic pressures and need effective strategies to manage their time, stay motivated, and perform confidently. Educators and academic counselors also benefit by gaining insights into how different learning and motivational strategies can be used to support diverse learners. Additionally, school administrators and curriculum developers can use the findings to design programs and interventions that foster academic self-efficacy and promote student success. Overall, the study provides practical value to those directly involved in the teaching-learning process.

Future researchers will benefit from this study as it provides a strong foundation for exploring the complex interactions between time management, academic self-efficacy, and motivational strategies. The findings and framework can guide future investigations into related factors such as mental health, digital learning tools, or cultural differences in learning behavior. Additionally, it opens avenues for comparative studies across educational levels, regions, or demographic groups, allowing researchers to expand, refine, or challenge the study's conclusions. By building on this research, future scholars can contribute to more targeted interventions and evidence-based educational practices.

METHOD

Research Participants

The participants of the study are the senior high students from different public secondary schools in Mati South District. A total of 325 respondents are needed in the study. Currently, Mati South District. has 1560 teachers. The 320 respondents is derived using the online Raosoft calculator (95% confidence interval, 5% margin of error, and 50% response distribution). After determining the sample size for this study, determining the respondents was done employing the stratified random sampling. The use of random sampling is used after determining the sample size for this study. Random sampling is a method of sampling that involves the division of a population into smaller sub-groups known as strata. In stratified random sampling or stratification, the strata are formed based on members' shared attributes or characteristics such as income or educational attainment (Hayes, 2019).

The researcher makes an effort to identify the population of senior high students from different public secondary schools in Mati South District which is subjected to Slovin's Formula and Raosoft calculator to get the sample size.

In the study, a students must officially enrolled in a public school in senior high level and sign the Certificate of Consent Form to participate in the study. Further, For the inclusion and exclusion of the respondents, only senior high students from different public secondary schools in Mati South District are catered. Apparently, elementary teachers in the private school, junior high school teachers and senior high school teachers both in the private and public schools were not included. Furthermore, there was no requirement for justification if participants wanted to withdraw early for any reason at all. Hence, the researcher perceived that the teachers lack teamwork, empathy, and support from the administration. This study followed the guidelines as stipulated in the Data Privacy Act 2012, an act protecting the fundamental human right of privacy. Morse & Coulehan (2014) expounded their thoughts about privacy and confidentiality that these are axial dogma in any research ethics.

The privacy and confidentiality in the study had been observed by giving the respondents an option of not indicating their name on the survey questionnaire. Besides, confidentiality and privacy were attained by not publishing the demographic data of the informants such as the age, gender, occupation, employment, disease if there is any. Hence, their identity is keep as confidential for safety purposes. Even their responses to the items in the survey questionnaire were considered confidential.

Materials and Instruments

There are three instruments use in this study designed in accordance with the research problem. These sets of questionnaires are adapted from experts and some questionnaires are standardized tools downloaded from the internet. The questionnaire on time management which focuses on time planning, time attitudes, and time wasting, Self-efficacy focuses on personal teaching efficacy, general teaching efficacy and professional knowledge efficacy (G*ibson & Dembo 1984). While* motivation focuses on intrinsic motivation, identified motivation; introjected regulation, external regulation; and amotivation. (Vallerand & Halliwell (1983).

The final version is developed before the instrument's administration,] accounting for the five (5) experts' mistakes, remarks, and recommendations. Cronbach's alpha is use to test the scales' reliability, and the results are presented in the tool description. A team of experts validated the four sets of questionnaires before approval. The scales is use to interpret experience the time management and self-efficacy and motivation are as follows:

RESULTS AND DISCUSSION

The data obtained from the respondents on the time management and academic self- efficacy: the mediating effect of diversity of strategy for motivation and learning of teachers in Mati City are presented, analyzed and interpreted in this section based on the research objectives previously stated. The order of discussion of the topics are as follows: level of time management; level of academic self- efficacy of the respondents; significant relationship between time management and diversity of strategy for motivation and learning; diversity of strategy for motivation and learning and academic self- efficacy and time management and academic self- efficacy.

Time Management

Shown in Table 1 are the average scores for the indicators of time management; with an overall mean of 4.15 described as high with a standard deviation of 0.28. The high level could be attributed to the equally *high* rating given by the respondents. The cited overall mean score was the result gathered from the computed mean scores of its indicators. It could be gleaned from the data that the indicator with the highest mean rating of 4.30 or very high is- *Time Attitudes.* In contrast, indicator with the lowest mean rating of 3.71 still high is *Short-Range Planning.*

This gap may hinder efficient daily task management and can lead to increased academic stress or last-minute cramming. The implications for educators and administrators are clear: while students generally value time and

Table 1

Level of the Time Management

Indicator	SD	Mean	Descriptive Level
Short-Range Planning	0.67	3.97	High
Time Attitudes	0.47	4.30	Very High
Long-Range Planning	0.37	4.17	High
Overall	**0.28**	**4.15**	**High**

manage it well, they may benefit from targeted support in short-term goal setting and planning techniques. Interventions such as time management workshops, personalized academic coaching, or the integration of planning tools into the curriculum could strengthen students' short-range planning abilities and further enhance their overall academic performance and well-being.The data implies that the teachers showed high level of time management in the following indicators: time tracking skill; calendaring skill; organizational skill; and prioritizing skill.

Research supports the idea of (Forsyth, 2021), time management is an essential skill which must be embedded in every person to achieve personal goals. Setting priorities, carrying out plans, and managing time all contribute to creating an environment that is effective in terms of cost benefit, quality of output, and time required to complete activities or projects. These time management techniques

increase the efficacy and efficiency of a company. At DepEd the teachers satisfactorily exhibited this as they mapped out everything that they intend to do, set their priorities, and get their goals done on promptly on time.

The result is related to the viewpoint of (LeBoeuf, 2021), emphasized the importance of calendaring skill, as this keeps one organized and productive. At DepEd the teachers satisfactorily utilized calendar management, which involved planning out, consolidating activities in week, and in the months to come, indicating specific blocks of time, setting aside specific activities. Through this, scheduling becomes easier, helps them to be more organized, prepared and be more proactive and productive.

Academic Self- Efficacy

Shown in Table 2 are the average scores for the indicators of academic self- efficacy with an overall mean of 4.01 described as high with a standard deviation of 0.48. The high level could be attributed to the equally *high* rating given by the respondents. The cited overall mean score was the result gathered from the computed mean scores of its indicators. It could be gleaned from the data that the indicator with the highest mean rating of 4.30 or very high is- *Belief in Personal Ability.* In contrast, indicator with the lowest mean rating of 3.71 still high is *Belief that Ability Grows with Effort.*

The very high level of teacher efficacy, as rated by the respondents, indicates that a teacher who is confident in teaching employs various strategies that would make the learning environment interactive. This indicates that managing disruptive behaviors in the classroom is vital but difficult for teachers. Some students display unruly behaviors that can distract other students from learning. Thus, teachers need skills to make classrooms a safe place to stay and free from harm. The finding parallels the viewpoints of Taylor (2023); Ormrod (2021) that classroom management has been a teacher's priority. The teacher's concern for their safety relies on classroom management with group management

Table 2

Level of Self Efficacy

Items	SD	Mean	D.E.
Belief in Personal Ability	0.54	4.35	Very High
Belief that Ability Grows with Effort	0.83	3.67	High
Overall	**0.48**	**4.01**	**High**

methods and encourages students' engagement with academic tasks establishing collaborative and expressive skills.

Teacher efficacy enables teachers to use their potential to enhance pupils'

learning. Teacher efficacy has been linked to positive student outcomes, such as motivation and achievement. It has also been linked to positive attributes for teachers, such as increased satisfaction, increased retention, more classroom innovation, and better teacher evaluations. This signifies that teachers need to use varied teaching strategies to document the learners learning. It is beneficial to students if the strategies are varied because they can use their different talents to engage in activities. The result of the findings parallels the idea of Ormrod (2023). Teacher efficacy is the belief that a teacher can perform appropriately and effectively to attain certain goals.

Diversity of Strategy for Motivation and Learning

Divulged in Table 1 is the level of diversity of strategy for motivation and learning with and average scores for the indicators of time management; with an overall mean of 4.17 described as high with a standard deviation of 0.373. The high level could be attributed to the equally *high* rating given by the respondents. The cited overall mean score was the result gathered from the computed mean scores of its indicators. It could be gleaned from the data that the indicator with the highest mean rating of 4.62 or very high is- *knowing when they are happy to be with.* In contrast, indicator with the lowest mean rating of 3.85 still high is *making notes and readings to refresh understanding.*

This practice is imperative in order to accurately assess modern-day student behaviors and to encourage better overall practices. The development of a valid and reliable measuring scale for student learning behaviors is a crucial step in improving the quality of education and in supporting the success of all students, particularly those who may be struggling. By using this index to identify areas where students may be struggling and providing tailored interventions and support, and further education colleges can foster a more supportive and effective learning environment that meets the needs of today's diverse student population.

Table 3

Level of Diversity of Strategy for Motivation and Learning

Items	SD	Mean	Descriptive Level
Liking material that really challenges them, even if it is difficult to learn	*0.530*	*4.12*	*High*
Are able to answer the question.	*0.548*	*4.14*	*High*
Knowing when they are happy to be with.	*0.614*	*4.62*	*Very High*
Are able to use what I learn in this course elsewhere in life.	*0.614*	*4.30*	*Very High*
Believing that will achieve a high grade this year	*0.461*	*4.08*	*High*
Putting effort into studying for classes and enjoy	*0.641*	*4.47*	*Very High*
Taking a test, and able to answer the questions	*0.639*	*4.60*	*Very High*
Are capable of getting a high mark in this subject	*0.561*	*4.26*	*Very High*
Accessing the virtual learning environment (VLE), e.g., Blackboard/Vital to look at course material	*0.796*	*4.04*	*High*
Are confident that they can understand the basic concepts of the subjects.	*0.553*	*3.92*	*High*
Are confident that they can understand the most complex/difficult concepts in this course.	*0.628*	*4.11*	*High*
Having interest in the content of this Subjects.	*0.628*	*4.18*	*High*
Are confident that they possess the skills needed to pass this subject.	*0.741*	*3.96*	*High*
Motivating to get a good grade.	*0.601*	*4.16*	*High*
Motivating to get a good grade for their own satisfaction.	*0.826*	*4.36*	*Very High*
Making good use of various information sources (lectures, readings, videos, websites, etc.) to help them understand.	*0.653*	*4.13*	*High*
Making notes and readings to	*0.646*	*3.85*	*High*

refresh understanding.			
Getting by in most assessments by memorizing key points rather than trying to understand the topic.	*0.426*	*4.14*	*High*
Trying to relate ideas in this subject to issues in the real world.	*0.881*	*4.15*	*High*
Trying to relate the material to what they already know.	*0.846*	*4.13*	*High*
Trying to understand the material in this class by making connections between the different types of information provided (lectures, readings, videos, websites etc.).	*0.704*	*3.90*	*High*
Using an academic database to help find materials to help support their studies.	*0.456*	*4.20*	*Very High*
Overall	**0.373**	**4.17**	**High**

Significance of the Relationship between Time Management and Diversity of Strategy for Motivation and Learning

Presented in Table 4.1 is the correlation between measures of time management and diversity of strategy for motivation and learning. From the table, we can see that when time management is linked to diversity of strategy for motivation and learning, the total r-value is 0.719, and the p-value is 0.001, which is less than the 0.05 significance level. This shows that time management is closely linked to the ability to work with others. indicates that the respondents often performed the indicators. Among the items cited, doing the tasks in order of their importance and prioritizing tasks so that they do the most important and urgent first topped the list and rated always.

The findings highlight that good time management and strong learning motivation are essential for working students to achieve optimal academic outcomes. With competing demands from work and school, effective time management enables students to plan, prioritize, and allocate their limited time efficiently, reducing stress and enhancing productivity. High levels of learning motivation further support this process by driving persistence, focus, and engagement in academic tasks. When students are both motivated and able to manage their time well, they are more likely to achieve higher academic performance and sustain long-term learning success. For educators and institutions, this underscores the importance of integrating time management training and motivational support into academic advising, especially for students balancing education with employment.

This implication is supported by Zimmerman's (2000) Self-Regulated Learning Theory, which emphasizes that time management is a core self-regulatory skill that allows learners to plan, monitor, and reflect on their academic efforts, particularly important for working students. Deci and Ryan's (1985, 2000) Self-Determination Theory further explains that intrinsic motivation—when students feel autonomous, competent, and connected—drives deeper engagement and persistence in learning. Sweller's (1988) Cognitive Load Theory also supports the role of time management in minimizing unnecessary cognitive effort, helping students to focus on essential academic tasks despite external pressures. Together, these theories validate the critical role of both motivation and time regulation in supporting the academic success of working students.

Table 4.1

Significance of the Relationship between Time Management and Diversity of Strategy for Motivation and Learning

Time Management	Diversity of Strategy for Motivation and Learning Overall
Short-Range Planning	.699* (0.000)
Time Attitudes	.682* (0.000)
Long-Range Planning	.633* (0.000)
Overall	**.719* (0.000)**

*Significant at 0.05 significance level.

Significance of the Relationship between Diversity of Strategy for Motivation and Learning and Academic Self- Efficacy

Presented in Table 4.1 is the correlate on between measures diversity of strategy for motivation and learning and academic self- efficacy. From the table, we can see that when diversity of strategy for motivation is linked to academic self- efficacy, the total r-value is 0.676, and the p-value is 0.001, which is less than the 0.05 significance level. This shows that time management is closely linked to the ability to work with others indicates that the respondents often performed the indicators. Among the items cited, doing the tasks in order of their importance and prioritizing tasks so that they do the most important and urgent first topped the list and rated always.

This suggests that students who utilize a wide range of motivational and learning strategies tend to exhibit higher levels of confidence in their academic abilities. The finding that students prioritize tasks and complete them based on importance and urgency reflects effective time management behaviors, which are essential for building academic self-efficacy. These practices also demonstrate a capacity to work effectively with others, indicating strong collaborative and organizational skills. For educators, this underscores the importance of encouraging diverse and strategic learning behaviors in students, as these not only improve academic outcomes but also enhance students' belief in their own competence—a key factor in long-term academic persistence and success.

These findings are well-supported by Bandura's (1997) Social Cognitive Theory, which identifies self-efficacy as a central determinant of motivation and performance; students who believe in their capabilities are more likely to persist in tasks and employ diverse learning strategies. Zimmerman's (2000) Self-Regulated Learning Theory also reinforces this connection, emphasizing that students with strong self-efficacy are more likely to plan, monitor, and adjust their learning strategies effectively.

Furthermore, Pintrich and De Groot (1990) suggest that the use of cognitive and metacognitive strategies is both a result and a reinforcement of academic self-efficacy. As such, the positive correlation found in Table 4.1 is theoretically sound and supports the view that cultivating diverse learning strategies can significantly enhance students' confidence in their academic abilities.

Table 4.2

Significance of the Relationship between the Diversity of Strategy for Motivation and Learning and Academic Self- Efficacy

Diversity of Strategy for Motivation and Learning	Academic Self-Efficacy		
	Belief in Personal Ability	Belief in Ability Grows with Effort	Overall
Overall	.728* (0.000)	.647* (0.000)	.676* (0.000)

*Significant at 0.05 significance level.

This indicates that the measure, Diversity of Strategies for Motivation in Learning (DSML), has good predictive power for students with or without academic successes, and it can be used as a quick and an early alert monitoring tool to measure student motivation and study skills. The DSML has supported various interventions; however, further testing is required in other cultures, languages and educational environment.

Significance of the Relationship between Time management and Academic Self- Efficacy

Presented in Table 4.1 is the correlate on between measures time management and academic self- efficacy. From the table, we can see that when time management is linked to academic self- efficacy, the total r-value is 0.874, and the p-value is 0.001, which is less than the 0.05 significance level. This shows that time management is closely linked to the ability to work with others indicates that the respondents often performed the indicators. Among the items cited, doing

Table 4.3

Significance of the Relationship between the Time management and Academic Self- Efficacy

Time management	Academic Self- Efficacy		
	Belief in Personal Ability	Belief that Ability Grows with Effort	Overall
Short-Range Planning	.746* (0.000)	.668* (0.000)	**.799*** **(0.000)**
Time Attitudes	.744*	.591*	**.765***

	(0.000)	(0.000)	**(0.000)**
Long-Range Planning	.818* (0.000)	.600* (0.000)	**0.806*** **(0.000)**
Overall	**.848*** **(0.000)**	**.689*** **(0.000)**	**.874*** **(0.000)**

*Significant at 0.05 significance level.

the tasks in order of their importance and prioritizing tasks so that they do the most important and urgent first topped the list and rated always.Results from this study showed that training of time management skills to increase academic performance and self-efficacy is influential.

The positive association between time management and academic self-efficacy is strongly supported by Bandura's (1997) Social Cognitive Theory, which emphasizes that individuals with high self-efficacy are more likely to regulate their behavior and persist in the face of academic challenges. Additionally, Zimmerman's (2000) Self-Regulated Learning Theory reinforces that time management is a core component of self-regulation, directly influencing students' ability to set goals, manage resources, and monitor progress—behaviors closely tied to a strong sense of efficacy. Pintrich (2004) also noted that students with high academic self-efficacy tend to use more effective time management strategies and display greater motivation and cognitive engagement. These theoretical perspectives validate the study's findings and affirm that fostering time management skills can directly enhance students' belief in their academic capabilities.

Mediation Analysis of the Variables

The method was used to look at the data that was fed into the medgraph. Baron and Kenny (1986) developed a mediation analysis, which looks at how a third variable affects the link between two variables. Someone or something else needs to do three things for it to be a referee. These are shown in Table 5 as Steps 1 through 3. time management, which is the study's independent variable (iv), is reliable for predicting academic self- efficacy, which is the study's dependent variable (dv). in step 2, diversity of strategy for motivation and learning, which is the mediator (m). in step 3, time management is strongly predicted by academic self- efficacy.

Table 5

Mediating Effect : Path Analysis

	ESTIMATES		SE	C.R.	P
PATH	Unstandardized	Standardized			
TM ⟶ DSML	.666	.749	.034	19.543	***
DSML ⟶ ASE	.264	.358	.027	9.637	***
TM ⟶ ASE	.396	.605	.024	16.278	***

Also, because each of the stages (paths a, b, and c) is essential, we need to do more mediation analysis using Medgraph. This includes the Sobel z test to see how important the mediation effect is. At the very end of the study, complete mediation will be reached if the effect of the independent variable on the dependent variable is not found to be significant. The mediator variable acts as a go-between for all the effects. Also, if the regression coefficient decreases significantly in the last step but is still significant, partial mediation exist. This means that the mediator (diversity of strategy for motivation and learning) only affects part of the independent variable (time management). in contrast, other parts may be directly or indirectly affected by factors not in the framework. Based on what was learned
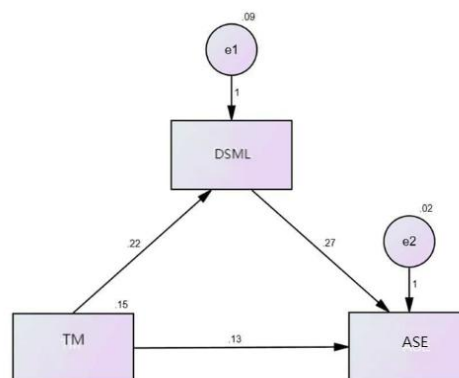
in step 3 (shown as c), time management strengthened academic self- efficacy. There was some interaction since the influence was significant at the 0.001 level. In Figure 2 is also shown   the outcome of the analysis of mediating effects. The beta obtained 16.21 and a p-value of 0.001.

Conclusions And Recommendations

In light of the preceding discussion, the study's conclusions are presented in this section. It is clear that the present programs may be kept going because there are high levels of time management and diversity of strategy for motivation and learning. There is a strong link between time management and diversity of strategy for motivation and learning; diversity of strategy for motivation and learning and academic self- efficacy and time management and academic self- efficacy. In other words, time management affects the ability to work as a team, and the ability to work as a team to regulate oneself. There is also some evidence that diversity of strategy for motivation can help explain the link between academic self- efficacy. Overall, this shows that diversity of strategy for motivation play a big role in the link between academic self- efficacy and time management.

The study's results clearly support the idea that academic self- efficacy and time management play a role in the connection between diversity of strategy for motivation and learning and academic self- efficacy.

On the very high level of time management, educators everywhere should keep their public service motivation up by giving new employees chances to learn regarding the company's principles and how they should behave in ways that reflect those values. They should use performance reviews that aren't just focused on tasks but also on skills that are important for accessible work. They may also clarify how each employee's job fits into the organization's general goal and set up job structures that help personnel be more self-regulated and give them more power.

This is a very high level of diversity of strategy for motivation. The examiner says that activities in school and in classes that helped each teacher and employee do their job properly should be brought up and checked regularly to make sure they are still working. One of these tasks could be to hold regular meetings once a month, either by department or by work project. When people can work together, they can keep up with every modification at school and help teachers with any concerns or problems they may be having.

Based on the partial mediation result, the researcher suggests that school administrators may constantly provide full attention to their staff, specifically the teachers there. This is the most effective approach for the school to keep running smoothly and give pupils the best education possible since teachers are dedicated to doing their best for their pupils. They should be able to completely accept the school's purpose, vision, and ideals as part of their system. This makes them a part of the institution's whole team.

It is also suggested that future researchers may conduct larger-scale studies to better grasp the elements impacting teachers' opinions of this issue. Designing a qualitative study would also provide useful information on this topic. This will finally help to fill the literature gap.

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