Classroom Management Approaches in Relation to Students' Engagement and Study Habits in Mathematics

Kristine P. Paynandos, Romulo G. Doronio

Assumption College of Nabunturan, Nabunturan, Davao de Oro, Philippines

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ABSTRACT

This study aimed to determine the influence of classroom management approaches on students' engagement and study habits in Mathematics at Linoan Elementary School and Montevista Central Elementary School. The research employed a quantitative descriptive correlational research design, utilizing a survey questionnaire. The participants were 100 Grade V and Grade VI learners randomly selected. Findings revealed generally low levels of classroom management, student engagement, and study habits, suggesting challenges that affect academic development. Ineffective classroom management—particularly in learning opportunities, proactive discipline, and instructional clarity—created a learning environment that does not fully support student success. Low emotional, cognitive, and behavioral engagement indicated a disconnect between students and their learning, shown in weak motivation, limited intellectual involvement, and minimal participation. Poor study habits, especially in note-taking, library use, and time management, reflected weak preparation for academic responsibilities. Statistical analysis showed no significant relationship between classroom management approaches and student engagement, nor between classroom management approaches and study habits. Likewise, the relationship between students' engagement and study habits was statistically insignificant. These results suggest that classroom management variations did not directly influence engagement or study routines. Instead, external factors like motivation, discipline, and academic support might be more critical. The study highlights the need for broader strategies beyond classroom management to improve engagement and study habits, emphasizing the role of individual, institutional, and environmental influences on learning outcomes.

Keywords: Mathematics Teaching, Classroom Management Approaches, Students' Engagement, Study Habits, Descriptive-Correlational Design

INTRODUCTION

The goal of education is to create an environment where students not only acquire knowledge but also develop skills and attitudes that allow them to become active and responsible members of society. In a classroom setting, this goal is supported by effective classroom management. Classroom management plays a vital role in facilitating effective teaching and learning in the classroom. It involves the use of strategies and techniques by teachers to maintain a structured, orderly, and supportive environment conducive to learning. According to Marder et al. (2023), effective classroom management improves academic performance and reduces disruptive behavior, which essential in facilitating student success, especially in challenging subjects like mathematics.

Despite its acknowledge importance, classroom management remains a challenge for many teachers, particularly in public elementary schools where class sizes are large and teaching resources may be limited. Teachers may struggle to consistently apply management approaches that successfully engage students and foster productive study habits. According to Bature (2020), ineffective classroom management often results in reduced student attention, poor participation, and irregular study routines, all of which negatively impact academic outcomes in mathematics. These challenges are compounded by the increasing demands on teachers to meet both academic and behavioural goals with minimal support or professional training on classroom discipline and student motivation.

As a teacher, the researcher believes that effective classroom management approaches is essential in fostering

student engagement and improving study habits in mathematics. Teachers who implement clear, consistent, and student-centered approaches are more likely to create an environment where students are motivated and actively participate. The primary goal of this study is to determine how different classroom management approaches influence students' engagement and study habits in mathematics. This research aims to provide insights that may help teachers enhance classroom management to support better student outcomes.

Globally, the importance of effective classroom management in enhancing student engagement and academic performance has been widely recognized. Research indicates that well-structured classroom environments, characterized by clear expectation and consistent routines, contribute to increased student participation and improved learning outcomes (Iskandar et al., 2025). In mathematics education, innovative approaches such as flipped classroom have been shown to enhance student engagement by promoting active learning and fostering a deeper understanding of mathematical concepts (Lo & Hew, 2021). These global trends underscore to the unique needs of students in different educational settings.

In the Philippines, the Department of Education (2016) has recognized the challenges associated with classroom management and its impact on student learning. Initiatives such as the Learning Action Cell (LAC) sessions aim to provide teachers with professional development opportunities to enhance their classroom management skills and improve student engagement (Naungayan, 2025). Despite these efforts, studies indicate that many teachers continue to face difficulties in implementing effective classroom management strategies, particularly in subjects like mathematics, which are often perceived as challenging by students (Tacadena, 2021).

In Montevista District, the researcher observed that some teachers in Linoan Elementary School and Montevista Central Elementary School are facing serious difficulties in effectively managing their classrooms, especially during mathematics lessons. There are instances where students display disruptive behavior, lack of participation, and inconsistent classroom routines affect the overall learning needs, making it difficult to implement strategies that sustain students' attention and interest in mathematics. Limited teaching materials and insufficient parental support further complicate their ability to maintain classroom order and promote effective study habits.

Research Objectives

The study aims to determine the influence of classroom management approaches in relation to students' engagement and study habits in Mathematics. Specifically, it seeks to answer the following questions:

1. What is the level of classroom management approaches in terms of:

    1.1 Opportunity to learn;
    1.2 Proactive behavior; and
    1.3 Instructional coherence?

2. What is the level of students' engagement of the students in terms of:

    2.1. Emotional engagement;
    2.2. Cognitive engagement; and
    2.3. Behavioral engagement?

3. What is the level of study habits of students in terms of:

    3.1 Note taking;
    3.2 Use of library; and
    3.3 Time allocation to study?

4. Is there a significant relationship between classroom management approaches and students' engagement of students in mathematics?

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5. Is there a significant relationship between classroom management approaches and study habits in mathematics?

METHODOLOGY

A quantitative descriptive-correlational research design was used in this study. Quantitative research designs prioritize numeric and stable data, as well as detailed and convergent reasoning, over divergent reasoning (Moree et al., 2020). This study quantitatively assesses the classroom management approaches in relation to students' engagement and study habits in Mathematics class. This is also supported by Norae, (2020), that the historical context, encompassing the conditions of relationships, prevailing practices, beliefs, and ongoing processes. The descriptive-correlation method is a statistical measure for assessing the relationship between variables. This study aimed to investigate the predictive relationship between two variables. This study aimed to investigate the correlation between classroom management approaches and students' engagement in Mathematics class, as well as classroom management approaches and study habits in Mathematics class.

Population and Sample

The study involved 100 learners in Grade V and Grade VI who were attending at Linoan Elementary School and Montevista Central Elementary School. Participants were required to have regular attendance in mathematics classes in order to experiences with classroom management, levels of engagement, and accurately report their study habits. For reliable data collection, students needed the ability to independently read, comprehend, and respond to survey questions. Informed consent, with parental or guardian approval, was required for participants to be included in the study.

The study excluded learners who were not enrolled in Grade V and Grade VI at Linoan Elementary School and Montevista Central Elementary School, as the research specifically targets this grade level. It also excluded those with irregular attendance or significant absences from mathematics classes during the academic term, as their engagement levels might not accurately represent those of regular attendees. Students with cognitive or learning disabilities that hinder their ability to comprehend and answer survey questions were excluded to mitigate potential bias in the data. Students without consent or whose parents or guardians did not provide informed consent were also excluded from the study.

The respondents were selected using the convenience sampling technique. Convenience sampling was a non-probability technique that selected participants based on their easy accessibility, proximity, and willingness to participate. This technique involved selecting easily accessible samples, such as individuals from a specific location, organization, or group. Convenience sampling was often used when there is a need for a quick and cost-effective way to collect data, especially in exploratory research or when there are time and resource constraints.

Statistical Tool

These following tools were used to analyze the data.

Mean. The mean score was used to assess the classroom management approaches on students' engagement and study habits in Mathematics.

Pearson Correlation. The Pearson r correlation was used to determine the significant relationship between the variables.

RESULTS

Level of Classroom Management Approaches

The highest mean score in **Opportunity to Learn** is 2.13, corresponding to the statement "I am encouraged to take part in group work and collaborative learning, which helps me learn from my peers." Despite this being the highest-rated item, it still falls within the "Disagree" category, indicating that students perceive limited

opportunities for collaborative learning. This suggests that while group work is present, it may not be effectively fostering engagement or knowledge acquisition among students. The second-highest mean score is 2.03, related to the statement "I feel that I am given equal opportunities to participate and learn in every lesson." This result implies that students do not strongly perceive their learning environment as inclusive or equitable, which can impact their motivation and academic confidence.

The statements "I believe the teacher creates an environment where all students can ask questions and express their thoughts" and "I feel that classroom activities are designed to enhance my understanding of the subject matter" both have a mean score of 2.02, indicating a shared perception that the classroom environment does not sufficiently support student engagement or conceptual comprehension. The lowest-rated statement, with a mean score of 2.00, is "I am provided with various learning materials and resources that cater to different learning styles." This suggests that students perceive a lack of diverse learning materials, which could hinder their ability to grasp content effectively.

The overall weighted mean is 2.04 indicates a general perception of inadequate opportunities to learn, as all statements fall within the "Disagree" category. This implies that students do not feel sufficiently supported in terms of participation, classroom engagement, resource availability, or collaborative learning. A learning environment with such limitations may contribute to decreased motivation, lower academic performance, and reduced confidence in learning outcomes.

The highest mean score in the **Proactive Behavior** is 2.17, corresponding to the statement, "I notice that the teacher sets clear expectations for behavior at the beginning of each class." This suggests that while students recognize the presence of behavioral expectations, they may still perceive them as ineffective or inconsistently reinforced, given that the rating remains within the "Disagree" category. The second-highest mean score is 2.10, related to the statement, "I am motivated to behave well because the classroom environment is structured and fair." This result indicates that students do not strongly associate classroom structure and fairness with their motivation to exhibit positive behavior, potentially pointing to issues in classroom management strategies.

The statement, "I observe that the teacher addresses potential disruptions before they escalate," received a mean score of 2.09, implying that while students acknowledge some level of proactive discipline, they may feel that disruptions are not consistently managed before they become problematic. Meanwhile, "I see that the teacher uses positive reinforcement to encourage good behavior among students" scored 2.03, reflecting a perception that the teacher does not frequently or effectively use reinforcement techniques to promote appropriate behavior. The lowest mean score, 2.01, is associated with the statement, "I feel comfortable knowing that the classroom rules are consistently enforced by the teacher." This suggests that students may perceive inconsistencies in rule enforcement, leading to uncertainty regarding behavioral expectations and consequences.

The overall weighted mean is 2.08 indicates a general perception that proactive behavioral management strategies are insufficient in the classroom. Since all statements fall within the "Disagree" category, students do not feel that their teacher effectively establishes clear expectations, prevents disruptions, enforces rules consistently, or utilizes positive reinforcement strategies to encourage good behavior. A lack of proactive classroom management may contribute to behavioral issues, decreased student motivation, and a less conducive learning environment.

In **Instructional Coherence**, the highest mean score is 2.06, corresponding to the statement, "I find that the lessons are well-organized and flow logically from one topic to the next." This suggests that while students acknowledge some level of structure in lesson delivery, they do not perceive it as sufficiently clear or effective, given that the rating remains within the "Disagree" category. A lack of instructional coherence can lead to difficulties in comprehension, as students may struggle to see connections between topics, thereby hindering their ability to retain and apply knowledge.

The second-highest mean score is 2.02, appearing in two statements: "I see that the teacher provides clear objectives and goals for each lesson, helping me stay focused," and "I think that the activities and assessments align with the lessons, reinforcing what I have learned." This indicates that students do not strongly agree that lesson goals and assessments are clearly communicated or aligned with instructional content. The inability to

establish clear learning objectives can negatively impact student engagement and achievement, as clarity in lesson structure is essential for guiding learners toward meaningful educational experiences.

The statement, "I feel that the teacher connects new content to what we have already learned, making it easier to understand," received a mean score of 2.01, suggesting that students struggle to see how prior knowledge is integrated into new learning experiences. The lowest mean score, 1.99, corresponds to the statement, "I am confident that the instruction is consistent and helps me build a deeper understanding of the subject." This indicates a lack of confidence in instructional continuity, meaning students do not feel that lessons build upon one another in a way that deepens their comprehension. The overall weighted mean is 2.02 reflects a general perception that instructional coherence is insufficient, highlighting concerns about lesson organization, continuity, and alignment with assessments.

Level of Students' Engagement

The highest mean score in **Emotional Engagement** is 2.55, corresponding to the statement, "I feel valued and respected by my teachers and peers during lessons." This is the only item in the table categorized under "Agree," suggesting that students generally perceive a sense of respect and value from their teachers and classmates. A supportive classroom environment where students feel acknowledged and respected plays a significant role in fostering engagement and motivation. When students experience positive social interactions in the learning environment, they are more likely to participate actively and develop a sense of belonging, which enhances their overall emotional engagement.

The second-highest mean score is 2.13, related to the statement, "I feel connected to my classmates and enjoy being part of classroom activities." Despite being classified under "Disagree," this relatively higher mean suggests that some students experience social engagement in classroom activities, but not at a level sufficient to foster a strong sense of community.

The statement, "I feel comfortable sharing my thoughts and opinions in class discussions," received a mean score of 2.04. This suggests that students are hesitant or reluctant to express their thoughts during discussions, which could be due to a variety of factors such as fear of judgment, lack of confidence, or an unwelcoming classroom environment.

The statement, "I am eager to attend classes because I find them enjoyable and interesting," received a mean score of 2.02. This suggests that most students do not find their classes engaging or stimulating enough to motivate consistent attendance and participation. The enjoyment of learning is a crucial factor in emotional engagement, as students who find lessons interesting are more likely to invest effort in their studies.

The lowest mean score, 2.01, corresponds to the statement, "I feel excited and enthusiastic about learning new things in class." This finding indicates a significant gap in emotional engagement, as enthusiasm for learning is a fundamental driver of academic success.

The overall weighted mean score is 2.15 falls under "Disagree," indicating that students, in general, do not feel emotionally engaged in their learning experiences. Emotional engagement is a crucial factor in academic success, as it influences motivation, persistence, and overall well-being. Low emotional engagement can lead to decreased academic performance, lack of participation, and even increased dropout rates.

In **Cognitive Engagement**, the highest mean score is 2.03, corresponding to the statement, "I challenge myself to learn new things, even if they are difficult." However, this score still falls under the "Disagree" category, indicating that students generally do not engage in challenging learning tasks. Cognitive engagement involves deep processing and a willingness to tackle complex ideas, but the results suggest that students may lack the motivation or confidence to persist when faced with difficulties.

The second-highest mean score is 2.02, related to the statement, "I focus on applying what I learn to real-life situations and problems." While slightly higher than other statements, it still falls under "Disagree," suggesting that students struggle to see the relevance of their learning in practical contexts.

The statement, "I try to understand the content deeply rather than just memorizing it," received a mean score of 2.01. This suggests that students do not consistently engage in deep learning processes, which can hinder their ability to develop analytical and critical thinking skills.

The statement, "I think critically about the topics discussed in class and form my own opinions," received a mean score of 2.00, indicating that students do not strongly engage in critical thinking during lessons. The lowest mean score, 1.99, corresponds to the statement, "I use different strategies, like summarizing and questioning, to help me learn better.

The overall weighted mean score is 2.01 falls under "Disagree," indicating that students, in general, do not exhibit strong cognitive engagement. The low mean scores suggest that students primarily rely on passive learning approaches rather than actively engaging with content. To improve cognitive engagement, educators must adopt teaching strategies that promote critical thinking, and real-world applications of knowledge.

The highest mean score in **Behavioral Engagement** is 2.05, corresponding to the statement, "I complete my assignments and projects on time with full effort." However, this still falls under the "Disagree" category, indicating that students generally do not consistently submit their tasks with diligence.

The second-highest mean score is 2.04, linked to the statement, "I pay attention and follow instructions given by the teacher during class." This indicates that students may struggle with maintaining attention and adhering to classroom directives.

The statement, "I stay focused on tasks and avoid distractions while in class," received a mean score of 2.03, further reinforcing the pattern of disengagement. The lowest mean scores, both at 1.99, correspond to the statements, "I consistently participate in class activities, such as discussions and group work," and "I take responsibility for my learning by preparing for tests and completing my readings." These results suggest that students generally do not actively engage in classroom discussions or take initiative in their learning. The overall weighted mean score is 2.02 falls under the "Disagree" category, indicating that students generally exhibit low behavioral engagement.

Level of Study Habits

The highest mean score in **Note-taking** is 2.15, corresponding to the statement, "I regularly take detailed notes during lectures to help me understand the material better." Despite being the highest-ranked statement, it still falls under the "Disagree" category, indicating that students do not consistently engage in detailed note-taking.

The second-highest mean score is 2.09, associated with the statement, "I review and organize my notes after each class to reinforce my learning." This suggests that students do not habitually revise their notes to strengthen their understanding.

The third-ranked statement, "I use different methods, such as bullet points and highlighting, to make my notes more effective," received a mean score of 2.07. This suggests that students do not frequently employ varied note-taking techniques to enhance their learning. The statement, "I find that taking notes helps me stay focused and engaged during lectures," received a mean score of 2.01, suggesting that students do not perceive note-taking as a means of maintaining attention in class.

The lowest-ranked statement, "I refer back to my notes when studying for exams or completing assignments," received a mean score of 1.98, indicating that students rarely use their notes for review. The overall weighted mean score for note-taking is 2.06, falling under the "Disagree" category, indicating that students generally exhibit low engagement in note-taking practices. The findings suggest that students do not regularly take detailed notes, review or organize them, use effective note-taking strategies, or refer back to their notes for studying.

In **Use of Library**, the highest mean score is 2.07, corresponding to the statement, "I utilize the library's online databases and journals for my research and assignments." Despite being the highest-ranked statement, it still falls under the "Disagree" category, indicating that students do not actively engage with online academic resources.

The second-highest mean score is 2.04, associated with the statement, "I borrow books from the library to supplement my course readings." This indicates that students do not frequently utilize library books as additional learning resources.

The third-ranked statement, "I use the library's quiet study areas to concentrate better while studying," received a mean score of 2.03. This suggests that students do not frequently utilize designated quiet study spaces for academic purposes. The fourth-ranked statement, "I find that studying in the library environment helps me be more productive," received a mean score of 2.01, indicating that students do not perceive the library as an optimal place for academic productivity.

The lowest-ranked statement, "I frequently visit the library to access study materials and resources for my coursework," received a mean score of 2.00, indicating that students rarely visit the library for academic purposes. The overall weighted mean score for library use is 2.03, falling under the "Disagree" category, indicating that students generally exhibit low engagement in library-related activities. The findings suggest that students do not frequently visit the library, borrow books, use quiet study areas, engage with online databases, or perceive the library as an effective learning environment.

The results of **Time Allocation to Study** indicate the level of time allocation to study among students, arranged from highest to lowest mean. The highest-rated item is "I prioritize study time over leisure activities, especially during exam periods" with a mean of 2.11, indicating that students acknowledge the importance of allocating time for studying but do not fully commit to it. This is followed by "I set aside time for breaks during study sessions to maintain focus and prevent burnout" with a mean of 2.05, suggesting that while students recognize the need for breaks, they do not actively implement structured study sessions. The third-ranked item is "I balance my study time between different subjects to ensure all are adequately covered" with a mean of 2.03, implying that students struggle with distributing their study time across multiple subjects. The next item, "I allocate specific time slots in my daily schedule for studying and completing assignments," has a mean of 2.01, showing that most students do not regularly plan their study schedules. The lowest-ranked item is "I use a planner or calendar to manage my study time effectively and avoid last-minute cramming," with a mean of 2.00, indicating that students rarely use organizational tools to structure their study habits. The overall weighted mean of 2.04 suggests that, in general, students disagree with the statements, demonstrating a lack of effective time management strategies in their study habits.

Relationship between Classroom Management Approaches and Students' Engagement in Mathematics

The Pearson correlation coefficient between classroom management approaches and student engagement is .076, with a p-value of .452, indicating a weak and non-significant relationship.

Relationship between Classroom Management Approaches and Study Habits in Mathematics

The correlation between classroom management approaches and study habits is .058, with a p-value of .566, also showing a weak and non-significant association.

Relationship between Students' Engagement and Study Habits in Mathematics

The correlation between student engagement and study habits is .134, with a p-value of .185, suggesting a weak relationship that does not reach statistical significance. The results suggest that classroom management approaches have minimal direct influence on student engagement and study habits, and student engagement has a weak correlation with study habits. The overall findings indicate that other factors may play a more substantial role in shaping students' engagement and study habits beyond classroom management.

DISCUSSIONS

Level of Classroom Management Approaches

The overall mean suggests a prevailing perception of insufficient learning opportunities and low classroom management approaches. This indicates that students perceive a lack of adequate support regarding participation,

classroom engagement, resource availability, and collaborative learning. A learning environment with such constraints may lead to diminished motivation, decreased academic performance, and a lack of confidence in learning outcomes. Addressing these issues necessitates interventions including differentiated instruction, the incorporation of active learning strategies, and the establishment of a more inclusive classroom environment that promotes student participation.

Research indicates that equitable learning opportunities are essential for enhancing student achievement and motivation. Casinillo et al. (2020) indicate that students who perceive fairness in learning opportunities demonstrate increased engagement and motivation. Conversely, when students experience exclusion from participation, it adversely affects their confidence and readiness to engage in classroom activities. Deng et al. (2020) emphasize that effective learning environments offer structured opportunities for student interaction, collaboration, and engagement with diverse learning materials. In the absence of these elements, students encounter challenges in understanding complex concepts, resulting in a decrease in academic performance.

The impact of collaborative learning on student engagement has been extensively studied. Research indicates that collaborative learning enhances comprehension by enabling students to gain insights from their peers and cultivate critical thinking abilities (El-Adl & Alkharusi, 2020). In environments lacking effective collaborative learning, students may experience difficulties with engagement and motivation. The results presented reveal that students do not express strong agreement regarding the efficacy of group work in enhancing their learning, indicating possible deficiencies in instructional design and classroom facilitation. The implementation of collaborative strategies, including structured peer discussions and cooperative learning models, can effectively address this issue (Fuentes-Cabrera et al., 2020).

The absence of diverse learning materials can substantially impede student understanding. Lo and Hew (2021) highlight the significance of differentiated instruction, which customizes teaching methods and materials to meet diverse learning styles. Limited access to diverse instructional resources, including visual aids, hands-on activities, and digital learning tools, negatively impacts students' engagement with content (Herman et al., 2022). This is consistent with the results presented, which indicate that the lowest-rated item relates to the absence of diverse learning materials. To enhance student learning outcomes, educators must incorporate diverse instructional resources, thereby accommodating various learning preferences.

According to Martínez-Jiménez and Ruiz-Jiménez (2020), clear expectations contribute to a sense of predictability and fairness, which fosters student cooperation and reduces classroom misbehavior. However, when students do not perceive these expectations as meaningful or consistently enforced, their motivation to adhere to classroom norms diminishes. This aligns with the findings, where students do not strongly agree that their teacher effectively establishes behavioral expectations. Inconsistent communication of rules can lead to uncertainty, making it difficult for students to navigate classroom expectations and develop self-regulatory behaviors (Naibertet al., 2022).

Level of Students' Engagement

The overall mean score suggests that students generally do not experience cognitive, emotional, and behavioral engagement in their learning experiences. Research indicates that students with elevated emotional engagement are more inclined to cultivate intrinsic motivation, resulting in enhanced academic performance and overall well-being. Quines and Relacion (2022) define emotional engagement as the enthusiasm, interest, and sense of connection that students experience in relation to their learning environment. The data presented indicate that students do not prominently display these characteristics, potentially impeding their overall academic development. Insufficient emotional engagement may lead to disengagement, absenteeism, and diminished effort in learning activities, thereby intensifying academic difficulties (Romero Albaladejo & GarcíaLópez, 2024).

An environment that is supportive and respectful is crucial for promoting emotional engagement. Research demonstrates that students who perceive themselves as valued and respected by teachers and peers are more inclined to engage actively and cultivate a positive attitude toward learning. Rone et al. (2023) highlight the importance of teacher-student relationships in influencing students' emotional engagement, noting that positive interactions foster a sense of belonging and motivation.

The low mean scores indicate that students predominantly depend on passive learning methods instead of actively interacting with the material. Educators should implement teaching strategies that enhance cognitive engagement by fostering critical thinking, problem-solving, and the application of knowledge in real-world contexts. The findings indicate that students do not engage in deep learning processes, revealing a potential gap in instructional methods and student motivation. Syarifuddin and Atweh (2022) define cognitive engagement as involving effortful learning behaviors, including critical thinking, problem-solving, and the application of learning strategies. The low mean scores indicate that these behaviors are not consistently implemented, potentially resulting in superficial learning and challenges in knowledge retention (Skilling et al., 2021).

Challenging oneself academically constitutes a fundamental aspect of cognitive engagement. Studies indicate that students who endure challenges cultivate resilience and adaptive learning strategies, thereby improving their academic performance (Shank & Santiague, 2022). The findings indicate that students' exhibit limited engagement in challenging learning tasks, potentially attributable to insufficient self-efficacy or fear of failure (Schnitzler et al., 2021). Promoting a growth mindset, in which students perceive challenges as opportunities for learning, can enhance cognitive engagement and motivation (Romero Albaladejo & GarcíaLópez, 2024).

The results imply that students may find it difficult to sustain attention due to factors such as lack of interest in the subject matter, ineffective teaching strategies, or external distractions (Prince et al., 2020). Participation in class activities fosters collaboration, critical thinking, and deeper understanding of the subject matter (Ozen & Yıldırım, 2020). The low engagement in this area may indicate a preference for passive learning, social anxiety, or a lack of confidence in expressing ideas (Olivier et al., 2021). Similarly, students' reluctance to take responsibility for their learning suggests a potential reliance on external motivation rather than intrinsic motivation, which has been shown to affect long-term academic success (Miller et al., 2021).

Level of Study Habits

The overall mean score indicates that students generally exhibit low engagement in study habits. The findings suggest that students do not regularly take detailed notes, review or organize them, use effective note-taking strategies, or refer back to their notes for studying. This lack of engagement may negatively impact their ability to retain and apply information, leading to challenges in academic performance (Naibert et al., 2022). Addressing this issue requires interventions such as explicit instruction in note-taking strategies, promoting the benefits of note-taking, and integrating note-taking activities into the curriculum (Maamin et al., 2021). Note-taking is a vital cognitive process that enhances learning, comprehension, and academic success. Research indicates that students who actively take notes and review them consistently perform better in assessments due to improved retention and organization of information (Lugosi & Uribe, 2022). However, the findings reveal that students exhibit low levels of note-taking engagement, which may stem from a lack of training in effective techniques, difficulty keeping up with lectures, or reliance on external study materials (Li & Lajoie, 2022). Studies emphasize that note-taking is not merely a transcription activity but a process that requires cognitive engagement and synthesis of information (Karaoğlan Yılmaz, 2022). The low mean scores suggest that students do not recognize the value of note-taking in their academic performance, which may hinder their ability to process and retain information effectively (Kundu et al., 2021).

Research suggests that students who engage in detailed note-taking develop stronger analytical skills and perform better in exams (Fuentes-Cabrera et al., 2020). However, the findings indicate that students do not regularly engage in this practice, which may be due to a lack of awareness of effective note-taking strategies or the perception that note-taking is unnecessary (Granberg et al., 2021). Studies show that structured note-taking techniques, such as the Cornell Method and concept mapping, enhance students' ability to organize and synthesize information (Fokkens-Bruinsma et al., 2021). Implementing instructional sessions on note-taking strategies can improve students' engagement and academic performance (El-Adl & Alkharusi, 2020).

Research highlights that students who regularly revise and structure their notes demonstrate higher levels of comprehension and recall (Garrote et al., 2020). However, the findings suggest that students do not habitually review their notes, which may lead to gaps in understanding and retention of information (Deng et al., 2020). One possible explanation is that students rely more on textbooks and lecture slides rather than their own notes for studying (Cayubit, 2022). Encouraging students to incorporate review sessions into their study routines can

significantly enhance learning outcomes (Casinillo et al., 2020).

The use of varied note-taking techniques, such as bullet points, highlighting, and concept mapping, has been found to improve information retention and comprehension. Research indicates that students who utilize multiple note-taking strategies engage more actively with the material and demonstrate better academic performance (Capone, 2022). However, the findings suggest that students do not frequently employ these methods, which may indicate a lack of training in effective note-taking strategies (Bernacki et al., 2021). Providing students with structured guidance on how to use diverse note-taking techniques can improve their ability to capture and process information (Büchele, 2020). Studies show that students who consistently use their notes during exam preparation perform better than those who rely solely on textbooks or external resources (Busebaia & John, 2021). However, the findings suggest that students rarely refer back to their notes, which may indicate that they do not perceive their notes as valuable study tools (Ayuwanti & Siswoyo, 2021). Research emphasizes the importance of teaching students how to structure and utilize their notes effectively to maximize learning outcomes (Angkarini, 2021).

The findings suggest that students do not frequently visit the library, borrow books, use quiet study areas, engage with online databases, or perceive the library as an effective learning environment. This lack of engagement may be attributed to digital alternatives, a lack of awareness about library services, or personal study preferences (Attard & Holmes, 2020). One of the primary reasons for the low utilization of library resources is the increasing reliance on digital platforms, which provide convenient and instant access to information (Aldanese & Limpot, 2023). Studies suggest that students often turn to online search engines and social media for academic content, perceiving these platforms as more accessible and user-friendly than traditional library resources (Angkarini, 2021). While digital tools offer convenience, they often lack the depth and credibility of academic sources available in libraries, which can lead to misinformation and gaps in learning (Adedigba & Sulaiman, 2020).

Correlation between Classroom Management Approaches, Students' Engagement and Study Habits

The Pearson correlation coefficient reveals a weak and non-significant relationship between classroom management approaches and student engagement. The correlation between classroom management approaches and study habits demonstrates a weak and non-significant association. The correlation between student engagement and study habits indicates a weak relationship that fails to achieve statistical significance. The findings indicate that classroom management strategies exert little direct impact on student engagement and study habits, while student engagement shows a weak correlation with study habits. The findings suggest that additional factors may significantly influence students' engagement and study habits beyond classroom management.

The limited correlation between classroom management and student engagement is consistent with prior research indicating that engagement is affected by various factors, such as individual motivation, teaching methods, and peer relationships. Student engagement includes behavioral, emotional, and cognitive dimensions, influenced by various factors beyond classroom management practices. Research indicates that although effective classroom management creates a structured environment that supports learning, it does not necessarily lead to increased engagement levels (Busebaia & John, 2020). Engagement is frequently influenced by students' intrinsic motivation, interest in the subject matter, and the perceived relevance of the learning material (Cayubit, 2022).

The weak correlation between classroom management approaches and study habits indicates that study behaviours are influenced by both external and internal factors, extending beyond teacher-imposed structures. Effective study habits are frequently linked to self-regulation, time management, and individual academic objectives, rather than solely to classroom management (Büchele, 2021). Students exhibiting robust self-regulatory skills are likely to establish consistent study habits irrespective of the classroom context, while those with diminished self-regulation may encounter difficulties even in effectively managed classrooms (Banihashem et al., 2022). Additionally, external support systems, including parental involvement and access to learning resources, play a significant role in shaping students' study habits (Angkarini, 2021).

The limited correlation between student engagement and study habits suggests that participation in class does not inherently result in productive study behaviors. Classroom engagement, especially in terms of emotional and

behavioral aspects, may not necessarily correlate with disciplined study habits beyond school hours. Research indicates that engaged students are more inclined to participate actively in class; however, their study habits are influenced by factors including self-discipline, motivation, and academic self-efficacy (Aldanese & Limpot, 2023). Certain students exhibit high engagement during lessons yet lack organized study routines at home, whereas others demonstrate lower engagement in class but cultivate effective study habits through external motivation and self-directed learning strategies (Adedigba & Sulaiman, 2020).

The findings emphasize the intricacies of learning behaviors and indicate the necessity for comprehensive interventions to improve student engagement and study practices. Effective classroom management is a fundamental component in establishing a conducive learning environment; however, further efforts are required to address the motivational and cognitive factors that influence engagement and study behaviors. Educators may integrate metacognitive strategies, goal-setting exercises, and self-regulation techniques into their teaching methods to improve engagement and study habits (Bedenlier et al., 2020). Additionally, personalized learning strategies that address the specific needs of individual students may enhance engagement and encourage disciplined study habits (Bond, 2020).

CONCLUSION

Based on the findings of the study, the low results in classroom management approaches, students' engagement levels, and study habits reveal underlying challenges that significantly impact student learning and development. The lack of effective classroom management, particularly in terms of opportunity to learn, proactive behavior, and instructional coherence, suggests that students may not be provided with the optimal environment for academic success. These deficiencies can hinder students' ability to focus, participate actively, and benefit fully from the educational content presented to them.

Furthermore, the low levels of student engagement, including emotional, cognitive, and behavioral engagement, highlight a disconnect between students and their learning process. Emotional disengagement points to a lack of motivation or interest, while the low cognitive and behavioral engagement reflects a lack of intellectual stimulation and active participation, both of which are essential for fostering a productive learning environment. Additionally, the poor study habits, especially in note-taking, library usage, and time management, indicate that students may lack the necessary skills and resources to engage deeply with the material and manage their academic workload effectively. These findings underscore the importance of addressing both classroom management practices and the development of students' engagement and study habits to improve overall educational outcomes.

The findings indicate that there is no significant relationship between classroom management approaches, student engagement, and study habits, as evidenced by the weak Pearson correlation values and high p-values above the 0.05 significance threshold. The correlation between classroom management approaches and student engagement suggests minimal association, indicating that variations in classroom management do not significantly impact student engagement levels. Similarly, the correlation between classroom management approaches and study habits shows a weak and insignificant relationship, suggesting that how teachers manage their classrooms does not directly influence students' study habits. Additionally, the relationship between student engagement and study habits remains statistically insignificant, implying that students who are more engaged in the classroom do not necessarily develop better study habits. These results highlight that other external factors, such as motivation, personal discipline, and external learning support, may play a more significant role in shaping student engagement and study behaviors than classroom management alone.

Additionally, it is important to consider that while the instrument was translated into the vernacular to support accessibility, some respondents may have still faced challenges in fully understanding certain concepts or questions. This may be attributed to varying levels of academic readiness, exposure to abstract ideas, or familiarity with the topics addressed. These factors could have influenced how respondents interpreted and answered the items, potentially affecting the overall reliability of the data. Nevertheless, their responses still provide valuable insights into the broader patterns and issues affecting student behaviour and learning, and highlight the need for continued support in enhancing students' educational experience.

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