



## EXAMINING THE ROLE OF STUDY HABITS AND SOCIAL MEDIA USAGE ON MATHEMATICS PERFORMANCE OF GRADE 7 STUDENTS IN A PHILIPPINE PUBLIC HIGH SCHOOL

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### Abstract:

The rapid advancement of technology has changed the way students learn and deal with school responsibilities, which has dramatically transformed their school engagement. This study examined the role of study habits and social media exposure on the mathematics performance of Grade 7 students at a public high school in Southern Leyte, Philippines, during the School Year 2025–2026 using a descriptive–correlational research design. There were 121 students who were chosen through complete enumeration and participated by answering the adopted survey questionnaires assessing their study habits and social media exposure, while their first-quarter grades were used to assess their mathematics performance. Data were analyzed using descriptive and inferential statistics. The results showed that the respondents exhibited good study habits in Mathematics and a moderate level of social media usage. Their average first-quarter grade in Mathematics was satisfactory. A significant but weak positive relationship was found between study habits and academic performance, while no significant relationship existed between social media usage and academic performance. The findings suggest that effective study habits contribute to improved academic performance, while social media usage does not directly affect learners' achievement. School administrators and teachers are encouraged to implement programs that mitigate the effects of social media and enhance study habits to further enhance students' learning outcomes.

**Keywords:** study habits; social media exposure; academic performance; Mathematics achievement; Grade 7 students

### 1. Introduction

Mathematics is a key academic subject that supports learning across all subject areas and is essential for problem-solving and decision-making in everyday life (Szabo *et al.*, 2020).

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In the Philippine educational context, the Department of Education (DepEd, 2022) underscores the importance of delivering mathematics instruction that is responsive to learners' cultural backgrounds, prior knowledge, and real-life experiences. Such an approach aims to equip learners with functional numeracy skills applicable to work, community engagement, and further education (Peteros, 2021). Despite these aspirations, however, mathematics remains one of the hardest topics for many pupils (Cabilan & Peteros, 2024). International large-scale assessments such as the Programme for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS) have consistently reported declining or persistently low levels of mathematics proficiency in participating countries (OECD, 2023). The PISA 2022 findings in the Philippines showed that just 16% of Filipino learners met the minimum competency level in Mathematics, meaning that most pupils lack the foundational skills needed to understand and apply mathematical concepts in real-world contexts (Silangan *et al.*, 2023). This national concern is mirrored in the researchers' school, where the results of the Rapid Mathematics Assessment (RMA) showed that a large proportion of learners were classified under the Emerging (Not Proficient) and Emerging (Low Proficient) numeracy levels, even after the implementation of the school-initiated numeracy intervention Project UNO (Unlocking Numeracy Obstacles).

Following these findings, the researchers' team performed a series of studies and discussions to determine plausible elements that might contribute to learners' low mathematical performance. Some recurring factors discovered included poor study habits and too much exposure to social media. Many studies have stressed the relevance of good study habits in academic accomplishment. Previous studies have found a relationship between study habits and academic achievement. Cabrera and Francisco (2020) established a favorable correlation between students' study habits and academic performance, indicating that systematic and consistent study tactics are associated with improved academic achievements (Peconcillo *et al.*, 2020). Likewise, Cappella *et al.* (1982) reported a moderate positive correlation between study behaviors and grade point average, further supporting the role of study habits in academic success. However, limited research has explored these relationships within the context of public secondary schools, particularly in local Philippine settings, indicating a gap that this study seeks to address.

In addition to study habits, social media use has been recognized as an important contributor to students' learning behaviors. Social media sites can promote communication, collaboration, and access to educational resources; nevertheless, excessive use has been connected with distraction, poor concentration, and poor academic achievement. Recent research has demonstrated that habitual use of social media while studying leads to procrastination and poor academic performance (Caratiquit *et al.*, 2023). Additionally, Mohammed *et al.* (2024) found that overuse of social media contributes to mental exhaustion and negatively affects students' academic outcomes, while Landa-Blanco *et al.* (2024) reported that social media addiction is linked to increased stress and anxiety, further hindering learning.

Given the persistent challenges in mathematics performance and the increasing prevalence of social media use among secondary school learners, it is necessary to examine how study habits and social media exposure jointly influence mathematics achievement. Investigating these relationships within the context of DepEd public secondary schools may provide valuable insights for strengthening existing numeracy interventions and informing the development of more targeted, evidence-based strategies to improve students' mathematical performance.

## **2. Purpose of the Study**

This research aimed to examine the study habits, social media use, and mathematics performance of Grade 7 students at a public high school in Southern Leyte, Philippines, for the school year 2025-2026. Specifically, it sought to answer the following objectives:

- 1) To determine the level of study habits of the students in learning Mathematics
- 2) To assess the level of social media usage of the students in learning Mathematics in terms of passive usage and active usage
- 3) To determine the level of academic performance of the students in Mathematics
- 4) To test the relationship between the students' study habits and academic performance in Mathematics,
- 5) To test the relationship between the students' social media usage and academic performance in Mathematics

## **3. Materials and Methods**

This section presents the research design, tools, and data gathering process observed during the conduct of the study to ensure valid and reliable results.

### **3.1 Research Design**

The study employed a descriptive-correlational research design to describe existing conditions and quantify the degree of association existing between two or more variables at the same time. A descriptive-correlational design, as defined by Creswell (2012), measures the statistical relationship between variables while attempting to maintain the natural state of the research domain without inferring any causal links. The design included the assessment of the study habits, social media usage, and academic performance in Mathematics of the respondents. Then, the descriptive-correlational approach was utilized to determine the presence and extent to which the respondents' study habits and social media exposure were related to their academic achievement in Mathematics.

### **3.2 Research Respondents**

The respondents of the study were the 121 Grade 7 students of Himbangan National High School in the District of Saint Bernard, Southern Leyte, Philippines during the School

Year 2025–2026. The school was selected due to the prevalence of students engaging in social media and the observed decline in their study habits, and the relevance of the study to the local educational context. In this study, a complete enumeration was used such that all the individuals of the target population had an equal chance to be involved. Under this approach, the entire population of Grade 7 students in the selected school was included as respondents, rather than selecting only a portion of the population through sampling. This method was adopted to obtain comprehensive and accurate data, minimize sampling error, and ensure that the findings fully represent the characteristics, study habits, social media usage, and mathematics performance of the population under investigation.

The use of complete enumeration was deemed appropriate given the manageable size of the population and the accessibility of the respondents. By incorporating all eligible individuals, the study was able to capture variances across different demographic profiles and learning practices, therefore improving the validity and dependability of the results. Furthermore, this approach ensured that no subgroup within the population was underrepresented, allowing for more robust analysis of the relationships among study habits, social media usage, and academic success in mathematics.

### **3.3 Data Collection Tools**

This research utilized an adopted survey questionnaire from Capuno *et al.* (2019) to assess the respondents' study habits. It has 9 items which require the respondents to answer based on their self-assessment of their study practices using a 5-point Likert scale, namely: 5-Strongly Agree, 4-Agree, 3-Undecided, 2-Disagree, and 1-Strongly Disagree. Moreover, an adopted survey questionnaire from Ozimek *et al.* (2022) was used to assess the respondents' social media usage with two categories, such as passive use with 10 items and active use with seven items. The statements were rated by the respondents according to their agreement about their social media usage using a 5-point Likert scale, namely: -Strongly Agree, 4-Agree, 3-Undecided, 2-Disagree, and 1-Strongly Disagree. On the other hand, the academic performance of the respondents in Mathematics was determined using their first-quarter grades in the subject, as reflected in the official grade sheets.

### **3.4 Data Gathering Process**

The researchers observed proper protocol and ethical standards during the data gathering process. Before the data collection, the researchers requested formal authorization from the Schools Division Superintendent, the District In-Charge, and the school principals to make the Grade 7 students of the selected public high school in the Saint Bernard District the respondents of the study. The objectives of the study, procedures in identifying the respondents and methods in gathering and collecting the data were clearly explained by the researchers.

After approval of the authorization for the study, the administration and collection of data started. All research respondents were informed of the aims of the research study,

activities before data collection, and their rights using an Informed Consent form. They were informed that the gathered information, incorporated with the collected documents, would be used; their identities were not included in any report. An orientation was conducted to inform the respondents about the research purpose, the procedures involved, and the manner in which the questionnaires were answered. The researchers also explained the time allotment and instructions for completing the questionnaires to ensure clarity of responses and a high retrieval rate. After data collection, the researchers systematically sorted, tabulated, summarized, interpreted, and analyzed the data obtained from the completed questionnaires.

### 3.5 Data Analysis

The data collected were analyzed and interpreted with the appropriate statistical tools. The researchers employed the following statistical analytic methods for the quantitative interpretation of data. Frequency count and percentage were used to determine which category the respondents belong based on the academic performance in Mathematics. Weighted Mean was used to determine the respondents' level of study habits and social media usage, while the standard deviation was used to describe the dispersion of the responses on the statements. Pearson's  $r$  was used to test the relationship between the respondents' study habits and academic performance in Mathematics, and the social media usage and academic performance in Mathematics.

## 4. Results and Discussion

This section presents the results of the data gathered, which includes the study habits, social media usage, and academic performance in Mathematics. The test of hypotheses is also presented here.

### 4.1 Level of Study Habits of the Respondents

Study habits are understood as relatively stable patterns of learning behavior that influence how individuals process information, engage with academic tasks, and sustain effort over time. They are shaped by cognitive, motivational, and environmental factors and are widely recognized as significant predictors of academic performance, learning efficiency, and educational outcomes. Thus, the respondents' level of study habits was examined and is presented in Table 1.

**Table 1:** Level of Study Habits of the Respondents in Learning Mathematics

| S/N | Indicators                                                                                            | WM   | SD   | Verbal Description |
|-----|-------------------------------------------------------------------------------------------------------|------|------|--------------------|
| 1   | I study mathematics even when I am very tired.                                                        | 2.76 | 0.85 | Good               |
| 2   | I study mathematics first by deciding which area to study.                                            | 2.97 | 0.94 | Good               |
| 3   | I study mathematics for about 50 minutes and then take about ten minutes break before starting again. | 2.44 | 0.96 | Fair               |
| 4   | I practice mathematics always with a textbook.                                                        | 2.82 | 1.07 | Good               |

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|   |                                                                                                   |             |             |             |
|---|---------------------------------------------------------------------------------------------------|-------------|-------------|-------------|
| 5 | I study mathematics with a friend(s), quiz each other, compare notes, and predict test questions. | 3.15        | 1.29        | Good        |
| 6 | In solving a problem, I pay much attention to details.                                            | 3.19        | 1.12        | Good        |
| 7 | I studied mathematics for a very long period without regard to my timetable.                      | 2.51        | 1.03        | Fair        |
| 8 | I feel good when I solve mathematics problems by myself.                                          | 3.64        | 1.18        | Good        |
| 9 | I study mathematics with a high level of concentration.                                           | 2.80        | 1.22        | Good        |
|   | <b>Aggregate Mean</b>                                                                             | <b>2.92</b> |             | <b>Good</b> |
|   | <b>Aggregate Standard Deviation</b>                                                               |             | <b>1.07</b> |             |

**Legend:** 4.21-5.00-Excellent; 3.41-4.20-Very Good; 2.61-3.40- Good; 1.81-2.60-Fair;1.00-1.80-Poor

Table 1 displays the level of study habits of the respondents in learning Mathematics as determined by weighted mean (WM), standard deviation (SD), and the associated verbal descriptions. The overall mean score is 2.92 within the range of 2.61-3.40, which implies that the respondents have decent study habits in Mathematics. Overall, this implies that students use good study behaviors to promote their learning of the subject.

At the item level, most indicators were rated as good, reflecting positive study practices among respondents. Notably, the highest weighted mean (WM = 3.64, SD = 1.18) was recorded for the statement “I feel good when I solve mathematics problems by myself,” indicating a strong sense of confidence and intrinsic satisfaction in independent problem-solving. Similarly, respondents demonstrated good habits in paying attention to details when solving problems (WM = 3.19, SD = 1.12) and studying mathematics collaboratively with peers (WM = 3.15, SD = 1.29).

However, two indicators were rated as fair, namely studying mathematics for about 50 minutes followed by a break (WM = 2.44, SD = 0.96) and studying mathematics for a very long period without regard to a timetable (WM = 2.51, SD = 1.03). These findings suggest that respondents may have weaknesses in time management and structured study scheduling, which could affect the efficiency of their learning. The aggregate standard deviation of 1.07 demonstrates moderate diversity in the study habits of the respondents, suggesting that although many students follow good habits, there are noteworthy disparities in how consistently these habits are applied throughout the group.

In summary, the findings reveal that respondents generally possess good study habits in Mathematics, particularly in terms of concentration, collaboration, and independent learning. Nonetheless, improvements are needed in time management and the adoption of structured study routines to further enhance learning effectiveness. The overall standard deviation of 1.07 suggests a moderate variance in the study habits among the respondents, with many students possessing good study habits but a substantial variation in the uniformity of these habits within the group. Villamora (2019) added that encouraging the development of intentional and structured study habits is essential for improving mathematics learning at various educational levels.

## 4.2 Level of Social Media Usage of the Respondents

In this study, social media usage refers to the frequency and duration of students' use of social networking sites for academic and non-academic purposes using a self-reported questionnaire. Therefore, the level of social media utilization in terms of passive and active usage was determined.

Passive social media use is the consumption of social media without engaging in interactive behaviors such as posting, commenting, or messaging, while active social media usage refers to intentional and interactive engagement with social media platforms through content creation, communication, and participation in online communities. Thus, the level of social media usage in terms of passive usage is presented in Table 2.

**Table 2:** Level of Social Media Usage of the Respondents in Terms of Passive Usage

| S/N | Indicators                                                                             | WM          | SD          | Verbal Description |
|-----|----------------------------------------------------------------------------------------|-------------|-------------|--------------------|
| 1   | I look at photo albums of other users.                                                 | 3.33        | 1.30        | Moderate           |
| 2   | I look at the profiles/ pages of other users or read through them.                     | 3.45        | 1.27        | High               |
| 3   | I look at the stories of my friends/ my subscriptions.                                 | 3.88        | 1.18        | High               |
| 4   | I read private messages that other users send me.                                      | 3.37        | 1.50        | Moderate           |
| 5   | I read entries/posts on the personal pages of other users.                             | 3.38        | 1.25        | Moderate           |
| 6   | I read through the comments on other users' pictures.                                  | 3.34        | 1.34        | Moderate           |
| 7   | I read the comments on my own pictures.                                                | 3.95        | 1.39        | High               |
| 8   | I look at links or video clips posted on other people's profile pages (e.g., YouTube). | 3.27        | 1.30        | Moderate           |
| 9   | I look at the profile pages of my own relatives.                                       | 3.74        | 1.24        | High               |
| 10  | I look at the "newsfeed" to see the latest activities of other users.                  | 3.44        | 1.24        | High               |
|     | <b>Aggregate Mean</b>                                                                  | <b>3.51</b> |             | <b>High</b>        |
|     | <b>Aggregate Standard Deviation</b>                                                    |             | <b>1.30</b> |                    |

**Legend:** 4.21-5.00-Very High; 3.41-4.20- High; 2.61-3.40-Moderate; 1.81-2.60-Low; 1.00-1.80- Very Low

Table 2 indicates the level of respondents' social media usage in terms of passive usage. The average of 3.51 suggests a high level of passive social media usage. This implies that respondents are often consuming and seeing content on social media platforms rather than actively engaging.

Several indicators were rated as high, particularly viewing friends' stories, reading comments on their own posts, checking relatives' profiles, and monitoring the newsfeed. Other activities, such as reading posts, comments, and private messages, were rated as moderate, indicating less frequent engagement in these behaviors. The aggregate standard deviation of 1.30 suggests moderate variability in respondents' passive social media usage. Overall, the findings reveal that respondents commonly engage in passive social media activities, reflecting a strong tendency toward content observation and information consumption.

Considering the operational definition of passive social media usage, it may appear tolerable, but according to Asghar *et al.* (2024), high levels of passive social media

usage, especially when not tied to academic purposes, may undermine learning by reducing the amount of time and cognitive resources students devote to mathematics study. While social media can offer educational resources, passive consumption without engagement in academic content tends to have limited or negative effects on academic performance, particularly for subjects that rely on deep concentration and sustained practice. In this study, active social media usage is defined as the frequency with which students engage in interactive behaviors on social media platforms, such as posting, commenting, sharing content, and participating in online discussions, as measured by a self-reported questionnaire. Table 3 below shows the result.

**Table 3:** Level of Social Media Usage of the Respondents in Terms of Active Usage

| S/N | Indicators                                | WM          | SD          | Verbal Description |
|-----|-------------------------------------------|-------------|-------------|--------------------|
| 1   | I create events or invite users to events | 1.83        | 1.22        | Low                |
| 2   | I post links or video clips myself        | 2.66        | 1.35        | Moderate           |
| 3   | I post photos with my family              | 3.40        | 1.32        | Moderate           |
| 4   | I create groups                           | 3.49        | 1.35        | High               |
| 5   | I post photos                             | 3.25        | 1.23        | Moderate           |
| 6   | I respond to event invitations            | 2.47        | 1.26        | Low                |
| 7   | I create highlights                       | 2.88        | 1.41        | Moderate           |
|     | <b>Aggregate Mean</b>                     | <b>2.85</b> |             | <b>Moderate</b>    |
|     | <b>Aggregate Standard Deviation</b>       |             | <b>1.30</b> |                    |

Table 3 demonstrates that the respondents have a modest level of active social media usage, as reflected by the aggregate mean of 2.85. This suggests that active engagement on social media occurs occasionally but is not frequent.

At the indicator level, creating groups showed a high level of usage, indicating a stronger tendency toward collaborative activities. Other active behaviors, such as posting content and creating highlights, were rated as moderate, while creating events and responding to invitations were rated as low, reflecting limited engagement in these features. The aggregate standard deviation of 1.30 indicates moderate variability in active usage. Overall, respondents' active social media engagement is selective, with greater participation in group-based interactions than in other forms of content creation.

Studies indicate that active participation in online educational communities and interactive digital platforms can enhance students' motivation and deepen their understanding of academic content, thereby supporting learning outcomes when such engagement is aligned with educational goals (Al-Rahmi *et al.*, 2018). In the context of mathematics learning, purposeful active social media engagement—particularly through collaborative and technology-supported activities—has been shown to positively influence students' motivation and academic outcomes (Capuno *et al.*, 2019). However, the literature also emphasizes that active social media use is not inherently beneficial; excessive or poorly regulated use may negatively affect academic performance due to distraction and the displacement of time needed for focused study (Cheng *et al.*, 2024).



**Table 4:** Summary of the Level of Social Media Usage of the Respondents

| Components                      | WM          | SD          | Verbal Description |
|---------------------------------|-------------|-------------|--------------------|
| Passive Usage                   | 3.51        | 1.30        | High               |
| Active Usage                    | 2.85        | 1.30        | Moderate           |
| <b>Grand Mean</b>               | <b>3.18</b> |             | <b>Moderate</b>    |
| <b>Grand Standard Deviation</b> |             | <b>1.30</b> |                    |

Table 4 presents a summary of the respondents' level of social media usage in terms of passive and active usage. The findings show that passive social media usage is rated as high (WM = 3.51, SD = 1.30), indicating that respondents frequently engage in viewing and consuming content on social media platforms. In contrast, active social media usage is rated as moderate (WM = 2.85, SD = 1.30), suggesting occasional engagement in interactive activities such as posting, sharing, and group participation.

The grand mean of 3.18 shows that usage of social media by the respondents was moderate. The consistent grand standard deviation of 1.30 reflects moderate variability in usage patterns. Overall, the results suggest that respondents are more inclined toward passive consumption of social media content than active participation, which may have implications for how social media influences learning and academic engagement.

Research shows that students choose to engage in social media passively (e.g., browsing and seeing content) rather than actively (e.g., publishing and communicating), as the former involves less work and commitment (Junco, 2012; Pempek *et al.*, 2009). Other studies indicate that passive social media use is linked with distraction and lower academic attention, while active use—particularly for academic collaboration—can support interaction and learning, although it occurs less frequently (Kirschner & Karpinski, 2010; Tess, 2013). Overall, the literature highlights that the type of social media engagement, rather than mere frequency of use, plays a critical role in influencing students' learning outcomes.

### 4.3 Level of Mathematics Performance of the Respondents

Academic performance is a measure of students' achievement and proficiency in mathematical learning, reflecting their cognitive understanding, problem-solving ability, and application of mathematical knowledge, as shown in the first quarter grades of the respondents. The treated data are shown in Table 5.

**Table 5:** Level of Mathematics Performance of the Respondents

| Level                         | Numerical Range | f          | %             |
|-------------------------------|-----------------|------------|---------------|
| Outstanding                   | 90-100          | 13         | 10.74         |
| Very Satisfactory             | 85-89           | 23         | 19.01         |
| Satisfactory                  | 80-84           | 23         | 19.01         |
| Fairly Satisfactory           | 75-79           | 58         | 47.93         |
| Did not meet the Expectations | Below 75        | 4          | 3.31          |
| <b>Total</b>                  |                 | <b>121</b> | <b>100.00</b> |
| Mean                          |                 | 80.88      |               |
| St. Dev.                      |                 | 6.72       |               |

Table 5 presents the level of Mathematics performance of the respondents. The results show that the largest proportion of students (47.93 percent) attained a Fairly Satisfactory level, while smaller proportions achieved Outstanding (10.74 percent) and Very Satisfactory (19.01 percent) performance. Only 3.31 percent of the respondents did not meet the expected level.

The mean score of 80.88 indicates an overall satisfactory level of Mathematics performance, while the standard deviation of 6.72 suggests moderate variability in students' achievement. Overall, the findings indicate that most respondents performed at an average to fairly satisfactory level in Mathematics, with relatively few students exhibiting very low performance. Research shows that students' Mathematics performance often clusters around average or satisfactory levels, with fewer students attaining outstanding achievement (Akinsola & Animasahun, 2007).

Studies further indicate that study habits, motivation, and engagement play significant roles in determining performance in Mathematics, as students who employ effective learning strategies tend to achieve higher academic outcomes (Duruji *et al.*, 2015). Additionally, the quality of instruction and availability of learning resources have been found to influence Mathematics achievement, with supportive teaching approaches contributing to improved student performance (Aremu & Sokan, 2003; Peteros, 2024).

#### 4.4 Correlation Analysis between the Respondents' Study Habits and Mathematics Performance

Academic performance in Mathematics is a key educational concern, as it reflects students' analytical and problem-solving abilities. Research shows that study habits significantly influence Mathematics achievement, with effective habits supporting better understanding and performance, while poor habits are associated with learning difficulties. Examining this relationship, as shown in Table 6, is essential for identifying strategies to improve students' Mathematics outcomes.

**Table 6:** Correlation Analysis between the Respondents' Study Habits and Mathematics Performance

| Variables                         | r-value | Strength of Correlation | p - value | Decision  | Result      |
|-----------------------------------|---------|-------------------------|-----------|-----------|-------------|
| Study Habits and Math Performance | 0.418*  | Weak Positive           | <.001     | Reject Ho | Significant |

\* significant at  $p < 0.001$

Table 6 shows the test of the significant relationship between the respondents' study habits and academic performance in Mathematics. The test statistic ( $r=0.418, p<.001$ ) indicates a significant weak positive correlation between the respondents' study habits and academic performance in Mathematics. This result implies that study habits have a significant influence on students' academic success in Mathematics.

Studies have continuously found a favorable association between study habits and Mathematics performance. Students with successful study techniques have greater

academic achievements (Duruji *et al.*, 2015). Research also shows that other factors that can lead to improvement in comprehension and accomplishment in Mathematics are effective study habits and time management (Akinsola & Animasahun, 2007). These findings support the view that effective study habits are an important factor in enhancing students' Mathematics performance.

#### 4.5 Correlation Analysis between the Respondents' Social Media Exposure and Mathematics Performance

The prevalent usage of social media among students has been a concern about how it impacts their academic achievement in Mathematics. While social media can support learning through information sharing and peer interaction, excessive or non-academic use may distract students from study activities.

Research reveals that the influence of social media on Mathematics performance is level-dependent. Moderate and intentional use could be beneficial to learning, whereas high or unregulated use could have a detrimental effect on academic results. Examining this relationship is essential for understanding how students' social media behaviors influence their Mathematics performance.

**Table 7:** Correlation Analysis between the Respondents' Social Media Usage and their Mathematics Performance

| Variables                             | r-value | Strength of Correlation | p-value | Decision         | Result          |
|---------------------------------------|---------|-------------------------|---------|------------------|-----------------|
| Social Media Use and Math Performance | 0.133   | Negligible Positive     | 0.146   | Do not reject Ho | Not Significant |

\* significant at  $p < 0.05$  (two-tailed)

Table 7 shows the test for the relationship between the respondents' social media usage and academic performance in Mathematics. The results indicate a negligible positive correlation between the two variables ( $r = 0.133$ ,  $p = 0.146$ ), suggesting a non-significant very weak association. The non-significant link between social media use and Mathematics performance could be attributed to the distinction between active and passive use. Passive use, such as browsing content, is more common and often linked to distraction, while active use can support learning when academically oriented. Combining both types of usage may mask their distinct effects, suggesting that the type of social media engagement, rather than overall use, is more relevant to Mathematics performance.

Research indicates a lack of substantial association between overall social media use and academic achievement, implying that the degree of social media use does not influence learning outcomes (Junco, 2012; Kirschner & Karpinski, 2010). Additional research suggests that passive social media use is more strongly linked to distraction and that active, academic social media use may facilitate learning, though not always in a strong or consistent way (Pempek *et al.*, 2009; Tess, 2013).

## 5. Conclusion

This study aimed to investigate the influence of study habits and social media usage of Grade 7 students in a public high school. The results suggest that students typically exhibit effective study habits that establish a robust foundation for learning, yet these can still be improved. The utilization of social media is predominantly passive, indicating a necessity to direct learners towards more intentional and academically advantageous participation. Although students demonstrate adequate proficiency in Mathematics, opportunities for enhancement remain. Notably, evidence in this study showed the role of students' study habits in ensuring academic success. This result is consistent with the previous findings that study habits play a crucial role in Mathematics learning. However, there is not enough evidence to prove that social media usage can affect students' mathematics performance; this cannot be disregarded, as unregulated social media use may pose a risk to students' mathematics performance. This underscores the significance of focused teaching methodologies, ongoing feedback, and refined study techniques to maximize learning results.

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### Conflict of Interest Statement

The authors declare no conflict of interest.

### About the Authors

**Bryan M. Bulactin** holds a Bachelor of Secondary Education major in Mathematics and has pursued postgraduate studies in mathematics education. He has been actively engaged in research and innovation in the field of education, serving as District Research Committee Chair from 2018 to 2024 and as Associate Editor for Mathematics of *TUKIB*, the official research journal of the Department of Education – Schools Division of Southern Leyte. He was recognized twice as Innovator of the Year by the Department of Education – Region VIII for his contributions to mathematics-based instructional innovations aimed at improving student performance. His professional and research interests focus on mathematics pedagogy, learner achievement, and educational innovation, particularly on examining study habits and social media usage as predictors

of mathematics performance among Grade 7 learners, with the goal of informing evidence-based instructional interventions and action plans.

**Rowena C. Bulactin** holds a Bachelor of Secondary Education major in Mathematics and a Master of Arts in Education major in Teaching Mathematics. She has actively contributed to research and innovation in mathematics education, with completed and presented studies focusing on mathematics pedagogy, learner achievement, and instructional innovation. Her professional practice includes the development of learner-centered innovations, notably the implementation of number puzzle activities to enhance numeracy skills. She currently serves as District Mathematics Coordinator, overseeing mathematics-related initiatives aimed at improving learner performance, as well as coordinating the consolidation and submission of numeracy assessment results across schools. She is also engaged as an ARAL Math teacher, further extending her instructional support to learners. Her scholarly interests include examining factors such as study habits and social media usage in relation to learners' academic performance, with the goal of informing data-driven educational interventions.

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