

Factors Influencing the Mathematics Performance among Grade 6 Pupils of Patikul East District, Division of Sulu

Darwisa U. Rahsi and Mailen A. Antao

School of Graduate Studies, Sulu State College, Jolo, Sulu, 4700, Philippines

*Corresponding author: sscgspub@sulustatecollege.edu.ph

ABSTRACT. This study aimed to identify the factors influencing the mathematics performance of Grade 6 pupils in Patikul East District, Division of Sulu. A descriptive-correlational research design was used, with data collected through a survey questionnaire from pupils in five elementary schools. Respondents were selected using purposive sampling to ensure relevant and meaningful data. Most pupils were 11–12 years old, with slightly more females than males. Many came from families earning ₱10,001 and above monthly, and a large number of parents had only completed elementary education. Findings revealed that pupils generally have positive attitudes toward mathematics and maintain good study habits, which support their learning. Teacher-related factors and the availability of learning materials were found to have a moderate influence, while peer influence was minimal. The study also showed that demographic factors such as age, gender, family income, and parents' educational attainment do not significantly affect pupils' perceptions of what influences their math performance. Overall, the results highlight that attitudes, study habits, teacher support, and learning resources are interconnected and collectively shape pupils' mathematics learning and achievement.

Keywords: *Factors, Influencing, Resources, Technical, Vocational*

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1. INTRODUCTION

Mathematics is a fundamental subject that deals with numbers, patterns, relationships, and logical reasoning. It plays a crucial role in various fields such as engineering, computer science, and finance (Ziegler & Loos, 2017). More importantly, mathematics helps develop learners' problem-solving skills, critical thinking, and mental discipline (Park et al., 2021). It also supports learning in other subject areas, making it an essential component of the overall curriculum (Cheema & Kitsantas, 2014; Uysal, 2015). In addition, learning experiences in mathematics are often shaped by students' home environment, parental involvement, and instructional support systems, which have also been highlighted in related educational studies (Chavez, 2020; Chavez, 2022; Chavez et al., 2023).

Studies have shown that students' performance in mathematics is influenced by several interconnected factors that shape how learners understand and engage with the subject. These include student-related factors such as attitude, motivation, and study habits; teacher-related factors like instructional methods, classroom strategies, and support; and environmental factors such as parental involvement, school resources, and socio-economic conditions (Tayong, 2023; Theron, 2025). In addition, learning is also affected by the availability and accessibility of instructional materials, as well as the overall learning environment that supports student engagement. Research further emphasizes that parental support, learning behaviors, and instructional practices significantly contribute to students' academic outcomes and learning motivation (Chavez et al., 2023; Chavez, 2023; Chavez et al., 2023; Chavez et al., 2025). In the Philippine context, additional challenges such as limited learning materials, poor internet connectivity, and low student motivation further affect mathematics performance (Obina et al., 2022).

In Patikul East District, the researcher observed that many Grade 6 pupils experience difficulty in mathematics, even in basic operations. Despite existing studies, there is limited research focusing specifically on this group of learners. Thus, this study aims to identify the factors influencing the mathematics performance of Grade 6 pupils in Patikul East District, Division of Sulu. It focuses on key variables such as students' attitudes, study habits, teacher-related factors, and the availability of learning resources. The findings are expected to provide valuable insights that can help improve teaching practices and enhance pupils' performance in mathematics.

2. METHODS

2.1 Research Design

This study used a descriptive-correlational research design. It is descriptive in nature because it focuses on describing the data collected without trying to explain why certain results occur. Instead, it answers questions such as what, where, when, and how (McCombes, 2019, revised June 22, 2023). A survey questionnaire was used as the main tool to gather the needed data from the respondents.

2.2 Participants of the Study

This study was conducted in five elementary schools in Patikul East District, Division of Sulu, namely Danag Elementary School, Kawmpang Elementary School, Latih Elementary School, Amman Elementary School, and Don Jose Godinez Elementary School. Although these schools are located at some distance from one another, they are all accessible through various forms of land transportation. The district is under the supervision of Sir Hji. Wilson S. Ali, who serves as the focal person.

Respondents of the Study

| SCHOOL | NUMBERS OF PUPILS |
|----------------------------|--------------------------|
| Danag Elementary School | 25 |
| Latih Elementary School | 25 |
| Godinez Elementary School | 25 |
| Amman Elementary School | 25 |
| Kawmpang Elementary School | 25 |

| | |
|--------|-----|
| TOTAL: | 100 |
|--------|-----|

2.3 Sampling Procedure

The respondents of the study were selected using a non-probability purposive sampling technique. In this approach, the researcher deliberately chooses participants based on specific characteristics or experiences that are relevant to the study’s objectives. This method helps ensure that the data gathered are meaningful and directly related to the research problem, as it focuses on individuals who can provide the most useful insights (Heffernan, 2025).

2.4 Research Instrument

The research instrument consisted of two parts. Part I gathered the demographic profile of the respondents, including age, gender, parents’ highest educational attainment, and parents’ average monthly income. The name of the respondents was optional. Part II focused on the factors influencing mathematics performance and included statements related to attitudes, study habits, teacher-related factors, availability of learning materials, and peer influence. Each area contained ten statements, with responses measured using a five-point Likert scale ranging from “strongly agree” to “strongly disagree.” The questionnaire was adapted from several validated instruments. The sections on students’ attitudes toward mathematics and study habits were adapted from the study of Sitti Harkum Abduraup (2023), which focused on junior high school students of Jolo School of Fisheries. The teacher-related factors were based on the work of Jennilyn F. Balbosa (2010) on mathematics performance among laboratory high school students at Laguna State Polytechnic University. The section on availability of learning materials was adapted from Best and Khan (2006) in *Research in Education*. Lastly, the peer influence component was adapted from the Peer Pressure Questionnaire-Revised (PPQ-R) developed by Sunil Saini and Sandeep Singh (2016).

2.5 Data Gathering Procedure

The researcher first prepared a formal letter requesting permission to conduct the study, which was addressed to the Dean of Graduate Studies of Sulu State University. After approval was granted, another letter was sent to the District Supervisor of Patikul East District, Division of Sulu to seek permission to carry out the research within the district. Once this approval was obtained, letters were then distributed to the principals of the selected schools in the area.

After securing all necessary permissions, the researcher personally visited the schools to conduct the study. The purpose of the research was clearly explained to the respondents, and they were assured that their responses would remain confidential and would be used strictly for academic purposes. The survey questionnaires were then distributed to the selected Grade 6 pupils, who were given enough time to complete them. Afterward, all questionnaires were collected immediately to ensure a high response rate.

Finally, the collected data were checked, tallied, and organized in preparation for statistical analysis.

2.6 Ethical Considerations

Upholding ethical standards was essential in ensuring the reliability, validity, and integrity of the research process. All data collected for analysis and interpretation were handled in accordance with recognized ethical guidelines.

Before the conduct of the study, the researcher ensured that informed consent was properly obtained. Participants were fully informed about the purpose, procedures, and scope of the research, and their voluntary participation was secured through a consent form. They were also informed that they could withdraw from the study at any time without any form of penalty.

Confidentiality and anonymity were strictly observed throughout the study. The identities of the participants and the schools involved were protected, and no identifying information was included in any report, presentation, or publication. Participation was entirely voluntary, with no coercion or pressure applied at any stage of the process.

The researcher also ensured the integrity of the data by accurately gathering, recording, analyzing, and reporting all information. Fabrication, falsification, or any form of misrepresentation was strictly avoided. Throughout the process, respect for persons was upheld by valuing the rights, dignity, and responses of all participants.

In addition, the study was guided by the principles of beneficence and non-maleficence, ensuring that it would not cause any physical, psychological, or social harm, and that it would contribute positively to the participants and the wider community. Compliance with the ethical policies and procedures of the School of Graduate Studies, Sulu State College (SSC), as well as relevant national and international research standards, was strictly observed. Lastly, ethical clearance was secured from the Research Ethics Committee of SSC prior to the administration of the survey questionnaire to ensure full compliance with institutional requirements.

3. RESULTS

Question 2. What is the extent of the factors influencing the mathematics performance of Grade 6 pupils in the context of: 2.1 Attitudes, 2.2 Study Habits, 2.3 Teacher-Related Factors, 2.4 Availability of Learning Materials, and 2.5 Peer Influence?

Table 2.1 Extent of the factors influencing the mathematics performance of Grade 6 pupils in the context of Attitudes.

| | Statements | Mean | S.D | Rating |
|----------------------------|---|---------------|---------------|--------------|
| 1 | I learn Mathematics easily. | 3.51 | 1.005 | Agree |
| 2 | I love Mathematics subjects. | 3.87 | 1.157 | Agree |
| 3 | I believe that I am good in solving Mathematics problem. | 3.56 | 1.003 | Agree |
| 4 | Mathematics is essential in everyday life. | 4.34 | .991 | Agree |
| 5 | I would rather complete a task in Math than to compose an exposition. | 3.52 | 1.119 | Agree |
| 6 | I am comfortable answering questions in Mathematics. | 3.68 | 1.029 | Agree |
| 7 | Mathematics is an interesting subject. | 3.83 | 1.022 | Agree |
| 8 | Mathematics does not scare me at all. | 3.42 | 1.321 | Undecided |
| 9 | I found myself struggling in solving Mathematics problem. | 3.26 | 1.204 | Undecided |
| 10 | Studying Mathematics makes me feel anxious. | 3.26 | 1.333 | Undecided |
| Total Weighted Mean | | 3.6248 | .66523 | Agree |

Legend: (5) 4.50-5.00=Strongly Agree; (4) 3.50-4.49=Agree; (3) 2.50- 3.49=Undecided; (2) 1.50- 2.49=Disagree; (1) 1.00- 1.49=Strongly Disagree

Table 2.1 The results show how different factors—specifically attitudes—affect the mathematics performance of Grade 6 pupils at Patikul East District in the Division of Sulu.

Overall, the pupils recorded a weighted mean score of 3.62 (SD = 0.67), which falls under the “Agree” category. This suggests that, in general, the students have a positive outlook toward mathematics. Their attitudes appear to play a noticeable role in shaping their performance in the subject.

Looking more closely, many pupils expressed confidence and interest in mathematics. They agreed with statements such as being able to learn math easily, enjoying the subject, and believing in their ability to solve mathematical problems. They also recognized the importance of mathematics in daily life, felt comfortable answering math-related questions, and even preferred doing math tasks over writing activities. These responses reflect a healthy level of engagement and self-confidence when it comes to mathematics.

However, not all responses were strongly positive. Some pupils were unsure about statements related to fear and anxiety in math. For example, they were undecided about whether mathematics scares them, whether they struggle with solving problems, and whether studying math makes them anxious. This suggests that while many students have a generally positive attitude, a portion of them may still experience uncertainty or occasional difficulty when dealing with the subject.

Table 2.2 Extent of the factors influencing the mathematics performance of Grade 6 pupils in the context of Study Habits.

| | Statements | Mean | S.D | Rating |
|----------------------------|--|---------------|---------------|---------------------|
| 1 | I examine Mathematics first before choosing what region to contemplate. | 3.80 | .907 | Agree |
| 2 | I study Mathematics with high level of concentration. | 3.63 | .912 | Agree |
| 3 | I review my notes daily rather than cram for test the night before. | 3.80 | 1.063 | Agree |
| 4 | I study Mathematics always with textbook. | 3.26 | 1.493 | Moderately Disagree |
| 5 | I always find a good place to study my Mathematics lesson. | 3.67 | 1.030 | Agree |
| 6 | I review my notes right after my class. | 3.37 | 1.089 | Moderately Disagree |
| 7 | I attend my Math class regularly and make sure I’m always on time. | 4.42 | 1.057 | Agree |
| 8 | I ask for help, I even approach my math teacher about what I don’t understand in the topic discussion. | 4.06 | 1.087 | Agree |
| 9 | I’m taking notes inefficiently. | 2.63 | 1.532 | Moderately Disagree |
| 10 | I never ask question about what I don’t understand in the subject matter. | 2.38 | 1.544 | Disagree |
| Total Weighted Mean | | 3.5032 | .58184 | Agree |

Legend: (5) 4.50-5.00=Strongly Agree; (4) 3.50-4.49=Agree; (3) 2.50- 3.49=Moderately Disagree; (2) 1.50-2.49=Disagree; (1) 1.00- 1.49=Strongly Disagree

Table 2.2 The findings highlight how study habits influence the mathematics performance of Grade 6 pupils at Patikul East District in the Division of Sulu. Overall, the group obtained a weighted mean score of 3.50 (SD = 0.58), interpreted as “Agree.” This suggests that the pupils generally practice positive study habits when learning mathematics, and these habits play a meaningful role in their academic performance.

In particular, many pupils reported good learning practices. They shared that they focus well when studying math, review their notes regularly instead of cramming, and try to find a suitable place for studying. They also attend their math classes consistently and on time, and they

are willing to seek help approaching their teacher when they do not understand a lesson. These behaviors point to a responsible and proactive approach to learning mathematics.

On the other hand, some study habits were less consistently practiced. Pupils moderately disagreed with statements about always using a textbook, reviewing notes immediately after class, and taking notes inefficiently. They also disagreed with the idea that they never ask questions, which reinforces that most are actually open to seeking clarification. Overall, while their study habits are generally positive, there are still areas where improvements can be made to further support their learning in mathematics.

Table 2.3 Extent of the factors influencing the mathematics performance of Grade 6 pupils in the context of Teacher-Related Factors.

| | Statements | Mean | S.D | Rating |
|----------------------------|--|---------------|---------------|------------------|
| 1 | Has a good relationship with the students and teachers. | 4.17 | 1.418 | Often |
| 2 | Shows smartness, confidence and firmness in making decisions | 4.06 | 1.207 | Often |
| 3 | Explains the objectives of the lesson clearly at the start of each period. | 4.46 | .819 | Often |
| 4 | Has the mastery of the subject matter. | 4.24 | 1.043 | Often |
| 5 | Uses various strategies, teaching aids/devices and techniques in presenting the lessons. | 3.54 | 1.097 | Often |
| 6 | Chalk and blackboard in explaining the lessons. | 3.74 | 1.443 | Often |
| 7 | Workbooks/textbooks. | 1.78 | 1.255 | Rarely |
| 8 | Powerpoint presentation (visual aid). | 1.93 | 1.493 | Rarely |
| 9 | Articles | 1.97 | 1.453 | Rarely |
| 10 | Materials for project development. | 2.77 | 1.627 | Sometimes |
| Total Weighted Mean | | 3.2648 | .39498 | Sometimes |

Legend: (5) 4.50-5.00=Always; (4) 3.50-4.49=Often; (3) 2.50- 3.49=Sometimes; (2) 1.50- 2.49=Rarely; (1) 1.00-1.49=Never

Table 2.3 The results show how teacher-related factors influence the mathematics performance of Grade 6 pupils at Patikul East District in the Division of Sulu. Overall, this area received a weighted mean score of 3.26 (SD = 0.39), interpreted as “Sometimes.” This suggests that while teachers do have an impact on students’ performance, their influence is felt only to a moderate extent.

Looking at the details, students often viewed their teachers in a positive light. They agreed that their teachers maintain good relationships with students, demonstrate confidence and decisiveness, and clearly explain lesson objectives at the start of each class. They also recognized their teachers’ strong knowledge of the subject and their use of different teaching strategies and tools. Traditional methods, such as using the chalkboard, were also frequently observed and appreciated.

However, some aspects of teaching resources were less commonly experienced. Students reported that materials for project development were only sometimes available, while resources like workbooks, textbooks, PowerPoint presentations, and articles were rarely used. This suggests that although teachers are generally effective in their approach, the limited use of varied instructional materials may reduce the overall impact of teacher-related factors on students’ learning in mathematics.

Table 2.4 Extent of the factors influencing the mathematics performance of Grade 6 pupils in the context of Availability of Learning Materials.

| | Statements | Mean | S.D | Rating |
|---|---|------|-------|-----------|
| 1 | I have enough Mathematics textbooks provided by the school. | 3.44 | 1.633 | Sometimes |

| | | | | |
|----------------------------|--|---------------|---------------|------------------|
| 2 | I can easily borrow Mathematics reference books from the school library. | 1.80 | 1.529 | Rarely |
| 3 | I have access to supplementary learning materials (workbooks, modules) | 1.74 | 1.172 | Rarely |
| 4 | Learning materials in Mathematics are updated and align with the curriculum. | 3.66 | 1.380 | Often |
| 5 | The learning materials are easy to understand and appropriate for my grade level. | 3.88 | 1.029 | Often |
| 6 | Teachers provides handouts or additional resources to help in Mathematics. | 2.47 | 1.495 | Rarely |
| 7 | I have enough notebooks and supplies to use for my Mathematics lesson. | 3.02 | 1.604 | Sometimes |
| 8 | I have access to visual aids (chart, models, etc.) that help me learn Mathematics. | 2.30 | 1.454 | Rarely |
| 9 | I can access digital or online learning materials for Mathematics. | 2.73 | 1.279 | Sometimes |
| 10 | The availability of learning materials helps me perform better in Mathematics. | 4.58 | .993 | Always |
| Total Weighted Mean | | 2.9616 | .58953 | Sometimes |

Legend: (5) 4.50-5.00=Always; (4) 3.50-4.49=Often; (3) 2.50- 3.49=Sometimes; (2) 1.50- 2.49=Rarely; (1) 1.00-1.49=Never

Table 2.4 The findings describe how the availability of learning materials affects the mathematics performance of Grade 6 pupils at Patikul East District in the Division of Sulu. Overall, this factor a weighted mean score of 2.96 (SD = 0.59), interpreted as “Sometimes.” This means that while learning materials do influence students’ performance, they are not consistently available, and their impact is only felt at times.

Looking more closely, students shared that when materials are available, they are generally helpful. They often find that the learning materials are updated, aligned with the curriculum, and easy to understand for their level. In fact, they strongly agreed that having access to learning materials helps them perform better in mathematics, highlighting how important these resources are to their learning.

However, access to these materials is not always reliable. Many pupils said they only sometimes have enough textbooks, notebooks, and other basic supplies. Access to digital or online resources is also limited. Even more concerning, students reported that they rarely have access to additional support materials such as reference books from the library, workbooks or modules, teacher-provided handouts, and visual aids like charts or models.

Overall, while students recognize the value of learning materials and benefit from them when they are available, the inconsistent access to these resources may be holding them back from fully improving their performance in mathematics.

Question 3. Is there a significant difference in the mathematics performance of Grade 6 pupils when grouped according to their demographic profile in terms of: 3.1 Age, 3.2 Gender, 3.3 Parent’s Average Monthly Income, and 3.4 Parent’s Highest Educational Attainment?

Table 3.1 Difference in the mathematics performance of Grade 6 pupils when grouped according to their demographic profile in terms of Age.

| Sources of Variation | Sum of squares | df | Mean Square | F | Sig. | Description |
|----------------------|----------------|------|-------------|------|------|-------------|
| Attitudes | Between Groups | .216 | 2 | .108 | .241 | .787 |

| | | | | | | | | |
|---|----------------|--------|-----|------|--|--|--|-----------------|
| | Within Groups | 54.66 | 122 | .448 | | | | Not Significant |
| | Total | 54.87 | 124 | | | | | |
| | Between Groups | .173 | 2 | .086 | | | | |
| Study Habits | Within Groups | 41.806 | 122 | .343 | | | | Significant |
| | Total | 41.979 | 124 | | | | | |
| | Between Groups | .479 | 2 | .239 | | | | |
| Teacher-Related Factors | Within Groups | 18.867 | 122 | .155 | | | | Significant |
| | Total | 19.345 | 124 | | | | | |
| | Between Groups | .488 | 2 | .244 | | | | |
| Availability of Learning Materials | Within Groups | 42.607 | 122 | .349 | | | | Significant |
| | Total | 43.096 | 124 | | | | | |
| | Between Groups | 1.256 | 2 | .628 | | | | |
| Peer Influence | Within Groups | 73.382 | 122 | .601 | | | | Significant |
| | Total | 74.638 | 124 | | | | | |

Note. * Significant at alpha 0.05

Table 3.1 This part of the study looks at whether age makes a difference in how Grade 6 pupils at Patikul East District, Division of Sulu view the factors that influence their mathematics performance. Based on the results, there were no significant differences found at the 0.05 level of significance. In simple terms, this means that pupils of different ages share similar views about the factors affecting their performance in math.

Whether the pupils were younger or 13 years old and above, their perceptions of attitudes, study habits, teacher-related factors, availability of learning materials, and peer influence were generally the same. Being older did not necessarily mean that a student had a better or different understanding of these factors, and the same is true for younger pupils.

Overall, this suggests that age does not play a meaningful role in shaping how these students perceive the factors influencing their mathematics performance. Because of this, the study accepts the hypothesis that there is no significant difference in mathematics performance when pupils are grouped according to age.

Table 3.2 Difference in the mathematics performance of Grade 6 pupils when grouped according to their demographic profile in terms of Gender.

| Variables | Grouping | Mean | S.D | Mean Difference | t | Sig. | Description |
|---|----------|-------|-------|-----------------|-------|------|-----------------|
| Attitudes | Male | 3.677 | .6128 | .08925 | .738 | .462 | Not Significant |
| | Female | 3.588 | .7020 | | | | |
| Study Habits | Male | 3.600 | .5914 | .16575 | 1.579 | .117 | Not Significant |
| | Female | 3.434 | .5689 | | | | |
| Teacher-Related Factors | Male | 3.269 | .3903 | .00759 | .105 | .916 | Not Significant |
| | Female | 3.262 | .4009 | | | | |
| Availability of Learning Materials | Male | 3.048 | .6994 | .14808 | 1.312 | .193 | Not Significant |
| | Female | 2.900 | .4927 | | | | |
| Peer Influence | Male | 1.915 | .8419 | -.01749 | -.124 | .902 | Not Significant |
| | Female | 1.933 | .7311 | | | | |

Note. * Significant at alpha 0.05

Table 3.2 This part of the study examines whether gender affects how Grade 6 pupils at Patikul East District, Division of Sulu perceive the factors influencing their mathematics performance. The results show that there are no significant differences at the 0.05 level of significance. In other words, male and female pupils generally share the same views regarding the factors that affect their performance in math.

Both groups had similar perceptions when it comes to attitudes, study habits, teacher-related factors, availability of learning materials, and peer influence. This suggests that being male or female does not give a student a different or stronger perspective on these factors.

Overall, the findings indicate that gender does not play a significant role in shaping how pupils understand the influences on their mathematics performance. Because of this, the study accepts the hypothesis that there is no significant difference in mathematics performance when pupils are grouped according to gender.

Table 3.3 Difference in the mathematics performance of Grade 6 pupils when grouped according to their demographic profile in terms of Parents' Average Monthly Income.

| Sources of Variation | | Sum of squares | df | Mean Square | F | Sig. | Description |
|---|----------------|----------------|-----|-------------|-------|------|-----------------|
| Attitudes | Between Groups | 1.457 | 4 | .364 | .818 | .516 | Not Significant |
| | Within Groups | 53.42 | 120 | .445 | | | |
| | Total | 54.87 | 124 | | | | |
| Study Habits | Between Groups | 1.949 | 4 | .487 | 1.461 | .218 | Not Significant |
| | Within Groups | 40.030 | 120 | .334 | | | |
| | Total | 41.979 | 124 | | | | |
| Teacher-Related Factors | Between Groups | .324 | 4 | .081 | .511 | .727 | Not Significant |
| | Within Groups | 19.021 | 120 | .159 | | | |
| | Total | 19.345 | 124 | | | | |
| Availability of Learning Materials | Between Groups | .524 | 4 | .131 | .370 | .830 | Not Significant |
| | Within Groups | 42.571 | 120 | .355 | | | |
| | Total | 43.096 | 124 | | | | |
| Peer Influence | Between Groups | .662 | 4 | .165 | .268 | .898 | Not Significant |
| | Within Groups | 73.976 | 120 | .616 | | | |
| | Total | 74.638 | 124 | | | | |

Note. * Significant at alpha 0.05

Table 3.3 This part of the study explores whether parents' average monthly income affects how Grade 6 pupils at Patikul East District, Division of Sulu perceive the factors influencing their mathematics performance. The results show that there are no significant differences at the 0.05 level of significance. In simple terms, students from different income groups tend to have similar views about what affects their performance in mathematics.

Regardless of whether their parents earn lower or higher incomes, pupils shared similar perceptions of key factors such as attitudes, study habits, teacher-related factors, availability of learning materials, and peer influence. This suggests that having a higher family income does not necessarily lead to a better or different understanding of these influences, and the same holds true for those from lower-income backgrounds.

Overall, the findings indicate that parents' average monthly income does not significantly shape how pupils perceive the factors affecting their mathematics performance. Because of this, the study accepts the hypothesis that there is no significant difference in mathematics performance when pupils are grouped according to their parents' income.

Table 3.4 Difference in the mathematics performance of Grade 6 pupils when grouped according to their demographic profile in terms of Parents' Highest Educational Attainment.

| Sources of Variation | | Sum of squares | df | Mean Square | F | Sig. | Description |
|----------------------|--|----------------|----|-------------|---|------|-------------|
|----------------------|--|----------------|----|-------------|---|------|-------------|

| | | | | | | | |
|---|----------------|--------|-----|-------|-------|------|-----------------|
| Attitudes | Between Groups | 2.562 | 2 | 1.281 | 2.988 | .054 | Not Significant |
| | Within Groups | 52.31 | 122 | .429 | | | |
| | Total | 54.87 | 124 | | | | |
| Study Habits | Between Groups | 2.095 | 2 | 1.048 | 3.21* | .044 | Significant |
| | Within Groups | 39.883 | 122 | .327 | | | |
| | Total | 41.979 | 124 | | | | |
| Teacher-Related Factors | Between Groups | .544 | 2 | .272 | 1.765 | .176 | Not Significant |
| | Within Groups | 18.801 | 122 | .154 | | | |
| | Total | 19.345 | 124 | | | | |
| Availability of Learning Materials | Between Groups | .722 | 2 | .361 | 1.039 | .357 | Not Significant |
| | Within Groups | 42.374 | 122 | .347 | | | |
| | Total | 43.096 | 124 | | | | |
| Peer Influence | Between Groups | .722 | 2 | .361 | .596 | .553 | Not Significant |
| | Within Groups | 73.916 | 122 | .606 | | | |
| | Total | 74.638 | 124 | | | | |

Note. * Significant at alpha 0.05

Table 3.4 This part of the study looks at whether parents' highest educational attainment influences how Grade 6 pupils at Patikul East District, Division of Sulu perceive the factors affecting their mathematics performance. The results show that, for most areas, there are no significant differences at the 0.05 level. This means that students generally share similar views on factors such as attitudes, teacher-related factors, availability of learning materials, and peer influence regardless of their parents' level of education.

However, one exception was found in terms of study habits. Here, a significant difference emerged, suggesting that students' study practices may vary depending on their parents' educational background. This could mean that pupils whose parents have higher educational attainment might develop different or possibly more effective study habits compared to others.

Despite this difference in study habits, the overall findings indicate that parents' educational attainment does not strongly influence how pupils perceive most factors affecting their mathematics performance. In general, being from a family where parents are college graduates does not necessarily lead to a better or different perception of these factors, and the same applies to those whose parents have lower educational attainment.

Because of this, the study still accepts the hypothesis that there is no significant difference in mathematics performance when pupils are grouped according to their parents' highest educational attainment, although it acknowledges the exception found in study habits.

4. DISCUSSION

This study gives a clearer and more relatable picture of how Grade 6 pupils at Patikul East District, Division of Sulu experience learning mathematics.

Looking at the pupils' background, most of them are 11–12 years old, which is exactly the expected age for Grade 6. There are slightly more girls than boys among the respondents. Many of the pupils come from families earning ₱10,001 and above monthly, but at the same time, most parents only reached elementary education. This suggests that while some families may have enough financial support, academic guidance at home may still be limited. Even so, these background factors did not appear to strongly affect how pupils view their learning in mathematics.

When it comes to what really affects their performance, the study shows a mix of strengths and challenges. On a positive note, pupils generally have good attitudes toward mathematics and

decent study habits. They try to stay positive about the subject and put effort into their learning. This supports earlier research by Devine et al. (2012), who found that students who feel positively about math tend to do better and engage more. It also agrees with Odiri (2015), who explained that good study habits play a big role in improving math performance. In simple terms, when pupils stay interested and practice good study routines, they are more likely to succeed.

However, not everything is consistently strong. Teacher-related support and the availability of learning materials were only experienced “sometimes.” This means that while teachers do help and resources are available, they are not always enough or consistently provided. Studies by Jindal (2023) and Kandemir (2024) highlight that good teaching methods and strong subject knowledge are important in helping students learn better. Likewise, Retnawati (2022) and Saritas (2021) emphasize that learning becomes easier when students have enough materials to use. In this study, the moderate results suggest there is still room to improve in these areas.

Peer influence, on the other hand, seems to have little impact on their learning in mathematics. This means students are not heavily influenced by their classmates when it comes to studying or understanding the subject. Instead, they rely more on their own efforts and their teachers.

Another important finding is that factors like age, gender, family income, and parents’ education do not really change how students view what affects their math performance. Whether rich or not, male or female, younger or older, pupils tend to think about learning in similar ways. This supports the idea from Kandemir (2024) and Tayong (2023) that what happens in the classroom matters more than a student’s background.

Finally, the study shows that all these factors are connected. When pupils have a positive attitude, they are more likely to develop better study habits. When teaching is effective and materials are available, learning also becomes easier. In other words, everything works together. As Devine et al. (2012) also pointed out, students’ performance is shaped by a combination of attitudes, behaviors, and support not just one single factor.

Overall, the findings suggest that students already have a good foundation, especially in their attitudes and study habits. What they need more is consistent support from teachers and better access to learning materials. Improving these areas together can help create a more supportive environment where students can perform better and feel more confident in mathematics.

5. CONCLUSION

The study shows that most Grade 6 pupils at Patikul East District are 11–12 years old, with more female respondents and a large number coming from families with modest educational backgrounds and relatively low to moderate income. However, these background factors alone do not appear to strongly determine how well students perform or how they view learning in mathematics, as learning is shaped by several other important influences. In terms of learning factors, pupils generally show positive attitudes toward mathematics and have acceptable study habits, which play a key role in their learning experience. Teacher support and the availability of learning materials are present but not always consistent, while peer influence has little impact on how they learn math. This suggests that students’ motivation and personal effort, along with classroom support, are more important than peer interactions in this context. The study also found that perceptions about mathematics learning do not significantly differ across age, gender, family income, or parents’ educational attainment. In other words, students tend to share similar views regardless of their background, highlighting that classroom experiences matter more than

demographic differences in shaping their learning. Finally, the findings show that all the key factors attitudes, study habits, teacher support, and learning materials are closely connected. When students have a positive attitude, they are more likely to develop good study habits and benefit from effective teaching and available resources. Together, these factors work hand in hand to influence how students learn and perform in mathematics.

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