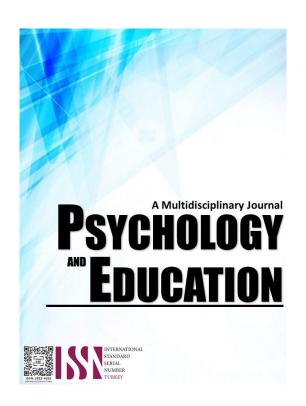
DIFFICULTIES IN LEARNING MATHEMATICS AMONG GRADE 7 LEARNERS IN GUMACA, QUEZON: BASIS FOR INTERVENTION PROGRAM



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Difficulties in Learning Mathematics among Grade 7 Learners in Gumaca, Quezon: Basis for Intervention Program

Ma. Kristina Casandra N. Leviste,* Maria Celerina D. Oreta, Melchor B. Espiritu For affiliations and correspondence, see the last page.

Abstract

This study seeks to examine the difficulties faced by Grade 7 students in Gumaca, Quezon, in learning mathematics, with the aim of providing a basis for an intervention program. It determined the profile of the respondents in terms of age, sex, and grades in mathematics (first quarter). It showed the difficulties in learning mathematics among grade 7 learners with respect to: performing geometric construction, addition and subtraction with negative numbers, difficulty with word problems that involve percentage and understanding the logical progression of concepts. The researcher used mixed method of research. It also revealed the lived experiences and difficulties encountered by the respondents in mathematics subject. This study employed proportionate random sampling. Under this procedure, the researcher considered using one hundred (100) Grade 7 students as respondents from Gumaca, Quezon to get the 100% of the respondents. The findings revealed that most of the respondents are between 12 to 13 years old. The male respondents outnumbered the female population. The majority of the Grade 7 student's grade ranges from 81 to 90. This study found out that Grade 7 students in Gumaca, Ouezon responded difficult that they are always experiencing difficulty in solving word problem involving percentage and there is significant differences on the difficulties in learning mathematics among grade 7 learners when grouped according to sex and grade. From the result of the study, recommendation was drawn. To the School Administrators: they may provide continuous professional development programs focused on differentiated instruction, remedial strategies, and the use of manipulatives and technology in teaching Mathematics. To the Parents: they may reinforce basic Math skills through daily practice such as budgeting, measuring, or playing educational Math games. To the Teachers: they may offer additional help to struggling learners through tutorials, peer mentoring, or individualized learning tasks. To the Students: they may utilize available learning resources such as textbooks, online tutorials, educational apps, and visual aids to supplement their classroom learning. To the Future Researchers: they may conduct similar studies in different grade levels or educational settings to compare difficulties in learning Mathematics across various age groups and learning environments.

Keywords: concepts, geometric construction, logical progression, mathematics and words problems

Introduction

Mathematics is often regarded as a challenging subject for many students - some people struggle with understanding concepts, applying abilities, and solving problems when learning mathematics (Archarya, 2017). Ineffective teaching methods, a lack of core skills, and math anxiety are some of the other reasons that can cause difficulties (Ong, 2025). According to various research, Filipino students have fallen far behind in their arithmetic education; more than half of the population has poor math skills (Hernadez et al.), and Grade 7 students in Gumaca, Quezon, are not an exception.

At this stage, students are exposed to more complicated mathematical ideas, which require for a higher degree of problem-solving abilities and cognitive growth. Most students, however, find it difficult to understand these ideas, which results in poor academic achievement, low self-esteem, and even a lack of interest in the topic. Students with low self-efficacy and high mathematics anxiety frequently show lower academic performance and less interest in mathematics, corresponding to studies by Cuevas and Berou (2016) and Ducay and Alave (2021). Several factors such as a lack of desire or engagement, instructional practices that do not accommodate different learning styles, and inadequate basic knowledge, are frequently blamed for this difficulty.

According to Tarrant P. and Wang (2019) suggests that incorporating multi-sensory learning approaches (e.g., visual, auditory, and kinesthetic learning) can significantly reduce barriers for students struggling with mathematics. Specifically, it highlights that Grade 7 students who use manipulatives and visual aids, alongside traditional instruction, demonstrate better comprehension of abstract concepts. The study emphasizes the need for intervention programs to adopt diverse teaching strategies that appeal to different learning styles.

This study seeks to examine the difficulties faced by Grade 7 students in Gumaca, Quezon, in learning mathematics, with the aim of providing a basis for an intervention program. By identifying the root causes of these difficulties, educational stakeholders can implement targeted strategies that will not only improve mathematical understanding but also increase student interest and confidence in the subject.

Research Questions

This study aimed to determine the difficulties in learning mathematics among grade 7 learners in Gumaca, Quezon: Basis for intervention program. Specifically, this study sought to answer the following:

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- 1. What is the profile of the respondents in terms of:
 - 1.1. age;
 - 1.2. sex; and
 - 1.3. grade in mathematics (first quarter)?
- 2. What are the difficulties in learning mathematics among grade 7 learners with respected to:
 - 2.1. performing geometric construction;
 - 2.2. addition and subtraction with negative numbers;
 - 2.3. difficulty with word problems that involve percentage; and
 - 2.4. understanding the logical progression of concepts?
- 3. What are the lived experiences and difficulties you encountered in mathematics subject?
- 4. Is there any significant difference on the perceived difficulties of learners in learning mathematics when the respondents are grouped by profile?

Methodology

Research Design

This study used mixed method to collect data for the measure the difficulties in learning mathematics among grade 7 learners in Gumaca, Quezon: Basis for intervention program. The researcher survey questionnaire as an instrument. Based on the survey's result the researcher will be able to determine the details of the study.

Mixed methods research, as a methodology, integrates qualitative and quantitative approaches within a single study. It aims to provide a more comprehensive understanding of a research question by combining the strengths of both qualitative and quantitative methods Creswell J.W (2014)

Respondents

The respondents of the study were selected 100 students of Gumaca National High School for the academic year 2024-2025. The student respondents were chosen through proportionate random sampling, she can obtain a representative sample by using sound judgment, which can also result in saving time and finances (Black K., 2010). In addition, the student in grade 7 has more Mathematics subject, learners in this level need to possess the necessary problem-solving skills that are expected to have. Enhancing math skills empowers students to become more effective problem solvers, critical thinkers and informed decision makers.

Instrument

This researcher used research made questionnaire. The questionnaire has the scale as follows 5-Verry Difficult (VD), 4-Difficult (D), 3-Moderately Difficult (MA), 2-Less Difficult (LD) and 1-Not Difficult (ND) for understanding the difficulties in mathematics among 7 learners. To identify the areas where students struggle the most (e.g., algebra, geometry, percentage, sequence and series) and whether these difficulties are related to gaps in prior knowledge or difficulties with new concepts. Part I of the questionnaire includes the profile of the respondents. Part II was composed of the difficulties in learning mathematics. Part III the questionnaire included lived experiences and difficulties you encountered in mathematics. The research instrument was validated by two specialists in education, along with pilot testing using Cronbach's alpha (targeting a reliability coefficient of 0.70 or higher), will ensure the questionnaire's validity and reliability. The result is 0.72, 0.71, 0.81,0.82 interpreted as acceptable.

Procedure

Prior to collecting the data, the researcher obtained necessary approvals from the school principal and a designated advisor. Following this, the research instrument (a structured questionnaire) was administered to the selected sample of Grade 7 students. Subsequently, a systematic process was implemented for the retrieval and compilation of the completed questionnaires. The collected data were thoroughly checked for accuracy and completeness, prepared for analysis, and subjected to rigorous statistical procedures to identify patterns and trends related to students' mathematical learning challenges. This analysis provided valuable insights to inform the development of effective interventions.

Data Analysis

To understand the characteristics of the respondents, this study used descriptive statistical analysis. This involves a detailed review of the collected data, followed by tallying and compilation into a master data sheet. Frequencies and percentages were calculated to create a profile of the respondents. To test the significant difference of three or more means, the researcher used the Kruskal-Wallis H-test for non -parametric test.

Results and Discussion

This section shows the presentation, analysis, and interpretation of the gathered data from the respondents. The data were presented in the tabular form followed by its descriptive analysis. Interpretation of the data was also provided to elaborate the data from the table.

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Table 1. Frequency and Percentage Distribution of the Respondents According Age

| Age | Frequency | Percentage (%) | Rank |
|------------------------|-----------|----------------|------|
| 12 to 13 years old | 89 | 89 | 1 |
| 14 to 15 years old | 11 | 11 | 2 |
| 16 to 17 years old | 0 | 0 | 3.5 |
| 18 years old and above | 0 | 0 | 3.5 |
| Total | 100 | 100 | |

Table 1 establishes the frequency and percentage distribution of Grade 7 student respondents according to age. The data reveals that 89 students or 89% were 12 to 13 years old, while only 11 students or 11% were 14-15 years old. This implies that most of the Grade 7 students are in the typical age range of 12 to 13 years old, suggesting that most students enter junior high school at the expected age level. The small percentage of students aged 14 to 15 may indicate instances of delayed school entry, grade repetition, or other educational interruptions.

Aguhayon (2023) supported this observation and emphasize different challenges within the Philippine educational system. The study revealed different causes of delays such as teacher shortages, lack of instructional resources, and other systemic issues that hinder the effective delivery of quality education. Consequently, some students may experience difficulties such as grade repetition or late enrollment, leading to age disparities in the classroom.

Table 2. Frequency and Percentage Distribution of the Respondents According to Sex

| Sex | Frequency | Percentage (%) | Rank |
|--------|-----------|----------------|------|
| Male | 67 | 67 | 1 |
| Female | 33 | 33 | 2 |
| Total | 100 | 100 | |

Table 2 exhibits the frequency and percentage distribution of the Grade 7 respondents according to sex. Male respondents had a frequency of 67 or 67% of the total population, while female respondents had a frequency of 33 or 33% of the total population. The data shows gender imbalance among the Grade 7 respondents, with higher proportion of male students (67%) compared to female students (33%). This disparity reflects the enrollment trends in the school or class and can have implications for gender-related analyses or interventions in academic performance.

Casinillo (2019) observed why students struggle in math and found that poor study habits, negative attitudes, and emotional problems can affect their performance. Although the study didn't focus on gender, these problems can affect male and female differently. Since there are more male than female students in the current data, this difference might influence how students behave and learn in class. This means that gender should be considered when planning lessons and programs, especially in a subject like math where many students face learning difficulties.

Table 3. Frequency & Percentage Distribution of the Respondents in Terms of Grade in Mathematics

| Grade | Frequency | Percentage (%) | Rank |
|-----------|-----------|----------------|------|
| | | | Kunk |
| 75 to 80 | 30 | 30 | 2 |
| 81 to 90 | 66 | 66 | 1 |
| 91 to 100 | 4 | 4 | 3 |
| Total | 100 | 100 | |

Table 3 presents the frequency and percentage distribution of the respondents based on their grade in Mathematics. The data indicates that 30 students or 30% had a grade of 75 to 80, 66 or 66% had a grade of 81 to 90 and 4 or 4% had a grade of 91 to 100. This implies that most of the student respondents performed moderately well in Mathematics, with 66% scoring between 81 and 90. A smaller portion (30%) had lower grades between 75 and 80, while only few students (4%) achieved high grades from 91 to 100. This suggests that the most students have an average to above-average knowledge of the subject.

Archarya (2017) identified that cognitive challenges, including anxiety, insufficient prior knowledge, and an unsupportive learning environment, often hinder students' understanding of mathematical concepts.

These difficulties may contribute to why most students in the present study scored within the average range (81–90) and why only a small percentage reached high performance levels. This reinforces the importance of addressing cognitive and environmental barriers to help students excel in Mathematics.

Table 4 exhibits the difficulties in learning mathematics among Grade 7 learners in terms of performing geometric construction. The average mean is 3.14 interpreted as "moderately difficult". As shown in the table, the indicator "I have a difficulty in understanding the importance of geometric constructions in real-life application." recorded the highest weighted mean of 3.36 which interpreted as moderately difficult. On the other hand, the indicator "I find it difficult using a ruler to draw straight lines and measure lengths." obtained the lowest weighted mean of 2.82 also interpreted as moderately difficult.

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Table 4. Difficulties in Learning Mathematics in terms of Performing Geometric Construction.

| Indicators | Mean | Verbal Interpretation | Rank |
|---|------|-----------------------|------|
| 1. I find it difficult in understanding the properties of basic geometric shapes (e.g triangles, circles, quadrilaterals) | 3.09 | Moderately Difficult | 3 |
| 2. I find it challenging identifying and using geometric terms correctly (e.g. angle, segment, bisector). | 3.35 | Moderately Difficult | 2 |
| 3. I have a difficulty in understanding the importance of geometric constructions in real-life application. | 3.36 | Moderately Difficult | 1 |
| 4. I find it difficult using a ruler to draw straight lines and measure lengths. | 2.82 | Moderately Difficult | 5 |
| 5. I find it difficult using compass correctly to construct circles and arcs. | 3.08 | Moderately Difficult | 4 |
| Average Mean | 3.14 | Moderately Difficult | |

Legend; Not Difficult (1.0-1.80), Less Difficult (1.81-2.60), Moderately Difficult (2.61-3.40), Difficult (3.41-4.20), Very Difficult (4.21-5.0).

The data suggests that Grade 7 students find geometric constructions somewhat difficult. Their biggest struggle is understanding how these constructions are useful in real life, while they have the least difficulty in using a ruler to draw and measure. This means that Grade 7 students need to appreciate the use of geometry for construction and in everyday situations.

Dayupay (2019) examines how GeoGebra software affects students' performance in geometry classes. The study revealed that students who are proficient in computers benefit more from the software. The use of GeoGebra enabled learning geometry to be interesting and easier, especially for visual tasks like geometric construction. The results support the findings that Grade 7 students find geometric constructions moderately difficult, especially when they try to understand their real-life use. The study suggests that using tools such as GeoGebra can help students understand how geometry is applied to real life, which may reduce the difficulty they experience.

Table 5. Difficulties in Learning Mathematics in terms of Addition and Subtraction with Negative Numbers.

| Indicators | Mean | Verbal Interpretation | Rank |
|--|------|-----------------------|------|
| 1. I have a difficulty in understanding the rule that adding a negative | 3.03 | Moderately Difficult | 3 |
| number is the same as subtraction. | | | |
| 2. I I have a difficulty in identifying the difference between positive | 2.75 | Moderately Difficult | 5 |
| and negative numbers. | | | |
| 3. I find it difficult in understanding the concept of negative numbers. | 3.24 | Moderately Difficult | 2 |
| 4. I have a difficulty in locating negative numbers on a number line. | 2.91 | Moderately Difficult | 4 |
| 5. I find it difficult adding a positive number and a negative number | 3.30 | Moderately Difficult | 1 |
| (e.g. 5 + (-3)). | | - | |
| Average Mean | 3.05 | Moderately Difficult | |

Legend; Not Difficult (1.0-1.80), Less Difficult (1.81-2.60), Moderately Difficult (2.61-3.40), Difficult (3.41-4.20), Very Difficult (4.21-5.0).

Table 5 displays the difficulties in learning mathematics among Grade 7 learners in terms of addition and subtraction with negative numbers. The average mean is 3.05 interpreted as "moderately difficult". As shown in the table, the indicator "I find it difficult adding a positive number and a negative number (e.g. 5 + (-3))." recorded the highest weighted mean of 3.30 which interpreted as moderately difficult. On the other hand, the indicator "I I have a difficulty in identifying the difference between positive and negative numbers" obtained the lowest weighted mean of 2.75 also interpreted as moderately difficult. The data indicates that the Grade 7 students have difficulty in adding and subtracting negative numbers. The students struggle the most in adding positive and negative numbers although they can differentiate positive and negative numbers. This implies that the students understand the basic concepts of positive and negative numbers and need to apply these concepts in operations like addition and subtraction.

Vilog, Lastierre, and Servinas (2023) explored the challenges faced by Grade 7 students in solving signed numbers. The study revealed that students struggle with operations involving integers due to fast-paced teaching, limited practice, and a lack of clear examples. Students also got confused when adding or subtracting numbers with different signs. This supports the results of the study, where students had difficulty in adding a positive and a negative number. Although they understood the difference between positive and negative numbers, they found it difficult to apply these concepts in actual calculations. The study recommends giving students more time to practice, clear examples, and fun or interactive ways to teach these math skills.

Table 6. Difficulties in Learning Mathematics in terms of Difficulty with Word Problems that Involve Percentage

| Indicators | Mean | Verbal Interpretation | Rank |
|--|------|-----------------------|------|
| 1. I always experience difficulty in solving word problem involving percentage. | 3.43 | Difficult | 1 |
| 2. I find it difficult in identifying given information and what is being asked | 3.16 | Moderately Difficult | 3 |
| about percentage. | | | |
| 3. I cannot apply the correct formula or method in finding percentage. | 2.99 | Moderately Difficult | 5 |
| 4. I have a lack of understanding of percentage concepts. | 3.05 | Moderately Difficult | 4 |
| 5. I find it difficult performing mathematical calculations involving percentage | 3.17 | Moderately Difficult | 2 |
| accurately. | | | |
| Average Mean | 3.16 | Moderately Difficult | |

Legend; Not Difficult (1.0-1.80), Less Difficult (1.81-2.60), Moderately Difficult (2.61-3.40), Difficult (3.41-4.20), Very Difficult (4.21-5.0).

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Table 6 presents the difficulties in learning mathematics among Grade 7 students in terms of difficulty with word problems that involve percentage. The average mean is 3.16 interpreted as "moderately difficult". As shown in the table, the indicator "I always experience difficulty in solving word problem involving percentage." recorded the highest weighted mean of 3.43 which interpreted as difficult. On the other hand, the indicator "I cannot apply the correct formula or method in finding percentage." obtained the lowest weighted mean of 2.99 also interpreted as moderately difficult.

The data in Table 6 shows that Grade 7 students find word problems involving percentages moderately difficult. The students encounter difficulty in solving word problems themselves, while they have a bit less trouble using the right formula or method. This means that they understand the steps but have a hard time figuring out how to use them in real problem.

Lestiana (2021) in her research with 250 students it was found out that only 41.1% were able to answer percentage problems correctly. Common mistakes revealed in the study are disregarding the percentage symbol, avoiding multiplication or division for percent problems, and and ignoring reference quantities. This supports the result of the study where students encountered difficulty in solving word problems which involves percentages, even though they had less trouble using the correct formula. The study suggests that students need to understand word problems and more practice in integrating math into everyday life.

Table 7. Difficulties in Learning Mathematics in terms of Understanding the Logical Progression of Concepts

| <u>Indicators</u> | Mean | Verbal Interpretation | Rank |
|--|------|-----------------------|------|
| 1. I find it difficult to understand how basic operations (addition, subtraction, | 3.17 | Moderately Difficult | 3 |
| multiplication, division) are connected. | | | |
| 2. I have a difficulty in solving problem that require multiple steps in a logical | 3.23 | Moderately Difficult | 2 |
| order. | | | |
| 3. I have a difficulty in understanding between whole number, fraction, | 2.97 | Moderately Difficult | 5 |
| decimals. | | | |
| 4. I have a difficulty in identifying pattern and sequences in number. | 3.07 | Moderately Difficult | 4 |
| 5. I have a difficulty in recognizing relationships between mathematical | 3.32 | Moderately Difficult | 1 |
| operation (e.g. addition is the opposite of subtraction). | | | |
| Average Mean | 3.13 | Moderately Difficult | |

Legend; Not Difficult (1.0-1.80), Less Difficult (1.81-2.60), Moderately Difficult (2.61-3.40), Difficult (3.41-4.20), Very Difficult (4.21-5.0).

Table 7 demonstrates the difficulties in learning mathematics among Grade 7 students in terms of understanding the logical and progression of concepts. The average mean is 3.13 interpreted as "moderately difficult". As shown in the table, the indicator "I have a difficulty in recognizing relationships between mathematical operation (e.g. addition is the opposite of subtraction)." recorded the highest weighted mean of 3.32 which interpreted as moderately difficult and ranked first among the other indicators. On the other hand, the indicator "I have a difficulty in understanding between whole number, fraction, decimals." obtained the lowest weighted mean of 2.97 also interpreted as moderately difficult and ranked least among the indicators.

The data suggests that Grade 7 students are unable to comprehend the flow and connection of math concepts at a moderate level. Their biggest challenge is recognizing the relationships between operations, like how addition is the opposite of subtraction. Meanwhile, they have slightly less difficulty understanding the differences between whole numbers, fractions, and decimals. This implies that students should understand how different math concepts work together.

Leongson (2021) assessed the reasoning skills of first-year college students in the Philippines using Piaget's theory of cognitive development. Results showed that most students were still in the concrete operational stage, meaning they had difficulty with higher-level thinking tasks such as recognizing relationships between math concepts. This supports the result of the study where Grade 7 students had difficulty recognizing how mathematical operations are connected such as how addition is the opposite of subtraction. Although students had less difficulty understanding the types of numbers (like whole numbers, fractions, and decimals), the study suggests that their ability to logically connect math ideas develops gradually. This implies that to help students understand the progression of math concepts, teachers need to give them more opportunities to practice reasoning and see how different operations relate to each other.

Table 8. Summary Table on the Difficulties in Learning Mathematics

| Perceived Responses on Difficulties in Learning Mathematics | Average Mean | Verbal Interpretation | Rank |
|---|--------------|-----------------------|------|
| Performing Geometric Construction | 3.14 | Moderately Difficult | 2 |
| Addition and Subtraction with Negative Numbers | 3.05 | Moderately Difficult | 4 |
| Difficulty with Word Problems that Involve Percentage | 3.16 | Moderately Difficult | 1 |
| Understanding the Logical Progression of Concepts | 3.13 | Moderately Difficult | 3 |
| Grand Mean | 3.12 | Moderately Difficult | |

Legend; Not Difficult (1.0-1.80), Less Difficult (1.81-2.60), Moderately Difficult (2.61-3.40), Difficult (3.41-4.20), Very Difficult (4.21-5.0).

Table 8 presents a summary of the perceived responses on difficulties in learning mathematics. The data reveal that respondents moderately agreed that word problems involving percentages are the most challenging, as indicated by the highest mean score of 3.16. In contrast, addition and subtraction with negative numbers was perceived as the moderately difficult, with the lowest mean score of 3.05.

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These findings suggest that while students generally understand the mathematical steps and know the appropriate formulas or methods, they struggle with applying them to real-world problem-solving situations. In particular, they encounter more difficulty in interpreting and solving word problems than in performing calculations or selecting the correct procedures.

Table 9. Significant Difference in the Perceived Difficulties in Learning Mathematics when Respondents are

Grouped according to Age

| Groups | N | Median | H value | p-value | Significant Level | Decision |
|-------------|----|--------|---------|---------|-------------------|------------|
| 12-13 y/old | 89 | 3.10 | 5 276 | 0.022 | 0.05 | Daigat IIa |
| 14-15 y/old | 11 | 3.65 | 5.276 | 0.022 | 0.05 | Reject Ho |

Table 9 demonstrates the significant differences in the perceived difficulties in learning mathematics when respondents are grouped according to age. The median of age group 12-13 years old is 3.10 while the median of age group 14-15 years old is 3.65. The computed H value is 5.276 and the p-value is 0.022. Since the p value is less than 0.05 level of significance, the null hypothesis is rejected. This suggests that there is a significant difference in the responses of different age groups towards the perceived difficulties in learning mathematics.

The data indicates that age significantly influences students' perceived difficulties in learning mathematics. The older age group (14–15 years old) reported to have a higher median score of 3.65 compared to the younger group (12–13 years old), which had a median of 3.10. The computed H value of 5.276 and a p-value of 0.022 confirm a statistically significant difference between the groups, leading to the rejection of the null hypothesis. This suggests that older students tend to experience greater difficulty in learning mathematics, which can be caused by different factors such as increased academic demands, more complex mathematical content, or varying levels of foundational knowledge acquired in previous years.

Archarya (2017) stated that as students' progress in school, their difficulties often increase due to factors like math anxiety, lack of prior knowledge, and teaching strategies that may not match their learning needs. These findings suggest that age is a factor in students' perception of math difficulty, possibly because older students face more complex topics and academic expectations, which can lead to higher levels of stress and learning difficulties.

Table 10. Significant Difference in the Perceived Difficulties in Learning Mathematics when Respondents are Grouped according to Sex

| Groups | N | Median | H value | p-value | Significant Level | Decision |
|--------|----|--------|---------|---------|-------------------|--------------|
| Male | 67 | 3.20 | 0.800 | 0.271 | 0.05 | A acomt II o |
| Female | 33 | 2.95 | 0.800 | 0.371 | 0.05 | Accept Ho |

Table 10 exhibits the significant differences in the perceived difficulties in learning mathematics when respondents are grouped according to sex. The median of male is 3.20 while the median of female is 2.95. The computed H value is 0.800 and the p-value is 0.371. Since the p value is greater than 0.05 level of significance, the null hypothesis is accepted. This suggests that there is no significant difference in the responses of male and female student towards the perceived difficulties in learning mathematics.

The data indicates that male and female students do not differ in how they perceive difficulties in learning mathematics. Although the median score for male students (3.20) is slightly higher than that of female students (2.95), the computed H value of 0.800 and p-value of 0.371 indicate that this difference is not statistically significant. Since the p-value is greater than the 0.05 level of significance, the null hypothesis is accepted. This implies that gender does not have a significant impact on students' perceived difficulty in learning mathematics within this group.

Reganit and Roxas (2021) examined whether male and female senior high school students in the Philippines differ in their math performance and attitudes. The results showed no significant difference between genders. Both male and female students had similar levels of engagement and perceived difficulty in learning math. This supports the findings that gender does not significantly affect how students perceive difficulty in mathematics. Therefore, interventions to help students improve in math can be applied equally to both male and female learners.

Table 11. Significant Difference in the Perceived Difficulties in Learning Mathematics when Respondents are Grouped according to Grade

Median H value p-value Significant Level Decision Groups 30 75-80 3.70 81-90 66 3.00 14.159 0.001 0.05 Accept Ho 91-100 2.20 4

Table 11 presents the significant differences in the perceived difficulties in learning mathematics when respondents are grouped according to their grade. The median of group of students with a grade of 75-80 is 3.70, while the median of group of students with grades of 81-90 is 3.00 and the median of group of students with a grade of 91-100 is 2.20. The computed H value is 14.159 and the p-value is 0.001. Since the p value is less than 0.05 level of significance, the null hypothesis is rejected. This suggests that there is a significant difference in the response of students with different grades towards the perceived difficulties in learning mathematics.

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The data suggests that the students' perceived difficulties in learning mathematics differs depending on their academic performance. Students with lower grades (75–80) observed to have a high level of difficulty with a median score of 3.70, while those with higher grades (91–100) are observed to have a low level of difficulty, with a median score of 2.20. The computed H value of 14.159 and the p-value of 0.001 indicate a statistically significant difference among the groups, leading to the rejection of the null hypothesis. This implies that students who excel in mathematics tend to find it less difficult, while those with lower grades experience greater difficulties in the subject.

Manlangit and Dela Cruz (2022) supports the result that students who get lower grades in math often find the subject more difficult. Their research shows that students with high levels of math anxiety usually have lower academic performance. On the other hand, students who perform well tend to feel less anxious and find math easier. This means that helping students overcome their fear and stress about math could improve their performance and reduce the difficulties they experience.

Conclusions

Based on the findings discussed in this research, the following conclusions were drawn: Most of the respondents are in the age between twelve to thirteen years old. Most of the respondents are male. The respondents are Grade 7 learners from Gumaca, Quezon. Grade 7 students in Gumaca, Quezon responded that they are always experiencing difficulty in solving word problems involving percentage. The perception of the respondents on the difficulties in learning mathematics among Grade 7 learners, when grouped according to age, does not vary, while in terms of sex and grade, it does vary.

Based on the findings and conclusions in this study, the recommendations of the researcher may help the following: To the School Administrators, they may provide continuous professional development programs focused on differentiated instruction, remedial strategies, and the use of manipulatives and technology in teaching Mathematics. To the Parents, they may reinforce basic Math skills through daily practice, such as budgeting, measuring, or playing educational Math games. To the Teachers, they may offer additional help to struggling learners through tutorials, peer mentoring, or individualized learning tasks. To the Students, they may utilize available learning resources such as textbooks, online tutorials, educational apps, and visual aids to supplement their classroom learning. To the Future Researchers, they may conduct similar studies in different grade levels or educational settings to compare difficulties in learning Mathematics across various age groups and learning environments.

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Affiliations and Corresponding Information

Ma. Kristina Casandra N. Leviste

Eastern Quezon College, Inc. – Philippines

Maria Celerina D. Oreta, Ed.D.

Eastern Quezon College, Inc. – Philippines

Melchor B. Espiritu, Ed.D.

Eastern Quezon College, Inc. - Philippines

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