Philippine Emirates Private School

Senior High School Department

The Factors Affecting the Performance of the Grade 7 Students in the Philippine Emirates Private School in Mathematics

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APPROVAL SHEET

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DEDICATION

We dedicate to study to:

Our parents who never ceased to support mentally and financially and

who never lost hope in us.

Our friends who are always there to lift us up.

Our teachers and staffs who guided us

The Almighty God who gave us wisdom, provision and strength to finish this study

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ABSTRACT

This study focused on the possible factors affecting the performance of the Grade 7 students in the Philippine Emirates Private School in Mathematics.

Thirty–two (32) students from both sections, Humility and Fortitude, of Grade 7 were chosen as the respondents of the study. With the online survey questionnaire that was distributed to the respondents, the researchers were able to gather enough data and information about the possible factors concerning the mathematical performance of Grade 7 students.

Based on the data analyzed, the teacher factor with the teacher having a good relationship with its students had a positive outcome because the student now more comfortable with the teacher allows them to be more inquisitive and participative during a discussion. Although, the teacher having a good relationship with its students, mental stress coming from the students may lead to a poor mathematical performance as mental stress will lead to disinterest and in turn gives a poor mathematical performance

Through this study, the students should be able to understand and grasp the information that can help them identify the factors that affects their mathematical performance. The teachers and the school will benefit from this study as well for they can identify the factors affecting the student's mathematical performance and then modify or enhance their ways to improve the mathematical performance of students as well as the future researchers can also benefit for, they can have more reference regarding this topic.

Chapter 1

The Problem and its Background

This Chapter presents the problem and its background. It includes the scope and delimitations, significance of the study and the definition of terms used in the study.

Background of the study

As people continue to progress day by day, studies about certain topics constantly improve. In terms of education, it's a cycle that is ever so the same, same topics but with added difficulty. Students tackle several subjects in school, half of them being major subjects and the other half as minor ones. Major subjects comprise of the majority knowledge you may use in day to day life, they are also the most important in terms of learning. All of them differ in difficulty and effort, Mathematics may be ranked as one of the hardest to master and may also be the most vital major subject.

Everything in the world will have some relation towards math and numbers, may it be through sports by strategic thinking to general terms like supermarket prices. As we are in the technological generation, gadgets need programming and so do the video games the children and teens of this generation play. All of those involve numbers, math is everywhere. School wise, math may

even be seen in other subjects, namely Science. Formulas also appear in the world of Science, through chemistry and physics.

Despite of Mathematics existing, not everyone is in favor of the subject due to numerous reasons. One of which is because of its difficulty and overall negative criticisms, according to the journal research, "Criticisms in the Mathematic Class" (Springer), the subject itself receives negative criticisms not only school due to its difficulty but also through social media sites and even everyday chats. The struggle people receive in the subject is based on understanding and difficulty and it affects not only the youth but also the adults.

Being the bridge out of elementary and into the life of a high school student, Grade 7 students are expected to be introduced to a higher form of learning and education. Graduating to be a Grade 7 student does not mean you are obligated to learn the highest form of math or anything in general that is out of reach of one's academic capabilities after moving up. It is all about the understanding of the subject in deeper concept or thought. But because being the crossing point of two stages, obstacles and problems may appear and will provide more challenge to the individuals. They may also develop a dislike for the subject due to inattentiveness, boredom, difficulty and other factors like school factors and teacher factors which may lead them to disfavor the subject. The advantages on the other hand are that the students will gain additional knowledge in terms of topics and lessons. They would also gain experience throughout studying the subject itself. Therefore, it

may be used and applied in their day to day lives and will help them not only in the long run but as of the present as well.

After identifying the different factors and reasons to as why students may disfavor the subject of mathematics, the researchers have decided to look further and deepen the research upon the given reasons.

The researchers also observed the reasons why they may dislike the subject, depending on which reasons fall on what factor. Given the factors, it may lead to their lack of will to pursue with more effort on the subject.

The researchers tackled the factors that students may consider when determining the reasons for disliking mathematics. It is believed that these factors include student factors, which include the attitude of a student and their lifestyle, teacher factors, which concern the teaching styled of the teacher in line with their attitude and lastly the school factors, which solely tackles the student's work environment and resources.

Statement of the problem

The researchers have observed that there are several factors affecting the mathematical performance of the students in the Philippine Emirates Private School.

The researchers aim to:

- Know the demographic profile of the students

- Identify the difficulties faced by the students
- Evaluate the factors that affects the student's behaviors, influencing their mathematical performance
- Determine the teaching factors that affects the mathematical performance of students
- Assess if the environment in which the students conduct their lesson affect their mathematical performance
- Analyze the possible solutions that will improve the students of PEPS mathematical performance

The researchers aims to answer these following problems:

- What is the demographic profile of the students?
- What are the possible difficulties encountered by the students in Mathematics?
- What are the factors that affects the student's behavior towards their mathematical performance?
- What teaching factor affects the student's mathematical performance?
- Does the environment in which the students conduct their lesson affect their mathematical performance?
- What are the possible solutions to improve the mathematical performance of the students in PEPS?

Research Hypothesis

The Grade 7 students of the Philippine Emirates Private School have a poor performance in Mathematics.

Scope and Delimitations

The study is mainly focused on the responses of the Grade-7 students about the common factors that affects their performance in mathematics. Thus, the survey questionnaire had only been given to the freshmen students of The Philippine Emirates Private School in the School Year 2019-2020. The survey questionnaire contains the respondent's name, age, gender, section and questions that the researches need in order to achieve their results which was disclosed in the data analysis

The research is only limited to how the freshmen students can identify the factors that affects their performance in mathematics and from that find ways to improve the performance of the students.

Significance of the following

The study is significant for it aims to widen the researchers' knowledge of reasons and factors that affects the performance of selected freshman high school students of the Philippine Emirates Private School. This study is significant to the following:

To the students. The grade 7 students of the Philippine emirates private school can learn what factors affects their performance in Mathematics.

To the teachers. Through this study, the teachers will be able to determine the factors that affects the performance of their students. With that information, they will be able to determine the best possible approach to teach their students.

To the administration. The administrators will be able to determine the factors affecting the performance of the students and therefore implement programs that will improve their performance in Mathematics.

To the future researchers. Through this study the future researchers will be aware and knowledgeable of the processes that are involved in making this kind of research. It would help to become better researchers and it can also be used as a future reference for those who will be making a similar topic related to the factors affecting the performance of Grade 7 students

Definition of Terms

The following terms listed in the current study is defined below to create a deeper understanding of the study, thus all the terms used are defined in its operational definition.

Mathematics. Mathematics includes the study of such topics as quantity, structure, space, and change. Mathematicians seek and use patterns to formulate new conjectures; they resolve the truth or falsity of conjectures by mathematical proof.

Personal Habits. These are the habits of the students after school hours such as sleeping, going outside, or just laziness that often makes the student not do their homework or tasks that were to be done at home.

School Factor. These are one of the three factors of the common problems faced by students in mathematics. The environment of the school whether if it is the students, teachers, or the authority that gives negative effects to the student in their learning belongs to the school factor.

Student Factor. This factor only focuses on the habits of the student him/herself that give them the common problems they're facing in mathematics. This could be their time management skills, inattentiveness in class, personal habits (like sleeping habits), or their work ethic.

Teacher Factor. This factor is about the techniques used by the teacher that gives the students problems in mathematics and the Strictness of the teacher towards the students that make the students intimidated/scared which makes the students face a more common problem.

Chapter 2

Review of Related Literature and Studies

This chapter presents books, published articles and unpublished articles which the researchers have found to have bearing or impact on the present study. The presentation of the related literatures and studies focus on the different factors that may affect a student's performance in mathematics.

The area of study known as the history of mathematics is primarily an investigation into the origin of discoveries in mathematics and, to a lesser extent, an investigation into the mathematical methods and notation of the past. Before the modern age and the worldwide spread of knowledge, written examples of new mathematical developments have come to light only in a few locales. Mathematics date back from the Mesopotamian era during 3000 BC, back then the subject has grown and has advanced to what Math is today (Novikoff, 2019). With the progression of the subject, its difficulty rose with it, adding more subtopics to topics, adding formulas upon formulas, and so on. While it may seem like math problems have no real use in life, this couldn't be farther from the truth. Math is incredibly important in our lives and, without realizing it, we use mathematical concepts, as well as the skills we learn from doing math problems, every day. The laws of mathematics govern everything around us, and without a good understanding of them, one can encounter significant problems in life (Pi Day, 2018).

This is where the study comes in, it is to figure out which issues, problems or academic concerns pull down a student's grade especially in a subject like Mathematics. Academic concerns may influence a student's performance in the classroom negatively, but they are also likely to have a significant effect on other areas of life (Mull, Klimek and Feldmann, 2018). This is why the study was conducted, in order to propose a tactical action plan that organizes sequence of steps designed to execute strategic plans and achieve strategic goals, which in the

researchers' case would be to solve or lessen the factors that affect their academic level and performance in school, mainly in Mathematics. It also provides useful data in order to help the freshmen students on how to change their mindset/perspective in mathematics for them to improve drastically and change their opinion about the distaste for the subject.

For the researchers to properly conduct this research, the proper category of factors should be identified whether which subtopics fall under what factor, what problems identify which subtopic and such. Next would be identifying the subtopics of the factors, this is to come up with what the main factor should consist of. It should be made of phrases that relate to the main ide of the factor affecting the student's performance. The last obstacle in this research would be tackling the factors themselves so the researchers could identify which of the factors provide a huge impact upon the students in their academics.

The study mainly focuses on the responses of the Grade-7 students about factors affecting their performance in Mathematics. Since the title of the topic is based on the grade 7 students, it becomes one of the limitations. The research should only focus on grade 7 and grade 7 only. The research is only limited to how the freshmen students can increase their academic level and performance level in mathematics and on how they can improve their Mathematical skills such as Problem Solving, Critical Thinking, and other skills.

To finish, though similar studies and literature on this specific topic are abundant, the use of qualitative methods we're mostly used in order to get the

deepest results possible for the best information. Quantitative method was used just to add relevance to the literatures that needed more ideas. Though both have been used accordingly, the researchers have included relevant examples of these studies, but it can be said that not all research that have been gathered can be considered relevant by the online research community

The Common Relevance of the General Factors in Improving Mathematical Performance

The first step is to uncover and identify the find out the essential factors needed for the improvement in terms of performance of the grade 7 students. The factors play an important role in identifying the certain hindrances that prevent them from academically improving in Mathematics. Moving on to the main factors which consist of 3 approaches towards the improvement of a student, the first would be the student factor. The student-factor tackles the students itself; it aims to observe the student's attitude, background, skills and overall interest on the subject. For attitude wise, would they be determined to learn the topics given by the subject willingly and if so, how would they tackle it. Background on the other hand shows the general information about that student, sort of like a demographic profile, but it goes deeper than what is intended in a demographic profile. Skills, it determines if the student is already good at mathematics and could easily understand the topics being thrown at the students. Lastly, is the

interest of the student, it shows the overall attention of the student in learning the subject (Singh, Granville, Dika, 2018)

Another factor would be the teacher factor, the teacher factor focuses on the teaching skills of the teacher, the ability to help the students, the attitude on teaching and the dedication of the teacher in his/her field of expertise. Helping the student whether they show if they need help or not and improving the teaching procedures in the classroom are much easier to achieve than changing background factors affecting students' performance. With proper teaching and understanding, the teacher can properly assist the student. The findings of the present study are important not only for the Iranian council but the for the general education of every student. (Kiamanesh, 2004)

Lastly, the environment or school factor, this determines whether the learning environment of the student can affect them greatly, it focuses on if the facilities are enough and are of great quality, if the surroundings allow them to focus and if the classroom itself is comfortable for their usage. The concept of the "flipped classroom" is to not limit the learning of students inside the four walls of a classroom. It tries to do away the traditional mode of lecture to a more dynamic classroom experience of the students where presentations are done outside alongside using instructional videos. It aimed to show how flipped classrooms improve the overall state of the student which later showed the improvement of students in lessening anxiety levels. It also shows that, exterior learning despite of the facility usage, the outside can be an alternative to the facilities that are inside

of a classroom, for say the quietness to focus more, the uncompacted space and lessening of stress brought by the intimidating 4 walled classroom. (Sagumpan and Tan, 2018)

The common theme of the factors here is that the factors stated involved the overall ideas that affect the performance of a student in Mathematics. Each factor emphasizes a subtopic that connects that certain subtopic to the main factor which shows how it may interfere in the learning of a student. It also highlights that with these factors we can help prevent the instant dislike for the subject but instead have a good impression on learning it. Furthermore, identifying these factors may help student's overcome Mathematics and increase their total grade in academics.

The Overall Factors Affecting the Performance of the Students in Mathematics

The main focus of our study is to identify the different factors affecting the students' on their performance in Mathematics. These will show their perspective towards the subject Mathematics. The major factors that would have an impact on the students' learning would firstly be coming directly from the student itself. Wherein, we can identify the students' background in terms of their capabilities as a learner, attitude, skill, to the extent of which they perform in Mathematics. As a student, mastery is a key to learning which means they are dependent to the teachings of the educator.

A teacher also plays a substantial role in the field of education, because the life of a student relies on the knowledge that he attains in his learnings. The

students' overall well-being is also dependent on the Teaching efficiency of the educator, as it can have either a positive or negative effect in their understanding towards Mathematics. Teaching skills and the ability to help students is an obligation to enhance the students' performance.

Environmental factors are essential to a students' training ground. The learning environment should be a place for learners to develop their skills and abilities, in which they are comfortable with the surroundings and allows them to focus to a greater extent in a classroom setting.

Different backgrounds' plays an important role towards the Mathematical performance of the students' as it is the basis of which or where they came from. A "flipped classroom" is a concept in which the students' are not surrounded with barriers in their learnings, but the opposite way of having the traditional mode of lecture in which they interest in presentations and instructional videos to improve the overall state of the student and thus, lessening the levels of anxiety.(Singh, et.al; Sagumpan and Tan, 2018)

A study shows the positive attitude towards Mathematics in terms of value in life, moderate or neutral attitude when it comes to their self-confidence, enjoyment and motivation in Mathematics. It reveals that attitude and study habit is a factor which greatly affects their learning as it affects their overall self. (Capuno, Necesario, Etcuban, Espina, Padillo, and Manguilimotan, 2019)

Anxiety is a common factor which all students encounter during their learnings. This has an effect on their mental health and attitude regarding their

performance in Mathematics. Students' may often feel uncomfortable or worried whenever they have a hard time keeping up with the knowledge they have in their studies. A student's performance is impacted with mathematical anxiety which is a key challenge in the education arena. (Skaalvik, 2018; Karimi &. Venkatesan, 2017)

Conclusion and the need for additional research

In conclusion, there are a lot of possible factors that affects the student performance in Mathematics. An example of which is Mathematics anxiety it seemed to be a problem to many learners. Mathematics anxiety is defined as a discomfort state created when students are required to perform mathematical tasks (Mohamed and Tarmizi, 2010). The feeling of Mathematical anxiety can lead to panic, tension, helplessness, distress, shame, inability to cope, sweaty palms, nervous stomach, difficulty breathing, and loss of ability to concentrate which can hinder the understanding of the student in Mathematics. A study conducted by Capuno .et.al (2019) also talks about that the attitudes and study habits of the respondents are significant factors that affect their performance in math. Moreover, these attitudes and study habits need to be improved to enhance the students' performance in mathematics. These examples can be easily grouped as student factor, teacher factor and environment factor/ school factor. These are the general factors that the researchers will be using in their study. The student factor tackles the students itself; it aims to observe the student's attitude, background,

skills and overall interest on the subject, For the teacher factor, it focuses on the teaching skills of the teacher, the ability to help the students, the attitude on teaching and the dedication of the teacher in his field of expertise. Lastly, the environment or school factor, this determines whether the learning environment of the student can affect them greatly, it focuses on if the facilities are enough and are of great quality, if the surrounding allow them to focus and if the classroom itself is comfortable for their usage.

Evidences also points out that grade 7 students are the most advisable to take information out of since its their first time experiencing high school level mathematics which is a big leap from elementary mathematics. They are also the step from elementary mathematics to high school level Mathematics (Andamon and Tan, 2018)

Additional research is required into finding more ways in order to relieve the anxiety and stress, students are facing in order to improve their mathematical performance. As most of the studies talks about how anxiety greatly affects the student's performance in mathematics. Also too much exposure to these activities may affect their performance in the discipline if not controlled because students who participate in extracurricular activities sometimes miss classes in mathematics (Capuno et.al, 2019) so with that said students should also limit the activities that they participate in order to not miss subjects that enhances their understanding in mathematics. Teachers also play an important part in the

learning of their students because as teachers they are supposed to relive the anxiety the students are experiencing. It's also suggested that teachers incorporate learning strategies to the students and apply this in their daily practice, and work together with pupils over time (Demir, Kılıç and Depren,2009). The environment of the student should be also further researched as it affects the academic performance of students, An example of which is a "flipped classroom" it's a concept in which the students' are not surrounded with barriers in their learnings, but the opposite way of having the traditional mode of lecture in which they interest in presentations and instructional videos to improve the overall state of the student and thus, lessening the levels of anxiety (Singh et.al; Sagumpan and Tan, 2018). Further research is required in to every factors contributing to the performance of high school students as this research will be beneficial to the community as it may give the certain factors affecting the mathematical performance of students in PEPS and around the world.

Theoretical framework of the study

The theoretical framework of the study focuses upon the theories supporting the study itself in order for the claim to be stronger. The theories that were gathered focuses on how a certain student's academic performance can be affected in various ways, not only in Mathematics but also in all subjects.

The theories that have been used were of Theory of Cognitive Development (Jean Piaget), Deficit Theory (Carey E, Hill F, Devine A, Szücs D) and lastly the Mathematical Learning Theory (R.C. Atkinsons).

The Deficit Theory stated by Carey E, Hill F, Devine A, Szücs D. (2016) suggests that people who start out with poorer math performance are more likely to develop anxiety about math. The math anxiety that the students are having may have an effect on the mathematic performance at several different levels. Firstly, evidence suggests that people with math anxiety are less willing to engage with math tasks at all. For example, people with math anxiety are less likely to enroll in math classes, and have a tendency to answer questions quickly but inaccurately. This suggests a tendency towards math avoidance in those with math anxiety, which has a negative impact on both learning opportunities and recall in tests.

Secondly, whilst individuals are engaged in math tasks, math anxiety might act to distract them from what they are trying to learn or remember. The idea that anxiety could interfere with learning and recall is known as 'cognitive interference' – anxiety generates distracting thoughts and sensations which affect memory capacity. This idea is supported by evidence suggesting that those with higher math anxiety have poorer working memory and that those with math anxiety do especially poorly in questions which require a high level of working memory to solve.

The idea is that math anxiety reduces math performance, then, both by reducing engagement with math tasks and by making these math tasks harder to

solve by reducing working memory capacity. There is some evidence that the relationship between math anxiety and performance does operate in this direction. For example, studies which elevate math anxiety in specific individuals find that this decreases math performance. Other studies have people do a task aimed to reduce math anxiety, and have observed an immediate performance increase.

It also suggests that suggests that the relationship between math anxiety and math performance operates in both directions. Whilst few studies find explicit proof of a bidirectional relationship, this could be because the two different directions are each best supported by different kinds of study. The effect of math anxiety on performance seems to most easily be observed in studies which change a person's math anxiety (in the short term) and see if this affects their performance.

Another theory used by the researchers is the Mathematical learning theory is an attempt to describe and explain behavior in quantitative terms. The work of R. C. Atkinson is particularly interesting because he applied mathematical learning theory to the design of a language arts curriculum.

Atkinson (1972) discusses the problem of optimizing instruction. He outlined four possible strategies: (1) maximize the mean performance of the whole class, (2) minimize the variance in performance for the whole class, (3) maximize the number of students who score at grade level, or (4) maximize the mean performance for each individual. Atkinson shows that while alternative (1) produces the largest gain scores, it also produces the greatest variance since it

increases the spread between the most and least successful students. Alternative (4) produces an overall gain but without increased variability. This is accomplished by giving each student variable amounts of time depending upon performance.

Meanwhile according to Jean Piaget (1979), a Swiss psychologist, human intellectual development progresses chronologically through four sequential stages. The order in which the stages occur have been found to be largely invariant, however, the ages at which people enter each higher order stage vary according to each person's hereditary and environmental characteristics.

Piaget defined intelligence as the ability to adapt to the environment. Adaptation takes place through assimilation and through accommodation, with the two processes interacting throughout life in different ways, according to the stage of mental development.

In assimilation, the individual absorbs new information, fitting features of the environment into internal cognitive structures. In accommodation, the individual modifies those internal cognitive structures to conform to the new information and meet the demands of the environment. A balance is maintained through equilibration. A child moves from one stage of cognitive development to another through the process of equilibration, through understanding the underlying concept so that the understanding can be applied to new situations.

Equilibration is a balance between assimilation and accommodation. Jean Piaget (1979) suggested that when children do not understand or have difficulty with a certain concept, it is due to a too-rapid passage from the qualitative structure of the problem (by simple logical reasoning -e.g. a ball existing physically) to the quantitative or mathematical formulation (in the sense of differences, similarity, weight, number, etc.).

The stages of cognitive development that Piaget distinguished are four:

Sensorimotor (0-2 years of age) - children begin to use imitation, memory and thought. They begin to recognize that objects do not cease to exist when they are hidden from view. They move from reflex actions to goal-directed activity.

Preoperational (2-7 years) - Children gradually develop language and the ability to think in symbolic form. They are able to think operations through logically in one direction and they have difficulty seeing another person's point of view.

Concrete operational (7-11 years) - Children are able to solve concrete (hands-on) problems in a logical fashion. They understand the laws of conservation and are able to classify and seriate. They also understand reversibility.

Formal operational (11-15 years of age) - Children are able to solve abstract problems in a logical fashion. Their thinking becomes more scientific, they develop concerns about social issues and about identity.

Math anxiety as per discussed by the theory is one of the student factors affecting the mathematical performance of students. It may be inherited through their genes or it may be developed while learning/understanding mathematics. Thus the mathematical performance of the students will be affected by the Math anxiety they are experiencing as stated by Carry E, et.al (2006). The relation of the theory to the study is that the discussion between math anxiety and its relation to the mathematical performance of students. Math anxiety is a factor affecting the mathematical performance of students. So the researcher's deemed that the math anxiety is a factor affecting the mathematical performance of students thus using it as one of the student factors affecting the mathematical performance of students. While Atkinson's research has primarily focused on simple language learning in the context of computer-based instruction. As the researchers' study targets the participants of the Grade-7 students based on their academic performance in Mathematics, the theory suggests the possible solutions to any problems that the students may face, particularly their attitude on the subject. Atkinson (1972) focuses on the possible strategies in which the students' overall performance can be measured through the variances of each individual. While Piaget's theory will be used in the current study, along with the stages, to further determine which factor utterly affects the students' inability to ascertain sets of mathematics-related

topics and absorb new information. The lack of guidance from their environment and how they are treated during the whole timeframe of their development can lead to the important stages not being fully developed; as a result, their brain may not function to the same level as the average people in their age.

As our study suggests that the possible problems usually faced by the Grade-7 students can be summarized as Student Factors, Teacher Factors, and Environment Factors. The theories presented and used resonate with our studies and the theories selected will be revolving all throughout our study as it provides a concrete base that will further support our study. It will also serve as a guide on how the study will be constructed and how it will flow.

Conceptual Framework of the Study

Various problems and obstacles may affect a student's performance in their studies thus classifying these certain factors may help a student in identifying the weak-points to as why their academic performance or level are affected.

The study claims that a student's performance in Mathematics are affected by three main factors, namely Student, Teacher and Environment Factors. These factors help determine which affect their studies and academic performance. Those who dislike the subject itself may have an impact on the student factor, towards the teacher on the other hand would be the teacher factor and if the student has a problem on focusing due to the surroundings, that would fall under

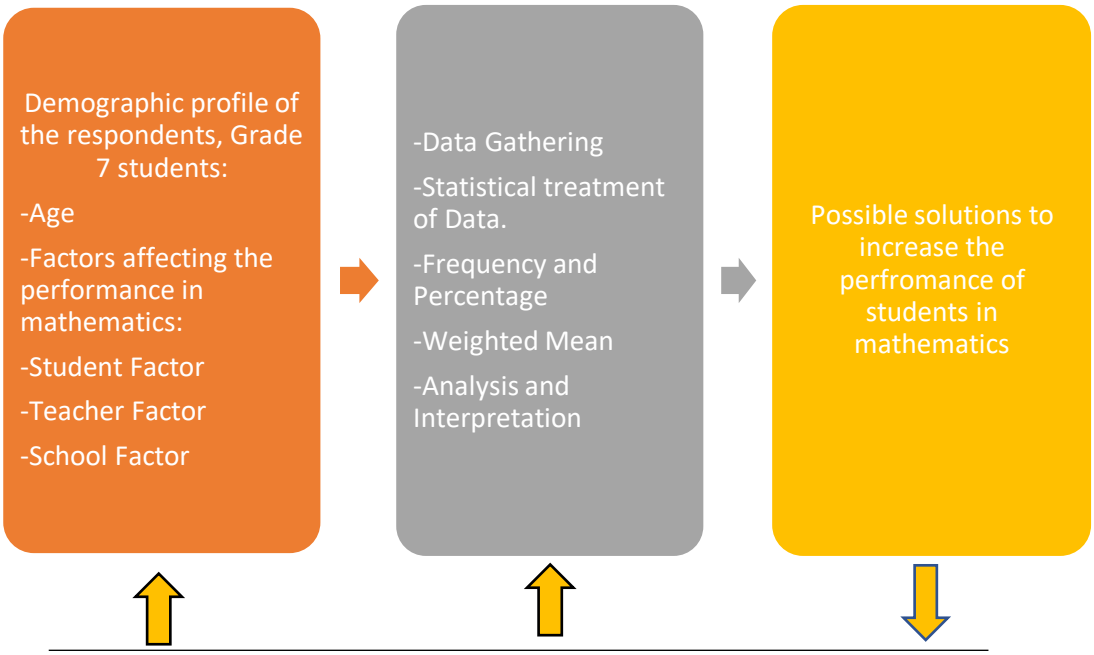
the environment factor. All of these factors with sub-topics contribute to of what grades they will possibly get in class, specifically Mathematics.

Notice that the variables of the study focus directly on the Grade 7 themselves. The two variables used for the was the independent variable being the factors affecting the Grade 7 students performance in Mathematics while the dependent being their academic performance. The former being the independent variable while the latter being the dependent. Both of these variables need accurate observations and measurements to as how much it affects a student. It can be done through a survey that contains the possible phrases or sub-topics which are under the main factors.

Assuming that the others are constant such as the demographic profile of the students, it is likely to relate both variables and confirm that indeed, problems and obstacles in studies through student, teacher and environment factors can affect the overall performance of a Grade 7 student.

The chart below provides an overview of how the demographics and factors contributing to freshmen students will influence each capacity and ability to understand the mathematical process and the nature of mathematics that influence the learning outcomes. The researchers have used the I.P.O. format to help identify the process of the study.

Figure 1. Research Paradigm of the Study



As seen in the figure, it has three parts: Input, Process, and the Output. These three are important to the study for these show the processes needed to complete it. The Input focuses on the demographic profile of the respondents and the data needed in the beginning of the study. The Process focuses on the process of gathering the data needed for the study such as using surveys, and by factoring the data collected from it. The Output focuses on what the researchers expect to be the result of the input and the process.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

This chapter contains the research design, respondents of the study, research instruments, data gathering procedures and the statistical treatment of the data.

Research Design

The researchers have applied and utilized the descriptive method in this study as an online survey questionnaire was distributed to selected students of the Grade 7 students of the Philippine Emirates Private School about the "Factors affecting the Grade 7 students in Mathematics."

Another research method used is the quantitative method as the tabulating and tallying of the survey respondents and questionnaires was done in order to gather the data that is needed to be based on the answers of the Grade 7 students of the Philippine Emirates Private School.

Respondents

The researchers have chosen the students from the Grade 7 students of the Junior Highschool Department in the Philippine Emirates Private school through purposive sampling for the respondents were only from a single grade level. In addition to that, random sampling was used in order to determine which of the 70% of the population of that certain class will take the online survey.

Research Instrument

The researchers created an online survey checklist on google forms as a mechanism for obtaining information and to see their perspective in relation to the given list of questions. The survey was used to determine the opinion of each respondent corresponding to their answers. The survey can be seen on the Appendix part of the study. The survey contains the following:

- **Objective I: Demographic profile of the students,** objective one will contain information about the respondent's sex, section, age, if he/she receives sufficient education in school and if Household composition affects the Student's mindset in terms of learning Mathematics
- **Objective II: Difficulties faced by the students,** objective two will contain the difficulties faced by the students both physically, mentally and whether there are enough materials present.
- **Objective III: Student behaviors/ factors,** objective three will contain how the students themselves perform during their Math class.
- **Objective IV: Teaching Factors,** objective four contains what the students observes from their teachers.
- **Objective V: Environment Factors,** objective five contains external factors that affect the student during their Math class.
- **Objective VI: Possible Solutions,** objective six contains the possible solutions that may improve the performance of students.

Likert's Scale was also used to identify Verbal Descriptions (VD) for each weighted mean coming from the tallied responses of the students.

The Likert's Scales is:

The Likert's Scale is:

Scale	Verbal Description (VD)	Range of Values
4	Strongly Agree (SA)	3.26-4.00
3	Agree (A)	2.51-3.25
2	Disagree (D)	1.76-2.50
1	Strongly Disagree (SD)	1.00-1.75

As seen above, the verbal description would identify the range of values. It helped the researchers measure the students' opinions on each factor related to the study

Data Gather Procedure

The researchers chose the Grade 7 students of the Philippine Emirates Private School respectively through the use of random sampling. The researchers formulated an online survey checklist that would determine the factors that are affecting the performance of the Grade 7 students of the Philippine Emirates Private School. The questionnaire checklist was reviewed and revised multiple times by the researchers before being distributed among the respondents. The researchers had to approach the class of Grade 7 Humility & Fortitude during their vacant periods and administer the survey to the chosen students. After collecting all the completed online survey checklist, the

researchers tallied, gathered all the data needed to for the research. In addition, the researchers also handed-out letters of approval to every respective person concerned for the process of our research before proceeding with our online survey.

Statistical treatment of data

The researchers used some statistical tools to generate the right results for the data gathered. The following statistical tools that the researchers used were:

1. **Slovin's Formula**. This formula was used to get the sample size of each grade level with the use of the total number of population (N) of the grade 7 high school students.

   The formula is:

$$n = \frac{N}{1 + Ne^2}$$

   Where:

   n = sample size

   N= total population

   e = error margin/ margin of error

2. **Frequency and Percentage**. This formula was used to get the data for the demographic profile of the participants and their interests in Mathematics.

The formula is:

$$\% = \frac{f}{n} * 100$$

where:

%=percentage

f = frequency

n = total number of respondents

3. **Weighted Mean.** This formula was mainly used to get the mean (General Average) in the data that has been gathered in the survey conducted by the researchers.

The formula is:

$$\bar{X} = \frac{wx_1 + wx_2 + wx_3 + \cdots + wx_n}{N}$$

where:

$\bar{X}$ = Weighted Mean

W= weight of each response

X = number of responses

N = total number of cases

CHAPTER IV

PRESENTATION, ANALYSIS AND PRESENTATION OF DATA

This chapter solely focuses on presenting and analyzing the data that has been gathered from the surveys that have been given to the Grade 7 students of the Philippine Emirates Private School. The gathered data will be interpreted and analyzed using the statistical treatment such as Frequency & Percentage and Average mean. It will also be presented in tables and graphs to thoroughly discuss the findings.

Characteristics of the respondents

This part of the survey will be discussing the respondent's age, section and sex. This part aims to identify the demographic profile of the students from both sections of Grade 7.

Table 4.1 Age

The respondents were asked to state their age. Table 4.1 presents the respondent's age and its frequency and percentage.

AGE	FREQUENCY	PERCENTAGE
12	16	50%
13	13	40.6%
14	3	9.4%

TOTAL:	32	100%

The respondents of the study were from the age range of 12 – 14. Majority of the respondents are from the age of 12 making 50% (16) followed by the age of 13 making 40.6% (13) and the remaining respondents are from the age 14 making 9.4% (3).

Table 4.2 Sex

The respondents were asked to state their sex. Table 4.2 presents the respondents sex and its frequency and percentage.

SEX	**FREQUENCY**	**PERCENTAGE**
MALE	17	53.1%
FEMALE	15	46.9%
TOTAL:	32	100%

The respondents of the study were both male and female only. Majority of the respondents are males making 53.1% (17) of the total respondent population and females making the remaining 46.9% (15) of the population.

Table 4.3 Section

The respondents of the study were asked to state their sections. Table 4.3 presents the respondents section and its frequency and percentage.

SECTION	**FREQUENCY**	**PERCENTAGE**
FORTITUDE	15	46.9%
HUMILITY	17	53.1%
TOTAL:	32	100%

The respondents of the study were taken from the 2 sections of the Grade 7. Majority of the students are from the section Humility making 53.1% (17) meanwhile the remaining students are from the section Fortitude making 46.9% (15).

Table 4.4 Sufficient education

The respondents of the study were asked to answer the following questions. Table 4.4 presents whether the respondents receive sufficient education in school, their frequency, their weighted mean and verbal description.

"I receive sufficient education in School."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	8	32	103/32 = 3.218	Agree
Agree (3)	23	69		
Disagree (2)	1	2		
Strongly Disagree (1)	0	0		
TOTAL	32	103		

Based on the tallied results, eight (8) of the selected grade 7 respondents answered "Strongly-Agree", twenty-three (23) answered "Agree", one (1) answered "Disagree" and none answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 3.218 wherein is considered to have the verbal description and scale of "Agree".

Table 4.5 Household Composition

The respondents of the study were asked to answer the following questions. Table 4.5 presents whether household composition affects the Student's mindset in terms of learning Mathematics, their frequency, their weighted mean and verbal description.

"Household composition affects the Student's mindset in terms of learning Mathematics."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	4	16	97/32 = 3.031	Agree
Agree (3)	25	75		
Disagree (2)	3	6		
Strongly Disagree (1)	0	0		
TOTAL	32	97		

Based on the tallied results, four (4) of the selected grade 7 respondents answered “Strongly-Agree”, twenty-five (25) answered “Agree”, three (3) answered “Disagree” and none answered “Strongly-Disagree”. With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 3.031 wherein is considered to have the verbal description and scale of “Agree”.

Difficulties faced by the students

This will the part that will further discuss and interpret the gathered data. This will help the researchers identify the difficulties faced by the students. This section of the survey will contain statements related to the topic, it also includes Likert's scale questions

Table 4.6

The respondents of the study were asked to answer the following questions. Table 4.6 presents whether the subject, Mathematics, is particularly difficult to understand, their frequency, their weighted mean and verbal description.

"The subject, Mathematics, is particularly difficult to understand."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	2	8	92/32 = 2.875	Agree
Agree (3)	25	75		
Disagree (2)	4	8		
Strongly Disagree (1)	1	1		
TOTAL	32	92		

Based on the tallied results, two (2) of the selected grade 7 respondents answered "Strongly-Agree", twenty-five (25) answered "Agree", four (4) answered "Disagree" and one (1) answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 2.875 wherein is considered to have the verbal description and scale of "Agree"

Table 4.7

The respondents of the study were asked to answer the following questions. Table 4.7 presents whether there are sufficient learning material present, their frequency, their weighted mean and verbal description

"There are sufficient learning materials present."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	6	24	100/32 = 3.125	Agree
Agree (3)	24	72		
Disagree (2)	2	4		
Strongly Disagree (1)	0	0		
TOTAL	32	100		

Based on the tallied results, six (6) of the selected grade 7 respondents answered "Strongly-Agree", twenty-four (24) answered "Agree", two (2) answered "Disagree" and none answered "Strongly-Disagree". With the gathered

data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 3.125 wherein is considered to have the verbal description and scale of "Agree"

Table 4.8

The respondents of the study were asked to answer the following questions. Table 4.8 presents whether physical abilities hinder a student's learning, their frequency, their weighted mean and verbal description

"Physical disabilities hinder a student's learning."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	2	8	82/32 = 2.562	Agree
Agree (3)	17	51		
Disagree (2)	10	20		
Strongly Disagree (1)	3	3		
TOTAL	32	82		

Based on the tallied results, two (2) of the selected grade 7 respondents answered “Strongly-Agree”, seventeen (17) answered “Agree”, ten (10) answered “Disagree” and three (3) answered “Strongly-Disagree”. With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 2.565 wherein is considered to have the verbal description and scale of “Agree”

Table 4.9

The respondents of the study were asked to answer the following questions. Table 4.9 presents whether the Student's experiencing mental stress during the discussion leads to disinterest, their frequency, their weighted mean and verbal description

“Student's experiencing mental stress during the discussion leads to disinterest.”				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**

Strongly Agree (4)	10	40	99/32 = 3.093	Agree
Agree (3)	16	48		
Disagree (2)	5	10		
Strongly Disagree (1)	1	1		
TOTAL	32	99		

Based on the tallied results, ten (10) of the selected grade 7 respondents answered "Strongly-Agree", sixteen (16) answered "Agree", five (5) answered "Disagree" and one (1) answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 3.093 wherein is considered to have the verbal description and scale of "Agree"

Table 4.10

The respondents of the study were asked to answer the following questions. Table 4.10 presents whether mental fatigue affects the student's comprehension or

understanding of the lesson, their frequency, their weighted mean and verbal description

"Mental fatigue affects the student's comprehension or understanding of the lesson?"				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	11	44	98/32 = 3.062	Agree
Agree (3)	14	42		
Disagree (2)	5	10		
Strongly Disagree (1)	2	2		
TOTAL	32	62		

Based on the tallied results, eleven (11) of the selected grade 7 respondents answered "Strongly-Agree", fourteen (14) answered "Agree", five (5) answered "Disagree" and two (2) answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean

by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 3.062 wherein is considered to have the verbal description and scale of "Agree"

Table 4.11

The respondents of the study were asked to answer the following questions. Table 4.11 presents whether Deficiency are faced by the students in coping up with their lessons in Mathematics, their frequency, their weighted mean and verbal description

"Deficiency are faced by the students in coping up with their lessons in Mathematics."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	3	12	95/32 = 2.968	Agree
Agree (3)	25	75		
Disagree (2)	4	8		
Strongly Disagree (1)	0	0		

TOTAL	32	95		

Based on the tallied results, three (3) of the selected grade 7 respondents answered "Strongly-Agree", twenty-five (25) answered "Agree", four (4) answered "Disagree" and none answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 2.968 wherein is considered to have the verbal description and scale of "Agree"

Factors that affects the student's behaviors

This will further discuss and interpret the gathered data. This will help the researchers identify the common student factors affecting the mathematical performance of grade 7 students. This section of the survey will contain statements related to the topic, which includes Likert's scale questions.

Table 4.12

The respondents of the study were asked to answer the following questions. Table 4.12 presents whether the respondents pay attention to the Math teacher

whenever he/she discusses their frequency, their weighted mean and verbal description

"I pay attention to the Math teacher whenever he/she discusses."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	8	32	101/32 = 3.156	Agree
Agree (3)	21	63		
Disagree (2)	3	6		
Strongly Disagree (1)	0	0		
TOTAL	32	101		

Based on the tallied results, eight (8) of the selected grade 7 respondents answered "Strongly-Agree", twenty-one (21) answered "Agree", three (3) answered "Disagree" and none answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both

frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 3.156 wherein is considered to have the verbal description and scale of "Agree"

Table 4.13

The respondents of the study were asked to answer the following questions. Table 4.12 presents whether the respondents develop skills in logical thinking and higher cognitive skills such as reasoning and remembering, their frequency, their weighted mean and verbal description

"I develop skills in logical thinking and higher cognitive skills such as reasoning and remembering."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	4	16	99/32 = 3.093	Agree
Agree (3)	27	81		
Disagree (2)	1	2		
Strongly Disagree (1)	0	0		
TOTAL	32	99		

Based on the tallied results, four (4) of the selected grade 7 respondents answered "Strongly-Agree", twenty-five (25) answered "Agree", four (4) answered "Disagree" and none answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 3.093 wherein is considered to have the verbal description and scale of "Agree"

Table 4.14

The respondents of the study were asked to answer the following questions. Table 4.14 presents whether the respondents have the passion of learning the subject itself, their frequency, their weighted mean and verbal description

"I have the passion of learning the subject itself."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	4	16		
Agree (3)	17	51		

Disagree (2)	11	22	89/32 = 2.781	Agree
Strongly Disagree (1)	0	0		
TOTAL	32	89		

Based on the tallied results, three (3) of the selected grade 7 respondents answered "Strongly-Agree", twenty-five (25) answered "Agree", four (4) answered "Disagree" and none answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 2.781 wherein is considered to have the verbal description and scale of "Agree"

Table 4.15

The respondents of the study were asked to answer the following questions. Table 4.15 presents whether the respondents have a growth mindset that allows them to understand mathematics that in, their frequency, their weighted mean and verbal description

"I have a growth mindset that increases allows me to understand Mathematics."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	5	20	91/32 = 2.843	Agree
Agree (3)	17	51		
Disagree (2)	10	20		
Strongly Disagree (1)	0	0		
TOTAL	32	91		

Based on the tallied results, three (3) of the selected grade 7 respondents answered "Strongly-Agree", seventeen (17) answered "Agree", ten (10) answered "Disagree" and none answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 2.843 wherein is considered to have the verbal description and scale of "Agree"

Table 4.16

The respondents of the study were asked to answer the following questions. Table 4.12 presents whether the respondents dislike the subject to the difficulty and impression it gives out, their frequency, their weighted mean and verbal description

"I dislike the subject due to the difficulty and impression it gives out."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	3	12	72/32 = 2.25	Agree
Agree (3)	8	24		
Disagree (2)	15	30		
Strongly Disagree (1)	6	6		
TOTAL	32	72		

Based on the tallied results, three (3) of the selected grade 7 respondents answered "Strongly-Agree", eight (8) answered "Agree", fifteen (15) answered

"Disagree" and six (6) answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 2.843 wherein is considered to have the verbal description and scale of "Agree"

Table 4.17

The respondents of the study were asked to answer the following questions. Table 4.17 presents whether the respondents were incompetent in taking down notes, their frequency, their weighted mean and verbal description

"I am incompetent on taking down notes."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	2	8	80/32 = 2.5	Agree
Agree (3)	15	45		
Disagree (2)	12	24		
Strongly Disagree (1)	3	3		

TOTAL	32	80		

Based on the tallied results, two (2) of the selected grade 7 respondents answered “Strongly-Agree”, fifteen (15) answered “Agree”, twelve (12) answered “Disagree” and three (3) answered “Strongly-Disagree”. With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 2.5 wherein is considered to have the verbal description and scale of “Agree”

Teaching Performance as per observed by the students

This will further discuss and interpret the gathered data. This will help the researchers identify the common teacher factors affecting the mathematical performance of grade 7 students. This section of the survey will contain statements related to the topic, which includes Likert's scale questions.

Table 4.18

The respondents of the study were asked to answer the following questions. Table 4.18 presents whether the teacher teaches with passion and with interest during class, their frequency, their weighted mean and verbal description

"My teacher teaches with passion and with interest for the benefit of the whole class."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	17	68	112/32 =3.5	Strongly Agree
Agree (3)	14	42		
Disagree (2)	1	2		
Strongly Disagree (1)	0	0		
TOTAL	32	112		

Based on the tallied results, seventeen (17) of the selected Grade 7 respondents answered "Strongly-agree", fourteen (14) answered "Agree", one (1) answered "Disagree" and none answered "Strongly-disagree". With the gathered data, the researchers the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and the scale of the frequency itself. Therefore, it gives us a weighted mean of 3.5 wherein is considered to have the verbal description and the scale of "Strongly-Agree".

Table 4.19

The respondents of the study were asked to answer the following questions. Table 4.19 presents whether the teacher encourages the students in learning and doing better in Mathematics, their frequency, their weighted mean and verbal description

"My teacher encourages the students in learning and doing better in Mathematics."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	17	68	107/32 = 3.343	Strongly Agree
Agree (3)	12	36		
Disagree (2)	2	2		
Strongly Disagree (1)	1	1		
TOTAL	32	107		

Based on the tallied results, seventeen (17) of the selected Grade 7 respondents answered "Strongly-agree", twelve (12) answered "Agree", two (2)

answered "Disagree" and one (1) answered "Strongly-disagree". With the gathered data, the researchers the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and the scale of the frequency itself. Therefore, it gives us a weighted mean of 3.343 wherein is considered to have the verbal description and the scale of "Strongly-Agree".

Table 4.20

The respondents of the study were asked to answer the following questions. Table 4.20 presents whether the teacher gives the appropriate and challenging task that helps the student improve and learn more, their frequency, their weighted mean and verbal description.

"My teacher gives the appropriate and challenging task that helps the student improve and learn more"				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	9	36		
Agree (3)	23	69		

Disagree (2)	0	0	105/32 = 3.281	Strongly Agree
Strongly Disagree (1)	0	0		
TOTAL	32	105		

Based on the tallied results, nine (9) of the selected Grade 7 respondents answered "Strongly-agree", twenty-three (23) answered "Agree", no one answered "Disagree" and none answered "Strongly-disagree". With the gathered data, the researchers the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and the scale of the frequency itself. Therefore, it gives us a weighted mean of 1 wherein is considered to have the verbal description and the scale of "Strongly- Agree".

Table 4.21

The respondents of the study were asked to answer the following questions. Table 4.21 presents whether the teacher has a good relationship between the students, their frequency, their weighted mean and verbal description

"My teacher has a good relationship between the students."

Scale (S)	Frequency (F)	S (f)	Weighted Mean	Verbal Description
Strongly Agree (4)	18	72	113/32 = 3.531	Strongly Agree
Agree (3)	13	39		
Disagree (2)	1	2		
Strongly Disagree (1)	0	0		
TOTAL	32	113		

Based on the tallied results, eighteen (18) of the selected Grade 7 respondents answered "Strongly-agree", thirteen (13) answered "Agree", one (1) answered "Disagree" and none answered "Strongly-disagree". With the gathered data, the researchers the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and the scale of the frequency itself. Therefore, it gives us a weighted mean of 3.531 wherein is considered to have the verbal description and the scale of "Strongly-Agree".

Table 4.22

The respondents of the study were asked to answer the following questions. Table 4.22 presents whether the communicates well and delivers the necessary knowledge to the students by the given topics, their frequency, their weighted mean and verbal description

"My teacher communicates well and delivers the necessary knowledge to the students by the given topics."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	16	64	112/32 = 3.5	Strongly Agree
Agree (3)	16	48		
Disagree (2)	0	0		
Strongly Disagree (1)	0	0		
TOTAL	32	112		

Based on the tallied results, sixteen (16) of the selected Grade 7 respondents answered "Strongly-agree", sixteen (16) answered "Agree", none answered

"Disagree" and none answered "Strongly-disagree". With the gathered data, the researchers the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and the scale of the frequency itself. Therefore, it gives us a weighted mean of 3.5 wherein is considered to have the verbal description and the scale of "Strongly- Agree".

Table 4.23

The respondents of the study were asked to answer the following questions. Table 4.23 presents whether the teacher considers every student as equal with everyone else, their frequency, their weighted mean and verbal description

"My teacher considers every student as equal with everyone else."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	18	72		
Agree (3)	11	33		

Disagree (2)	2	4	100/32 = 3.437	Strongly Agree
Strongly Disagree (1)	1	1		
TOTAL	32	110		

Based on the tallied results, eighteen (18) of the selected Grade 7 respondents answered "Strongly-agree", eleven (11) answered "Agree", two (2) answered "Disagree" and one (1) answered "Strongly-disagree". With the gathered data, the researchers the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and the scale of the frequency itself. Therefore, it gives us a weighted mean of 3.437 wherein is considered to have the verbal description and the scale of "Strongly-Agree".

Environmental Factors

This will further discuss and interpret the gathered data. This will help the researchers identify the environmental factors affecting the mathematical performance of grade 7 students. This section of the survey will contain statements related to the topic, which includes Likert's scale questions.

Table 4.24

The respondents of the study were asked to answer the following questions. Table 4.24 presents whether the school is conductive for learning, their frequency, their weighted mean and verbal description

"The school is conductive to learning."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	5	20	99/32 = 3.093	Agree
Agree (3)	25	75		
Disagree (2)	2	4		
Strongly Disagree (1)	0	0		
TOTAL	32	99		

Based on the tallied results, five (5) of the selected Grade 7 respondents answered "Strongly-agree", twenty-five (25) answered "Agree", two (2) answered "Disagree" none answered "Strongly-disagree". With the gathered data, the

researchers the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and the scale of the frequency itself. Therefore, it gives us a weighted mean of 3.093 wherein is considered to have the verbal description and the scale of "Agree".

Table 4.25

The respondents of the study were asked to answer the following questions. Table 4.25 presents whether the resources and facilities are sufficient enough for the students to learn properly and efficiently, their frequency, their weighted mean and verbal description.

"The resources and facilities are sufficient enough for the students to learn properly and efficiently."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	6	12		
Agree (3)	23	69		
Disagree (2)	3	6		Agree

Strongly Disagree (1)	0	0	87/32 = 2.718	
TOTAL	32	87		

Based on the tallied results, six (6) of the selected Grade 7 respondents answered "Strongly-agree", twenty-three (23) answered "Agree", three (3) answered "Disagree" and none answered "Strongly-disagree". With the gathered data, the researchers the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and the scale of the frequency itself. Therefore, it gives us a weighted mean of 2.718 wherein is considered to have the verbal description and the scale of "Agree".

Table 4.26

The respondents of the study were asked to answer the following questions. Table 4.26 presents whether the school has different learning programs like online program are available, their frequency, their weighted mean and verbal description

"My school has different learning programs like online program available"				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	6	24	89/32 = 2.781	Agree
Agree (3)	16	38		
Disagree (2)	7	14		
Strongly Disagree (1)	3	3		
TOTAL	32	89		

Based on the tallied results, six (6) of the selected Grade 7 respondents answered "Strongly-agree", sixteen (16) answered "Agree", seven (7) answered "Disagree" and three (3) answered "Strongly-disagree". With the gathered data, the researchers the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and the scale of the frequency itself. Therefore, it gives us a weighted mean of 2.781 wherein is considered to have the verbal description and the scale of "Agree".

Table 4.27

The respondents of the study were asked to answer the following questions. Table 4.27 presents whether Information should come only from books within the four (4) walls of the classroom, their frequency, their weighted mean and verbal description

"Information should come only from books within the four (4) walls of the classroom."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	4	16	82/32 = 2.437	Disagree
Agree (3)	11	33		
Disagree (2)	12	24		
Strongly Disagree (1)	5	5		
TOTAL	32	82		

Based on the tallied results, four (4) of the selected Grade 7 respondents answered "Strongly-agree", eleven (11) answered "Agree", twelve (12) answered

"Disagree" and five (5) answered "Strongly-disagree". With the gathered data, the researchers the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and the scale of the frequency itself. Therefore, it gives us a weighted mean of 2.437 wherein is considered to have the verbal description and the scale of "Disagree".

Table 4.28

The respondents of the study were asked to answer the following questions. Table 4.28 presents whether the school itself is in line with the proper topics and curriculum, their frequency, their weighted mean and verbal description

"The school itself is in line with the proper topics and curriculum."				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	11	44		
Agree (3)	17	51		

Disagree (2)	3	6	102/32 = 3.187	Agree
Strongly Disagree (1)	1	1		
TOTAL	32	102		

Based on the tallied results, eleven (11) of the selected Grade 7 respondents answered "Strongly-agree", seventeen (17) answered "Agree", three (3) answered "Disagree" and one (1) answered "Strongly-disagree". With the gathered data, the researchers the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and the scale of the frequency itself. Therefore, it gives us a weighted mean of 3.1817 wherein is considered to have the verbal description and the scale of "Agree".

Table 4.29

The respondents of the study were asked to answer the following questions. Table 4.29 presents whether extracurricular activities unrelated to Mathematics affects the students learning in Mathematics, their frequency, their weighted mean and verbal description

"Extracurricular activities unrelated to Mathematics affects the students learning in Mathematics"				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	10	40	77/32 = 2.406	Disagree
Agree (3)	5	15		
Disagree (2)	10	20		
Strongly Disagree (1)	2	2		
TOTAL	32	77		

Based on the tallied results, ten (10) of the selected Grade 7 respondents answered "Strongly-agree", five (5) answered "Agree", ten (10) answered "Disagree" and two (2) answered "Strongly-disagree". With the gathered data, the researchers the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and the scale of the frequency itself. Therefore, it gives us a weighted mean of 2.406 wherein is considered to have the verbal description and the scale of "Disagree".

Possible solutions that will improve the mathematical performance

This will further discuss and interpret the gathered data. This will help the researchers identify the possible solutions that may improve the mathematical performance of grade 7 students. This section of the survey will contain statements related to the topic, which includes Likert's scale questions.

Table 4.30

The respondents of the study were asked to answer the following questions. Table 4.30 presents whether the school needs to implement school programs to improve the mathematical performance of students, their frequency, their weighted mean and verbal description

"The school needs to implement school programs to improve the mathematical performance of students"				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	10	40		
Agree (3)	20	60		
Disagree (2)	0	0		Agree

Strongly Disagree (1)	2	2	102/32 = 3.187	
TOTAL	32	102		

Based on the tallied results, ten (10) of the selected grade 7 respondents answered "Strongly-Agree", twenty (20) answered "Agree", no one answered "Disagree" and two (2) answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 3.187 wherein is considered to have the verbal description and scale of "Agree".

Table 4.31

The respondents of the study were asked to answer the following questions. Table 4.31 presents whether the teachers should be oriented to improve their teaching capabilities, their frequency, their weighted mean and verbal description

"The teachers should be oriented to improve their teaching capabilities"

Scale (S)	Frequency (F)	S (f)	Weighted Mean	Verbal Description
Strongly Agree (4)	6	24	99/32 = 3.093	Agree
Agree (3)	24	72		
Disagree (2)	1	2		
Strongly Disagree (1)	1	1		
TOTAL	32	99		

Based on the tallied results, six (6) of the selected grade 7 respondents answered "Strongly-Agree", twenty-four (24) answered "Agree", one (1) answered "Disagree" and one (1) answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 3.093 wherein is considered to have the verbal description and scale of "Agree".

Table 4.32

The respondents of the study were asked to answer the following questions. Table 4.32 presents whether the teaching paraphernalia are in need of improvement, their frequency, their weighted mean and verbal description.

"The teaching paraphernalia are in need of improvement"				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	4	16	94/32 = 2.937	Agree
Agree (3)	24	72		
Disagree (2)	3	6		
Strongly Disagree (1)	1	1		
TOTAL	32	94		

Based on the tallied results, four (4) of the selected grade 7 respondents answered "Strongly-Agree", twenty-four (24) answered "Agree", three (3) answered "Disagree" and one (1) answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale

which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 2.937 wherein is considered to have the verbal description and scale of "Agree".

Table 4.33

The respondents of the study were asked to answer the following questions. Table 4.33 presents whether the environment where the students are learning should be improved, their frequency, their weighted mean and verbal description

"The environment where the students are learning should be improved"				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	9	36	100/32 = 3.125	Agree
Agree (3)	19	57		
Disagree (2)	3	6		
Strongly Disagree (1)	1	1		
TOTAL	32	100		

Based on the tallied results, nine (9) of the selected grade 7 respondents answered "Strongly-Agree", nineteen (19) answered "Agree", three (3) answered "Disagree" and one (1) answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 3.125 wherein is considered to have the verbal description and scale of "Agree".

Table 4.34

The respondents of the study were asked to answer the following questions. Table 4.34 presents whether there is a need to change the way Mathematics is taught to improve the Mathematical performance of students, their frequency, their weighted mean and verbal description

"There is a need to change the way Mathematics is taught to improve the Mathematical performance of students"				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**

Strongly Agree (4)	8	32	100/32 = 3.125	Agree
Agree (3)	20	60		
Disagree (2)	4	8		
Strongly Disagree (1)	0	0		
TOTAL	32	100		

Based on the tallied results, eight (8) of the selected grade 7 respondents answered "Strongly-Agree", twenty (20) answered "Agree", four (4) answered "Disagree" and no one answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 3.125 wherein is considered to have the verbal description and scale of "Agree"

Table 4.35

The respondents of the study were asked to answer the following questions. Table 4.35 presents whether the students should be tested more to determine their capabilities on their mathematical performance, their frequency, their weighted mean and verbal description

"The students should be tested more to determine their capabilities on their mathematical performance				
Scale (S)	**Frequency (F)**	**S (f)**	**Weighted Mean**	**Verbal Description**
Strongly Agree (4)	8	32	100/32 = 3.125	Agree
Agree (3)	20	60		
Disagree (2)	4	8		
Strongly Disagree (1)	0	0		
TOTAL	32	100		

Based on the tallied results, eight (8) of the selected grade 7 respondents answered "Strongly-Agree", twenty (20) answered "Agree", four (4) answered

"Disagree" and no one answered "Strongly-Disagree". With the gathered data, the researchers multiplied the result of the frequency to the scale which comes up with the product of the two. Then afterwards calculating for the weighted mean by finding the quotient between the sum of the product of both frequency and scale and the frequency itself. Therefore, it gives a weighted mean of 3.125 wherein is considered to have the verbal description and scale of "Agree".

Interpretation of Findings

Based on the gathered data, the researchers have observed that the grade 7 students receive sufficient education in regards to mathematics and they also agree that household compositions affect the student's mindset in terms of learning Mathematics. The selected grade 7 students faced difficulty on the subject of mathematics, most notably is the subject is particularly difficult, mental stress and fatigue also took part in the difficulty faced by the respondents. The respondents also agreed that physical disabilities take part in learning the subject but in a good note, there are sufficient learning materials present in the school even though there are sufficient materials, the respondents are still having a hard time coping up with missed lessons. The students during their class in Mathematics are paying attention to their teacher, they have the passion of learning the subject and have a growth mindset that allows them to understand the subject but the respondents have agreed that they're incompetent in taking down notes and they agreed that they don't like the subject due to the difficulty and impression it gives

out. The teachers on the other hand as per observed by the respondents were passionate in teaching the subject, they also have a good relationship with the respondents, the teacher also encourages the respondents as well as give out appropriate and challenging tasks for their students. The environment is where the respondents mostly spend their time learning and according to the respondents the school is conductive to learning it contains sufficient resources and facilities to supplement its students. The school also contains different learning programs and is in line with the proper curriculum. Extracurricular activities on the other hand does not affect the respondents' mathematical performance and they have agreed that information should not only come inside the 4 walls of the classroom, that it can be obtained even outside the classroom. There are possible solutions to improve the mathematical performance of the students as a school still has imperfections that can be improved, the respondents' have agreed that the school and the learning environment are in need of improvement as well as the teachers and their teaching paraphernalia. The respondents also asked that they should be tested more to improve their performance and overall change the way Mathematics is taught to further improve the mathematical performance of the respondents. Mathematics is a lesson particularly difficult for all levels it causes mental stress and fatigue but mathematics is not all to blame because there are a lot of factors that affects the student's performance and these factors must be identified in order to asses if the

current situation between the students, teachers and the environment is overall in sync to allow the student's to have a greater mathematical performance.

Chapter 5

Summary, Conclusion and Recommendation

This chapter presents the summary of the findings, conclusions drawn, and finally, the recommendations based from the conclusions arrived at in the course of discussing and analyzing the data

Summary of the findings

This study entitled "**The Factors affecting the performance of the Grade 7 Students in Mathematics in the Philippine Emirates Private School**" which is composed of five (5) portions otherwise known as the chapters of the research. The Chapter 1 tackles on how certain factors affect the students in learning the subject of Mathematics, specifically in three (3) major components otherwise known as the student, teacher and school or environment factor. Moreover, the said chapter focuses on the background of the study and why the researchers have chosen to pursue this kind of study. The Chapter 2 on the other-hand indicates the related literatures and studies that aims to support the and strengthen the claim of the overall study. It also helps the researchers understand the claim of the authors that are correlated to the study. Chapter 3 talks about research design, respondents of the study, research instruments, data gathering procedures and the statistical treatment of the data. It shows how the researchers conducted the study and how the study is computed. It includes the formulas of Weighted Mean, Slovin's Formula and Frequency and Percentage. Chapter 4 on the other hand consists of the tabulated and tallied data received from the answers of the respondents surveyed. It's filled with all the corresponding responses with the scale provided.

It also has the respondent's characteristics and demographic profile. Lastly the Chapter 5, it focuses on the overall thesis which can be seen in the conclusion and summary. The recommendations can also be found here for the usage of future researchers.

Conclusions

The researchers have drawn conclusions based on the summary of findings the researchers have gathered all throughout the study. The study itself would be much strengthened if the "Neutral" option was present in the online questionnaire as the data would've been more accurate due to the respondents not having to be forced to pick "Agree" or "Disagree". Following to that, the Grade 7 students in the Philippine Emirates Private School receive sufficient education in school. The difficulty most Grade 7 students faced that leads them to poor mathematical performance is mental stress, the feeling of stress can lead to anxiety and in turn cause panic, tension, helplessness, distress, shame, inability to cope, sweaty palms, nervous stomach, difficulty breathing, and loss of ability to concentrate which can hinder the understanding of the student in Mathematics. . Based on the data gathered, the teacher factor was very effective for most of the support for it having a combined weighted mean and also because the teacher has a good relationship with the students scoring a 3.531 and verbal description of "Strongly Agree" which

has the biggest weighted mean over the other teacher factors. With that said, the results of teacher factor give Mathematics a good point of view in the study. The next factor, the environment factor had the high percentage following the teacher factor with a 2.759 combined weighted mean this leads to a positive impact towards the performance of the Grade 7 students as the school is in line with the proper curriculum with a 3.187 and verbal description of "Agree" which was the biggest weighted mean over the other environmental factors, this affects the substantial performance in mathematics for the overall school environment. Lastly, the student factor had a combined weighted mean of 2.7 which means the respondents are participative in class however the respondents also agreed that they are incompetent in taking down notes which poses a concern. As stated, they should work on their overall coordination not only through listening but also through performance wise. A series of solutions were presented towards the respondents wherein the school or facility needs to implement school programs to improve the mathematical performance of the students for this is the best solution towards the situation being faced by the students. With that, they could improve the state of the Grade 7 students for it would create new actions which may encourage them in learning more efficiently. The overall study focused on the Grade 7's improvement towards higher form of knowledge and their academics due to the fact that they're the bridge out of elementary.

Recommendations

After conducting the study and survey, the researchers have formulated these recommendations:

1. The school needs to implement school programs to improve the mathematical performance of students and to further enhance their knowledge so that they could perform and achieve higher grades in this subject.
2. The teacher should be oriented through weekly meetings or seminars to develop and improve their skills and qualities in teaching as well as their teaching capabilities.
3. The teaching equipment and apparatus are in need of improvement during a particular activity for the betterment of the student in their learnings.
4. The learning environment of the students' needs development for the students to be more determined upon their studies and in accomplishing goals.
5. The subject Mathematics is needed to be taught concisely and with clarity in a way that it would be easier for the students to comprehend the subject itself and for them to further develop their Mathematical performance.
6. The students are needed to be given an assessment and math question or problems to test out their knowledge and capabilities on their Mathematical

performance. Whether they have excelled especially on the lesson in which they find difficult to understand and analyze.

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Appendix A. Letter to Conduct the survey

LETTER OF REQUEST TO ADMINISTER THE QUESTIONNAIRE

January 2020

LALAINE G. RAGODON, MA Ed.
School Principal
Philippine Emirates Private School

Dear Mrs. Ragodon,

We, the researchers: **Alfredo S. Mandia III, Gef F. Guico** and **Charles Gabriel A. Salomeo of Grade 11 Einstein**, will conduct a study entitled **"The factors affecting the performance of the Grade 7 students in the Philippine Emirates Private School in Mathematics"** in partial fulfillment of the requirements of our Practical Research I, under the guidance of Mr. Henry P. Nadong.

In this regard, we would like to request your permission to conduct our survey within the school campus, Philippine Emirates Private School. Our respective respondents for the survey will come from Grade 7 students. The survey would only last about 30 minutes and would be arranged at a time convenient to the students' schedule. The information provided will be kept in utmost confidentiality and would be used only for academic purposes.

Your approval to conduct this survey would be highly appreciated by the researchers as this would affect the study. Thank you in advance for your interest and assistance with this research.

Respectfully yours,

Researchers:

Alfredo S. Mandia **Charles A. Salomeo**

Gef F. Guico

Received by:

LALAINE G. RAGODON, MA Ed.
School Principal

Noted by:

HENRY P. NADONG, MA Ed.
Subject Teacher

Appendix B. Letter to Administer the Questionnaire

LETTER OF REQUEST TO ADMINISTER THE QUESTIONNAIRE

JOSEPHINE C. DE GUIA. MA Elt.
Phase Coordinator
Philippine Emirates Private School

Dear Mrs. De Guia,

We, the researchers: **Alfredo S. Mandia III, Gef F. Guico** and **Charles Gabriel A. Salomeo of Grade 11 Einstein**, will conduct a study entitled **"The factors affecting the performance of the Grade 7 students in the Philippine Emirates Private School in Mathematics"** in partial fulfillment of the requirements of our Practical Research I, under the guidance of Mr. Henry P. Nadong.

In this regard, we would like to request your permission to conduct our survey within the school classrooms of both Grade 7 Fortitude and Humility. As said, our respective respondents for the survey will come from Grade 7 students. The survey would only last about 30 minutes and would be arranged at a time convenient to the students' schedule. The information provided will be kept in utmost confidentiality and would be used only for academic purposes.

Your approval to conduct this survey would be highly appreciated by the researchers as this would affect the study. Thank you in advance for your interest and assistance with this research.

Respectfully yours,

Researchers:

Alfredo S. Mandia **Charles A. Salomeo**

Gef F. Guico

Received by:

JOSEPHINE C. DE GUIA, MA Elt.
JHS/SHS Coordinator

Noted by:

LALAINE G. RAGODON, MA Ed.
School Principal

HENRY P. NADONG, MA Ed.
Subject Teacher

Appendix C. Letter to Administer the Questionnaire

LETTER OF REQUEST TO ADMINISTER THE QUESTIONNAIRE

January 2020

ARNEL T. TAGOTO
Intermediate Coordinator
Philippine Emirates Private School

Dear Mr.Tagoto,

We, the researchers: **Alfredo S. Mandia III, Gef F. Guico and Charles Gabriel A. Salomeo of Grade 11 Einstein**, will conduct a study entitled **"The factors affecting the performance of the Grade 7 students in the Philippine Emirates Private School in Mathematics"** in partial fulfillment of the requirements of our Practical Research I, under the guidance of Mr. Henry P. Nadong.

In this regard, we would like to request your permission to conduct our survey within the school computer lab. With your permission, we will be using the computer lab of the Intermediate level facilitated by Sir Melvin D. Ajoc. The survey would only last about 30 minutes and would be arranged at a time convenient to the students' schedule. The information provided will be kept in utmost confidentiality and would be used only for academic purposes.

Your approval to conduct this survey would be highly appreciated by the researchers as this would affect the study. Thank you in advance for your interest and assistance with this research.

Respectfully yours,

Researchers:

Alfredo S. Mandia **Charles A. Salomeo**

Gef F. Guico

Received by:

ARNEL T. TAGOTO
Intermediate Coordinator

Noted by:

LALAINE G. RAGODON, MA Ed.
School Principal

HENRY P. NADONG, MA Ed.
Subject Teacher

Appendix D. Letter to Administer the Questionnaire

LETTER OF REQUEST TO ADMINISTER THE QUESTIONNAIRE

Hannah A. Asperga
Adviser of Grade 7 - Fortitude
Philippine Emirates Private School

Dear Ms. Asperga,

We, the researchers: **Alfredo S. Mandia III, Gef F. Guico** and **Charles Gabriel A. Salomeo of Grade 11 Einstein**, will conduct a study entitled **"The factors affecting the performance of the Grade 7 students in the Philippine Emirates Private School in Mathematics"** in partial fulfillment of the requirements of our Practical Research I, under the guidance of Mr. Henry P. Nadong.

In this regard, we would like to request your permission to conduct our survey within the school classroom, Grade 7 - Fortitude. Our respective respondents for the survey will come from the Grade 7 students. The survey would only last about 30 minutes and would be arranged at a time convenient to the students' schedule. The information provided will be kept in utmost confidentiality and would be used only for academic purposes.

Your approval to conduct this survey would be highly appreciated by the researchers as this would affect the study. Thank you in advance for your interest and assistance with this research.

Respectfully yours,

Researchers:

Alfredo S. Mandia **Charles A. Salomeo**

Gef F. Guico

Received by:

Hannah A. Asperga
Adviser of Grade 7 - Fortitude

Noted by:

LALAINE G. RAGODON, MA Ed.
School Principal

JOSEPHINE DE GUIA, MA Elt.
JHS/SHS Coordinator

HENRY P. NADONG, MA Ed.
Subject Teacher

Appendix E. Letter to Administer the Questionnaire

LETTER OF REQUEST TO ADMINISTER THE QUESTIONNAIRE

Lord Nell H. Feliciano
Adviser of Grade 7 – Humility
Philippine Emirates Private School

Dear Mr. Feliciano,

We, the researchers: **Alfredo S. Mandia III, Gef F. Guico** and **Charles Gabriel A. Salomeo of Grade 11 Einstein**, will conduct a study entitled **"The factors affecting the performance of the Grade 7 students in the Philippine Emirates Private School in Mathematics"** in partial fulfillment of the requirements of our Practical Research I, under the guidance of Mr. Henry P. Nadong.

In this regard, we would like to request your permission to conduct our survey within the school classroom, Grade 7 Humility. Our respective respondents for the survey will come from the Grade 7 students. The survey would only last about 30 minutes and would be arranged at a time convenient to the students' schedule. The information provided will be kept in utmost confidentiality and would be used only for academic purposes.

Your approval to conduct this survey would be highly appreciated by the researchers as this would affect the study. Thank you in advance for your interest and assistance with this research.

Respectfully yours,

Researchers:

Alfredo S. Mandia **Charles A. Salomeo**

Gef F. Guico

Received by:

Sir. Lord Nell H. Feliciano
Adviser or Grade 7 - Humility

Noted by:

LALAINE G. RAGODON, MA Ed.
School Principal

JOSEPHINE DE GUIA, MA Elt.
JHS/SHS Coordinator

HENRY P. NADONG, MA Ed.
Subject Teacher

Appendix F. Letter to Administer the Questionnaire

LETTER OF REQUEST TO ADMINISTER THE QUESTIONNAIRE

January 2020

MELVIN D. AJOC
Computer Laboratory Facilitator
Philippine Emirates Private School

Dear Mr. Ajoc,

We, the researchers: **Alfredo S. Mandia III, Gef F. Guico** and **Charles Gabriel A. Salomeo of Grade 11 Einstein**, will conduct a study entitled **"The factors affecting the performance of the Grade 7 students in the Philippine Emirates Private School in Mathematics"** in partial fulfillment of the requirements of our Practical Research I, under the guidance of Mr. Henry P. Nadong.

In this regard, we would like to request your permission to conduct our survey in the computer laboratory. We will be needing around 12 computers provided with wi-fi connection. Our respective respondents for the survey will come from Grade 7 students. The survey would only last about 10-15 minutes and would be arranged at a time convenient to the students' schedule as well as the availability of the laboratory.

Your approval to conduct this survey would be highly appreciated by the researchers as this would affect the study. Thank you in advance for your interest and assistance with this research.

Respectfully yours,

Researchers:

Alfredo S. Mandia **Charles A. Salomeo**

Gef F. Guico

Received by:

MELVIN D. AJOC
Computer Laboratory Facilitator

Noted by:

LALAINE G. RAGODON, MA Ed.
School Principal

HENRY P. NADONG, MA Ed.
Subject Teacher

ARNEL T. TOGOTO
Intermediate Coordinator

Appendix G. Letter to Acquire Student Profile

LETTER OF REQUEST TO ACQUIRE STUDENT PROFILEs

MILAGROS S. OBAOB
School Registrar
Philippine Emirates Private School

Dear Ms. Obaob,

We, the researchers: **Alfredo S. Mandia III, Gef F. Guico** and **Charles Gabriel A. Salomeo of Grade 11 Einstein**, will conduct a study entitled **"The factors affecting the performance of the Grade 7 students in the Philippine Emirates Private School in Mathematics"** in partial fulfillment of the requirements of our Practical Research I, under the guidance of Mr. Henry P. Nadong.

In this regard, we would like to request your permission to provide us some information about the student profiles needed in this survey. Our respective respondents for the survey will come from Grade 7 students. The information provided will be kept in utmost confidentiality and would be used only for academic purposes.

Your approval to give us access to these information would be highly appreciated by the researchers as this would affect the study. Thank you in advance for your interest and assistance with this research.

Respectfully yours,

Researchers:

Alfredo S. Mandia **Charles A. Salomeo**

Gef F. Guico

Received by:

MILAGROS S. OBAOB
School Registrar

Noted by:

LALAINE G. RAGODON, MA Ed.
School Principal

HENRY P. NADONG, MA Ed.
Subject Teacher

SURVEY QUESTIONNAIRE

SECTION 1: Demographic Profile

Name:

Sex:

Section:

Age:

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
I receive sufficient education in School				

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
Household composition affects the Student's mindset in terms of learning Mathematics				

SECTION 2: Difficulties Encountered

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
The subject, Mathematics, is particularly difficult to understand				
There are sufficient learning materials present				
Physical disabilities hinder a student's learning				
Student's experiencing mental stress				

during the discussion leads to disinterest				
Mental fatigue affects the student's comprehension or understanding of the lesson?				
Deficiency are faced by the students in coping up with their lessons in Mathematics				

SECTION 3: Student Factors

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
I pay attention to the Math teacher whenever he/she discusses				
I develop skills in logical thinking and higher cognitive skills such as reasoning and remembering				
I have the passion of learning the subject itself				
I have a growth mindset that increases allows me to understand Mathematics				
I dislike the subject due to the difficulty and impression it gives out				

I am incompetent on taking down notes				

SECTION 4: Teacher Factors

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
My teacher teaches with passion and with interest for the benefit of the whole class				
My teacher encourages the students in learning and doing better in Mathematics				
My teacher gives the appropriate and challenging task that helps the student improve and learn more				
My teacher has a good relationship between the students				
My teacher communicates well and delivers the necessary knowledge to students by the given topics				
My teacher considers every student as equal with everyone else				

SECTION 5: Environment Factors

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
The school is conductive to learning				
The resources and facilities are sufficient enough for the students to learn properly and efficiently				
My school has different learning programs like online program are available				
Information should come only from books within the 4 walls of the classroom				
The school itself is in line with the proper topics and curriculum				
Extracurricular activities unrelated to Mathematics affects the students' learning in Mathematics				

SECTION 6: Solutions

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
The school needs to implement school programs to improve the mathematical				

performance of students				
The teachers should be oriented to improve their teaching capabilities				
The teaching paraphernalia are in need of improvement				
The environment where the student is learning should be improved				
There is a need to change the way Mathematics is taught to improve the Mathematical performance of students				
The students should be tested more to determine their capabilities on their mathematical performance				

CHARLES ALONZO SALOMEO

Mobile Number: 056 – 146 - 7116

E-mail Address: charlessalomeo@gmail.com

EDUCATIONAL ATTAINMENT

Secondary Education
Year: 2019 - 2020
Place: Philippine Emirates Private School

Secondary Education
Year: 2017-2019
Place: The Philippine Global School

Elementary Education
Year: 2009-2017
Place: Tanza Child Development Centre

Primary Education
Year: 2007-2009
Place: Tanza Child Development Centre

ACHIEVEMENTS

- Grade 1 to Grade 8 : First Honor
- Valedictorian at Grade 6
- Participant of Science Competition at GMA, Cavite
- Spelling quiz bee champion

- Math quiz bee champion
- Science quiz bee champion
- Bible quiz bee champion
- 1st at TCDC robotic competition
- Grade 9 honors
- Grade 10 honors
- Best in Math
- Best in Science
- MVP at volleyball competition grade 6
- 1st place in a badminton competition

SKILLS

- Capable of playing sports primarily ball games
- Capable of mind games
- Capable of fluently speaking English and Filipino •
- Capable of reading fluently and with clarity
- Capable of problem solving
- Capable of understanding lessons and topics easily
- Capable of being independent

Organization

- Youth for Christ
- Altar server at St. Joseph
- A Student of PEPS
- Innovators

PERSONAL INFORMATION

Birth Date: December 19, 2002

Birth Place: Tanza, Cavite, Philippines

Nationality: Filipino

Name of Father: Charlies Buendia Salomeo

Name of Mother: Adelyn Alonzo Salomeo

GEF MARLO FELIPE GUICO

Mobile Number: 050 – 902 - 7137

E-mail Address: gefguico@gmail.com

EDUCATIONAL ATTAINMENT

Secondary Education

Year: 2019 - 2020

Place: Philippine Emirates Private School

Secondary Education

Year: 2014-2019

Place: The Philippine School , Baniyas East

Elementary Education

Year: 2009-2014

Place: Philippine National School

Primary Education

Year: 2007-2009

Place: Philippine National School

ACHIEVEMENTS

- Top achievers at Grade 6 & 7
- Grade 9 honors
- Best in Math

SKILLS

- Capable of playing sports primarily ball games
- Capable of board games
- Capable of having good communication
- Capable of reading fluently and with clarity
- Capable of playing instruments such as Drums or Guitar
- Capable of Dancing

Organization

- Youth in ANFGM (All Nations Full Gospel Ministry)
- A Student of PEPS

PERSONAL INFORMATION

Birth Date: June 26, 2003

Birth Place: Jose Reyes Memorial Hospital, Rizal Philippines

Nationality: Filipino

Name of Father: Marcelo Loyola Guico

Name of Mother: Floida Felipe Guico

ALFREDO SABADO MANDIA III

Mobile Number: 056 – 341 - 5583

E-mail Address: thirdmandia@gmail.com

EDUCATIONAL ATTAINMENT

Secondary Education

Year: 2019 - 2020

Place: Philippine Emirates Private School

Secondary Education

Year: 2014-2019

Place: The Philippine Global School, 21st Street Muroor, Abu Dhabi

Elementary Education

Year: 2009-2014

Place: Twenty First Century Private Academy, 21st Street Muroor, Abu Dhabi

Primary Education

Year: 2007-2009

Place: PISCO Private School

ACHIEVEMENTS

- Consecutive Achiever with Honors from Kindergarten II until Grade 10
- Best in Science (Elementary and Junior Highschool)

- Best in Social Studies (Elementary and Junior Highschool)
- 3 Year Consecutive School Chess Champion (Junior Highschool)
- Green-Audit and Innovation Champion and Title Holder
- Foundation Day Presentation Champions (Elementary)
- Eco-Summit Representative
- Eco-Summit Overall Best School
- 3 Consecutive Years of being President in Arts Club
- Consecutive officer in ICT club (Vice President and Secretary)
- Model Building in Science Champion
- Investigatory Project Most Recommended

SKILLS

- Capable of playing sports specifically Volleyball and Badminton
- Capable of board games especially chess and scrabble
- Capable of having good communication, fluent in English
- Capable of reading fluently and with clarity
- Capable of playing instruments such as Piano and Guitar
- Capable of Singing

Organization

- Innovators Club

- A Student of PEPS

PERSONAL INFORMATION

Birth Date: July 23, 2003

Birth Place: Philippines

Nationality: Filipino

Name of Father: Alfredo R. Mandia Jr.

Name of Mother: Maricel S. Mandia