

## Learning Attitude and Performance of Grade I Pupils in Math on Modular Distance Learning

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*Abstract* — Attitudes are psychological orientation developed as a result of one's experiences which influences a person's view of situations, objects people and how to respond to them either positively or negatively or favorably or unfavorably (Mensah et al, 2013). Attitudes are positive and negative views about a person, object, idea, and situation that influence individual choice of action and responses to challenges (Marianne & Elaine, 2015). Attitude towards mathematics presents a disposition towards an aspect of mathematics that has been acquired by an individual through his or her beliefs and experiences but which could be changed (2). Some authorities regard attitude towards Mathematics as just a like or dislike for Mathematics, while others extend the meaning to embrace beliefs, ability, and usefulness of Mathematics. During this time new normal learning modality, attitude towards Mathematics has been one of the challenges teachers look into, especially in Grade I, where pupils adjust to the situation. By using the modular distance learning modality, teachers are hesitant to know whether their pupils who are learning at home can understand the lessons. Thus, the researcher conducted this study in order to determine the significant relationship between the learning attitude and performance of Grade I pupils in Math in the implementation of modular distance learning modality. A proposed intervention plan was formulated based on the findings of the study. It was revealed in this study that the learning attitude of Grade I pupils in Math is positive and performance of pupils is fairly satisfactory. Likewise, this study found out a significant relationship between the learning attitude and performance of Grade I pupils in Math on modular distance learning modality. Thus, learning attitude predicts the performance of Grade I pupils in Math on modular distance learning modality.

*Keywords* — *Learning Attitude, Performance, Modular Distance Learning Modality, Math, Grade I Pupils*

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## I. Introduction

Learning mathematics does not only involve thinking and reasoning, it is dependent on the attitudes of the learners towards learning and mathematics (5). Han and Carpenter (3) state that attitudes consist of cognitive, affective and behavioral reactions that individuals display towards an object or the surrounding based on their feelings or interest. The cognitive component of attitude is what the individual thinks or believes about mathematics (6). The affective component of attitude is the individual's feeling or emotions associated with learning mathematics (4). Thus, the affective component is the source of driving the engagement of students towards mathematics. Furthermore, the affective aspect is also influenced by the belief formed from the cognitive component of attitude, which creates a mindset that becomes constant over time and influences the feelings of the students towards learning mathematics (4). As such, the cognitive and affective components of attitude are interrelated and deeply interact with each other (1).

The behavioral aspect of attitude is the tendency to respond in a certain way towards learning mathematics (6). Behavioral attitude is also influenced by affective attitude. Students feeling confident in doing mathematics is linked with being successful in mathematics, which is regarded as a positive behavior. If students are not confident in doing mathematics, they may not experience success, and unsuccessful behavior is regarded as negative feelings (7). Hence the behavioral component of attitude impacts on the cognitive component of attitude as well. When students see the importance of mathematics in real lives, they feel engaged, confident and connected to their learning (Attard, 2012). As such, the three components of attitude, confidence, importance of mathematics and engagement are interrelated (6). Students' attitudes play a vital role in the learning of mathematics (4;5).

An important question that arises here is how can an increased level of confidence, awareness of the importance of mathematics and engagement be achieved so that learners' attitudes towards learning mathematics become more positive? As Grade I teacher, this question has been unanswered and this is the reason why this study was conducted. It was observed during the first two months of the implementation of modular distance learning that some of the modules were not answered by the pupils. The researcher, as the teacher adviser in Grade I conducted home visitation and found out that most of the pupils lack interest in accomplishing the modules. The pupils need motivation and proper guidance in order to accomplish or answer the activities given them through modules. Thus, the researcher conducted this study in order to determine the significant relationship between the learning attitude towards Math and performance of grade I pupils in Math on modular distance learning modality.

The researcher also believed that the result of this study will be beneficial to all teachers and of great help in formulating what instructional activities will inspire the pupils to work on their modules with their learning facilitators to assist and guide them during this time of pandemic. It is in the aforementioned rationale that the researcher who is currently teaching in the above

mentioned local, would like to delve worthy research undertaking that will benefit the school she is currently teaching and that of her Graduate Program.

This study determines the significant relationship between the learning attitude and performance of Grade I pupils in Math on modular distance learning modality.

Specifically, this study sought to answer the following questions:

5. What is the learning attitude of the Grade I pupils towards Mathematics on modular distance learning modality?
6. What is the test score performance of Grade I pupils in Mathematics on modular distance learning modality?
7. Is there a significant relationship between the learning attitude and performance of Grade I pupils in Math on modular distance learning modality?
8. What intervention plan can be proposed based on the findings of this study?

## II. Methodology

**Design.** This study utilized the descriptive-correlational research design to evaluate the learning attitude and performance of Grade I pupils in Math on modular distance learning modality. Montebello Central School, Kananga III District, Leyte Division is the main locale of the study. The 40 Grade I pupils enrolled in the current school year are the main respondents of the study and the Student's Attitude Towards Learning Mathematics Survey and 2<sup>nd</sup> quarter test were utilized. This research is mainly focused on evaluating learning attitude towards Math and performance of grade I pupils in Math on modular distance learning modality and their relationship. A Proposed Intervention Plan based on the findings of the study is the output.

**Sampling.** There are 40 pupils involved in this study. A survey questionnaire was administered through face-to-face interaction with consent from the Local IATF and strictly following the prescribed Health Protocol.

**Research Procedure.** The researcher prepared the research design and tools to be utilized in the study. Approval and recommendation from the Schools Division Superintendent, Public School District Supervisor and school principal was sought. The proposed title and design were submitted to the panel for screening, evaluation and approval. When the research was approved, the researcher began the process of data gathering. Validation of the instruments through the School Head and District Supervisor was sought. The survey was pre-tested and undergone validation. Orientation of the participants by groups of 10 was done. Answering and retrieval of the research survey followed. The survey was translated into the vernacular for further understanding by the respondents. Tallying of results and treatment of data. Analysis and Interpretation of Data. Making of Proposed Intervention.

**Ethical Issues.** The right to conduct the study was strictly adhered through the approval of the Schools Division Superintendent of the Division, District Supervisor of the District and school principal. Orientation of the respondents was done using face to face modality. In the orientation, issues and concerns were addressed and consent to be included in the study were signed.

**Treatment of Data.** The Simple Percentage and Weighted Mean was employed to evaluate the extent of parents' involvement in the implementation of modular distance learning modality and their profile and academic performance of the Grade V pupils in English. Pearson Product Moment Correlation was used to determine the significant relationship between the learning attitude towards Math and performance of grade I pupils in Math on modular distance learning modality.

### III. Results and Discussion

**Table 1**

**Learning Attitude Towards Math (N=40)**

STATEMENTS	Weighted Mean	Description	Interpretation
1. Enjoys answering the modules in Math.	3.92	Agree	Positive
2. Asks from learning facilitator regarding the concept in Math stipulated in the module.	3.93	Agree	Positive
3. Shows willingness to learn the subject.	3.72	Agree	Positive
4. Easily finds solution to any Math problems presented to him/her.	3.88	Agree	Positive
5. Is happy while learning the lessons in Math.	3.81	Agree	Positive
6. Shows signs of anxiousness while answering the Math lessons.	3.23	Undecided	Neutral
7. Believes that mathematics is one of the most dreaded subjects.	3.38	Undecided	Neutral

8. Enjoys playing while learning the lessons in Math.	3.87	Agree	Positive
9. Easily gets tired when answering Math modules.	3.75	Agree	Positive
10. Shows adverse reactions when doing math.	3.66	Agree	Positive
11. Is able to solve mathematics problems without too much difficulty.	3.62	Agree	Positive
12. Is comfortable expressing his/her ideas on how to look for solutions to a difficult problem in Math.	3.67	Agree	Positive
13. Believes that Mathematics is dull and boring.	3.12	Undecided	Neutral
14. Likes to solve new problems in Mathematics.	3.73	Agree	Positive
15. Believes that Mathematics is an important in everyday life.	3.64	Agree	Positive
<b>GRAND MEAN</b>	<b>3.66</b>	<b>Agree</b>	<b>Positive</b>

Table 1 presents learning attitude of Grade I pupils towards Math on modular distance learning modality. It was revealed on the table that the learning attitude of Grade I pupils towards Math has a grand mean of 3.66 which is interpreted as positive. This means that parents agree that their pupils had a positive learning attitude towards Math. These findings revealed that pupils as observed by their parents while answering the modules for the subject possess a certain attitude which is not present with that of other subjects. The indicator which states that pupils ask from learning facilitator regarding the concept in Math stipulated in the module was rated the highest with an average mean of 3.92 which is interpreted as positive. This means that pupils do not just accomplish the module but they want that their answers are correct. This implies that with their positive attitude towards Math will help improve their performance on modular distance learning modality. The positive attitude towards the subject is an important educational outcome that should be nurtured regardless of the achievement level of the learners who should be helped in order to bring out their best abilities.

On the other hand, the indicator which states that pupils show signs of anxiousness while answering the Math lessons, believe that mathematics is one of the most dreaded subjects and is dull and boring shows the lowest rated learning attitude towards Math. This means that pupils are

undecided whether Math is difficult or easy, enjoyable or not, useful or not useful. This implies that the attitude of the pupils has the strong effect on behavior which helps in understanding and predicting peoples' behavior in a wide range of contexts. This implies further that the learning attitude of the pupils influence social thought and help them organize and evaluate the stimuli into pleasant or unpleasant, negative or positive or useful or not useful. Unless positive attitude towards Math is injected into the minds of the pupils then they will learn and enjoy doing Math activities even at home.

**Table 2**  
**Test Performance of the Grade I Pupils in Math (N=40)**

<b>TEST SCORE PERFORMANCE</b>		
<b>DATA</b>		<b>Interpretation</b>
No. of Pupils	40	<b>Fairly Satisfactory</b>
No. of Items	30	
Total Score	904	
Mean	22.6	
<b>MPS</b>	<b>75.33</b>	

Table 2 presents the test performance of the Grade I pupils in Math on modular distance learning modality. It was revealed on the table that there are 40 pupils who were given the 30-item test and the total score is 904 while mean is 22.6 and Mean Percentage Score is 75.33 which is interpreted as fairly satisfactory. This means that competencies for the grade, grading period and subject met the required mastery level of 75%. This implies that these pupils are able to master the skills and they were able to understand the concepts.

**Table 3**  
**Test of Relationship**

<b>Variables Correlated</b>	<b>r</b>	<b>Computed Value or t</b>	<b>Table Value @.05</b>	<b>Decision on Ho</b>	<b>Interpretation</b>
<b>Learning Attitude and Test Performance</b>	0.34	2.36	1.228	Reject Ho	Significant Relationship <i>(Moderate Relationship)</i>

Table 3 presents the test of relationship between the learning attitude and performance of Grade I pupils in Math on modular distance learning modality. It was revealed on the table that the computed value or t of 2.36 is greater than the tabular value of 1.228 @ .05 level of significance, so null hypothesis is rejected. This means that there is a significant relationship between learning attitude and performance of Grade I pupils in Math on modular distance learning modality. This implies that when pupils have positive learning attitude towards Mathematics they would achieve better which reflect a significant relationship between attitude and performance.

#### **IV. Conclusion**

The data revealed that there is a significant relationship between learning attitude and performance of Grade I pupils in Math on modular distance learning modality. Thus, positive learning attitude towards the subject predicts a positive learning outcome.

## **V. Recommendations**

1. The proposed intervention plan formulated should be utilized;
2. School Heads and teachers should monitor the pupils while learning at home;
3. Teachers should provide hands-on activities to the pupils to boost their love for the subject;
4. Teachers should lessen the number of activities to be given to pupils for them not to get bored;
5. Teachers should encourage the learning facilitator to get in touch with them to address the issues and concern that may arise at home while accomplishing the modules;
6. Teachers should acknowledge little accomplishments of the pupils; and
7. Future researchers should replicate this study to include different locale, and include different variables aside from what is mentioned in this study.

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## AUTHOR'S PROFILE



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The author is born on January 31, 1991 at Kananga, Leyte, Philippines. She finished her elementary education at Montebello Central School, Montebello, Kananga, Leyte in the year 2003 and secondary education at Kananga National High School, Kananga, Leyte last 2007. After graduation she enrolled in Western Leyte College, Ormoc City where she graduated and earned a degree of Bachelor of Elementary Education in the Year 2013 and immediately passed the Licensure Examination for Teachers. She is currently enrolled at Western Leyte College Ormoc City taking up Master of Arts in Education major in Elementary Education.

She is teaching at Montebello Central School, Kananga III District, Leyte Division holding a position of Teacher I. She is teaching all subjects in Grade I. She attended series of trainings in the Division and District most specifically on teaching the Distance Learning Education. She was able to receive different awards in recognition of her exemplary performance in teaching.