

**FACTORS THAT INFLUENCE THE PERFORMANCE OF  
PRIMARY SCHOOL PUPILS IN MATHEMATICS IN  
SIBANGA SUB COUNTY MANAFWA DISTRICT**

**BY**

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## DECLARATION

I Mayeku Innocent Mwaka hereby declare that this is my original piece of work and it has never been presented to any institute of higher learning for any award.

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SIGNED :   
DATE : 10/21/2023

## **DEDICATION**

I dedicate this work to my parents Mr. Busisa Peter and late Nabukasya Zoe, my wife Namusimbi Caroline, my children Naluwende Martha, Busisa Henry, Nakhayenze Mary, Nabukasya Jacinta and Mukhaye Pauline for your contribution in the course of my education. Indeed, you have supported me up to this far may God bless you abundantly.

## APPROVAL

Having read through this piece of work, I certify that this report meets the minimum requirements. I recommend that the researcher presents it to the examination board.

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10.2.2024

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I thank God who has enabled me all this way to carry on with my studies

I feel deeply indebted to many people for the help and advice as far as my education is concerned. Special recognition goes to my employer Manafwa local government for paying my salary in time to enable me pay my tuition in time.

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## **ABSTRACT**

This research investigated into factors that influence the performance of primary school pupils in mathematics in Sibanga subcounty in Manafwa district

The study was centered on finding out if teachers and learners' attitudes towards mathematics.

Inadequacy of instrumental materials and pupils' cultural backgrounds influence performance of pupils in mathematics.

The study was conducted in three primary schools with the respondents being pupil, teachers and the head teachers of the selected schools

The research instruments used to collect data from teachers and headteachers included questionnaire and interview guide, documentary review was used to collect data from pupils' The data collected was analyzed using percentage and frequencies for comprehensive analysis.

Generally, it was established that negative attitude by pupils towards learning of mathematics greatly affected pupil's performance in mathematics.

It was also found out that the use of instructional materials in mathematics classes was almost negligible, influence of pupil's cultural backgrounds on gender perspective contributed to low performance in mathematics especially among girls.

For improved performance, the research recommended that the ministry of education and sports should harmonize the policy of payment of all mathematic teachers right from primary to higher institutions of learning without discrimination, provide teaching and learning resources and organize inservice training for mathematics teachers to enhance emerging strategies aimed at improving mathematics teaching and learning.

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## **ABBREVIATIONS AND ACRONYMS**

UPE	:	Universal Primary Education
STEM	:	Science, Technology, Engineering and Mathematics
UNESCO	:	United Nations Education Scientific and Cultural Organizations
UNEB	:	Uganda National Examination Board
P.L.E	:	Primary Leaving Examination
CRT	:	Cognitive Reflection Test
SPSS	:	Statistical Packages for Social Sciences
UN	:	United Nations

## **CHAPTER ONE**

### **1.0 INTRODUCTION**

This chapter encompasses background of the study, statement of the problem, purpose of the study, objectives of the study, significance of the study conceptual frame work and definition of operational terms.

### **1.1 BACK GROUND OF THE STUDY**

Many studies and reports already have come up with various reasons for low performance in mathematics. Among these are student related factors such as interest and study habits towards mathematics and teacher factors such as personality traits, teaching skills and instructional materials displayed by the teacher.

Many studies have found out that the attitude towards study of mathematics has the highest correlation with mathematics achievement. The study conducted by (Zadoo and Rana 2016), came up with the funding that study habits and academic achievement are possibly correlated.

Hadi and al-ommar (2015) while studying about factors contributing academic.

Achievement, found out student's level variables (prior achievement and self-concept) were more important than school level factors (school gender, number of pupils in class and teacher's satisfaction)

The pupils in public schools belong to a variety of back grounds depending upon their demography. This diversity is much vast and complex as ever before in Philippine. Teachers also affect the students' performance. The guidance from the parents and the teachers indirectly affect the performance of the students (Hussan 2016)

According to Effandi and Normach (2016), a pupil had to think and make decisions using appropriate strategies to mathematical problems. They added that negative attitudes need to be overcome, so that later in life, pupils will not suffer from poor problem-solving skills. Current educational data shows that the surge in primary school enrolment due to introduction of UPE in 1997 has been matched by quality performance outstanding mathematics particularly in north eastern and eastern districts of Uganda (Mutebi.L.,2013) despite increase in enrolment, most regions have centrally registered poor results at the annual national primary leaving examination (PLE) most especial in mathematics for the last two decades (Bwayo. G., 2014)

The poor performance in mathematics particularly drove the researcher to investigate and address the declining trend. The research study took place in Sibanga Sub County in

government aided schools of Bulako Primary School, Watakhuna Primary School and Kimaluli Primary School which constituted the targeted population where the researcher aimed at finding the factors that influence the performance of pupils in mathematics in those three schools.

### **1.2 STATEMENT OF THE PROBLEM**

The study aimed at determining factors that influence the performance of pupils in mathematics in primary schools in Sibanga Sub County. The declining performance particularly in mathematics in those schools comprised the research population. The major concern needed immediate investigation and appropriate remedial measures to be taken. A thorough study was therefore carried out in the three schools addressing the problem in order to save the future of our country and the fields related to mathematics.

### **1.3 OBJECTIVES OF THE STUDY**

The study was based on the following objectives;

- To find out if teachers' and learners' attitudes towards mathematics influences pupil's performance in mathematics.
- To find out whether inadequacy of instructional material influence performance of pupils in mathematics.
- To examine the influence of pupil's cultural backgrounds to performance in mathematics.

### **1.4 RESEARCH QUESTIONS**

The research was guided by the following questions:

- Does teachers' and learners' attitude towards mathematics influence performance of pupils in mathematics?
- Does inadequacy of instructional materials influence performance of pupils in mathematics?
- What is the influence of cultural backgrounds to pupil's performance in mathematics?

### **1.5 SCOPE OF THE STUDY.**

#### **1.5.1 CONTENT SCOPE**

The study focused on exploring the factors that influence the performance of primary school pupils in mathematics. The study however confined its self to the teachers and learners' attitudes towards mathematic, in adequacy of instructional materials, cultural backgrounds and how they influence the performance of primary school pupils in mathematics

#### **1.5.2 GEOGRAPHICAL SCOPE**

The study took place in Sibanga Sub County Manafwa District. It is bordered by manafwa town council in the north, Butta Sub County to the east, Lukhonje Sub County in the west and Nalondo Butta Sub County in the south. The schools included Watakhuna Primary

School, Kimaluli Primary School and Bulako Primary School. These formed a good sample where other schools across the sub county were judged in relation to the topic.

### **1.5.3 TIME SCOPE**

The researcher took a time frame of three months and by the end, he had got sufficient data about the topic. The researcher visited each school four times i.e. got permission from the head teachers, took questionnaires, made school observations, conducted documentary review and collected data from the respondents.

### **1.6 SIGNIFICANCE OF THE STUDY**

The study findings were of significance to the following categories of stake holders.

The government used the findings of the study to create and employ good strategies to improve education and make it friendly to pupils.

The study would be useful to the policy makers at the ministry of education and sports. The findings would be useful to the development of curriculum that ensures that pupils are aided with easy to understand so that it acts as a motivator to their concentration on mathematics subject.

The study findings on the other hand will equip head teachers with advanced knowledge on promoting purposeful learning environment that will help in improving pupil's academic performance in mathematics.

The findings will be useful to the teachers of mathematics in the process of selecting instructional materials for teaching and learning mathematics.

The findings will be of value to parents as it will make them aware of their contribution towards good learning for their children in terms of material provision and regular school visits to follow up the progress of their children especially in mathematics.

Also it will be useful to pupils who will use the result to study and improve mathematics performance. The findings will further give guidance to pupils to change their attitudes towards mathematics.

The findings will help those who intend to carry out further research about the topic by reviewing related literature in correlation to their study.

The study will give the researcher an opportunity to apply the theoretical knowledge obtained from class room planning and will put it to real practice.

Through this study the research will be able to fulfill the requirement for the award a bachelor's degree of Busitema University.

### **1.7 THEORETICAL FRAME WORK**

This study was guided by the classical liberal theory as stipulated by Horace Mann (1796 – 1889). The classical liberal theory asserts that every person is born with a given amount of capacity and abilities. According to his theory, educational system should be designed with a view to removing barriers of any nature, such as economic, gender, geographic, that prevent individual from developing their in born talents, which may enable them in social promotion (Sherman & wood, 1982)

Horace Mann (1796-1889), who was a liberal progressivism, termed education as “the great equalizer of opportunity and chance” which enhances life chances to those born in humble background. This theory calls for further going through education at different levels from primary to secondary levels to which access would be determined on the basis of an individual's merit and not on social backgrounds. According to his theory, educational opportunities should be availed to all such that accessing it be according to one's desire and motivation and not a few individuals are allowed to receive it. Thus, the U.N declared education as a basic right and should be made available for all (1948).

The introduction of Universal Primary Education(UPE) in Uganda by the government in 1997 increased educational opportunities of over 7million in primary schools. This was a positive move made by the government to alleviate barriers off social injustices. The classical liberal theory was relevant for this study because it emphasized on the need for removing barriers to educational opportunities which the government tried by introducing UPE. However performance of pupils continued to be low especially in mathematics. It was this reason why the researcher carried out the study on factors that influence performance of primary pupils in mathematics.

### **1.8 KEY TERMS, PHRASES AND SYMBOLS**

**Performance:** accomplishing or achievement of specific goals, objectives set in academic Undertaking in basic mathematics

**Attitude:** how the teacher/ learner feel or behave towards specific objects.

**Type of school:** whether boys/ girls or mixed, public or private, boarding or day.

**District:** this is a sub section off a region which is head by local council v.

**Sub County:** this is subsection of a district which is headed by Local Council III.

**Class size:** the number of learners in the class.

**School based factors:** refers to physical human and financial resources used by schools in  
Promotion of academic performance

**Teaching/ learning materials:** resources that the teacher intends to use so as to facilitate  
Learning for example charts models among others.

**Academic performance:** refers to grades achieved by pupils in the examination.

**Influence:** is the power to have an effect on pupils learning.

**Cultural background:** Refers to tribal religions, racial, gender, linguistic or other socio  
Economic factors that shape individuals up bringing.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### 2.0 INTRODUCTIONS

In this chapter, literature of factors that influence pupil's performance in mathematics were reviewed. The researcher also looked at the view of other scholars in relation to the study. The review was done following sub themes.

#### 2.1 THEORETICAL REVIEW

Horace mann (1796-1889) classical liberal was based on to guide the research review.

According to his theory, education system should be designed with a view to remove barriers of any nature such as gender and geographic that prevent individual from developing their in born talents. Horace termed education as a great "equalizer of opportunity and chance".

Nyerere (1967) according to Mtitu (2014) was an advocate of education for self reliance. According to (Nyerere 1967) saw education as an equalizer (Horace 1796-1889), He championed for curriculum changes, he insisted on both content and pedagogical approaches. This meant that curriculum should be tailored on the pupil's daily life and the class room practices thus need to connect pupils to real life.

By achieving this, barriers that influence performance in mathematics would be removed today, teachers need to change attitudes and approaches in teaching mathematics actively involve learners in their teaching and learning process so as to make them practically learn mathematics. By so doing better results in mathematics would be realized in the long run.

According to the UN declaration of right to education for all (1948) equal allotment of educational resources or experiences must be for all. This justifies that schools should ensure removal of mechanism, and doing so disparities in the social environment that affect favorable learning. By so doing, schools should look into it by providing enough instructional materials to promote learning of mathematics in schools.

Bounaga ,A. (2022), a scholar of Horace's Classical liberal theory championed empowering Moroccan girls through education as a liberal or liberating approach. The liberal view of equality suggests that all persons hold an equal right to education. This is fully represented in article 26 of the universal declaration of human rights (1948). "Every one has a right to education"

In this view a right to education ought not to be limited due to interlia, one's nationality, race, gender or disability status.

This declaration aimed at removing obstacles against gender biasness of girl child in education. All children are able and free to learn any subject whether math. This stereo type view that mathematics is for boys held by most African societies shouldn't be tolerated. This stereo type has demonized many girls to take on mathematics related service hence should be removed and equal opportunities availed to all learners to improve performance of mathematics.

### **2.3 CONCEPTUAL REVIEWS**

Mathematics learning and capability to achieve good grades in mathematics examination was not only attributed to some unique talent, great effort or good discipline from an individual, but also to favorable attitudes and interest in mathematics (Zadoo and Rana 2016). Formation of such attitudes can depend on several factors to which pupils got exposed while learning such as motivation he/she got from teachers or parents, readiness to learn mathematical concepts and difficulty or organization of memory of what was learnt.

Attitudes formed by students were categorized into cognitive affective and behavioral, components B.F. Skinner (1953). From these components of attitudes, a conceptual framework review model of attitudes formation towards learning process of mathematics among pupils in primary schools was developed. Learning of mathematics involved all the three components responsible for attitude formation. However, other factors come into play developing on students' individual experiences in his/ her mathematics learning environment. The learning environment may comprise of sufficient learning/ instructional materials or lack of it. It may include learner evaluation/ tests at school or lack of it. Peer pressure and school experiences may either re-enforce a pupil to learn mathematics or may as well restrain effective learning of the subject. This depends on the peer group the learners were in. if the group was motivated to learn mathematics, then a group member may be motivated to learn mathematics also and vice versa. Pupils day today activities while in school may influence his interest in mathematics and in the long run develop favorable attitudes towards learning of mathematics. All these aspects contributing to attitudes formation are as shown in figure 1.1.

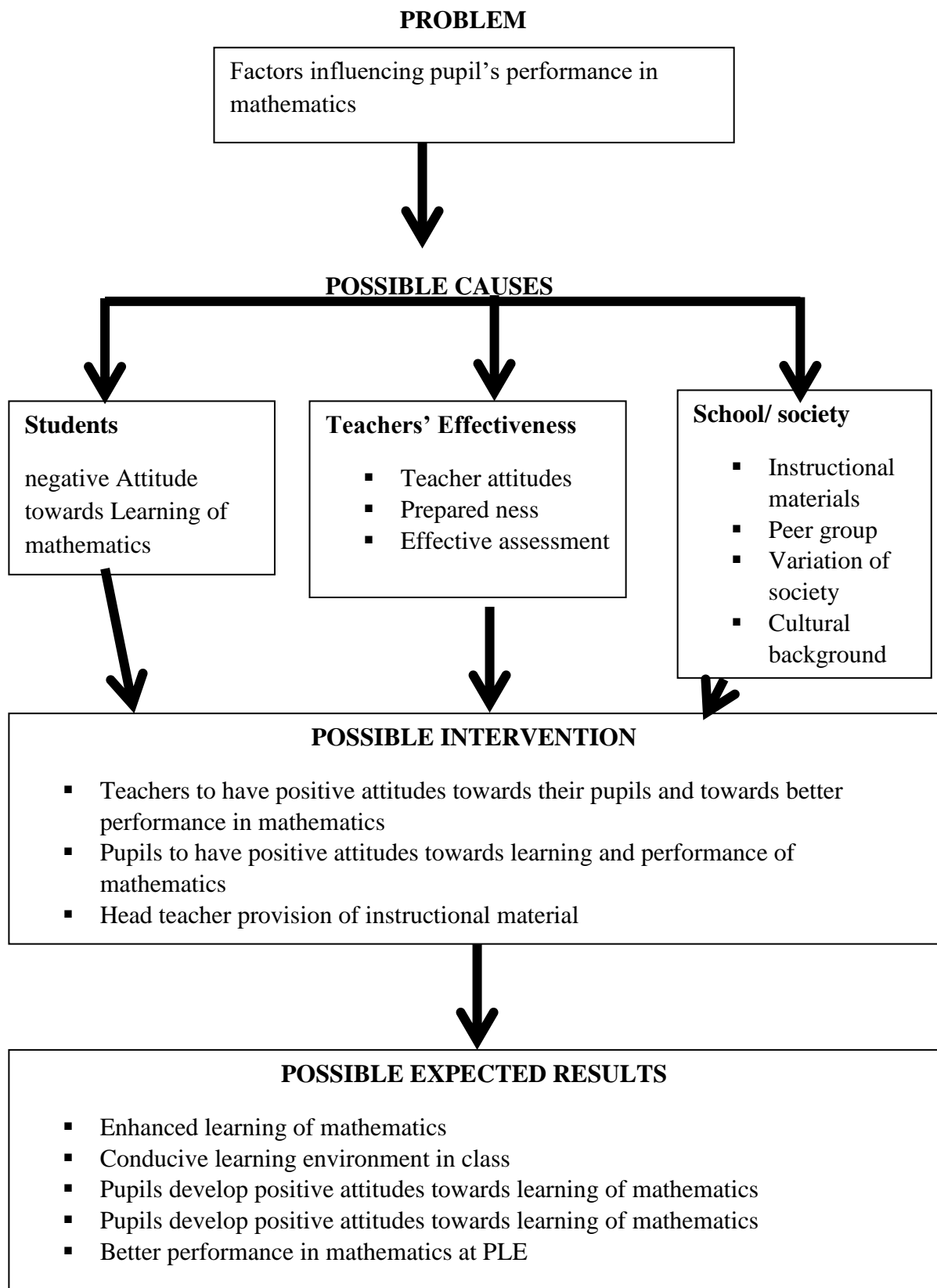


Figure 1: Conceptual framework

Fig 1.1 Shows various possible factors which influence pupil's performance in mathematics. They include pupil's negative attitudes towards learning of mathematics Poor learning experience of mathematics at all levels in primary school, teachers own negative attitudes, lack of adequate learning/ instructional materials, cultural background and peer group influence. Possible intervention as indicated includes; Teachers to motivate pupils to learn mathematics, teachers to have positive attitudes towards learning of mathematics and they themselves portray positive attitudes towards the subject, they may in turn provide a better learning classroom environment hence enhance pupil's performance in mathematics.

#### **2.4.1 TEACHER AND LEARNER ATTITUDES TOWARDS MATHEMATICS WHICH INFLUENCES PUPIL'S PERFORMANCE IN MATHEMATICS**

Ayuman-valdez and Gulab (2015) concluded that grade vi pupil – respondents have a positive attitude towards math and pupils see it as interesting and contributing to their development in terms of the subject. Dela Cruz (2018) also revealed that pupils have a positive attitude and beliefs towards the subject

In contrast, Jenkins (2016) reported a negative attitude towards mathematics among her pupils many of them would rather work with other subjects than math: according to her, this might be caused by the poor linkage between math concepts and their real-world importance. Suan (2014) found that the attitude and interest of the respondents towards mathematics is almost negative. Pupils view the subject as boring, difficult and has no relevance to their daily lives.

Many researchers found out that, the attitude towards study of mathematics for both pupils and teachers had the highest correlation with mathematics performance. Zadoo and Rana (2016) came up with the findings that study habits/ attitudes are possibly correlated in mathematics.

Ntim, S.K (2010) asserts that attitudes towards mathematics has cognitive, affective and behavioral components. Like any other kind of attitude, it can be formed through any of the three processes described earlier. A student can develop positive attitude towards mathematics because he or she learn to associate positive experiences or events with it. Also positive reinforcement creates room for the formation of positive attitudes in mathematics and by no means is pupil's observation of teacher and teacher's behavior especially in relation to mathematics among the least of the factors that influence their attitude towards mathematics.

Pezaris (2011), pointed out that attitudes can also be gender related. There are many who hold the view that boys do better in mathematics than girls. This belief tends to affect the attitude of girls towards mathematics.

Researchers have proposed the existence of several components of attitudes towards mathematics from multidimensional perspectives for example, on the basis of survey data from 318 school students in Malaysia.

Pupils attitudes towards mathematics are formed through their various experiences with mathematics (Davadas & lay,2017; Goldin. et al, 2016). As accumulated experiences with a certain object and subject influences subjects psychological state, they develop a positive attitude towards such experiences. Moreover, pupils tend to behave and think in a certain way that matches their attitude. for example, a pupil with a positive attitude towards mathematics tend to like mathematics, view it as evaluable subject and have confidence engaging in the subject (Mullis. et al, 2020). Such pupils also put more time and effort into studying mathematics. However pupils with negative attitudes towards mathematics tend to dislike mathematics deem it as a useless subject and feel afraid to engage in it (Guo. et al,2015; Wig field.et al;2016) as consequence such pupils tend to avoid mathematics related activities (Cho &Hwang,2019)

(Davadas & lay,2017) suggested motivation, enjoyment and self-confidence and value as components of attitude towards mathematics exhibited by both teachers and learners to influence performance.

#### **2.4.2 INADEQUACY OF INSTRUCTIONAL MATERIALS INFLUENCE PUPILS PERFORMANCE IN MATHEMATICS**

Piagets' theory of child development places the child age 7-11 years under the concrete operational stage. This implies that for this child to learn he has to see and if possible, touch the objects of the lesson for concrete experience. instructional materials allow pupils to have relatively uniform attention and opportunities to practice and acquire skills. They make teaching experiences of mathematics flexible and rich enough to meet individual pupils' learning styles.

Instructional materials have direct contact with sense organs. Pupils are able to use a combination of senses (smell, hearing, touch, taste and sight) for easier and better acquisition of concepts and facts they are being taught. Instructional materials enable pupils see as a whole certain relationship that are difficult to conceptualize in parts for instance pupils in the kindergarten learn to identify and differentiate the shapes more accurately when they see the

real objects. It allows them to compare and contrast the shapes and make mental note of their similarities and differences.

By lacking instructional materials, it means pupils' learning is rote in nature hence cramming is encouraged no comparison can be made, learning is more of teacher centered yet modern teaching is more of learner centered

Abdu Raheem (2016), asserts that the need for utilization of instructional materials should be over emphasized. It is the life wire of the instructional process and has far reaching successful out comes. The ineffectiveness of the school system and poor performance of students in schools is linked to the non-availability and inadequacy of instructional materials.

The contention is that availability of instructional materials in the right quantity improves pupil's performance in mathematics.

Adequacy of instructional materials alone however may not guarantee learner's performance. These materials need to be utilized effectively to achieve the desired objectives.

Orodho, et al (2013) states that adequate instructional resources such as text books are essential to teaching learners with dyscalculia as they enable learners to follow the teacher's sequence of lessons presentation, and subsequently aid in understanding of the lesson.

Instructional materials help in teaching mathematics to learners with dyscalculia to remember rules, instructions, and formulas.

#### **2.4.3 INFLUENCE OF CULTURAL BACKGROUND TO PUPIL'S PERFORMANCE IN MATHEMATICS.**

Research on influence of cultural backgrounds to pupil's performance in mathematics will be based on gender differences in academic performance of pupils. The accumulated literature on this topic covers pupil's confidence in learning mathematics, sex stereo typed expectations for performance in mathematics and science, gender related stereotype self-estimations of ability to learn mathematics laboratory experiences for females and participation in mathematics.

In this review of literature, the researcher pays particular attention to research that focuses on gender differences in mathematics.

Women are still under represented in science technology engineering and mathematics (STEM) education and careers. worldwide, women comprise of 35% of students enrolled in higher education STEM degrees (UNESCO,2017). The under representation of women in the STEM field the gender imbalance in STEM. Education is due to differences in mathematical abilities (Wang & Degol,2016).

Findings have shown that gender differences in mathematical performances are not present in childhood (Bakker, et al 2019) but differences favoring boys emerge in high school and persist in adulthood (Lindberg et al 2010 for meta-analysis). This is true because most communities consider boys first to stay in school in case priority is to be given when difficulties come in a family.

Lynne and Irwing (2008) examined gender differences in children and adults for the arithmetic subset of the Wechsler intelligence scale.

Results reveal that men performed better on mental arithmetic and that gender difference emerged in late childhood and early adolescence. Since arithmetic fluency is the foundation for developing higher order mathematical skills (Price et al, 2013), studies have shown that boys perform better than girls in cognitive reflection test (CRT) and this in turn affects differences in real life outcomes.

(Cueva et al, 2016) in summary, most mathematical tasks primarily assess the ability to understand and solve the problem, but the CRT also assesses the ability to suppress emotions. Therefore, the CRT is a highly relevant task to take into account when examining gender and negative attitudes towards mathematics.

According to (Hart & Ganley, 2020), examined gender differences in math anxiety and found that girls report higher level of math anxiety leading to eventual avoidance of math related activities. Could be also the reason why there are fewer girls offering math related subject at higher institution of learning than boys?

Gender related stereotypes, the view that men are better in mathematics and science or mathematical related subjects are for males is widely held in our society. These stereotypes affect female's mathematical performance. Barroso. et al, (2021) research has consistently shown that women show more negative feelings towards math and that in turn has affected their mathematical performance.

In Uganda, the UNEB (2023) statement of the release of 2022 primary leaving examination (PLE) results by the executive secretary indicated a total of 832,654 candidates sat for PLE 2022. Females performed better in English but the reverse was true in mathematics for the boys. He continued to say this trend had been observed over the years meaning the performance of girls in mathematics has been poor for some time. Overall, 7.8% boys scored distinctions while 6.3% girls scored distinctions. This is the clear indicator that boys perform better in mathematics than girls right from the lower classes.

In conclusion, gender differences in academic has been a topic of research for several decades. The role of teachers cannot be over emphasized, particularly when entry barriers against women serve as obstacles for education. Some of the barriers begin at the primary

school level with teachers and text books projecting attitudes that discourage school attendance and performance of girls, or promote stereotype of girls not being as good as boys in technical subjects or mathematics. The role that parents play should not overlooked, much of the socialization that shapes a child's life comes from the family, especially from mothers. Inadequate research has been conducted on gender and pupil performance in mathematics and therefore this study seeks to contribute to this area of study.

## **2.5 CHAPTER SUMMARY.**

### **2.5.0 INTRODUCTION**

Despite noticeable unsatisfactory performance in mathematics, a review of related literature above indicated a significant gap in the area of study, factors influencing performance of primary school pupils in mathematics subject require in depth investigation to enlighten the factors influencing performance of pupils in mathematics.

### **2.5.1 RESEARCH GAP**

The researcher developed research gap where by the researcher wanted to find out factors influencing performance of primary school pupils in mathematics for which findings were generalized to other schools in Uganda.

### **2.5.2 SUMMARY**

This chapter presented the theoretical framework and conceptual frame work reviews and objective related reviews about the study.in conceptual framework the researcher gave out assumptions on factors that influence pupil's performance in mathematics. These assumptions were enlightened with theoretical and objective related literature review. It was noticed that pupils performance in math is the function of attitudes of teacher and learning instructional materials and cultural backgrounds.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 INTRODUCTION**

This chapter dealt with research design, population sample, sample size, sampling techniques, data collection, methods of data analysis, data quality control, measurement of variables and ethical considerations.

#### **3.1 RESEARCH DESIGN**

The study was carried out using descriptive research design utilizing qualitative and quantitative research approaches. This was desired because it allowed the researcher to acquire deep information from different categories of respondents. Descriptive survey was useful in gathering information by interviewing or administering questionnaires to a sample of individuals to obtain data useful in evaluating present particulars which had not been controlled or manipulated (Kothari, 2004). This type of survey looked at the nature of the existing conditions in the selected schools. The survey obtained views from the teachers, pupils and the headteachers.

#### **3.2 POPULATION**

The respondents who participated in the study included headteachers, teachers and pupils. The headteachers were selected because they are overall supervisors of all school programs therefore are aware of the factors that influence pupils' performance in mathematics in primary schools.

Teachers were chosen since they are grass root implementors and therefore are aware of the factors that influence pupils' performance in mathematics in primary schools.

Pupils were chosen because they are the ones affected with the factors which influence performance in mathematics.

#### **3.3 SAMPLE SIZE.**

The study comprised of 3 headteachers, 20 teachers, 22 pupils totaling to 45 respondents.

A Morgan and Krejcie (1970) sampling technique was applied on the selection of the respondents.

#### **3.4 SAMPLING TECHNIQUE**

Teachers and pupils were selected using simple random technique which gave equal opportunity to all targeted respondents, whereas headteachers were selected using purposive sampling technique also known as judgmental sampling, purposive sampling was a non-

probability technique that involves the conscious selection by the researcher of certain people to include in a study. Participants were selected because they had particular characteristics that were of interest to the researcher. For example, they may have certain experience in which the researcher was interested in, or there was a certain aspect of their lives in which the researcher was interested in.

### **3.5 DATA COLLECTION METHODS AND INSTRUMENTS.**

The researcher used the following tools and methods of data collection and why.

#### **3.5.1 QUESTIONNAIRES.**

Open questionnaire were used on head teachers and teachers because of high level of education which enabled them to read, understand and fill the questionnaire properly. The instrument was to help collect data from many respondents within the shortest time possible.

#### **3.5.2 INTERVIEW GUIDE**

The researcher also used this instrument to collect data from pupils. This is because the pupils may have difficulties in interpreting questionnaires.

This tool is very important because it will allow the researcher to ask for word clarification from the respondent in case of more information about the guide is needed.

#### **3.5.3 OBSERVATION GUIDE.**

An observation guide was applied in data collection where by the researcher was observing the status of physical classrooms while carrying out the interviews with pupils to establish whether there was display of instructional materials and their applicability.

#### **3.5.4 DOCUMENTARY REVIEW**

The researcher also applied documentary review. Documentary research is the use of outside sources, documents to support the view point argument of an academic work (Omari, 2011). The researcher reviewed the following documents, reports of pupils, mathematics file, mathematics bank of questions, mathematics syllabus, continuous assessment, external and internal examination files, performance analysis files, mark list and exercise books of learners.

### **3.6 DATA QUALITY CONTROL.**

**3.6.1 Validity** - To establish validity of the instruments to be applied, the researcher conducted a pilot study prior to the actual data collection. The instruments were to be tested by providing to staff mates who are teachers in Manafwa District. The instruments were presented to the supervisor for further comments and improvement hence all necessary adjustments were made for items which were found unsuitable were removed.

**3.6.2 Reliability** - To ensure reliability of the information collected, some of the items in questionnaire focused on interviews were asked more than one time to the respondents i.e. a test retest method was applied to see if there is consistency in responses from the respondents.

### **3.7 DATA ANALYSIS PROCEDURE**

According to Kothari (2004), data analysis is a process of editing, coding classification and tabulation of collected data. The process involves operations which was performed with the purpose of summarizing and organizing the collected data from the field. Since the study involved both qualitative and quantitative data, the data analysis process was done in the two ways.

First the researcher applied statistical packages for social sciences (SPSS) for quantitative data. This was the software which was used to analyze information that was quantitative in nature. In this study data collected using questionnaire was analyzed using SPSS software. The process involved coding data, sorting and conclusion drawn.

Secondly, the qualitative data obtained using interview, observation, was analyzed by considering major themes to extract relevant information.

This helped the researcher to make description of the data collected from the field basing on research objectives and derives conclusion on what to take regarding its usefulness.

### **3.8 MEASUREMENT OF VARIABLES.**

The information collected was analyzed and edited to create consistency and completeness.

After collecting the questionnaires, they were edited for completeness and consistency across the respondents and located omitted information obtained from the research study presented and analyzed using frequency tables, narrative and statistical figure that is; -

Descriptive statistics. This was used to measure central tendency, variability and relationship between variables. It included proportions, mean scores and percentage.

Summary statistics. This was used in the presentation of analysis. It included use of mean and percentages summarized tabulations and frequency distribution.

### **3.9 ETHICAL CONSIDERATIONS.**

To obtain population of study, data collection and dissemination of the findings the researcher was sensitive to research ethics and its values. This helped to ensure that good image of research enterprise in the world to be maintained (Omari, 2011). The researcher obtained a permission letter to pursue research activities from Busitema University and was submitted to the district administrative authority.

The researcher took a week to accomplish all the procedures and allowed to conduct research activity. All the letters will be found in the appendices of this work.

The research ensured the freedom of participants by adhering to the principal of informed concern. This principal required the researcher to ensure that participants are aware of the purpose of the study so as to get their concern and participate freely.

The statement of the research purpose, description of any potential risks or discomforts.

Description of potential benefits and the description of confidentiality were assured to the respondents. The researcher assured them not to reveal their identity of to anyone other than the researcher.

The findings were stored in such a way that it will be accessible only for the research purpose so as to maintain privacy for confidentiality and anonymity of the respondents in the researcher's personal computer with password.

## CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION

### 4.0 INTRODUCTION

This research focusses on various factors that influence the performance of primary school pupils in mathematics in Sibanga subcounty Manafwa district

The results were presented, interpreted and analyzed following the research questions and objective, starting with data analysis

### 4.1 DATA ANALYSIS

The collected data was organized and analyzed using both qualitative and quantitative methods. The statistical tallying method was used to tabulate the results from which the analysis was done. Objective (a) to (c) generated quantitative data were descriptive statistics. The open-ended question yields qualitative data and were descriptively analyzed and using frequency distribution tables and percentages. The following are the different responses generated by the study.

### 4.2 PRESENTATION OF THE FINDINGS

#### 4.2.1 RESEARCH QUESTION ONE: DOES TEACHERS' AND LEARNERS ATTITUDES TOWARDS MATHEMATICS INFLUENCE ITS PERFORMANCE IN PRIMARY SCHOOLS.

Table 1.1. Shows the view of the respondents on whether pupils' attitude towards mathematics

Influences its performance in primary schools of Sibanga subcounty

Frequencies

RESPONDENTS	YES	%	NO	%	NUMBER	TOTAL
Headteacher	2	66.67	1	33.33	3	100%
Teachers	15	75	5	25	20	100%
Pupils	16	73	76	6	27	100%

Table 1: Shows the view of the respondents on whether pupils' attitude towards mathematics

Source: primary data 2023

2(66.67%) head teachers noted that pupils' attitude towards mathematics greatly influence its performance. They testified that a positive attitude towards mathematics reflects a positive correlation towards the subject and a similar way, a negative attitude towards mathematics relates to negative correlations have an impact on an individual behavior as one is likely to achieve better in a subject that one enjoys, has confidence in or finds it useful. Positive attitudes towards mathematics are desirable since they may influence willingness to learn and also increase participation in mathematics related subjects.

I (33.33%) of the head teacher urged that it is the lack of suitable support material like chalk board, geometry set among learners, lack of mid-day meals that leads to teachers' negative attitude towards the teaching of mathematics affecting pupil's performance.

The respondent testified that it's not only pupils attitude contributing to poor performance in mathematics however a combination of factors mentioned above that influence pupil's performance in mathematics

Besides 15(75%) of the teachers believed that attitude of pupils towards mathematics influenced greatly its performance. They asserted that attitudes towards mathematics had cognitive, affective and behavioral effects. By having positive attitude toward, a pupil is able to associate positive experiences and by no means pupils' acquisition of knowledge is receptive. They stressed that a pupil can develop positive attitude towards mathematics because he or she learns to associate positive experiences event with it. Also, positive reinforcement creates room for the formation of positive attitude towards learning of mathematics. Teachers testified that this positive attitude promotes progress in terms of learning achievement in mathematics.

On top of that 16(73%) of the pupils noted attitudes towards mathematics are formed through their various experiences with mathematics. Most of this pupil have negative attitudes towards mathematics dislike it, deem it as hard subject, feel afraid to engage in it and as a consequence had avoided mathematics related activities.

The 6(27%) of the pupils say mathematics has become difficult not because of their attitude towards it however due to lack of necessities like sets, peer groups and lack of regular assessment carried out by the school.

In general, the concept pupils hold about mathematics determines how they approach the subject in many cases pupils have been found to approach mathematics as procedural and rule oriented hence many approach mathematics as if an art subject.

Overall some headteachers and teachers disagreed with the assumption that pupils' attitudes towards performance in mathematics has lesser extent. Therefore, put emphasis on poor motivation of mathematics teachers. Teachers preparedness and ineffectiveness as the root causes of pupils' poor performance thus putting teaching learning process at stake.

Therefore, headteachers and teachers advocate for better pay of mathematics teachers as it in post primary institutions to motivate teachers towards teaching mathematics purposefully.

**4.2.2 RESEARCH QUESTION TWO: DOES INADEQUACY OF INSTRUCTIONAL MATERIALS IN INFLUENCE PUPILS PERFORMANCE IN MATHEMATICS IN SIBANGA SUB COUNTY.**

The respondents were asked to state whether inadequacy of instructional materials influence performance in mathematics in Sibanga sub county. Their views were presented in the table below.

RESPONDENTS	FREQUENCIES				TOTAL	
	Yes	%	No	%	Number	
Teachers	18	90	2	10	20	100%
Head teachers	2	66.67	1	33.33	3	100%
Pupils	10	91	2	9	22	100%

*Table 2: inadequacy of instructional materials and performance in mathematics*

From table 2. 18(90%) of the teachers reported that lack of inputs when teaching retards the retention span of pupils since the use of instructional resources makes discovery of facts and memory retention of acquired knowledge. Further ascertain that utilization of instructional materials during learning of mathematics is life wire of the instructional process and has far reaching impact on the success of learning out comes. Instructional resources are educational inputs which are vital to the teaching of the subject in the school curriculum.

Therefore, teaching without instructional materials retards retention span of pupils, thus affecting their academic progression.

2 (10%) of the teachers however urged that variation of methods of teaching determines the retention span of pupils in mathematics. Learner centered methods are favorable and preferable that teacher centered methods that encourage cramme work and less retention span among pupils.

20 (91%) of the pupils pointed out that during learning when teachers use instructional material, they understand best because they are able to see and practice by them themselves during free time. They continued to testify that instructional materials have direct contact with sense organs. They are able to use a combination of senses (smell, hearing, touch, taste and sight) for easier and better acquisition of concepts and facts are brought closer to them through instructional materials. They are able to conceptualize learnt concepts especially when teachers use instructional materials during learning process. By applying instructional materials, it allows them to compare and contrast the shapes and make mental note of their similarities to learnt concepts.

Pupils with dyscalculia said were able to follow their teachers’ sequence of lesson because of using the instructional materials.

2(9%) of the pupils however claimed that teacher family background plays a pivotal role towards performance in mathematics. Lack of support to provide them with scholastics materials due to poverty has harboured their progress in learning mathematics.

2 (66.67%) of the head teachers pointed out that teaching without instructional materials makes learners loose interest towards school and testified that this leads to increasing rate of pupil’s low performance in mathematics. They said that a well-planned and imaginative use of visual aids in lessons does to banish apathy, supplement adequate books as well a rouse the interest of learners by giving something practical to see and do.

Scarcity of test books, libraries and instructional materials constraints educational system from responding more fully to new demands.

1 (33.33%) of the head teachers asserted that it is teacher’s way of presentation which determines the performance of pupils. They stressed that proper presentation of content, good learner – teacher relation and old pupils understanding of mathematical concepts more than just having instructional materials.

#### **4.2.3 RESEARCH QUESTIONS THREE: INFLUENCE OF CULTURAL BACKGROUND AND PUPIL’S PERFORMANCE IN MATHEMATICS IN SIBANGA SUB COUNTY.**

Their views were presented in the table below

RESPONDENTS	FREQUENCIES				TOTAL	
	Yes	%	No	%	Number	
Teachers	13	65	7	35	20	100%
Head teachers	1	33.33	2	66.67	3	100%
Pupils	15	68	7	32	22	100%

*Table 3: cultural background and pupils’ performance in mathematics in Sibanga sub county.*

From table 3. 13 (65%) of the teacher respondents said boys compared to girls in upper classes had more confidence and debilitating causal attribution patterns, more fluent in mathematics than female counter parts.

The respondents however said influence in mathematics could be traced to the family backgrounds. Parents need to provide essentials like sets, meals and uniform, failure to do so pupils are impacted.

However, 35% of teacher respondents said cultural background had less impact on the performance of mathematics, things like language of instruction used by the teacher, methods of teaching and lack of role models contributed to low performance in mathematics.

On top of that 1 (33.33%) of the head teacher agreed that cultural background had influence to performance of mathematics. As head of the institution, he realized from documentary review that boys were leading in mathematics that in other subjects in most of the classes. The remaining 2 (66.67%) of the headteachers disagreed, to them performance in mathematics was more of methods used by the teachers, text books used and teacher – pupil relationship. Once the above are in place then good results may be realized in mathematics. The 15 (68%) of pupil's respondents sampled, influence of cultural background on performance of mathematics had effect on their performance. Parents from home had no encouraging words for them to continue with the subject.

Most peer viewed mathematics as being hard and they discouraged them to continue with it. Lack of necessities like sets, graph books, rulers, text books for them to practice on their own hampered their study of mathematics.

However, 7 (32%) said they liked mathematics, it was their favorite subject and was going to help them in future. They said they had competent teachers and were ready for the challenge.

## **CHAPTER FIVE**

### **DISCUSSION OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS.**

#### **5.0 INTRODUCTION**

This research focused on the factors that influence pupil's performance in mathematics in Sibanga subcounty Manafwa district.

This chapter covers the discussion of the findings in relation to the literature reviewed, conclusion and recommendations

#### **5.1 DISCUSSION OF THE FINDINGS**

##### **5.1.1 INFLUENCE OF TEACHERS' AND PUPILS' ATTITUDES TOWARDS MATHEMATICS PERFORMANCE**

The major feeling/ opinion towards learning and performance in mathematics in this study was a general feeling of extreme anxiety and fear. This was evident when 73% of pupil's respondent affirmed of such feelings when a new mathematical concept was introduced or exams were mentioned or brought. This in turn prompted lack of confidence among the pupils as confirmed by approximately 75% of teacher respondents.

It was noted mathematics was a useful subject in life (Ayuman – Valdez and Gulab 2015) said the pupils had positive attitude towards mathematics because they saw it interesting and contributed to their development. The low performance was attributed to the fact that some topics were perceived not to be applicable to daily life problem. Jenkins (2016) Reported that because of poor linkage between new concepts and real-world importance greatly hampered, resulting in another vicious cycle of poor performance in mathematics as a subject.

Pezaris (2011) pointed out that attitudes are also gender related. It was clear that influence of the teachers, parents, siblings and peers impact positively or negatively on pupils performance, further played part in the total development of the pupils attitudes towards learning and performance in mathematics.

The need to improve quality in mathematics education is a great necessity bearing in mind the dismal performance in this subject in Sibanga subcounty Manafwa district and Uganda as a whole. Achieving this goal, positive attitudes towards mathematics should be enhanced and pupils motivated to like mathematics as a subject. Mathematics is crucial to the entire development process of the country since teachers as well agree that the subject is a multi-disciplinary and can be applied in everyday life of a person.

The negative attitudes of pupils towards learning and performance in mathematics was due to existing learning methods that discouraged participation, as well as un founded believes that mathematics was a difficult subject as well as enhancement of quality teaching of the subject.

The findings should enlighten teachers, parents, pupils and all education stake holders to ensure they enhance positive attitudes towards learning and performance of mathematics. This was so because a connection between attitudes, learning and performance in mathematics was identified in the study. In a nut shell it is important that school management committees, government, parents and well-wishers take active interest in the development of positive attitudes towards learning and performance of mathematics among pupils and teachers in Sibanga subcounty

### **5.1.2 INADEQUACY OF INSTRUCTIONAL MATERIALS AND PERFORMANCE OF PUPILS IN MATHEMATICS**

A greater percentage (90%) of teachers respondents pointed out that teaching without instructional materials greatly impact on the academic performance of pupils in mathematics they testified that without instructional materials when teaching retards the retention span of pupils. Teaching without instructional materials makes learners to lose interest towards mathematics thus increasing the rate of pupils low performance is affected by the quality and quantity of teaching and learning resources. The findings concur with national teacher institute manual (2006) which highlights that instructional materials help the teacher in providing the means of learning his pupil learning experience, providing his pupil's with meaningful source of information provide the teachers means of exposing the pupils to a wide range of learning activities and increase the efficiency of teacher by providing tutorials and response guidance for individual pupils and small groups.

On top of that the findings are in line with Abu- Raheem (2016) who asserts that the need for utilization of instructional materials should be over emphasized

It is the life wire of the instructional process and has far reaching successful out comes. The in effectiveness of the school system and performance of pupils in school are related to the non-availability and inadequacy of instructional materials. The contention is that availability of instructional materials alone however may not guarantee learners achievement. These materials need to be utilized effectively to achieve the desired objectives.

The findings on the other hand align with Oroho, et al (2013) who holds that instructional materials help in teaching learners to follow the teacher's sequence of lessons presentation and understanding of the lesson. Instruction for learners during learning because of their concreteness foster continuity of thought when words are coupled with explanation in pictures and sounds. Provide freshness and variety appeal to pupil's varied interests and abilities, others include; encouraging active participation, giving necessary reinforcement, widening the range of pupil's experience, assuming order and continuity.

Finally the finding also match with Abdu Raheem (2016) who contents that pupils learn a lot if their teachers through the process of applying instructional materials .The provision and utilization of teachers made instructional materials will promote the intellectual ability of pupils, probably because instructional materials act as motivator to the pupils and will equally awaken their internalizing the learnt mathematics.

### **5.1.3 INFLUENCE OF CULTURAL BACKGROUND AND PUPIL'S PERFORMANCE IN MATHEMATICS.**

According to smith (2004), it is identified that pupils' cultural backgrounds differ and can affect pupils influence to study mathematics. Pupils from different cultural background are influenced differently based upon parental experiences, interests in mathematics.

Cultural views and gender related attitudes towards mathematics.

Additionally (Bakker et al 2019) findings had shown that gender differences in mathematics are not present in childhood but differences favouring boys emerge in high school and persist in adulthood.

In the same way research found out that stability and consistence got from the field was impacted by pupil's background on their performance in mathematics subjects. Pupils whose parents had a higher socio-status, pupils tend to perform consistently in classes, however parents with lower social economic status indicates that most pupils were not consistent. This was true because pupils from high social-economic status had basic needs availed however those from low economic status had difficulties in getting school basic needs.

The research wanted to find out how gender difference influence performance in mathematics subjects. To understand some of the things that had cultural influence to performance in mathematics. The research distributed questionnaires in each school, sampled questionnaires were provided to the head of school, directors of studies, mathematics teachers and pupils. From the sampled schools the findings made it was revealed that mathematics teachers said boys performed better on mental arithmetic's and that gender differences emerged in late childhood and early adolescence since arithmetic influence was the foundation for the foundation of developing higher order mathematics skills (price et al 2013).

This statement was in line with the statement made during the release of PLE (UNEB 2022) by the executive secretary who indicated that boys performed better in mathematics than girls.

Concerning performance, pupils said it was low because they were not provided with enough exercise and do not have books of their own for self-practice. They said some teachers attend classes irregularly. The lost sessions are not compensated.

School libraries according to pupils are not furnished with the relevant reference book that pupils need in learning mathematics. They only get supplementary readers, story books which are not relevant.

From heads of school, a lot of information had been found. Such information was as follows;

1. concerning the ability of teaching staff and the number of teachers teaching mathematics at the school. They said that the number of available teaching staff does not match with the demand of the enrolment. The said teachers are overloaded hence could not handle individual difference, it was difficult because every teacher had three classes to handle with 40 lessons to cover per week.
2. On view of gender inequality, the school heads said all pupils are given equal opportunities during classes learning. Teachers always ensured participatory of all children books protecting attitudes that discourage school attendance and performance of girls or promote stereotype of girls not being as good as boys and removed from the library by the teachers.
3. The findings also emphasized that there was a gap in upper classes on attitude development. Most schools visited the researcher found out that mathematics is mostly handled by male teachers. This had far impact on girl child attitude development. Since few female teachers were teaching mathematics in upper classes to some pupils, girls lacked role models to encourage them pursue mathematics rather viewed it to be a male domain.

This finding had far reaching impact, women are underrepresented in science technology engineering and mathematics (STEM) careers (UNESCO 2017). This was due to difference in mathematical abilities.

Finally, mathematics teaching primarily takes place within a professional framework. However, teaching mathematics is very demanding even though being professional, for success in teaching mathematics one ought to give sufficient time both the teacher and learner for success to be achieved in mathematics.

## **5.2 CONCLUSION**

Based on the findings of the study, it can be concluded that

- i) Attitude of teachers and pupils greatly influences pupil's performance in mathematics. Positive attitudes for both teachers and pupils are the life wire to attainment of academic excellence in mathematics negative attitudes derail high achievement in class.

- ii) There was a significant relationship between retention span when used instructional materials. Teachers who used instructional materials during lesson delivery achieved a lot of success for example teachers demonstrating and pupils contributing in the teaching session found out more about the topic under study.
- iii) Mathematics department, heads of school had a lot to do in ensuring pupils perform well in mathematics. Though there was no actual practice in division of labour among head of schools, director of studies and what head of mathematics departments had to do.
- iv) Teacher – pupil relationship had its motivation for both teachers and pupils. Teacher were motivated to teacher classes were there was no hostility. It also motivates pupils to like the subject as they don't have negative attitude towards their teacher.

### **5.3 RECOMMENDATIONS**

Based on the results of the study the following recommendations were made.

- i. The government should endeavor to motivate mathematics teachers and provide necessary scholastics materials. Motivation of teacher through incentive like better pay, provision of accommodation and medical allowances will help to develop the attitude of teachers towards teaching mathematics innovatively if teachers are well motivated, they will be able to sacrifice more time other than do other business to make necessary learning aids that support teaching – learning process.
- ii. The government through the ministry of Education and sports should provide sensitization programs to promote awareness to parents and pupils about the value of mathematics education to the economy. This should be done through provision of funds to facilitate workshops and seminars aimed at enhancing mathematics learning. Through these seminars' parents will be sensitized on limits of their contribution towards their pupils performance in mathematics in terms of awareness the basic facilities to be provided to learn mathematics.
- iii. The government through the ministry of education and sports should provide refresher course to update teachers on the methods used when teaching mathematics. This can be done facilitation in terms of funding for teachers to attend regular workshops intended to enhance emerging strategies aimed at improving mathematics teaching and learning.
- iv. The researcher recommends mathematics teachers to consider pupils cultural and learning backgrounds in choosing instructional strategies. It is suggested that they align teaching methods with the assessed learning needs and capabilities of pupils.

Teachers may attempt to find a balance of teaching strategies rather than teaching pupils hence few understand the subject and at last may fail the subject. They may be able to realize the importance of recognizing learning styles, identify pupils' differences, and adjust the teaching methods accordingly. By doing that, teachers would be able to deliver content clearly, making every pupil understand mathematics, motivated pupils leading to better performance in mathematics subject.

#### **5.4 SUGGESTION FOR FURTHER RESEARCH**

The researcher is recommending research to be done in future on identifying factors that deter girl's progression in mathematics as they move in high levels than their male counter parts. The research must also be done on individual teacher factors that affect their teaching practice to the extent pupils perform poorly in mathematics. This is highly suggested in order to widen the scope of the current study and initiate the process of creating a wider science-based community that drive economic development.

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**APPENDICES**

**I. QUESTIONNAIRES FOR HEAD TEACHERS**

Dear respondents

I am MAYEKU INNOCENT MWAKA, a student of Busitema University carrying out a study titled, factors that influence pupil’s performance in mathematics in primary schools of Sibanga in Manafwa District.

I request for your participation in providing the required information

The information provided will be kept confidential

**SECTION A: BIO DATA**

Sex .....

Age .....

Working experience .....

**SECTION B: RESEARCH QUESTIONS**

1. What is the teacher - pupil relationship in mathematics classes at your school?

.....  
.....

2. What are the state classroom environment/ condition where teaching takes place in your school?

.....  
.....

3. Do you often hold departmental meetings with your teachers on how best to improve performance in your school?

.....  
.....

4. How does school management committee support teaching and learning in your school?

.....  
.....

5. Is there gender sensitivity as far as learning and teaching of mathematics is concerned in your school?

.....  
.....

\*\*\*Thank you\*\*\*

## II. QUESTIONNAIRE FOR TEACHERS

Dear respondents

I am MAYEKU INNOCENT MWAKA, a student of Busitema university carrying out a study titled, factors that influence pupil's performance in mathematics in primary schools of Sibanga in Manafwa District.

I request for your participation in providing the required information.

The information provided will be kept confidential

### SECTION A: BIO DATA

Sex .....

Age .....

Working experience .....

### SECTION B: RESEARCH QUESTIONS

1. What do you comment about teaching of mathematics in your school?

.....  
.....

2. Does the administration avail you with necessary support in the teaching of mathematics in your school?

.....  
.....

3. How often do you hold departmental meetings to discuss performance of mathematics in your school?

.....  
.....

4. From your experience explain teacher-pupil relationship in your mathematics classes?

.....  
.....

5. Do all pupils equally participate during mathematics classes fully?

.....  
.....

\*\*\*Thank you\*\*\*

**III. INTERVIEW GUIDE FOR PUPILS**

Dear respondents

I am MAYEKU INNOCENT MWAKA, a student of Busitema University carrying out a study titled, factors that influence pupil’s performance in mathematics in primary schools of Sibanga in Manafwa District.

I request for your participation in providing the required information.

The information provided will be kept confidential

**SECTION A: BIO DATA**

Sex .....

Age .....

Number of years in the school: .....

**SECTION B: RESEARCH QUESTIONS**

6. Which one is your best subject in class?

.....  
.....

Do you think Teacher – Pupil relationship in class helps to improve performance in mathematics?

.....  
.....

How do mathematics teachers treat pupils in your class?

.....  
.....

How often do you visit the school library to read relevant mathematics text books?

.....  
.....

Are all learners in your class interested in learning mathematics?

.....  
.....

Do teachers allow you to ask questions when you have not understood?

.....  
.....

\*\*\*thank you\*\*\*

#### IV BUDGET ESTIMATES

S/No.	Item	Price	Cost
	Stationery 4 reams	25,000	100,000
	Transport	150,000	150,000
	Feeding (6 days)	5,000	30,000
	Typing and printing	150,000	150,000
	Photocopying	60,000	60,000
	Binding (4copies)	10,000	40,000
	Supervision	100,000	100,000
	Flash	40,000	40,000
	Airtime/ data	50,000	50,000
	Miscellaneous	30,000	30,000
<b>Total</b>			<b>750,000/=</b>

*Figure 1.2: budget estimates*

## V. TIME FRAME


Proposed research time frame for the year 2023 – 2024

Activity	Duration					
	Aug. 2023	Sept. 2023	Oct. 2023	Nov. 2023	Dec. 2023	Jan. 2024
submission of research topic for approval						
Writing of research report						
Acceptance of research report and preparing of research instruments						
Seeking permission and data collection						
Data entry and analysis						
Submission of research report						

Figure 1.3 Table showing scheduled for research writing and submission.

## VI. EXPLANATORY NOTE

### Introductory letter from Busitema University

 **BUSITEMA UNIVERSITY**  
*Pursuing Excellence*

P.O. Box 236, Tororo  
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**FACULTY OF SCIENCE AND EDUCATION  
DEPARTMENT OF EDUCATION**

20<sup>th</sup> September, 2023

**TO WHOM IT MAY CONCERN**


**BACHELOR OF EDUCATION, PRIMARY**


MR/Ms..... MAMEKU INNOCENT MWAKA..... is a student  
of Bachelor of Education, Primary of Busitema University, Faculty of Science and Education,  
Nagongera Campus. His/her Registration Number is..... BULUP/2020/1585.....


The purpose of this letter is to formally request you to allow him/her to access any information in  
your organisation which is relevant to his/her research.


His/her research topic is..... FACTORS THAT INFLUENCE  
THE PERFORMANCE OF PRIMARY SCHOOL PUPILS  
IN MATHEMATICS IN SIBANGA SUBCOUNTY, MANAFWA DISTRICT.....

Yours Sincerely,

  
**Dr Kaweesi Muhamadh**  
Ag Head of Department, Education

  
BUSITEMA UNIVERSITY  
DEPARTMENT OF EDUCATION  
FACULTY OF SCIENCE AND EDUCATION  
22 SEP 2023  
NAGONGERA CAMPUS  
P.O BOX 236, TORORO (U)

  
BILAKO PRIMARY SCHOOL  
HEADTEACHER  
DATE: 24/9/2023  
P.O BOX 223 MBA

*Permission Granted.*  
  
H/c