



POOR PERFORMANCE AMONG GIRL CHILD IN MATHEMATICS IN PRIMARY
SCHOOLS IN IYOLWA TOWN COUNCIL, TORORO DISTRICT

BY

ODOI YONA

BU/UP/2022/0294

ARESEARCH REPORT SUBMITTED TO THE DEPARTMENT OF SCIENCE AND
EDUCATION IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
AWARD OF BACHELOR DEGREE IN EDUCATION PRIMARY OF BUSITEMA
UNIVERSITY.

SEPTEMBER 2024

Declaration:

I Odoi Yona, hereby declare that this research work is a result of my own sweat and endeavors and that it has never at any time been submitted to Busitema University or any other institution for the award of Bachelor's Degree in any university in Uganda.

Signature: _____



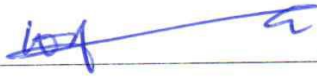
Date: _____

27/09/2024

Approval.

This research report by Odoi Yona titled poor performance in mathematics among girl child in Primary Schools in Iyolwa Town Council, Tororo District has been under my supervision and is due for submission with my approval.

Signature: _____



Date: _____

28/09/2024

Mr. Anthony Wanyama

Supervisor.

Dedication

I dedicate this piece of work to my supervisor Mr. Wanyama Anthony, my wife Asio Naume, my brothers Onyango Joseph and Owori Ernest, my friends Mr. Kasiisa Stephen and Oburu Samuel.

In addition, I also dedicate it to my children Owori Reuben, Onyango Simon, Akongo Jennifer Dina and Nyadoi Eveline Linda.

Acknowledgement

I am grateful to the entire Busitema University Administration for the academic, moral and parental support they enabled me to conduct and produce this report work. I appreciate so much Mr. Wanyama Anthony my supervisor for the time he spent to provide me with all the necessary support and guidance to make the study a success.

I also thank the support of my brother Onyango Jospeh, my wife Asio Naume, friends and relatives for their kind assistance throughout the study.

My sincere appreciation goes to all my lecturers of Busitema University Prof. Olema David Kani, Dr. Kaweesi Muhammad, Mr. Anthony Wanyama, Mr. Mugoya Livingstone, Mr. Imai Onyapidi, Mr. Hissa Samuel, Mr. Madam. Abullo, Madam Namukose Sarah, Mr. Rogers Masika, Mr. Alhaji Salim Guma.

May God bless them abundantly?

Table of contents

Declaration:.....	Error! Bookmark not defined.
Approval.	Error! Bookmark not defined.
Dedication	ii
Acknowledgement	iv
Table of contents.....	v
List of tables.....	viii
List of figures.....	ix
Chapter One	1
Introduction.....	1
1.1 Background of the study.	1
1.1.1 Historical background.	1
1.1.2 Conceptual Background.....	3
1.1.3 Theoretical background.	3
1.1.4 Contextual background.	4
1.2 Statement of the problem.....	4
1.3 Purpose of the study.....	5
1.4 Objectives of the Study.....	5
1.5 Research Questions.....	5
1.6 Scope of the study.	6
1.7 Significance of the Study.	6
1.8 Limitations of the Study.....	7
1.9 Definition of terms.	7
Chapter Two.....	8
Literature Review.....	8
2.0 Introduction.	8
2.1 Causes of girl child poor performance in mathematics.....	8

2.2	Appropriate methods of teaching Mathematics.	10
2.3	Government Strategies in promoting the teaching of mathematics.	12
Chapter Three.....		17
Methodology.		17
3.0	Introduction	17
3.1	Research Design.....	17
3.2	Study population	17
3.4	Sampling techniques.	18
3.4.1	Purposive Sampling.....	18
Target population.....		18
Sample size		18
Sample techniques		18
Simple random sampling		18
3.5	Data collection instruments.....	19
The researcher employed both primary and secondary data collection method.....		19
3.5.1	Primary data collection.....	19
3.5.2	Secondary data collection.	19
3.6	Data presentation.....	20
3.7	Data analysis	20
3.8	Validity and variability of the instrument	20
3.8.1	Validity.....	20
3.8.2	Reliability	20
3.9	Measurement of the variables	21
3.10	Research Procedure	21
3.11	Ethical considerations	22
Chapter Four		23
4.0	Introduction.....	23

4.1	Demographic characteristics of respondents.....	23
4.1	Causes of poor performance in mathematics by girl child.....	25
	Chapter Five.....	38
	Discussion of findings, conclusions and recommendations	38
	Introduction.....	38
5.1	Discussion of the findings.....	38
5.2	Conclusion.....	44
5.3	Recommendation.....	45
	References.....	46
	Appendices.....	53
	Appendix 1: Pupil’s Questionnaire.3.....	53
	Appendix 11: Teachers Questionnaire.....	61

List of tables

Table 1: Showing gender of the respondents.....	23
Table 2: Showing the age of the respondents	24
Table 3: Showing the working experience of respondents.....	25
Table 4: Are poor methods of teaching mathematics in primary schools cause poor performances in mathematic by girl child?	26
Table 5: Do teachers use text lards in class when teaching like alters textbooks, charts?	27
Table 6: Do you have time to do homework at home?	28
Table 7: Do parents provide enough support to poems at school?	29
Table 8 : Do you have enough teachers in your school?	30
Table 9:Are learners are interested in mathematics?	30
Table 10:Do teachers motivate learners during mathematic lessons?	31
Table 11: Are assessment tasks embedded in mathematic lessons?	32

List of figures

Figure 1: Showing Education Qualification of Respondents.....	24
Figure 2: Presentation of the results on Bar Graph.....	29

Abstract

This study investigated the poor performance in mathematics among girl children in primary schools in Iyolwa Town Council, Tororo District. Guided by three research objectives, the study aimed to identify the causes of poor performance in mathematics among girls, establish appropriate teaching methods for mathematics in primary schools, and evaluate government strategies promoting mathematics education. Data was collected from four primary schools, including four head teachers, four mathematics teachers, and twenty learners from each school through simple random sampling, utilizing questionnaires, interviews, focus group discussions, observations, and documentary reviews.

The findings revealed that the use of concrete manipulatives significantly enhanced students' conceptual understanding of mathematical concepts. A majority of respondents (90%) deemed the problem-solving method "very effective" for teaching mathematics. In addition, half of the respondents (50%) indicated that they "Always" used the discovery method in their classrooms, while 30% used it "Often." Despite this, a substantial portion (70%) of respondents disagreed that the government had implemented sufficient financial support programs to promote mathematics education. Conversely, all respondents (100%) agreed that government-led counseling and guidance programs had positively influenced girls' attitudes toward mathematics.

The study concluded that the teaching methods employed during mathematics lessons were often ineffective, with many respondents expressing skepticism about the efficacy of concrete manipulatives and digital tools in enhancing understanding. These findings aligned with existing literature highlighting the crucial role of teaching methods and materials in developing mathematical competence. Recommendations included the adoption of diverse teaching strategies catering to various learning styles, particularly emphasizing problem-solving and interactive methods. Furthermore, initiatives aimed at engaging parents in their children's education should be established, including workshops and informational sessions to help parents better support their daughters academically, especially in mathematics.

Chapter One

Introduction

This chapter presented the background of the study, the statement of the problem, purpose of the study, specific objectives, research questions, scope of the study, significance of the study and conceptual framework.

1.1 Background of the study.

The background of this research report was presented in four ways i.e., the historical background, conceptual background, theoretical background and contextual background.

1.1.1 Historical background.

Globally, research conducted in developed nations such as United Kingdom, United States of America (USA), and Uruguay has highlighted widespread importance of mathematics education. For instance, a study focusing on enhancing mathematical concepts, instructions in short term facilities in Washington DC, USA conducted by Leone Wilson and Mulchahy (2010) underscored the significance of creating an inclusive classroom environment.

The study revealed that teacher's active engagement in mathematics activities and learning was positively influenced by the inclusiveness of the classroom setting, facilitated by the use of various instructional materials. These materials not only promoted active participation among learners but also fostered a positive attitude towards classroom activities thereby creating conducive learning conditions and stimulating learners' interest and curiosity in the subject matter.

Similarly, in Sub Saharan Africa, research indicates a growing acceptance in mathematics education observed Ogbole and Uko (2013) emphasized better ways of acquisition of mathematics concepts leading to improved achievement scores.

In east Africa, the performance of mathematics by girl child remains significantly wanting affecting the effective implementation of the curriculum as noted by Eshwan (2016) , Ruth Edward and Alex 2015 for they highlighted the adverse impact of insufficient teaching materials on education service delivery and learners acquisition of mathematics competence in public schools in Kenya Okumbe (2026) stress. The pivotal note of teachers in curriculum delivery.

Mathematics is a compulsory subject in Uganda for primary school pupils. Mathematics is academically and vocationally important for both girls and boys.

Academically mathematics plays a very important role for shaping the future population of young people as it develops their intellectual ability.

Vocationally the knowledge of mathematics prepares pupils for jobs where mathematics is applied for example engineering, architecture, accountancy or tailoring, agriculture etc.

Mathematics is a basic for technology and modern scientific development. According to “Wool Cotti” (1998), it is the language of science, technology and engineering thus it plays a big role in their development.

The performance of the girl child in mathematics in primary schools in Iyolwa town council has been declining for the last three years. A number of factors seem to be at play. However, the focus stems from pedagogy and lack of interest from learners.

There has been concerted effort by stakeholders to change this trend through employing mainly teachers who have specialized in mathematics, and who are willing to offer more of their time to guide learners especially the girls to believe in themselves and be able to change the negative attitude they have been having towards mathematics.

Amidst all these efforts lies the concepts of aiming at improving academic achievements in mathematics, In order to achieve these the teachers of mathematics in primary schools in Iyolwa

town council have decided to adopt team teaching to enhance their attitude and thereby deliver content in a manner that enable the learners to grasp with ease what would appear to be complex.

1.1.2 Conceptual Background.

Mathematics is a compulsory subject in Uganda. Uganda's education curriculum among other subjects taught in primary schools and secondary schools inclusive. Mathematics concepts develop problem-solving skills and deepen their understanding of mathematical principle Magonal (2016).

Mathematics competencies refers to an individual's ability to understand, apply and communicate mathematical concepts, principles and procedures effectively in various context.

It encompasses both procedural fluency and the ability to perform mathematic operation accurately and efficiently and conceptual understanding or the comprehension of underlying mathematical ideas and relationships Nyamongo (2014).

Acquisition of mathematical competencies. This is grasping the concepts or the understanding of mathematics concepts by learners.

1.1.3 Theoretical background.

Temu Bruners Theory of construction (1966) guided this research. He advocated for the development of autonomous learners who have the ability to create knowledge independently. He argued that the primary goal of schools in Uganda should be to produce problem solvers and critical thinkers rather than merely imparting concepts and categories dictated by cultural norms. Bruner (1966) proposed that for knowledge to be effective by storage and encoded in memory. Learning should progress from enactive to iconic to symbolic representation of the surrounding world which is termed as three modes of representation.

1.1.4 Contextual background.

The study concentrated in Iyolwa Town Council. Iyolwa town council is located in Tororo district in eastern region of Uganda. It is one of the 43 sub counties / town councils that make up Tororo district. Iyolwa town council has a population of approximately 28, 000 people and covers an area of 49 square kilometers. The town council is located about 25 kilometers south of Tororo town the main commercial and administrative center of the district. The town council has several small trading centers, health centers, tertiary institution, secondary schools and primary schools.

Records from Iyolwa town council education department (2023) recorded that 88% of the girl child in upper primary performed poorly in mathematics subject during Primary Leaving Examination of 2021, 2022 and 2023.

1.2 Statement of the problem.

In Ugandan schools, mathematics is one of the fundamental subjects according to the Ministry of Education and Sports (2018). The use of Instructional Materials plays a crucial role in promoting mathematics competence and academic achievements among learners.

Records from Iyolwa town council Learners Education Department (2023) revealed that 88% of the learners in upper primary performed poorly in mathematics.

If this trend continues, we expect big number of school drop outs amongst girl child in primary schools in Iyolwa Town Council.

Even though women have made progress in the past few decades, they still make up less than one quarter of the work force. A number of factors have been driving the girls away from performing well in mathematics. There has been public outcry regarding the academic achievements in mathematics by the girl children in primary schools in Iyolwa Town Council.

A lot of effort has been put into changing the status quo to no avail. This study has established the reasons for poor academic performance especially by the girl child in primary schools in Iyolwa Town Council.

1.3 Purpose of the study.

The main purpose of this study was to establish the factors responsible for poor academic performance in mathematics by the girl child in primary schools in Iyolwa Town Council. In addition, the study recommended measures to address the identified factors to alleviate the situation.

1.4 Objectives of the Study

The main objectives of this study was;

- i. To establish the causes of poor academic performance in mathematics by the girl child in primary schools in Iyolwa Town council.
- ii. To identify appropriate methods of teaching mathematics in primary schools
- iii. To find out/establish government strategies in promoting the teaching of mathematics in primary schools

1.5 Research Questions

The researcher was guided by the following research questions;

- i. What are the causes of poor academic performance in mathematics by the girl child in primary schools in Iyolwa Town council?
- ii. Are the methods of teaching mathematics in primary schools in Iyolwa town council a contributing factor to the poor performance in mathematics by the girl child?

- iii. Do the teachers use appropriate teaching/learning aids in delivering their lessons to the learners?

1.6 Scope of the study.

1.6.1 Content scope.

To understand the causes of poor performance in mathematics among girl child in primary schools in Iyolwa Town Council Tororo district.

1.6.2 Geographical scope

Geographically the study was limited to Iyolwa town council. The study concentrated in Iyolwa town council. Iyolwa town council is located in Tororo District in the Eastern Region of Uganda. It is one of the 43 sub-counties/town council that make up Tororo District. Iyolwa town council has a population of approximately 28,000 people and covers an area of about 49 square kilometers. The town council is located about 25 kilometers southeast of Tororo town, the main commercial and administrative center of the district. The area is primarily rural and agriculture is the main economic activity. The town council has several small trading centers, health centers, and primary schools secondary schools and technical schools. The study concentrated on Iyolwa town council in Tororo District because it is near the researcher.

1.6.3 Period scope.

The study covered the periods beginning from 2021-2023.

1.7 Significance of the Study.

The following groups or categories are to benefit from this study;

- i. The girl child is expected to benefit from this study through simplified delivery of mathematical concepts, which will in turn enable them improve in their academic achievement in the subject of mathematics.

- ii. The teachers are expected to benefit from this study through extra and continued research to enable them improve in pedagogy while teaching mathematics. In addition, mathematics workshops and seminars will be organized
- iii. The school administration is expected to benefit from this study through improved passes in mathematics which will put the schools on map thereby increasing their enrollment
- iv. Other stakeholders are also expected to benefit because their contribution to the teaching/ learning environments will have yielded some fruits.

1.8 Limitations of the Study.

The researcher was limited by the following;

- i. Finance for travels, photocopy, typing, printing and binding
- ii. Harsh weather, which disrupted mobility of the researcher especially during data collection.
- iii. Time, which was not adequate to enable the researcher collect comprehensive data for the study in time.
- iv. Uncooperative respondents who could not give correct information to the researcher during the course of data collection.

1.9 Definition of terms.

The following terms or phrases have been defined in the context here below,

- i. Impact – the effect or result of
- ii. Poor performance – below average academic achievement by learners
- iii. Girl child- female learners in a school
- iv. Mathematics – key subjects taught to learners in primary school
- v. Motivation – arousing interest.

Chapter Two

Literature Review.

Introduction.

The aim of this chapter is to review related literature on the possible factors contributing to girls' poor performance in mathematics. In this case, the researcher reviewed various books, also carried out studies of different researchers both locally, and internationally.

2.1 Causes of girl child poor performance in mathematics.

There are different causes of poor academic performance in mathematics for example.

Poor methods of teaching, child's poor attitudes towards mathematics, unconducive learning environment, lack of effective instructional materials as identified.

Experiences at home are important in making learners to develop mathematical interests, motivation and beliefs. Therefore, interaction of learners and parents at home influence to a great extent the learning in school and specifically the learning of mathematics. This is brought by the fact that children observe and learn from their parents and apply it later according to the observation made. They therefore tend to look at their parents as role models. Parents have individual differences right from birth. Hence, boys and girls are socialized differently as they grow up. Boys and girls have individual differences from birth. Hence, boys and girls take more passive roles.

Daughters are brought up for female responsibilities such as child rearing while sons have to devote themselves to career building. (Maccoby & Jacklin, 1974; Hunger & Crawford 1992) noted that parents may allow boys to have more chances for active interaction with the physical world, but they talk more to the girls. Parents believe that females do not have qualities of independence, initiative and assertiveness (Mapale, 1994). They tend to rate daughters as less

mathematically able than sons. (Eccless, 1989; Yee & Eccless 1988) also noted that many parents accept their sons' mathematical success as evidence of innate ability while they think of their daughter's success as hard work compensating for innate ability.

The different treatment from parents brings about learner's different attitudes depending on the learner's observation according to their parent's attitude, value and beliefs towards girls and mathematics. This is confirmed by (Orton, 1994) that difference in parental expectations, desires and pressure they exert at home on their sons and daughters have been attributed for attainment of various roles among the sexes. Parent's presumption about mathematics ability predicts children's self-conception in mathematics. Comments said by parents consciously or without much thought are registered in the sub-conscious mind of a child and may influence how he/she perceives mathematics. Hence, formation of attitudes among students may have been unconsciously registered from parents particularly and from the society in general. Parental expectations have a notable influence for there is an indirect relationship with performance from the learner's perception of how much importance his/her parent assign to their children to pursue goals with hard work, enhance self-efficacy and nurture good study habits.

Learners with illiterate parents cannot get assistance on their homework, they become frustrated and this results to poor performance. To assert on this (Castejon & Perez 1998) noted that among family factors of greatest influence are educational levels of parents. Research shows that students with parents who are both college graduates tend to achieve at the highest level. (Odhiambo, 2005) also indicated that parent's education and encouragement are strongly related to improved pupil achievement. For the literate parents their attitudes towards the subject affect their children's performance. The remarks that they make towards the subject affect their children's performance such that negative remarks are not helpful to their situation and fail to work hard towards coming out of it. In a study that was conducted by Ying and Chiang (1991),

comparing 894 students from 26 schools in Hong Kong, they revealed that the parental expectations and students' achievement in mathematics had a strong correlation. They undertook this study to identify correlations between mathematics achievement and expectations from parents and students themselves through multiple regression analyses.

2.2 Appropriate methods of teaching Mathematics.

There are various methods of teaching mathematics for example problem solving, discovery, questions and answers demonstration, illustration and many more. All these lies in the hand of teachers.

Learning of mathematics is largely dependent on the role of the teacher as an instructor or facilitator. Bull (1996) observed that the learning of mathematics was dependent on the teacher such that those who cannot do mathematics can trace their inability almost certainly to the teacher. According Cockcroft (1982) there is no area in knowledge, where a teacher has more influence over the attitudes as well as the understanding of his/her pupils than he or she docs in mathematics. A mathematics teacher may influence good or bad the attitudes towards mathematics of several students and decisively affect many of their career choices. According to (Field man & Thesis, 1982; Good & Brophy, (1987); Roycnthal & Jacobson, (1968) teachers' expectations can have a direct influence on students' grades, with students who are expected to do well consistently out performing those who are expected to do poorly. According to Fennema and Sherman (1976), teachers are a major determinant in students learning of mathematics and highly determine the achievements of the students.

The teacher's inherent attributes; his/her qualification and training, his/her general behavior and attitudes towards mathematics, other subjects and towards the students themselves have a huge influence on student achievement, another study by Kinga (2010) on the impact of teachers'

attitudes on girls' achievement in Mathematics, teacher's opinion about mathematics or how Mathematics is taught greatly influences the girls' attitude and beliefs, which in turn impact achievement in the subject. Additionally, learning of Mathematics depends on the way it is presented to the learner, the way the learner interacts with the learning experiences presented and the environment within which the learning takes place (King as 2010), the study showed that 82% Of the teachers in the study strongly believed that boys have a natural talent for Mathematics and this attitude influenced teachers' teaching and reaction to the way girls performed in Mathematics. This kind of attitude does not serve the girls well, since the belief that boys can naturally do mathematics implies that regardless to effort, girls can outperform boys.

Many shortcomings have been exposed by research on teachers' attitudes towards mathematics. Geliert (1999) reported that in mathematics education research, it seems to be undisputed that teacher's philosophy of mathematics has a significant influence on the structure of mathematics classes, the teacher's attitudes reinforce the attitudes formed by the students towards learning of new concepts or the consequent similar concepts. Meyer & Koehler (1990) state that one of the most important factors in developing learners' mathematical ability is the attitude of the teacher. It builds the basis of whether the learners would develop a liking of mathematics or not. A teacher's way of looking at issues generally and in particular, mathematical concepts influence the learner. A student would like to learn a new concept depending on how the teacher presents it. Costello (1991) also concurs that many teachers often unconsciously reinforce and validate students' perceptions of appropriate gender-related behavior.

Government strategies. Male and female teachers unconsciously form attitudes towards the subject they are teaching thus teachers gender determines how he or she portrays the subject. These attitudes formed by teachers depending on their own gender influence how their students will learn the subject being taught, mathematics included- According to (Oketch, 1982)

Mwangi, 1983, Cockcroft, 1982 & Onyango, 2003). Worth to note is that most male teachers prefer to teach mathematics and science subjects. However, female teachers mostly prefer language subjects and arts. This scenario is usually consciously registered in the minds of student's mind in the process they unconsciously form attitudes towards learning in general and particularly learning mathematics. Thus, teachers' expectation and attitude are believed to be important factors in determining teaching and learning of mathematics. Gilman & Anderman 2006; suggest that maintenance of high motivation influence psychological and social functioning and facilitates academic performance as well as positive school perception.

Lack of adequate in-service training opportunities for some teachers is a barrier to girls' academic achievement in mathematics. Mullis (1991) confirm this in his findings about the State Of mathematics achievement in the USA found some modest evidence of a positive relationship between the extent of in-service education for teachers and learner achievement in grade 8. According to (Ralston 1999) findings, many teachers had exhibited higher levels of negative mathematics attitudes and comparable less mathematics skills than their academic skills. Teachers need to be well informed about the instructional methods to use for specific behaviors of students and be conversant of the content in mathematics. The more qualified and better trained the teachers are the easier it is to effect better performance among the students.

2.3 Government Strategies in promoting the teaching of mathematics.

Counseling and guidance of girl child is of paramount importance. In that, girls will develop positive attitudes towards mathematics subject. Students' feelings and perception towards mathematics is a key factor affecting their performance in mathematics. This is confirmed by Donovari (1976) that the attitude that our students develop are likely to stimulate or stop further study of mathematics. Thou (1985) further assert that, in Kenya the students' attitude towards mathematics expectation and aspirations contributed to achievement, many researchers found

that the attitude the students have towards the study of mathematics had the highest correlation with mathematics achievement Zadoo and Ranza (2008) Wanga& Thomas (1995). Mathematics has been viewed as a difficult subject and it is for this reasons student have shied away from it. According to Kenya times, (April 2001) girls have exhibited negative attitudes to mathematics because they continue to doubt their capabilities to pursue the subject because Of the fear that it carries many challenges, which only boys can withstand. Girls also think it isa waste of time to concentrate on a subject they would not pass.

Recent findings show that Mathematics' school achievement and grades do not differ significantly between boys and girls (Halpern, 2010). However, Lindberg (201). Acknowledges that there are noticeable differences in the beliefs held by boys and girls. Eshiwani (1974) in his research shows that in general, girls develop negative attitude and little aspirations towards mathematics and this tends to affect their performance whileStipekand Granlinski (1991) in their article indicated that girls have lower expectations for themselves in math than boys, and that girls have mathematical ability.

The girls' feelings and perception about mathematics is a major factor affecting their attainment and realization of full potential. According to Leder (2005), girls' views of Mathematics are shaped in part by gender-based stereotypes that convey misconceptions that differential innate mathematical abilities exist between males and females. (Dweck, 2007) observes that socio-cultural forces impart beliefs that boys are born with a greater aptitude for Mathematics. Environments such as Mathematics classrooms and households that are heavily influenced by beliefs that girls may be disadvantaged genetically when it comes to Mathematics ability can also have a serious negative effect on Mathematics interest among girls.

According to Mwangi (1988) positive attitude towards learning is important because it affects students' motivation to learn, the quality of life within the school and continuing motivation to

not only apply & utilize what has been learnt but also seek out further related learning opportunities. This means if a student develops a positive attitude towards mathematics, then there are chances of liking the subject hence better performance and vice versa. Most girls harbor doubts about their own ability in mathematics. They see no reason to persist when the difficulty in mathematics goes beyond what they believe to be their limits; this belief of low ability in mathematics makes them not care about good performance. Weiner (1986) asserts that if expectations of future successes are low or if these successes are discounted students will withhold their effort rather than risk failing and confirming their low opinion of ability, this is further confirmed by Steele (1999) who also found that among the talented; the fear of being associated with a negative stereotype impaired intellectual functioning and disrupted test performance regardless of preparation, ability, self-confidence, of motivation.

Research shows that because of their negative attitude towards mathematics girls tend to lack vision and prospects for future life. Their interest to participate, achieve and perform in education also reduces. This is asserted by Barch and Veroff (2004) that anticipation of positive outcome enhances the tendency to achieve while anticipation of negative outcomes blocks or inhibits action. Bandura (1997) persistent hypothesis states that self-efficacy is positively related to persistence. Those students who persist at mathematics problems in the face of obstacles and frustrations are more likely to get correct answers than those who despair.

According to researchers the socio-economic status of a family is based on parents' income, education and occupation the higher the socioeconomic Status of parents the higher their children's achievement in mathematics and vice versa. This is asserted by Phillips (1998) who found out that parental education and socioeconomic status have an impact on pupils' achievement. Peng & Peng (1994) analysis of academic achievement (including family income and educational activities) concluded that home environment and

education activities explained the greatest amount of variance, A family with high socio-economic Status is often more successful in preparing its young children for school because they typically have access to a wide range of resources to promote and support their development, are able to provide their young children with high quality child care, books and toys to encourage them in various learning activities at home. This in turn, will affect the students' academic achievement in Mathematics.

The government strategies to accord every Uganda with financial support in income generating activities. The parish development model (PDM), Operation Wealth Creation, and Emyoga Funds

Financial difficulties and poverty has been a major barrier to better performance among students from low socioeconomic background. Tratai (1970) investigated the scholastic achievement of ninth class students in relation to the income and education of their parents. A Positive correlation was found between the education and income of parents with the scholastic achievement of their children. Many families with low socioeconomicStatus struggle to make ends meet compared to economically stable families. According to Ndiritu (1996), limited incomes among lower class families have been found to restrict provisions of school fees and necessary materials to ensure good performance and attendance. This causes psychological disturbances among the learners and lowers their self-esteem bringing about feelings of inadequacy and therefore poor performance. This means the family background and context of a child affect his/her reaction to life situations and level of performance.

A study by Mathur and Hundal (1972) on school achievement and intelligence in relation to some socio-economic background factors found that there was a close mutual relationship among factors of achievement and family background. The correlations reported by them were between the parents' income and achievement, and between the parents' education and achievement. They

concluded that the higher the family income the higher were the achievement levels of the subjects. Students from poor families are also forced into child labor; they have to work after school to help their parents make ends meet instead of getting time to study. The students also do not have the luxury of good housing and good home environment. Because of their poor background, they mostly reside in the congested slums in the town and this affect their performance negatively. Cassidy & Lynn (1991) found out that, a less physically crowded environment, along with motivation & parental support was associated with higher education levels of children. Their parents struggle to provide them with the basic needs leave alone. study rooms, comfortable chairs, lighting, extra learning materials at home and stationery contrary to their counterparts in stable socioeconomic families, this is asserted by Bos that a wide range of reading material at home can be thought to foster academic interest and serves to encourage learning.

Hawley (1989) and House (2002) also contend that students learn better if they are from above average or average income family, with well-educated parents who participate in the school's education process and encourage their children to learn. They established that the socio-economic status of students affected their achievement. Hence, it is concluded that a student belonging to low socio-economic Status group will score low score in academic achievement. This may be because the students who belong to low socio-economic status group are faced with many adverse circumstances. Due to the lack of interest in the parts of the parents, little attention is paid to the child's school progress. Thus, apart from innate, mental, physical and intellectual deficiencies, there are some unfortunate environmental factors, which hinder the progress of students. It can therefore be seen that many variables like intelligence, achievement motivation, self-concept, academic achievement, attitude, study habits etc. are affected by socioeconomic status of students thus the study sought to establish its effect

The use of appropriate educational materials is equally important as the use of effective teaching methods when presenting mathematics lessons to gain optimal results the use of these materials should not be limited to teachers' administration but rather pupils must use them in meaningful ways.

Chapter Three.

Methodology.

3.0 Introduction.

This chapter presents the methods employed in conducting the study, encompassed research design, study population, sample size, sampling techniques, purposive sampling, simple random sampling, data collection instruments, primary data collection, self-administered questionnaires, interviews secondary data collection, data presentation, data analysis, validity and reliability of the instruments, validity, reliability, measurement of the variables, research procedure and ethical considerations.

3.1 Research Design.

The study utilized across sectional research design, integrating both quantitative and qualitative approaches to data analysis. Across sectional survey, design was chosen for its ability to provide a systematic and factual description of data at a single point in time as noted by AMIN (2005). This approach is straight forward, less time consuming, and cost effective.

3.2 Study population

The population targeted for data collection included 1200 people, 4 head teachers and 80 teachers from 4 selected primary schools in Tororo District. Segere Primary school, Iyolwa P/S, Gule P/S and Poyem primary school.

3.3 Sample Size

The sample size of 80 respondents was determined using Knejtce and Morgan's (1970) table for sample size determination at a confident level. This sample size was selected from a population of 1200 persons ensuring practicability in data collection, adequate representative of the target population, efficiency in time management and manageable workload for analysis.

3.4 Sampling techniques.

Sampling techniques are essential methods used to select subsets of individuals or items from large population for study, enabled efficient data collection and inference draining.

3.4.1 Purposive Sampling.

Purposive sampling was employed to selected head teachers based on specific criteria relevant to the research objectives. The method ensures the inclusion of participants with diverse perspectives crucial for comprehensive insights into educational practices.

3.4.2 Simple Random Sampling

Simple random sampling was used for selecting pupils from the population.

Each pupil had an equal chance of being chosen, thereby minimizing bias and enabling generalization of findings to the entire population. This method involved assigning unique identifiers to each pupil and using a random number generator to select the required sample size.

S/N	Categories of respondents	Target population	Sample size	Sample techniques
1	Head teacher	04	4	Purpose sample
2	Teachers	80	16	Purpose
3	Pupils	1200	80	Simple random sampling
	Total	1,284	100	

3.5 Data collection instruments

The researcher employed both primary and secondary data collection method.

3.5.1 Primary data collection

Primary data collection involved gathering original data directly from respondents at their respective schools. This was done using questionnaires and interview manually ensuring first hand data obtained.

i) Self-administered questionnaires.

Self-administered questionnaire was a research tool consisting of a server of questions designed for gathering information from correspondents. The researcher used structural questionnaires to collect data from primary respondents. The advantage of self-administered questionnaire is that respondents answered at their convenience. These questionnaires were employed for teachers and head teachers of respective schools.

ii) Interviews.

An interview was structured. Conversation between an interviewer and an interviewee aimed at gathering information, insights or opinions on a particular topic.

Its advantages included clarifying responses and establishing report.

The interviewer asked questions relevant to the purpose of the interview, guiding the conversation to extract valuable responses from the interviewee.

Interviewers employed pupils of the respective schools.

3.5.2 Secondary data collection.

Secondary data collection also known as desk data collection, explored methods supplementary to the primary methods.

Data was obtained from administrative records of selective (companies obtained from reads of various departments and speakers) dissertations textbooks, the internet and other materials such as journals and newspapers. This type of data collection was important for the study especially in the literature review and chapter five. It was advantageous for its cost effectiveness, time efficiency and access to vast amounts of the pre-existing data.

Using secondary data provided valuable insights complemented primary research and helped validate findings. Making it valuable resource for researchers and analysis seeking to understand the patterns and phenomena in regard to instructional materials usage and learners' acquisition of mathematics competencies.

3.6 Data presentation.

Tables were used in the presentation of the responses before being analyzed.

3.7 Data analysis.

The summarized data was analyzed to extract meaningful information. The data were analyzed using inferential statistics such as regression analysis and correlation coefficients to determine the relation of the variables and to test the null hypothesis using excel version 2010.

3.8 Validity and variability of the instrument.

3.8.1 Validity.

Validity referred to the accuracy and meaning fullness of inferences based on the research results (Mugenda 1999)

The validity of instrument was ascertained by discussing the questionnaires and interview schedule drafts with the supervisor.

3.8.2 Reliability.

According to Mugenda (1999), reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. The reliability of instruments was established based on the preliminary results derived from the pilot study.

The study instruments were set for a pilot run.

Results realized were discussed with the supervisors and the reliability of the instrument was accepted.

3.9 Measurement of the variables.

Information technology described the nature of information within the members assigned to variables; psychologist Stanley Smith Stevens's 1986 developed the best-known classification with four levels or scales measurement, nominal ordinal, interval and ratio. This fragmental originating in psychology is widely criticized by scholars in other disciplines.

Psychologists (Rensis Likert 1932) measured the instructional materials usage and learners' acquisition of mathematics competencies using a 5-point Likert scale.

3.10 Research Procedure.

The research proposal was approved by the supervisor. The researcher designed the research instrument for use in data collection activity with the supervisor's help. The researcher obtained a letter from the coordinator of the research school of management and other officials in the study area, which enabled the official conduct of the study in the areas with ease.

This helped in setting up the program for interviews and distributing and collecting questionnaires. Data collection involved questionnaires and interviews to gather information pertinent to the research objectives.

Raw data was recorded meticulously using paper forms, ensuring accuracy and consistency throughout the process, before it was organized for analysis.

3.11 Ethical considerations.

The study was conducted following the ethical values of the community as directed by the head teacher of the place.

This study was purely academically and only questions in time with structured objectives

Objectives were used as a guide for investigations. No issues outside the study topic were discussed to avoid deviations. After compiling the report, the questionnaires were burnt to avoid misuse of study data by others who might access the sheets.

Finally, each respondent was accorded equal respect to ensure their contribution to the study was without any biasness.

Chapter Four

Data presentations analysis and interpretation of finding

4.0 Introduction.

This chapter presents the data, analysis and interpretation of the study. Data was gathered in Iyolwa town council primary schools.

4.1 Demographic characteristics of respondents.

This section includes gender, age education qualification and experiences of respondents.

TABLE 1:SHOWING GENDER OF THE RESPONDENTS

Gender	Frequency	Percentage
Male	10	50
Female	10	50
Total	20	100

Source: Primary data 2024

Table 1 above illustrates the gender distribution of the respondents. The male respondents were 10 making 50% and female respondents were 10 representing 50%.

The statistics from table 1 above shows that the male and female respondents were equal in number.

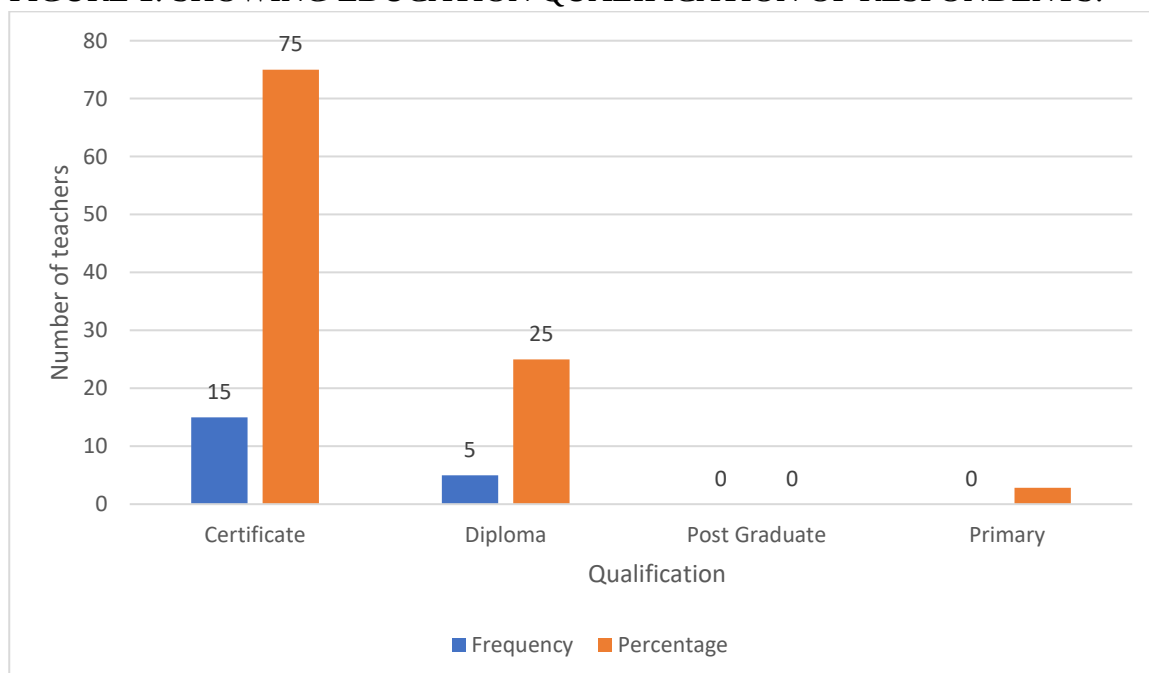
TABLE 2: SHOWING THE AGE OF THE RESPONDENTS

Age brackets	Frequency	Percentage %
18 - 30	5	25
31 - 40	10	50
41 - 50	5	25
50 and above	0	0
Total	20	100%

Source primary data 2024

Table 2 above illustrates the age distribution of the respondents 5 (25%) of the respondents were within the age brackets of 18 – 30 years 10 (50%) were within bracket of 31 – 40 years 5(25%) were 50 and above. This implied that majority of the staff were above the age of 18 years so they are very knowledgeable about the information they gave.

FIGURE 1: SHOWING EDUCATION QUALIFICATION OF RESPONDENTS.



Sources: primary data 2024

The statistical data in figure 1 above slums that must of the respondents are having certificates with 15(75%) followed by Diplomas 5 (25%) followed by graduate with 0 (0%) followed by others 0(0%) and lastly post graduate are showed 0 (0%). These masons of respondents are university graduate with minimum qualification of certificates. According to Owen etal (2015), being knowledgeable and educated increases the ability to control area's life and tasks at work.

TABLE 3: SHOWINGTHE WORKING EXPERIENCE OF RESPONDENTS

Experience	Frequency	Percentage %
Below 5	0	0
6 - 10	05	25
11 - 15	05	25
Above 15	10	50
Total	20	100

Source: primary data 2024

Table 3 indicates the number of years respondents have worked representing 0 (0%) of them have below 5 years 05 respondents making 25% have seemed for 6 – 10 years, 05 have seemed for 6 – 10 years 05(25%)of respondents have spent 11 – 15 years working and 10 (50%) have worked for above 15 years . Therefore, this indicates that the majority of the respondents have a work experience of more than 5 years.

4.1 Causes of poor performance in mathematics by girl child.

The respondents were asked vary question abort the causes of poor performances in mathematics by girl child. In addition, the results were as indicated in the table below.

TABLE 4: ARE POOR METHODS OF TEACHING MATHEMATICS IN PRIMARY SCHOOLS RESPONSIBLE FOR THE CAUSES OF POOR PERFORMANCES IN MATHEMATICS BY GIRL CHILD?

Response	Frequency	Percentage
Agree	10	50
Strongly agree	5	25
Disagree	2	10
Strongly disagree	1	5
Not sure	2	10
Total	20	100

Source: Primary data 2024

When asked about poor methods of teaching mathematics the respondents differed with some 10 (50%) Agreeing 05 (25%) Strongly agreeing 02 (10%) Disagreeing 01 (05%) strongly disagreeing 2 (10%) Not sure. These responses reflected the causes of poor performance in mathematics presentation of the results in pie chart.

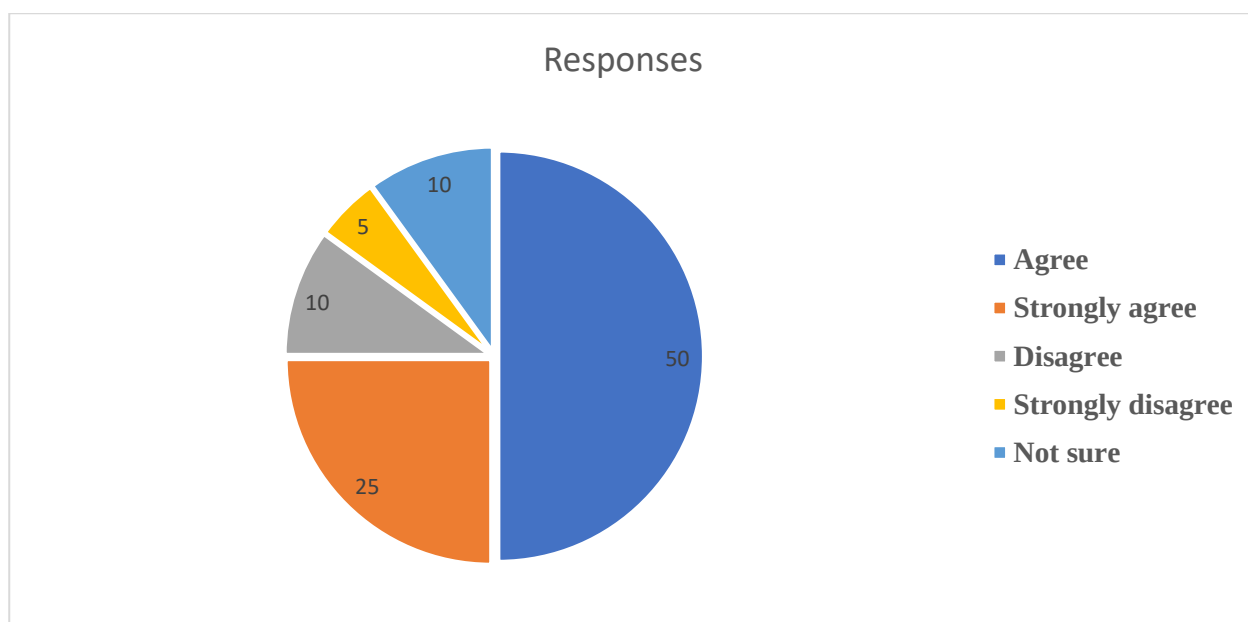
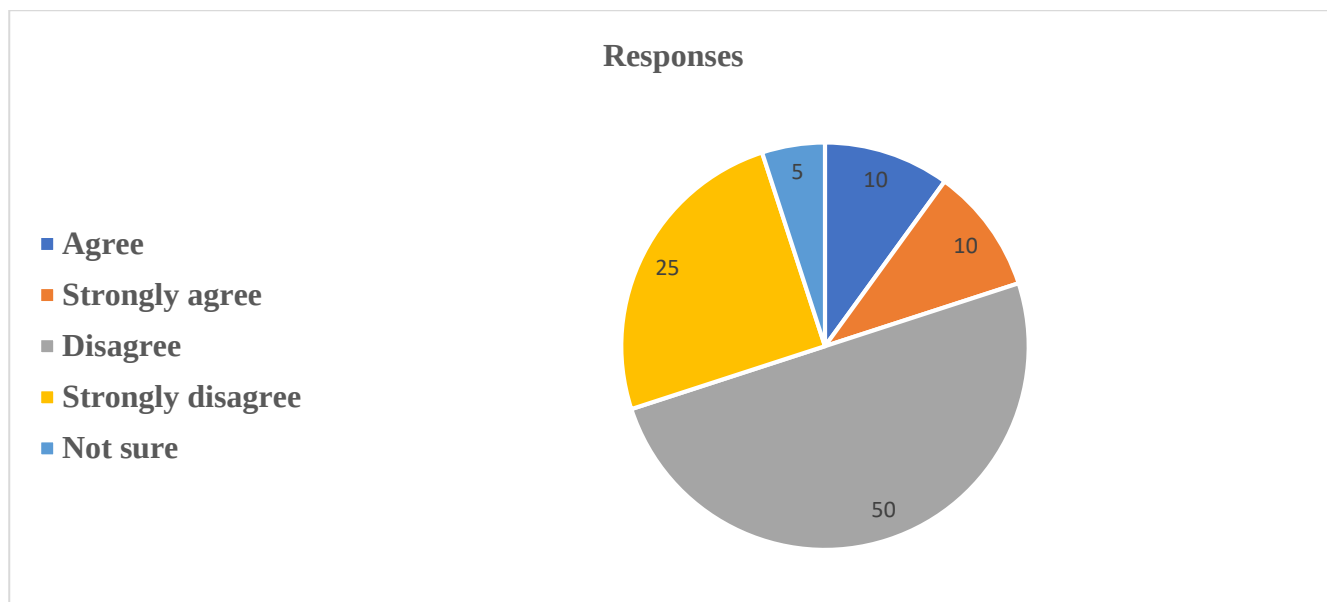


TABLE 5: DO TEACHERS USE TEXT LARDS IN CLASS WHEN TEACHING LIKE ALTERS TEXTBOOKS, CHARTS?

Response	Frequency	Percentage
Agree	2	10
Strongly agree	2	10
Disagree	10	50
Strongly disagree	5	25
Not sure	1	5
Total	20	100

Presentation of the findings on pie chart



Source of primary data 2024

2 (10 %) Agree

2 (10 %) Strongly agree

10 (50%) Disagree

5 (25%) Strongly disagree

1 (5 %) Not sure

TABLE 6: DO YOU HAVE TIME TO DO HOMEWORK AT HOME?

Response	Frequency	Percentage
Agree	01	05
Strongly agree	01	05
Disagree	12	60
Strongly disagree	05	25
Not sure	01	05
Total	20	100

Explanation in 1(5%) A, 1(5%) SA, 12(60%) D, 5(25%) SD and 1(5%) NS

FIGURE 2: PRESENTATION OF THE RESULTS ON BAR GRAPH

Figure 1: Showing education qualification of respondents. 24

Figure 2: Presentation of the results on bar graph..... 29

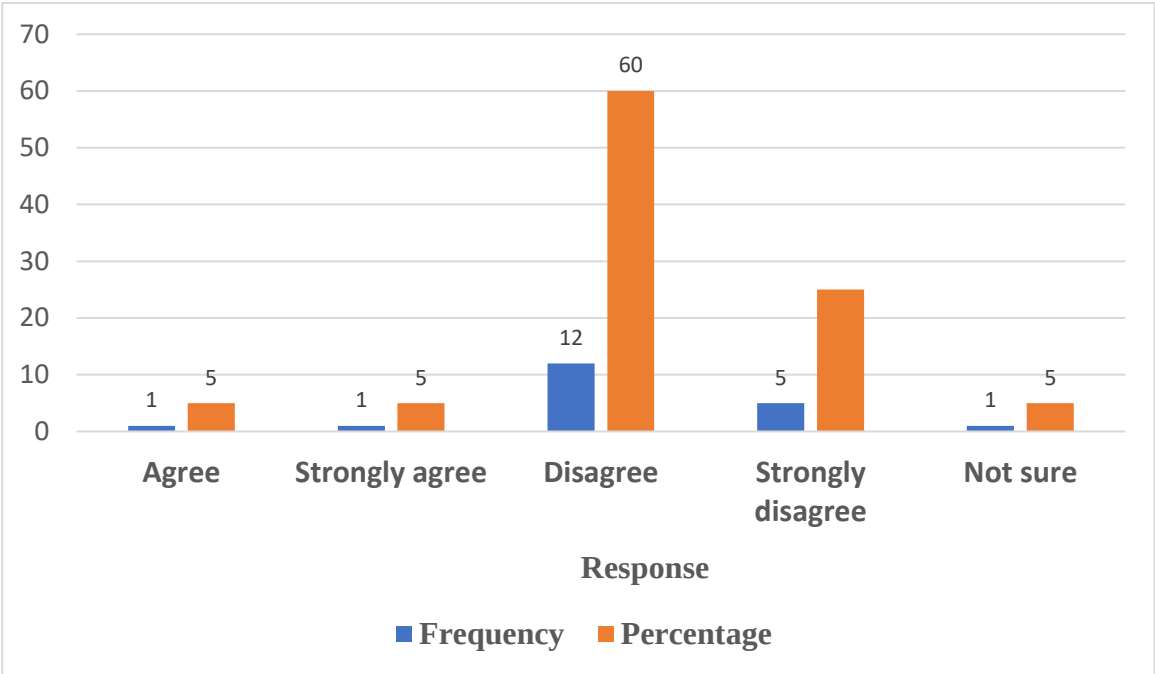


TABLE 7: DO PARENTS PROVIDE ENOUGH SUPPORT TO POEMS AT SCHOOL?

Response	Frequency	Percentage
Agree	5	25
Strongly agree	4	20
Disagree	6	30
Strongly disagree	5	25
Not sure	0	0
Total	20	100

Presentations of the finding above are as follows;

5 (25%) Agree

4 (20%) Strongly disagree

6 (30%) Disagree

5 (25%) Strongly disagree

0 (0%) Not sure

TABLE 8 :DO YOU HAVE ENOUGH TEACHERS IN YOUR SCHOOL?

Response	Frequency	Percentage
Agree	2	10
Strongly agree	2	10
Disagree	10	50
Strongly disagree	6	30
Not sure	0	0
Total	20	100

Regarding work force (number of teacher.

The following are the outcomes

2 (10%) Agree

2 (10%) Strongly agree

10 (50%) Disagree

6 (30%) Strongly disagree

0 (0%) Not sure

TABLE 9:ARE LEARNERS ARE INTERESTED IN MATHEMATICS?

Response	Frequency	Percentage
Agree	4	20

Strongly agree	5	20
Disagree	6	30
Strongly disagree	4	20
Not sure	1	0
Total	20	100

Among the respondents answered as follows;

4 (20%) Agree

5 (20%) Strongly agree

6 (30%) Disagree

4 (20%) Strongly disagree

0 (0%) Not sure

TABLE 10:DO TEACHERS MOTIVATE LEARNERS DURING MATHEMATIC LESSONS?

Response	Frequency	Percentage
Agree	6	30
Strongly agree	5	25
Disagree	4	20
Strongly disagree	4	20
Not sure	1	5
Total	20	100

Responses from respondents were as follows;

6 (30%) Agree

5 (25%) Strongly agree

4 (20%) Disagree

4 (20%) Strongly disagree

1 (5%) Not sure

TABLE 11: ARE ASSESSMENT TASKS EMBEDDED IN MATHEMATIC LESSONS?

Response	Frequency	Percentage
Agree	6	30
Strongly agree	6	30
Disagree	4	20
Strongly disagree	4	20
Not sure	0	0
Total	20	100

Responses from respondents were as follows;

6 (30%) Agree

6 (30%) Strongly agree

4 (20%) Disagree

4 (20%) Strongly disagree

0 (0%) Not sure

4.2 Appropriate methods of teaching mathematics in primary schools

Table 12: How effective do you find the problem-solving method in teaching mathematics

Response	Frequency	Percentages
Very Effective	18	90
Effective	2	10

Total	20	100
-------	----	-----

Source: primary data, (2024)

The data showed that a significant majority of the respondents (90%) found the problem-solving method to be "Very Effective" in teaching mathematics, while only 10% considered it "Effective." This indicates that teachers overwhelmingly supported the problem-solving method, viewing it as highly successful in fostering students' understanding and engagement with mathematical concepts.

Table 13: How often do you use the discovery method to teach mathematics in your classroom

Response	Frequency	Percentages
Always	10	50
Often	6	30
Sometimes	1	5
Never	1	5
Not sure	2	10
Total	20	100

Source: primary data,(2024)

In the case of the discovery method, half of the respondents (50%) reported that they "Always" used this approach in their classrooms, while 30% said they used it "Often." A small percentage of respondents (5%) used the discovery method "Sometimes" or "Never," and 10% were "Not Sure" about their frequency of use. These results indicate that the discovery method is a common

teaching strategy, though not universally applied. The 50% usage rate suggests that while many teachers favor this method, some still refrain from employing it regularly, possibly due to varying classroom contexts or teaching styles.

Table 14: To what extent do you agree that demonstration and illustration enhance students' understanding of mathematical concepts

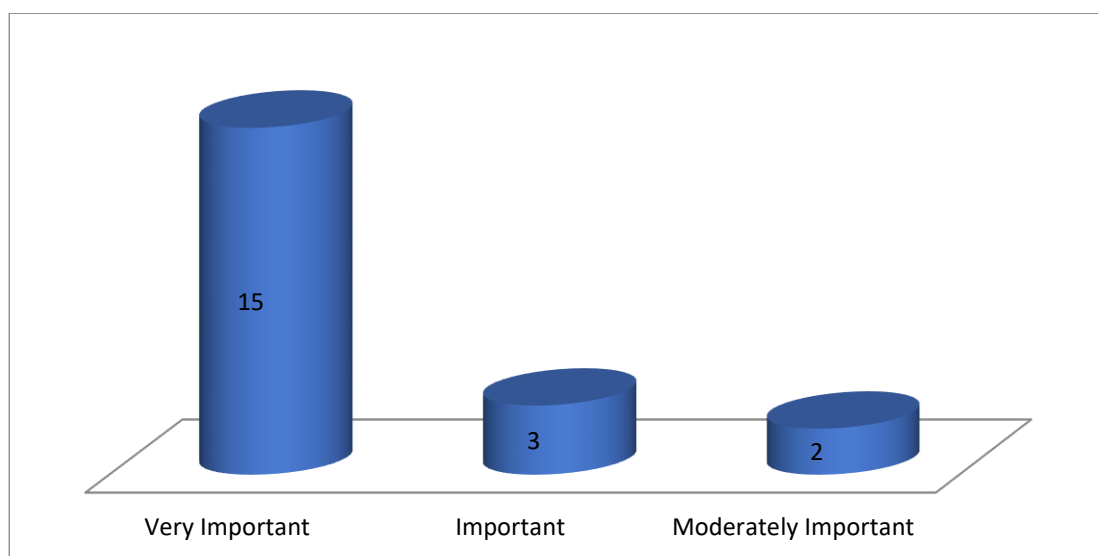
Response	Frequency	Percentages
Agree	20	10
Total	20	100

Source: primary data, (2024)

All respondents (100%) agreed that demonstration and illustration methods enhance students' understanding of mathematical concepts. This unanimous agreement highlights the importance of visual and practical teaching techniques in helping students grasp complex mathematical ideas.

Figure 5:How important do you think teacher expectations in determining students' performance in mathematics

Source: primary data, (2018)



Most respondents (75%) rated teacher expectations as "Very Important" in determining students' performance in mathematics, with 15% finding it "Important" and 10% seeing it as "Moderately Important."

4.3 Government strategies in promoting the teaching of mathematics in primary schools

Table 15: Has the government implemented sufficient financial support programs (e.g., Parish Development Model, Operation Wealth Creation) to promote mathematics education?

Response	Frequency	Percentages
Agree	2	10
Strongly agree	1	5
Disagree	14	70
Strongly disagree	3	15
Not sure		
Total	20	100

Source: primary data, (2024)

A majority of respondents (70%) "Disagreed" that the government had implemented sufficient financial support programs to promote mathematics education, while 15% "Strongly Disagreed." only 10% "agreed" and 5% "strongly agreed" with the sufficiency of these programs. This indicates a general dissatisfaction among the respondents regarding the adequacy of government financial support for mathematics education.

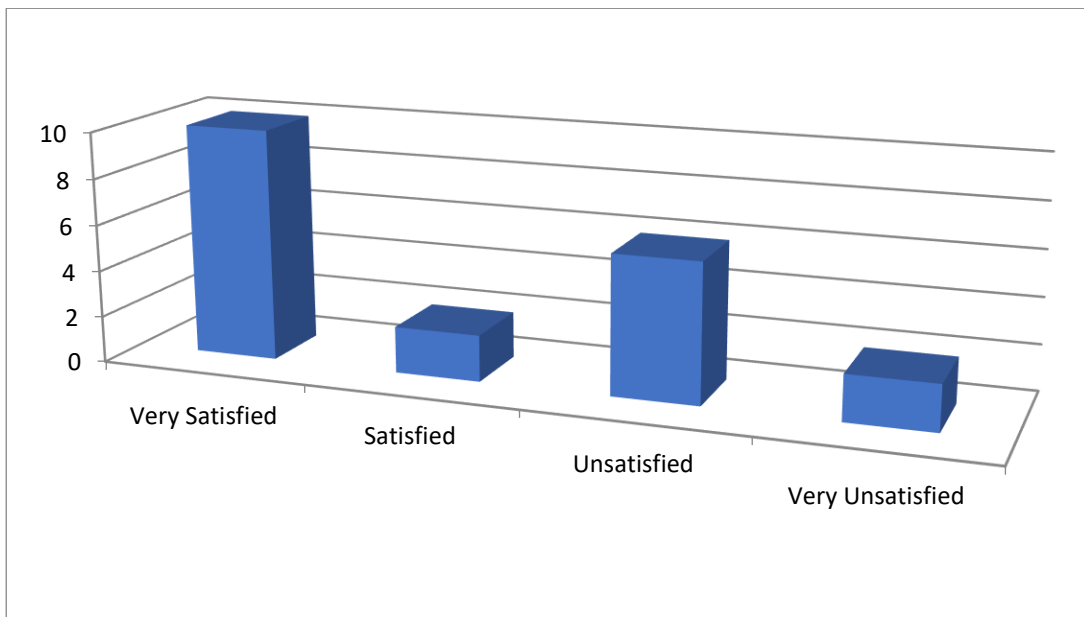
Table 16 Do you believe that government-led counseling and guidance programs for the girl child have improved attitudes towards mathematics

Response	Frequency	Percentages
Agree	20	100
Total	20	100

Source: primary data,(2024)

All respondents (100%) "agreed" that government-led counseling and guidance programs for girls had improved attitudes towards mathematics.

Figure 6:Are you satisfied with the availability of in-service training opportunities for mathematics teachers to enhance their teaching skills



Half of the respondents (50%) were "Very Satisfied" with the availability of in-service training opportunities for mathematics teachers, while 10% were "Satisfied." However, 30% were "Unsatisfied" and 10% were "Very Unsatisfied." This indicates a divide among the teachers, with some satisfied with the training opportunities but a significant portion dissatisfied

Chapter Five

Discussion of findings, conclusions and recommendations.

Introduction.

This chapter presents the discussion of findings conclusions and recommendations of the study. The chapter also suggests areas for further research; Conclusions were drawn based on the content analysis, research questions and objectives of the study as well as the findings of the study. Therefore, recommendations were made based on content analyzed and the findings of the study.

5.1 Discussion of the findings.

5.1.1. Discussion of the findings on the causes of poor performance in mathematics by girl child in primary school in Iyolwa town council.

The male respondents were 10 making up 50% and the female respondents were 10 making up 50%. The statistical data showed that same number of both male and female respondents. Regarding the age of respondents were above 18 years. These findings aligned with a study conducted by Sanny (2018) in Southeast Malawi where it was found that the majority of the respondents who participated in this study were above 18, and they were mainly females. The result showed that 50% of respondents agreed and 25% strongly agreed that methods used during mathematical lesson conducted could not make most learners understand mathematic concepts.

However, 10% disagreed, 5% strongly disagreed, and 10% were not sure about methods of teaching mathematics. These findings were consistent with a study conducted by Cetin and Wesliham (2015) in USA which heightened delivery of mathematics concepts as key in performance and improvement.

Regarding the belief that the use of concrete manipulatives enhances proper conceptual understanding of mathematic concepts, 10% of respondents agree and 10% strongly agree. Conversely, 50% disagreed, 25% strongly disagreed and 5% were unsure.

The majority of respondents disagreed on the contrary. Studies conducted by Smith and Jones (2017), Chen, and Lee (2019), who heightened the positive impact of concrete manipulatives on the development of mathematical competences among students. Concrete materials such as counting blocks, geometric shapes and measuring tools, provide tangible representation that facilitate conceptual understanding and problem-solving skills.

When asked about the observed improvements in students problems solving skills due to the use of digital tools such as interactive white boards and educational apps during mathematic instructions, 10% agreed, and 10% strongly agreed in contrast, 50% disagreed, 25% strongly disagree, and 5% were unsure.

The majority of respondents disagreed with these statements. However, a study conducted by Miller and Smith (2016) found that digital technologies promote mathematical reasoning, problem solving and computational skills among students.

To find out whether printed materials such as textbooks and workbooks effectively support the development of student's mathematical competences, 10%of respondents agreed and 10% strongly agreed, on the other hand, 50% disagreed, 25% strongly disagreed and 5% were unsure. The majority disagreed and these findings were inconsistent with students done by Adams and Clark (2019), Kim, and Park (2020) who stated that printed materials offer structured content, practice exercises and reference materials aligned with curriculum standards.

However, researcher suggests the need for of printed materials to ensure relevance, accessibility and engagement for all students.

In regards to assessment task being embedded in mathematic lessons, 30% respondents agreed and 30% strongly agreed mean while 20% disagreed, 20% strongly disagreed and 0% were unsure. These findings aligned with Eisner (2013) who stated that printed material such as textbooks, worksheets and flash cards are commonly used in primary classrooms to provide written explanations, practice exercises and reference materials.

Textbooks offer structured content aligned with the curriculum, while worksheets and flash cards provide opportunities for independent practice and reinforcement of skills.

When asked about having time to do homework to enhance mathematics learning, 5% of respondents agreed 5% strongly agreed on the hand 60% disagreed 25% strongly disagreed and 5% were unsure. These findings were consistent with the study conducted by Mayer (2014) which found out that when a pupil hears, sees and does could enhance learning experiences. Homework caters to diverse learning styles and reinforces understandings.

In regard to the provision of enough support by parents to girl child at school, 25% of respondents agreed and 20% strongly agreed, in contrast 30% disagreed 25% strongly disagreed and 0% were unsure. These findings were consistent with studies done by Graccia and Kim (2020) and Payloret (2023) who stated that support by parent offered to the girl child in the area of scholastic materials and moral support encourage the learner to aim higher.

Among the respondents 30% agreed, 25% strongly agreed, 20% disagreed, 20% strongly disagreed and 5% were unsure with the facts that pupils' motivation during mathematics lessons plays a big role in enhancing mathematical concepts. A study by Brown and Nguyer (2019) and Lee Etal (2021) revealed the interactive while boards, manipulative kits and ant material resources stimulate students' curiosity and involvement in learning activities. Interactive features, such as drag and drop exercises and virtual manipulative encourage students to explore, experiment and collaborate, leading to increased motivation and interest in mathematics.

When asked learners who are interested in mathematics; 20% agreed 25% strongly agreed, 30% disagreed, 25% strongly disagreed and 5% were unsure. In the study by Ngoyen (2019) and Lee et al (2021) stated that motivation and interest in mathematics encouraged students to explore, experiment and collaboration leading to increased motivation and interest in mathematics hence, enhancing the learning of mathematical concepts.

In regards to enough teachers of mathematics, 10% agreed 10% strongly agreed, 50% disagreed, 30% strongly disagreed and 0% were unsure.

Basing on the study conducted by Hermandes and Martinez (2017) and Gupta et al (2022) which highlighted the adaptability of instructional material in providing entry points and pathways for learning. Teachers can leverage a variety of materials, such as leveled texts, adaptor software, and flexible assignment to accommodate varying readiness levels, learning styles and languages proficiencies among learners. In those findings it also explained that when a teacher is not enough, instructional materials could boost learning hence, enhancing development of mathematical concepts.

5.1.2. Appropriate Methods of Teaching Mathematics in Primary Schools

A majority of the respondents (90%) found the problem-solving method to have been "Very Effective" in teaching mathematics, while only 10% considered it "Effective." This indicated that teachers overwhelmingly supported the problem-solving method, viewing it as highly successful in fostering students' understanding and engagement with mathematical concepts. Bull (1996) supported the use of various methods, including problem-solving, as essential tools in the hands of teachers. His observation aligned with the majority of respondents who found the problem-solving method to have been "Very Effective" in teaching mathematics. Bull emphasized that

different teaching strategies, such as discovery, questions and answers, and demonstration, were key to engaging students and improving their mathematical understanding.

In the case of the discovery method, half of the respondents (50%) reported that they "Always" used this approach in their classrooms, while 30% said they used it "Often." A small percentage of respondents (5%) used the discovery method "Sometimes" or "Never," and 10% were "Not Sure" about their frequency of use. Kirschner, Sweller, & Clark (2006) critiqued the discovery method, arguing that it could lead to cognitive overload, particularly for students who did not have a strong foundation in the subject. They believed that more structured and guided learning was necessary for students who struggled with complex concepts. This may explain why 5% of respondents used the method only "Sometimes" or "Never," as they may have found it less effective in certain classroom settings, particularly where students needed more direct instruction.

Most respondents (75%) rated teacher expectations as having been "Very Important" in determining students' performance in mathematics, with 15% finding them "Important" and 10% seeing them as "Moderately Important." Rubie-Davies (2010) agreed that teacher expectations could influence student outcomes but cautioned that the relationship was not always straightforward. She noted that while high expectations could lead to positive results, unrealistic expectations or biases could also harm student performance. This nuance suggested that while 75% of respondents rated expectations as "Very Important," it was essential to consider how these expectations were communicated and managed to avoid negative effects on students who may have felt pressured.

5.1.3. Government Strategies in Promoting the Teaching of Mathematics in Primary Schools

A majority of respondents (70%) "Disagreed" that the government had implemented sufficient financial support programs to promote mathematics education, while 15% "Strongly Disagreed." Only 10% "Agreed" and 5% "Strongly Agreed" with the sufficiency of these programs. This indicated a general dissatisfaction among the respondents regarding the adequacy of government financial support for mathematics education. Miller and Warren (2005) might have disagreed with these findings. They argued that while financial support could be important, other factors such as curriculum design, teacher competency, and pedagogical strategies played a more significant role in improving mathematics education. This contrasted with the strong dissatisfaction found in this study regarding financial support for mathematics programs. Lockheed and Vespoor (1991) offered a slightly different perspective, suggesting that financial investment alone did not ensure quality education. They argued that while governments might allocate resources to education, the effectiveness of these investments depended on how well resources were used, challenging the view that increasing financial support would automatically improve mathematics education.

All respondents (100%) "Agreed" that government-led counseling and guidance programs for girls had improved attitudes towards mathematics. Donovanari (1976) confirmed the importance of counseling and guidance programs for girls in shaping their attitudes toward mathematics. Donovanari argued that when girls were guided and counseled effectively, they developed a positive attitude towards mathematics, which aligned with the 100% of respondents who agreed that government-led counseling programs had improved attitudes towards the subject.

Half of the respondents (50%) were "Very Satisfied" with the availability of in-service training opportunities for mathematics teachers, while 10% were "Satisfied." However, 30% were "Unsatisfied" and 10% were "Very Unsatisfied." This indicated a divide among the teachers, with some satisfied with the training opportunities, but a significant portion dissatisfied. Garet et al. (2001) supported the notion that in-service training opportunities were crucial for teacher effectiveness, particularly in mathematics. They found that well-designed professional development programs significantly improved teachers' knowledge and instructional skills. This aligned with the 50% of respondents who were "Very Satisfied" and the 10% who were "Satisfied" with the training opportunities. Garet et al. highlighted the positive impact of ongoing professional development, which may explain the satisfaction among some respondents.

5.2 Conclusion.

The findings from the study on the causes of poor performance in mathematics among girl children in primary schools in Iyolwa Town Council highlight several critical factors influencing educational outcomes. Despite a balanced representation of male and female respondents, there appears to be a consensus on the inadequacies of teaching methodologies and the lack of effective support systems for learners. The statistical data revealed that many respondents found the teaching methods employed during mathematics lessons ineffective, with a significant portion expressing doubts about the use of concrete manipulatives and digital tools in enhancing understanding.

The findings corroborate existing literature that emphasizes the importance of teaching methods and materials in fostering mathematical competence. Respondents indicated a strong preference for problem-solving methods, yet a substantial number expressed concerns regarding the effectiveness of other instructional strategies, such as discovery learning. This suggests a need

for more structured and supportive teaching approaches, particularly for students struggling with complex mathematical concepts.

Moreover, the lack of adequate parental support and motivation among students emerged as key contributors to poor performance. While some respondents acknowledged the significance of parental involvement in education, many indicated insufficient support for girls in their academic pursuits. Additionally, the findings reflected a general dissatisfaction with government initiatives to improve mathematics education, particularly regarding financial support and teacher training opportunities.

5.3 Recommendation.

Schools should adopt a diverse range of teaching strategies that cater to different learning styles, emphasizing problem-solving and interactive methods. Training sessions for teachers on effective instructional strategies, including the use of manipulatives and digital tools, should be prioritized.

Initiatives to engage parents in their children's education should be developed. Workshops and informational sessions can help parents understand how they can support their daughters academically, especially in mathematics.

Establish programs that provide additional academic support for girl children, including tutoring sessions and peer mentoring programs. These initiatives can help bridge the gap in understanding mathematical concepts.

The government should enhance financial support for mathematics education, ensuring that schools have the necessary resources to implement effective teaching strategies. Additionally, in-

service training opportunities for mathematics teachers must be expanded to ensure that they are well-equipped to deliver quality education.

Continued support for counseling and guidance programs aimed at girls is essential. These programs should focus on building confidence in mathematics and addressing any societal stereotypes that discourage girls from pursuing mathematical subjects.

Schools should implement regular assessments to track student progress in mathematics and provide timely feedback to both students and parents. This will help identify areas needing improvement and support students' learning journeys.

References

Bandura (1997) stated that self-efficacy is positively related to persistence

Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory.
Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1989). Social cognitive theory. *Annals of child development*, 6. Six theories of
child development, pp. 1-60. Greenwich, CT: JAI Press.

Barch and Veroff (2004) said that anticipation of positive outcome enhance tendency
achieve and vice versa

Becker, J.R. (1981). Differential treatment of females and males in mathematics classes. *Journal
for Research in Mathematics Education*, 12, 40-53

Betz, N.E., & Hackett. (1983). The relationship of mathematics self-efficacy expectations to the
selection of science-based college majors. *Journal of Vocational Behavior*,

Bole and Uko (2013) emphasized better way of accusation of mathematics concepts leading
to improved achievement scores

Bruner (1966) Proposed that for knowledge to be effectively strong and enclosed in memory
leaving should progress from enactive to iconic to symbolic representation of the
someone world, when the termed as three modes of representation

Buy 1996 observed that learning of mathematics as dependent of the teacher

Castejon and Perez (1998), Assents on educational law of people

Clewell, B. C., Anderson, B.T., & Thorpe, M.E (1992). Breaking the barriers.

Cockcroft (1982) altitudes and understanding of pupil has more influence

Construction (1966) He advocated for the development of autonomous learners who have the ability to create knowledge independently

Costello 1997, Teachers refocus and validates students' perception

Crawford, M., Herrmann, D.J., Holdsworth, M., Randall, E., & Robbins, D. (1989). Gender and beliefs about memory. *British Journal of psychology*, 25, 109-116.

Dew, K.M., Galassi, J.P., Galassi, M.D. (1984). Math anxiety: Relation with situational test anxiety, performance, physiological arousal, and math avoidance behavior. *Journal of Counseling Psychology*, 31, 580-583.

Donovari (1976) Developmental aptitude has impact in mathematics

Dweck (2007) observed that socio-cultural forces impart beliefs that boys have greater ability in mathematics

Dweck, C. S., & Repacks, N. D. (1973). Learned helplessness and reinforcement responsibility in children. *Journal of Personality and Social Psychology*, 25, 109-116.

Dweck, C.S. (1986). Motivational processes affecting learning. *American*

Eccles, J. S. (1983). Expectations, values and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motivations* (pp. 75-146). San Francisco: Freeman.

Eccles, J. S. (1987). Gender roles and women's achievement-related decisions. *Psychology of Women Quarterly*, 11, 135-172.

Eccles, J. S., & Jacobs, J. F. (1986). Social forces shape math attitudes and performance. *Signs*, 11, 367-380.

Eccles-Parson, J. S., Adler, T. F., & Kaczula, C. M. (1982). Socialization of achievement attitudes and beliefs: Parental influences. *Child Development*, 53, 310-321

Eshiwani (1974) Girls develop negative attitudes

Eshwan (2016), Ruth Edward and Alex (2015) for the highlighted the adverse impact of sufficient teaching materials on education secured delivery and learners acquisition of mathematics competence in public in

Eysenck, M. W. (1992). *Anxiety: The cognitive perspective*. Hove, UK: Lawrence Erlbaum Associates. Cited in Fox. E. (1994). Attentional bias in anxiety: A defective inhibition hypothesis. *Cognition and Emotion*, 8, 165-195.

Fennema, E., & Reyes, L. H. (1981 October). Teacher/peer influences on sex differences in mathematics confidence (Final report to National Institute of Education grant NIE-G79-0112). Madison: University of Wisconsin-Madison, Department of Curriculum and Instruction. Cited in Koehler, M.S. (1990). Classrooms, teachers and gender differences in mathematics. In E. Fennema & G.C. Leder (Eds.), *Mathematics and Gender* (pp. 128-148). New York: Teachers College Press.

Fennema, E., & Sherman, J.A. (1976). Fennema-Sherman Mathematics Attitude Scales. *JSAS: Catalog of Selected Documents in psychology*, 6, 31 (Ms. No. 1225).

Fennema, E., & Sherman, J.A. (1978). Sex related differences in mathematics achievement, spatial visualization and affective factors: A further study. *Journal for Research in Mathematics Education*, 9, 189-203.

Fledman, R.S., & Theiss, A.J. (1982). The teacher and student as pygmaliions: Joint effects of teacher and student expectations, *Journal of Educational Psychology*, 74, 217-223.

Fuller B (2011). Cross-national Differences in Educational Achievement Inequality.

Gecirt (1999), this philosophy has significant influence on the structure of mathematics

Gilman and Anderman 2006 motivation influences psychological and social functioning and facilitates academic performances

Hackett, G & Betz, N.E. (1981). An exploration of the mathematics self-efficacy/mathematics performance correspondence. Journal of Research in Mathematics Education, 20, 261-273.

Halpern (2010) and Lindbergh noticed differences between boys and girls

Helping female and minority students succeed in mathematics and science. San Francisco, CA: Jossey-Bass.

Jungen, K.A. (2008). Parental Influence and Career Choice: How Parents Affect the Career Aspirations of Their Children. The Graduate School University of Wisconsin-Stout Menomonie, WI. Retrieved from http://minds.wisconsin.edu/bitstream/handle/1793/42711/2008_jungenk.pdf?Sequence.

Keller, B. K. (2004). Parental behaviors that influence adolescents career development. National career development association. Retrieved from http://associationdatabase.com/aws/NCDA/pt/sd/news_article/491_1/PARENT/layout_details/false

Kenya or cumbia (2020) stress the pivotal role of teachers in communication delivery

Kenya time April (2001) Girls negative attitudes towards mathematics

Kings (2010) impact of teachers' attitude on girls' achievement in mathematics

Leder (2005) viewed it as gender-based stereotype that convey misconceptions

Magomal (2016) mathematics competence refers to an individual's ability to understand, apply, principles and procedures effectively in various context

Mapale (1994). The tend to rate daughters as less mistakable than boys.

Meyer and koehler (1990), its altitude in developing learner's mathematic ability.

Mulchahy (2010) under scored the significant of creating an inclusive classroom environment

Mullis (1991) State of mathematics achievement in the USA

Mwangi (1988) had positive attitudes towards learning issues important

Nya Mongol (2014) Acquisition of mathematical competences is grasping the concept or the understand of mathematic concepts by learners

Odhiambo (2005) parents' education and encourage are strongly related to improve pupils' achievements

Oketch (1982) Mwangi (1983) Cockcroft 1982 and onyongo 2003 must male teachers prefer teaching mathematics and science while female teachers prefer teaching English and arts

Orton (1994), Difference in parental expectation desire and pressure ray exerts at home on sums and decision.

Peng and Wrights (1994) A family of high socioeconomic status achieves a lot

Phillip (1998) Found out that parental education and socio economic status has an impart

Psychologist, 41, 1041-1048.

Ralston 1999 many teachers had exhibited higher levels of negativity

Steele (1999) Talked by ability self-confidence of motivation

Stipek and Granlinski (1991) teachers said girls have lower expectations in mathematics than boys

Thou (1985) Attitudes makes achievement a success

Wangi and Thomas (1995) mathematics viewed a difficult subject

Wiener (1986) asserts that if expectations of future successes are low students will hold their effort

Ying and Chiang (1991), parental expectation and students' achievements in MTC has strong connection

Zadoo and Ranza (2008) Wangi and Thomas (1995) mathematics viewed as a difficult subject

Appendices.

Appendix 1: Pupil's Questionnaire.3.

1. Table 4 Are poor methods of teaching mathematics in primary schools cause poor performance in mathematics by girl child.

Response	Frequency	Percentage
Agree		
Strongly agree		
Disagree		
Strongly disagree		
Not sure		
Total		

2. Table 5. Do teaches use teaching/ learning aids in class while teaching.

Response	Frequency	Percentage
Agree		
Strongly agree		
Disagree		
Strongly disagree		
Not sure		
Total		

3. Table 6. Do you have time to do homework?

Response	Frequency	Percentage
Agree		
Strongly agree		
Disagree		
Strongly disagree		
Not sure		
Total		

4. Table 7. Do parents provide enough support to pupils at school?

Response	Frequency	Percentage
Agree		
Strongly agree		
Disagree		
Strongly disagree		
Not sure		
Total		

5. Table 8. Do you have enough teachers in your school?

Response	Frequency		Percentage
Agree			
Strongly agree			

Disagree			
Strongly disagree			
Not sure			
Total			

6. Table 9. Are learners interested in mathematics?

Response	Frequency	Percentage
Agree		
Strongly agree		
Disagree		
Strongly disagree		
Not sure		
Total		

7. Table 10. Do teachers motivate learners in mathematics lesson?

Response	Frequency	Percentage
Agree		
Strongly agree		
Disagree		
Strongly disagree		
Not sure		
Total		

8. Table 11. Are assessment tasks embedded in mathematics lessons?

Response	Frequency	Percentage
Agree		
Strongly agree		
Disagree		
Strongly disagree		
Not sure		
Total		

Section A-Bio Data

This section appreciates the background information of the respondent (pupils) in the research study.

I. What is your level of study (class)?

- a) Primary four.
- b) Primary five
- c) Primary six.
- d) Primary seven.

Section B-Substantive Data.

Guidelines for filling part B below

Strongly disagree =1 Disagree =2 Undecided=3 Agree=4 strongly Agree=5

Fill in each space provided using the scale above.

1. Girls own self-influence towards mathematics.

The following statements are meant to determine the influence of girls own self towards mathematics.

STATEMENT

RESPONSE

Strongly Agree Un decided Disagree Strongly
Agree disagree

It is easier to understand
mathematics than any other subject
and it is interesting learning it.

Mathematics is my greatest
nightmare in school. I'd drop it if it
was optional

It is quite normal for boys to perform
bettering mathematics than girls.

I hate mathematics with passion

2. Teacher's influence

The following statements are meant to determine teachers influence towards girls' poor performance in mathematics.

STATEMENT	RESPONSE				
	Strongly Agree	Agree	Un decided	Disagree	Strongly Disagree

I like my mathematics teacher's way of teaching mathematics; I understand very well.					
my mathematics teacher has made me feel I have the ability to perform well in mathematics and pursue it further.					
My mathematics teacher treat girls differently from the way boys are treated during the lesson.					
I prefer being taught mathematics by a female teacher rather than a male teacher. .					
Our teacher encourages us to work together during lessons irrespective of our gender					
We have many mathematics teachers in our school that take care of all student mathematical needs.					

3. Parents Influence.

The following statements are meant to determine parents influence towards girls' poor performance in mathematics.

STATEMENT	RESPONSE				
	Strongly Agree	Agree	Un decided	Disagree	Strongly Disagree
My parents do not care whether I like mathematics or not, they have never encouraged me to do well in mathematics.					
My parents do not care whether I like mathematics or not, they have never encouraged me to do well in mathematics.					
My parents think boys are better in mathematics than girls					
My parents are the reasons I hate mathematics					
My parent often visits my school to check on my academic performance especially in mathematics.'					

4. Socio-economic background influence

The following statements are meant to determine socioeconomic background influence

STATEMENT	RESPONSE				
	Strongly Agree	Agree	Un decided	Disagree	Strongly Disagree

I am always absent in school due to lack of school fees.					
My parents can't afford educational at home e.g. study tables, diaries and books					
I work after school to help my 11trents make ends meet					
My home environment motivates to do mathematics					
I could perform better in mathematics if I lived somewhere better than my home.					

THANK YOU FOR YOUR TIME!

Appendix 11: Teachers Questionnaire.

Section A: Bio Data

This section appreciates the background information of the respondents (teachers) in the research study.

1. What is your gender?
 - a. Male
 - b. Female
2. What is your position in the school under study?
 - a. Principal
 - b. Deputy principal
 - c. Subject/mathematics teacher
 - d. Class teacher
3. How long have you taught in the school under study
 - a. Less than a year
 - b. Two-year years
 - c. Above three years
4. What is your highest qualification?
 - a. Post graduate diploma in Education
 - b. Graduate teacher
 - c. Diploma

Section B: Substantive Data

Guidelines for filling part B below

Strongly disagree =1 Disagree =2 Undecided =3 Agree =4 strongly agree = 5

Fill in each space provided using the scale above.

STATEMENT	RESPONSE				
	Strongly Agree	Agree	Un decided	Disagree	Strongly Disagree
I have different attitude towards girls and boys' ability towards mathematics					
I prefer teaching mathematics to boys than girls as they are highly motivated to achieve higher in mathematics than girls					
I always talk to girls about the importance of mathematics and how they can achieve better performance					
I occasionally attend seminars for mathematics teachers					

THANK YOU FOR YOUR TIME!



**BUSITEMA
UNIVERSITY**
Pursuing Excellence

P.O. Box 236, Tororo
Gen: +256-434448842
Dir: +256-434448864
Mob: +256-782999874
Fax: +256-434436317
Email: info@busitema.ac.ug
Website: www.busitema.ac.ug

**FACULTY OF SCIENCE AND EDUCATION
DEPARTMENT OF EDUCATION**

06th May, 2024

TO WHOM IT MAY CONCERN

BACHELOR OF EDUCATION, PRIMARY

MR/Ms. ODOI YONA is a student

of Bachelor of Education, Primary of Busitema University, Faculty of Science and Education,

Nagongera Campus. His/her Registration Number is BULUP/2022/0294

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

His/her research topic is POOR PERFORMANCE

AMONG GIRL CHILD IN MATHEMATICS IN
PRIMARY SCHOOLS IN NYOLWA TOWN COUNCIL
TORORO DISTRICT

Yours Sincerely,

**BUSITEMA UNIVERSITY
DEPARTMENT OF EDUCATION
FACULTY OF SCIENCE AND EDUCATION**

06 MAY 2024



Dr. Kaweesi Muhanda
P.O BOX 236, TORORO (U)

Ag Head of Department, Education