

**TEACHER MOTIVATION AND GIRL'S PERFORMANCE IN MATHEMATICS IN
PRIMARY SCHOOLS: A CASE STUDY OF MAEFE SUB COUNTY MANAFWA
DISTRICT**

JAMES MAYANZA

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**A DISSERTATION SUBMITTED TO THE SCHOOL OF EDUCATION IN PARTIAL
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ABSTRACT

The research study concentrated on teacher motivation and girls performance in Mathematics in primary schools in Maege Sub County Manafwa District and it was guided by three specific objectives: To investigate the effect of teacher motivation on girl's performance in Mathematics in primary schools in Maege sub county, Manafwa District, to examine challenges affecting teacher motivation and girl's performance in Mathematics in primary schools in Maege sub county, Manafwa district and lastly to assess interventions for enhancing teacher motivation and girl's performance in Mathematics in primary schools in Maege Sub county, Manafwa district. The study used a descriptive research design which was both qualitative and quantitative and considered a sample size of 80 respondents. Study findings concluded that: lack of teacher motivation affects understanding of subject matter by girl students, the study also concluded that lack of teacher motivation contributes to inefficiency of the educational system and lower subject score in Mathematics by girls, that Poor work environments that are not favourable affect teacher motivation, that rewarding teachers can work as a measure to improve girl's performance in mathematics, that improving teacher remuneration can help in improving girls performance in mathematics. The study recommends that: There should be more investments by different Governments in a number of strategies to improve teacher motivation such that student's performance can be improved upon and lastly that there is need for teachers to go for further studies such that they can understand how to ethically handle different children that they teach.

DECLARATION

I, **MAYANZA JAMES** hereby declare that this research report entitled “Teacher Motivation and girl’s performance in mathematics in primary schools in Maefe Sub County Manafwa District” is my original work and to the best of my knowledge has never been submitted to any other institution of higher learning for any academic award.

Sign: 

Date: 

MAYANZA JAMES

APPROVAL

This research report was carried out under my supervision on the topic "Teacher Motivation and girl's performance in mathematics in primary schools in Maefe Sub County Manafwa District" and it is now ready for submission as a partial fulfillment for the requirements of the award of a bachelor's degree of Education of Uganda Christian University.

Signature: Tsemayi Vincent Date: 22/10/2024

Mr. Tsemayi Vincent

Supervisor

DEDICATION

This research report is a special dedication to my entire family who have in one way or another put effort towards my studies to this level. May the Almighty God bless the work of their hands abundantly.

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I acknowledge God the Alpha and Omega, for the precious gift of life, strength, knowledge and wisdom which have enabled me carry out this research successfully.

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LIST OF ABBREVIATIONS

MoES,	Ministry of Education and sports
MoH	Ministry of Health
OECD	Organization for Economic Co-operation and Development
PLE	Primary Leaving Examinations
SPSS	Statistical Package for Social Sciences
UK	United Kingdom
UNEB	United National examination board
UNICEF	United Nations Children’s Fund
USA	United States of America
VSO	Voluntary Service Overseas

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter presents information about the background to the study, problem statement, objectives of the study, research questions, scope of the study, and significance of the study, limitations and delimitations to the research study

1.1 Backgrounds to the study

Globally, employees in organizations and learning institutions like to feel that someone cares about their work and appreciates it which in turn motivates them to work more effectively. Owens (2020) describes motivation as the forces that cause people to behave as they do. He further points out that behaviorists think of it as extrinsic while others believe it is intrinsic. Generally, in schools, the challenge for administrators is to develop highly motivated teachers who are actively engaged in teaching and learning, open to new ideas and approaches, and committed to students and change over the lifetime of their teaching careers.

Africa has one of the highest numbers of unmotivated teachers globally with over 70% of them unsatisfied with their jobs. In Africa, the function of teachers' motivation has drawn a lot of interest in the field of education due to its potential impact on students' academic performance. The motivation of instructors, which is one of the most crucial roles they play in the learning process, has a considerable impact on the classroom environment, instructional strategies, and girl's involvement. In a study done by Ofoegbu (2018) in Nigeria on: Teacher motivation as a factor for classroom effectiveness and school improvement; he found that teacher motivation enhances classroom effectiveness and improves girl's performance in mathematics.

Teacher motivation plays an important role in the promotion of teaching and learning excellence among girl child in UK, Japan and Italy among other European countries. In the USA, motivated teachers are more likely to motivate girls to learn in the classroom, to ensure the implementation of educational reforms and feelings of satisfaction and fulfillment (Oswen et al., 2018). While teacher motivation is fundamental to the teaching and learning process, several teachers are not highly motivated. This observation should be taken seriously and an investigation into the factors influencing teacher motivation is therefore necessary to achieve

the educational goals in every learning institution. Compared with other professions, teachers across various countries, school contexts, and subject fields exhibit higher levels of emotional symptoms. According to Dai and Sternberg (2019), high levels of job dissatisfaction, stress, and burnout can negatively influence motivation of the teachers which in return affects girl's performance in mathematics in primary schools.

Motivation is the attribute that moves us to do or not to do something (Broussard and Garrison (2016). In the context of this study, it is defined as the act of making teachers feel that their work is recognized and valued and at the same time they get the rewards worth their input. Many factors have been found to promote teacher motivation.

Tomkins notes that Payment incentives have been found not to be successful in increasing motivation. In a study done by Sylvia and Hutchinson (2015) in the USA, a study among 167 teachers, found that teacher motivation is due to freedom to try out new ideas, assignment of appropriate responsibility levels and intrinsic work elements. They explain that true job satisfaction is derived from the gratification of higher order needs rather than lower-order needs.

A study done by Organization for Economic Co-operation and Development (OECD), which is an international organization, in 2020 pointed to the importance of the motivation of teachers towards their jobs. In a research report on teachers in developing countries, undertaken by Voluntary Service Overseas (VSO) in the U.K in 2019 noted that, one of the main findings was that teachers' motivation was fragile and declining. The report noted that "There is a strong link between teachers' motivation and girl's performance, and education quality, but improving teachers' motivation is not uniformly prioritized as a major concern of national and international policymakers" (VSO, 2019). The report added that addressing the factors that reduce teachers' motivation should be a major concern of policy makers; this was to create conditions for the success of other education interventions (VSO, 2019).

According to Deci and Ryan's 1985 Self-Determination Theory, intrinsic and extrinsic factors both influence teachers' motivation. Extrinsic motivation is driven by outside rewards and recognition, whereas intrinsic motivation is produced by the intrinsic fun and satisfaction of teaching. Teachers' motivation levels can affect their teaching strategies and interactions with pupils. There is a connection between the classroom environment and the instructors' drive.

Highly motivated teachers are more likely to foster an environment that promotes active learning, student participation, and critical thought, according to Kunter et al. (2019). A dull learning environment can be fostered by uninspired teachers, which would lower student achievement. Teachers' Motivation and teaching tactics Teachers' motivation is crucial in developing their teaching tactics and girls' performance in mathematics. Motivated teachers are more likely to adopt cooperative learning and problem-based learning, to innovative, student-centered educational practices (Kyriacou, 2019). These strategies have been linked to increased student accomplishment and performance.

Teachers are arguably the most important group of professionals for our Nation's future. Michaelowa (2018) in her study on analysis of the key determinants of teacher motivation in the developing country context, found that large class size, double-shifting, rural location, high educational attainment and active parental involvement negatively correlated with teacher job satisfaction in these countries. She further found that the level of communication between teachers and school managers had no statistically significant impact on teacher job satisfaction.

In Uganda, girls in public primary schools have not been performing well countrywide. As per the examination results announced by UNEB from 2019 to 2023. From the statistics, girls' public primary schools in Uganda have been performing low as compared to private primary schools in Primary Leaving Examinations (PLE). As per the available statistics, private schools have managed to take the first ten positions for the different year. Thus performance in public primary schools is low countrywide. Moreover, studies by HakiElimu and Tumusiime et al., (2022) revealed that 5,000 girls in public primary schools completed P7 in 2023 without knowing how to do simple arithmetic countrywide.

In primary schools in Maefe Sub County in Manafwa district, girls' performance in mathematics is poor. In the year 2020, out of 4,252 girls who sat for the national examination 2,920 failed mathematics which was 68.7%. This denotes that majority of girls' who sat for PLE for the mentioned years from public primary schools could not secure a chance in secondary schools. All the pupils who sat for PLE in Government aided primary schools in year 2019, 2020 and 2021 passed poorly and may be attributed to lack of teacher motivation. A slight drop in performance was also witnessed in 2022 whereby out of the 164 pupils who

sat for national examination 160 (96.6%) failed Mathematics. Only four (2.4%) pupils passed the subject both in private and government schools (District Report, 2023).

The most critical factor that emerges from studies is that very sizeable proportions of primary school teachers, particularly in Uganda, have low levels of job satisfaction and are poorly motivated leading to absenteeism and poor performances of girls in mathematics. Many girls are, therefore, not being taught properly and are not receiving even a minimally acceptable education. As the authors of the Ugandan country report (2022) point out the de-motivation of teachers as a major contributory factor to the poor learning achievements of primary school girls (Bennell and Muykanuzi, 2022) both in private and government schools. It is upon this background that this study is aimed at determining the effect of teacher motivation on girls' performance in Mathematics in primary schools in Maefe Sub County.

1.2 Problem Statement

In Maefe sub County the performance of girls in mathematics in public primary schools is poor (District Report, 2003). Despite the several measures put in place to improve girl's performance in in mathematics in both private and public schools, girls' performance in Mathematics in primary schools has been low. For instance, in 2019, out of 6,821 girls who sat for PLE only 2,891 (42.3%) of girls passed Mathematics in the exam. This indicates that 3,930 (57.7%) of failed. Similarly, out of the 7,474 pupils who sat for PLE in 2020 only 2,294 (30.7%) of girls passed the exam while 5,180 (69.3%) failed the examination. Likewise, in 2021 out of 7,290 girls who sat for primary living examinations (PLE) in public primary schools only 3,291(44.7%) of the girls passed the examination while 4,029 (55.3%) of the pupils failed the examination.

The above case has raised concerns to educational stakeholders as to what could be the cause of the poor performance in public primary schools in Maefe Sub county in Manafwa District. There could be many reasons that may have contributed to this problem. However, the actual cause for the low performance could not have been determined without carrying out a study in the area. For the purpose of this study, attention was given to effectiveness of teacher motivation in influencing girls' performance in mathematics in primary schools in Maefe sub County in Manafwa District. The researcher believes that by investigating the effectiveness of teacher motivation in influencing pupils' performance in Mathematics among primary schools

would be able to identify the real cause of the low performance of girls in Maefe sub county in Manafwa district.

1.3 Objectives of the study

1.3.1 General Objective

The major objective of this study is to analyze the effect of teacher motivation on girl's performance in mathematics in primary schools in Maefe Sub County, Manafwa district.

1.3.2 Specific Objectives

This study will be guided by the following research objectives;

- I. To investigate the effect of teacher motivation on girl's performance in Mathematics in primary schools in Maefe sub county, Manafwa District
- II. To examine challenges affecting teacher motivation and girl's performance in Mathematics in primary schools in Maefe sub county, Manafwa district
- III. To assess interventions for enhancing teacher motivation and girl's performance in Mathematics in primary schools in Maefe Sub county, Manafwa district

1.4 Research Questions

- I. What is the effect of teacher motivation on girl's performance in mathematics in primary schools in Maefe sub county, Manafwa district?
- II. What challenges affect teacher motivation and girl's performance in Mathematics in primary schools in Maefe sub county, Manafwa district
- III. What interventions can be implemented to enhance teacher motivation and girl's performance in Mathematics in primary schools in Maefe sub county, Manafwa district

1.5 Scope of the study

1.5.1 Content Scope

The study will analyze the effect of teacher motivation on girl's performance in mathematics in primary schools in Maefe Sub County, Manafwa district. The study will specifically look at the effect of teacher motivation on girl's performance in Mathematics and challenges affecting teacher motivation and girl's performance in Mathematics in primary schools in Maefe Sub

County, Manafwa district. It will also assess interventions for enhancing teacher motivation and girl's performance in Mathematics in primary schools in Maege Sub County, Manafwa district.

1.5.2 Geographical Scope

The study will be conducted in Maege Sub County in Manafwa district.

1.5.3 Time scope

The study will look at the period of the past five years ie 2019-2022. This period will be considered because it is during this time that the performance of girls highly declined in Maege sub county Manafwa district (district report, 2023)

1.6 Significance of the study

This study may help to identify potential challenges and barriers to teachers' motivation: By understanding these obstacles, educators and policymakers can develop targeted interventions and support systems to nurture and sustain teachers' motivation.

This study may help to investigate how teachers' motivation impacts their instructional strategies, classroom management, and overall teaching methodologies. By understanding these effects, we aim to discern how motivated teachers can implement innovative and effective teaching practices to enhance student learning experiences.

Moreover, it may help to identify potential challenges and barriers that teachers may encounter in maintaining high levels of motivation. By understanding these obstacles, educators and policymakers can develop targeted interventions and support systems to nurture and sustain teachers' motivation.

The study findings may provide information to future researchers who may intend to carry out research in the similar field of investigation.

1.7 Conceptual Frame work

Independent Variable

Teacher motivation

Better remuneration
Good working environment
Professional training
Good rewards systems

Dependent Variable

Pupil's performance in MTC

High subject scores
Better subject grade in PLE
Good performance in tests
Early submission of assignments

Moderating Variables

- ❖ School rules
- ❖ Provision of learning aids
- ❖ School meals

Figure 1.1 Conceptual Framework showing relationship between variables

Source: Miles & Huberman (1994, p.18) and modified by the researcher 2024

From the above conceptual framework, teacher motivation as independent variables (IV) has parameters of better remuneration, good working environment, professional training and good rewards systems. The dependent variable (DV) in this case is girl's performance in mathematics with parameters of high subject scores, better subject grade in PLE, good performance in tests and early submission of assignments. The framework assumes that when teachers are motivated, it is likely to transform girl's performance in mathematics. Nevertheless, this may not be automatic as other factors may come into play. These include school rules, provision of learning aids and school meals. These factors have been dully coined as intervening variables by the study and are being isolated to avoid making wrong conclusions.

1.8 Operational Definition of Terms

Motivation- This is the attribute that moves us to do or not to do something (Broussard and Garrison (2004). In the context of this study, it is defined as the act of making teachers feel that their work is recognized and valued and at the same time they get the rewards worth their input. **Reward System-** This is the compensation given to teachers for the services they render in terms of salary and incentives (Ojangole, 2018)

Job Satisfaction- This is the feeling by the employee towards the job they do with regard to conditions of work and the rewards accrued (Moody et al., 2018)

Girls performance in mathematics: Refers to the level of achievement attained by female learners in the learning subject of mathematics (Mande et al., 2017)

CHAPTER TWO

REVIEW OF LITERATURE

2.0 Introduction

This chapter presents the review of the past literature related to area under investigation. The review has been conducted according to objectives of the research study. This literature review attempts to provide light on the mechanisms by which teacher motivation influences student results by reviewing earlier studies on the relationship between instructors' motivation and girls' performance in mathematics. According to Mugenda and Mugenda (2017) and Kumar (2019) interprets literature review as the systematic identification, location and analysis of documents containing information related to the research problem being investigated, which forms an integral part of the entire research process and makes a valuable contribution to almost every operational step in the research. This chapter shows the various sources of related literature to the topic of the research. The sources include; review of scholarly journals, government documents, text books, Internet and Newspapers, it also presents theoretical review, actual review on the effect of street vending on pupil's lives. This Literature review will be done objective by objective.

This chapter therefore presents the summary of the literature review highlighting gaps in the existing literature while generating and refining research ideas and drawing conclusions in line with the problem under investigation.

2.1 Effect of teacher motivation on girl's performance in Mathematics

Teachers' motivation directly impacts student success and academic performance. An enthusiastic and dedicated teacher serves as a positive role model for students, encouraging them to embrace a similar attitude towards learning (Wentzel, 2002). Such teachers foster a supportive learning environment for girls, which significantly influence students' engagement and willingness to participate actively in the learning process. Research has consistently shown a positive correlation between teachers' motivation and students' academic achievements in mathematics (Wang & Eccles, 2012).

Teachers, who have access to professional development, are acknowledged and grateful, have autonomy in decision-making, and uphold healthy work life balances are some of the most

important qualities that inspire teachers (MoES, 2022). Improving these factors can make instructors more committed and successful, which will improve student learning outcomes and educational quality as a whole. The influence of teacher excitement on student involvement and participation cannot be overstated, say many educators. Motivated teachers can create a stimulating learning environment for girls that fosters students' enthusiasm or learning and internal motivation (Mande et al., 2020). Motivated teachers can encourage students to actively participate in their educational journey and achieve academic greatness by developing strong teacher-student relationships, providing worthwhile learning opportunities, fostering autonomy, and recognizing accomplishments.

In the current study, it will be determined that there was a strong and positive correlation between girl's performance in mathematics and instructor motivation. By establishing more conducive and interesting learning environments, motivated teachers boost their students' interest in and zeal for learning (Ajila and Abiola, 2018). These instructors are more inclined to employ effective teaching strategies, provide constructive feedback, and meet the individual needs of each student, all of which have the potential to improve students' academic achievement ((Ajila and Abiola, 2018). The word "teacher motivation" describes the inner passion and drive that directs their work, commitment, and pedagogical strategies in Mathematics in the classroom. The performance of girls, on the other hand, is a crucial outcome variable that captures their accomplishments in a variety of academic subjects.

When educators are provided with chances to enhance their teaching skills, they feel empowered and more engaged in the classroom, resulting in improved student outcomes. Intrinsic motivation, stemming from a genuine passion for teaching and a sense of purpose, is another essential factor in sustaining teachers' motivation (Vallerand et al., 2020). Teachers who are genuinely passionate about their subject matter and their students (girls) are more likely to inspire and ignite the same passion in their learners.

The Uganda Ministry of Education (2012) found in a different crosscultural study that motivated teachers helped their students obtain better performance in mathematics as well as higher levels of self-efficacy and self-regulation. Teachers' motivation can have an impact on how the classroom is run and how lessons are taught, which can then have an impact on the results of the students. Additionally, Klassen and Chiu (2018) found that instructors'

motivation, which indirectly affects students' motivation, may have an impact on students' impressions of the learning environment. The motivation, devotion, enthusiasm, and commitment of instructors are among the six essential components that greatly affect their success in the classroom. It is crucial for teachers to comprehend the factors that influence their motivation if they want to improve student learning outcomes and become more dedicated to their mathematical work.

The motivation and dedication of teachers to their careers are significantly impacted by a positive workplace culture (Ingersoll, 2019). When teachers feel valued, respected, and properly supported by their peers and school authorities, they are more likely to remain enthusiastic and committed to their work as educators. A supportive workplace also fosters a sense of belonging and reduces fatigue among girls, which enhances the standard of education overall (Hassan & Amin, 2019). Access to opportunities for ongoing professional development is a crucial factor that influences instructors' motivation (Opdenakker & Van Damme, 2016). When instructors are given the chance to develop their knowledge, skills, and pedagogical practices, they feel more empowered and confident in their ability to conduct good instruction. A study by Podgursky and Springer (2017) indicated that teachers who receive adequate compensation are more likely to stay motivated and dedicated to their teaching responsibilities

2.2 Challenges affecting teacher motivation and girl's performance in Mathematics

Educators serve a central and vital function in the realm of education, acting as facilitators of learning, knowledge disseminators, and mediators between students and society. Nevertheless, teachers working in rural areas frequently encounter obstacles such as inadequate or delayed compensation, a lack of attention to their training needs, and bureaucratic hurdles impeding their career advancement and overall effectiveness. The teaching profession grapples with challenges like high attrition rates, persistent turnover, diminished confidence, and varying levels of professional commitment.

While possessing the necessary expertise to educate students, teachers require consistent motivation to enhance their personal circumstances and deliver successful learning experiences (MoES, 2018). Motivation emerges as a crucial element within educational organizations, empowering teachers to act autonomously. It is imperative to ensure that educators can effectively nurture and guide the next generation of the nation. Various factors, including

salary, job satisfaction, work environment, organizational support, social standing, and interpersonal relationships, play pivotal roles in boosting motivation, both materially and spiritually.

Poor work environment affect teacher motivation (Onyango et al., 2017). The work environment has a significant impact upon employee performance and productivity. By work environment we mean those processes, systems, structures tools or conditions in the work place that impact favorable or unfavorable individual performance. The work environment also includes policies; rules, culture, resources, working relationships, work location and internal and external environmental factors, all of which influence the ways those employees perform their job functions

Relatedly, studies referring to physical environment factors tend to refer to the physical parameters of the mathematical tasks being performed rather than to features of the physical space in which work is done. According to Macfie (2022), it is important for management's effort to create a working environment where everyone is highly motivated and feels valued. He adds that if staff look after their health, they will be better in their own lives and in the business. If people feel better about the way they manage, their lives they will be more creative and more productive in the way they contribute at work.

Lack of privacy within the work place and the amount of space available per person tends to determine the level of staff motivation (Mande et al., 2018). One of the most widespread work space design trends in recent years has been the phasing out of closed offices and replacing them with open office plans. This has encouraged interaction and sharing of information and tasks which is essential to improving motivation and performance. Lohr (2017) said that sometimes described as the cave versus cube debate, the former provides privacy whereas the latter facilitates open communication. Caves limit interaction with students and peers and thus organizations have sought to increase flexibility and employee collaboration by removing physical barriers like high walls, closed offices and doors. Benciveng et al, (2019) asserted that, while the trends is clearly towards cubes, organizations are making exceptions for employees engaged in work that requires deep concentration. Companies like Microsoft, Apple computer, and Adobe systems, for example continue to rely primarily on private offices for software programs, as it requires tremendous concentration. According to Baron (1994), there

is also growing evidence that the desire for privacy is a strong one on the part of many people, yet the trend is clearly toward less privacy at the work place. Further research is needed to determine whether organizational efforts to open workspaces and individual preferences for privacy, are incompatible and results in lower employee performance and satisfaction.

Lack of teacher training affect teacher motivation (Mwiti et al., 2022). According to Clotfelter, et al. (2016), better trained and more experienced teachers tend to be assigned to students of greater ability and with fewer discipline problems. Varga (2017) stated that some of the factors characterizing education in schools (class size, expenditure per pupil) do not have demonstrable effects on student performance while teacher quality (as measured by skills, knowledge and qualifications) plays a decisive role in girls' progress. Based on an analysis of teacher training policies in 25 countries, the OECD (2015) report cogently entitled *Teachers Matter* comes to the conclusion that teacher quality is the most important factor in an education system, and the second most important factor (only preceded by family background) among the variety of influences affecting student achievement. McKinsey & Company (2020) report stated that certain education systems achieve substantially better outcomes than others because—they have produced a system that is more effective in doing three things: getting more talented people to become teachers, developing these teachers into better instructors, and in ensuring that these instructors deliver consistently for every child in the system.

In line with the above argument, Barber & Mourshed (2017), the quality of an education system cannot exceed the quality of its teachers. This appears to be the area that resources should target; knowledge-intensive training institutions and knowledge-rich teacher development centres should be provided. Falus (2018) stated that requirements defined in terms of teacher competences cannot fully replace qualification requirements since the latter must be measurable in an unambiguous and economical way. According to TDA (2015), indicators of teachers' qualifications, the so-called standards define levels of competence in a way that is sufficiently specific, explicit and simple to measure in order to provide a clear and reliable criterion for awarding qualifications regardless of where a candidate completed teacher training studies. For the assessment of teacher performance, in contrast, at present no indicators are available which could provide unambiguous and simple to use methods of measurement.

2.3 Interventions for enhancing teacher motivation and girl's performance in Mathematics

Rewarding teacher

Rewarding teacher is an important factor in teacher motivation. Most schools have gained the immense progress by fully complying with their business strategy through a well-balanced reward and recognition programs for teachers. Motivation of teachers and their productivity can be enhanced through providing them effective recognition which ultimately results in improved performance of girls in mathematics. The entire success of an organization is based on how an organization keeps its employees motivated and in what way they evaluate teacher's performance of employees for job compensation. Management should pay more attention to extrinsic rewards but intrinsic rewards are equally important in employee motivation. Intangible or psychological rewards like appreciation and recognition plays a vital role in motivating employee and increasing his performance. Andrew (2004) concludes that commitment of employees is based on rewards and recognition. Lawler (2003) argued that prosperity and survival of the organizations is determined through how they treat their human resource.

Improve teacher remuneration

Teacher remuneration is typically utilized to energize, direct or control teacher behavior and improve girl's performance in Mathematics. An organization exists to accomplish specific goals and objectives. The individuals in an organization have their own needs. The system that an organization uses to reward employee can play an important role in the organization's effort to gain the competitive advantage and to achieve its major objectives. Compensation system should attract and retain the talent an organization needs, encourage teachers to develop the skills and abilities they need, motivate employees and create the type of team culture in which employees care about the organization's success. Through motivation individuals willingly engage in some behavior (Heneman et al, 2018). In retention, linking pay to performance is likely to help improve workforce composition (Cole, 1997). High performers tend to gain a larger share of compensation resources and thus are motivated to stay with the organization. Below to average performers becomes discouraged and tend to leave wok creating room for

poor performance in mathematics among girls. Thus the effect of motivation on the performance and retention of teachers should be assessed and addressed in public.

Utilizing and retaining contract teachers

One short-term solution to the teacher shortage problem is the use of contract teachers in mathematics to improve teaching workloads. These teachers typically have a temporary or fixed-term agreement and minimal pedagogical training or teaching certifications. This strategy has proven effective in some places, as shown by (Mwenanyi et al., 2019) where the introduction of contract teachers led to improved mathematics test and examination scores for girls. While this approach offers high levels of flexibility, it comes with its set of challenges, such as constant teacher turnover, high replacement costs, and a cycle of recruiting new participants. However, a more effective long-term approach involves offering opportunities for contract teachers to move out of a temporary contract and into the permanent teaching force. This could involve requiring degrees or advanced training, offering a competitive application process, or allowing contract teachers to become civil service employees after serving for a set period.

Improving working conditions

Much like low salaries, poor working conditions can lower teacher motivation and reduce the overall attractiveness of the profession. Examples of poor working conditions can vary from system to system (MoES, 2020). For teachers in conflict or crisis situations, it could mean a lack of safety and security or struggling to meet basic needs. Teachers in low- and middle-income countries may lack educational necessities such as desks, books, internet access, or other instructional materials and this affect girl's performance in mathematics. However, improving working conditions doesn't just mean providing better resources. It also involves creating a more supportive work environment, which includes providing teachers with the resources and support they need to be successful in their roles, such as technology and classroom supplies.

Providing professional development opportunities for teachers

One of the most effective strategies for attracting and retaining talented teachers is to provide them with professional development opportunities. This could include workshops, training

sessions, and other opportunities for teachers to learn new skills and stay up to date on the latest teaching methods and technologies (Okiiria and Okiidi, 2018). By providing teachers with opportunities to grow professionally, schools can help to keep them engaged and motivated to stay in the profession.

One such professional development program for teachers is the Train-the-Trainer) (or TTT) program. It allows teachers to update their skills to become learning facilitators, which entails using teaching methods adapted for modern learning environments and learner's expectations and needs. The TTT program is based on the premise that the most powerful type of learning is not passively being taught what to do, it's about learning how to find a solution on your own. Learning facilitators are more like coaches or trainers who guide and help students to learn on their own (Oscar, 2019). The "Train the Trainer" program gives teachers the practical skills required to become adept facilitators, giving them the tools and experience to develop methodologies, invent classroom activities, use diverse technology, and implement verbal and nonverbal communication skills. Overall, this program gives teachers the means to improve their own classroom experiences and find greater satisfaction in their roles, without changing jobs.

Encouraging collaboration

According to UNICEF (2017), one of the biggest threats to a teacher's well-being is the feeling of being isolated and unsupported. So, facilitating exchanges and collaboration among teachers is a relatively easy and low-cost way to boost their morale and motivation. Collaboration allows mathematics teachers to share their ideas, support one another, and lead the way to effective student education. This can be facilitated through official, informal, and virtual configurations, allowing such teachers from the same subject and grade level to confer on content, curriculum development, and teaching strategy. This will ultimately help to improve girls performance in mathematics.

Providing comprehensive guidance to teachers

School administrators and leaders must effectively communicate the school's mission and student learning objectives so teachers and staff can work toward these goals. This guidance can significantly impact their feelings about continuing to teach (African Union Commission

on Education, 2018). Support from colleagues and administrators are crucial, as teachers should always feel the administration will support them in achieving their mission and that their personal objectives are aligned with a greater purpose.

Tackling gender imbalances in teaching

According to Basil et al., (2018), gender imbalances in teaching can also impact teacher retention. Indeed, women are significantly over represented in the pre-primary and primary teaching sector and significant discrepancies in wages exist between male and female teachers. Providing equitable and enabling working conditions and compensation for women, on par with men, is the place to start. Offering targeted incentives to get more women teachers into secondary, tertiary, and leadership positions can help reduce these imbalances and encourage girls to perform well at school. At the same time, efforts should be made to encourage more men into pre-primary and primary education.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter describes the methodology that was used in the study and some of the areas that were covered included: Research design, area and population of the study, sample size, sampling techniques, research instruments, data quality control, data analysis and ethical issues in the study.

3.1 Research Design

The research study used a cross-sectional research design using both qualitative and quantitative research approaches to analyze the relationship between teacher motivation and girl's performance in mathematics in Maefe Sub County, Manafwa District. This design helped the researcher to generate more sufficient data and relevant information that supported the variables and objectives of the research study.

3.2 Sample size

The total population (N) was estimated at 100 people and therefore the sample population of 80 persons was arrived at using Morgon table (1973) methods of determining a sample size from the population.

Table 3.1: Summary of the Sample Size and Sampling Technique

Sample selection

Participants	Population (N)	Sample Size (n)	Sampling Technique
Local leaders	10	7	Purposive sampling
Teachers	20	18	Simple random sampling
Head teachers	20	15	Purposive sampling
Total	100	80	

Source: Miles & Huberman (1994, p.18) and modified by the researcher 2024

3.3 Sampling Techniques

The researcher used the following sampling techniques:

3.3.1 Simple random sampling

The researcher used simple random sampling to select teachers. This technique involved giving a number to every respondent of the accessible population, placing numbers in the container and then picking any number at random. The subject corresponding to the numbers were included in the sample. Simple random sampling enabled the researcher to get a representative sample for the research study and it allowed generalizability to a larger population with a margin of error that was statistically determinable.

3.3.2. Purposive sampling

Purposive sampling was used to select local leaders and head teachers because this category of respondents were assumed to have in depth information about the study variables.

3.4 Research instruments

The researcher used both questionnaires and interview guide.

3.4.1 Questionnaire

The researcher used a self-administered questionnaire as a research tool to collect data from the teachers and local leaders. The questionnaire had three sections: Section A included respondents' demographic information, Section B, C and D focused on general close ended statements which were in accordance with the objectives of the study. The researcher got a list of local leaders and these were selected through purposive sampling.

According to Fisher (2004), a questionnaire is used because it is easy to administer, not so expensive, and helps to collect unbiased data. The nature of the questions were in form of structured and close ended questions where by a 5 Liket scale of measurement on close ended questions based on a scale of strongly agree (5), agree (4), unsure (3), disagree (2), strongly disagree (1) was used because allowed respondents to provide firsthand information which is free of bias and easy to use.

3.4.2 Interviews

Other data was collected using interviews with the help of an interview guide. An interview guide is a research instrument that contains a set of questions on defined issues under study that are put to respondents on face to face basis (Saunders, et al, 2007). These instruments contained mostly open-ended questions. The interview guide was used on head teachers and local leaders because this category of study respondents is assumed to have more knowledge that could not fully be captured using questionnaires.

3.5 Data Analysis

3.5.1 Quantitative data analysis

Data processing was done through editing of the data which was coded for further data analysis. After data processing, quantitative data analysis was carried out by simple frequency tabulation using a Statistical Package for Social Science (SPSS). Data was then presented using different methods such as simple frequency tables which ultimately helped to access teacher motivation and girl's performance in Mathematics in Maege Sub County, Manafwa District, and the listed method above clearly fulfills that purpose.

3.5.2 Pearson Correlations and Regression Analysis

Pearson Correlations and regression analysis was used to establish the effect of teacher motivation and girl's performance in mathematics in Maege Sub County, Manafwa District. This type of inferential statistics is easy to compute and interpret and it helped in making conclusions. Descriptive statistical techniques (frequencies and percentages) was used to analyze field data from questionnaires which assisted in the interpretation of data.

3.5.3 Qualitative data analysis

On the other hand, qualitative data gathered from open-ended questions in the interview guide will be summarized. A style called content analysis was used to test the validity and authenticity. Then, data was categorized according to the sub-themes identified earlier.

3.6 Research procedure

The researcher presented a research topic to the department of education for approval. Thereafter the researcher developed a research proposal. After approval of the research

proposal, the researcher obtained an introductory letter from the Head of department which was presented to the relevant authorities in the study area for data collection. Thereafter the researcher wrote a report which was presented to the department for further examination.

3.7 Ethical considerations

3.7.1 Consent

The researcher got approved consent from the respondents. Respondents willingly decided to participate in the study after the researcher explaining to them the purpose of the study which was purely academic. It was possible that the researcher's views could influence the way the study findings may be documented thus creating an ethical dilemma of failure to present exactly what the study subjects revealed in the course of data collection. However, the prepared instruments helped the researcher to collect objective information hence fears of personal views were reduced.

3.7.2 Confidentiality

Respondents were assured of confidentiality by keeping information given confidential. Respondents' identity was kept anonymous or pseudo names were used. This increased on disclosure of information as well as increasing on respondents' willingness to participate in the study.

3.7.3 Fraud and plagiarism

Mugenda and Mugenda (2007) argued that fraud involves faking data. It also includes false presentation of research methodologies. On the other hand, plagiarism refers to owning another person's work by the researcher without acknowledging the author. According to copy rights law, in many countries including Uganda, both fraud and plagiarism are crime punishable by panel code. To avoid fraud and plagiarism, the researcher personally collected, analyzed and presented data and endeavored to present exactly what the study subject revealed. Where information was picked from another source, the author (copy right owner) was acknowledged.

3.8 Validity and reliability

3.8.1 Validity

The validity of an instrument is defined as the ability of an instrument to measure what it is intended to measure. To establish the validity of the instruments, the researcher used expert judgement as recommended by Gay (1997) as the best method for ensuring validity. Thus the researcher will ensure that the instrument is clear, relevant, specific and logically arranged. The validity of the questionnaire was tested using the content validity Index (CVI). To arrive at the relevancy of the questionnaire, the researcher designed the instrument that will yield content – valid data by first specifying the domain of indicators that were relevant to the concept being measured. A content-valid data measure containing all possible items that were used in measuring teacher motivation and girl’s performance in Mathematics in Maege Sub County, Manafwa District

$$CVI = \frac{R}{R + N + IR}$$

Where, Relevant (R), Neutral (N), to Irrelevant (IR).

3.8.2 Reliability

The reliability of the instruments was tested using the test re-test method of reliability and Cron-bach alpha tests to determine the reliability index with the help of SPSS. Data was collected from 20 residents not among those in the sample. The principle of reliability as far as research instruments are concerned is clearly put forward by Amin (2005) that an instrument is reliable if it produces the same results wherever it is repeatedly used to measure a trait or a concept from the same population and under similar circumstances. According to Nunnally (1978) the reliability coefficient Alpha should be above 0.7 which shows that there is reliability.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

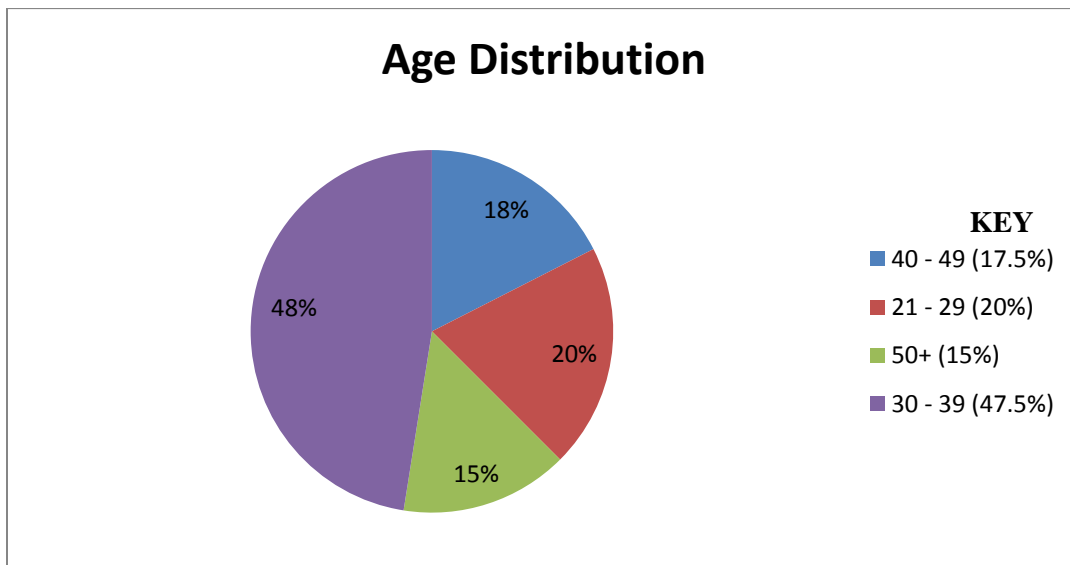
This chapter presents information about the data analysis and interpretation of study findings in line with teacher motivation and girl's performance in mathematics in primary schools in Maege Sub County in Manafwa District in line with the objectives : To investigate the effect of teacher motivation on girl's performance in Mathematics in primary schools in Maege sub county, Manafwa District, to examine challenges affecting teacher motivation and girl's performance in Mathematics in primary schools in Maege sub county, Manafwa district and lastly to assess interventions for enhancing teacher motivation and girl's performance in Mathematics in primary schools in Maege Sub county, Manafwa district.

4.2 Respondent's Bio Data

4.2.1 Age Distribution

Under this section, respondents were asked to mention their age and their responses were recorded in age brackets as shown below:

Figure one: Showing Age distributions of respondents of the study



Source: Field data 2024

Data given in figure one above shows that respondents were aged between 30 – 39 years with a percentage of 47.5%, 20% of the respondents were between 21-29 years, 40-49 had 18%, while 15% of the respondents were aged 50 (Fifty) years and above. This data indicated that all the respondents who participated in the study were mature in age since most of them were aged between 30-39 (47.5%) of the sample and therefore were able to express their opinions independently and freely in line with teacher motivation and girl’s performance in Mathematics in Primary Schools in Maefe Sub County Manafwa District.

4.2.2 Sex of respondents

Under this section, respondents were asked to reveal their gender and results are tabulated in the table 2.

Table 2 showing Sex of respondents of the study

Sex	Frequency	Percentage (%)
Male	50	62
Female	30	38
Total	80	100

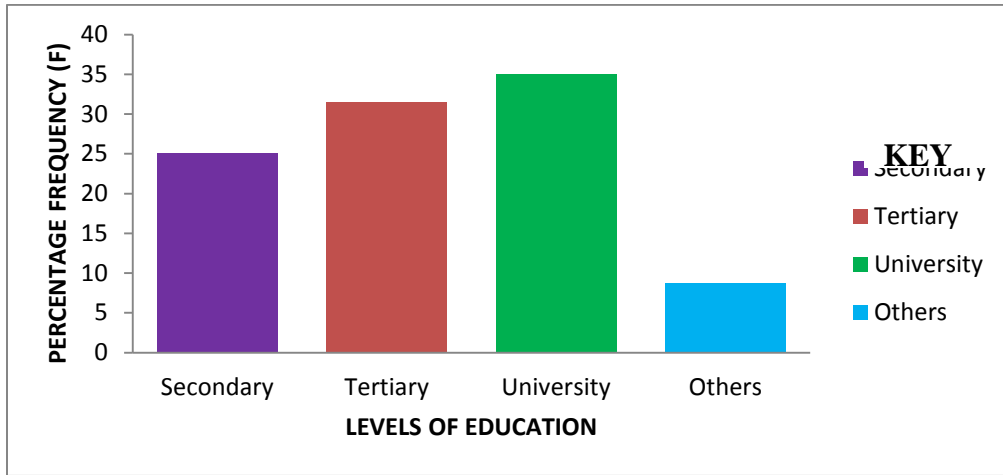
Source: Field data, 2024

Results presented in the table 2 above show that 62% of the respondents were males and 40% were Females. This indicated that male respondents were more than females. However, though males were the majority, findings of the study revealed that both sexes were well represented.

4.2.4 Respondent levels of Education

Respondents were asked to reveal their level of education because those who had attained higher levels of education had sufficient knowledge on teacher motivation and girl’s performance in mathematics in primary schools in Maefe Sub County Manafwa district.

Figure two: showing levels of education attained by respondents of the study



Source; Field Data 2024

Results from figure two above shows that 25% of the respondents reached secondary level while tertiary were 31.5% University graduates were 35% and 8.7% of the respondents had other Qualifications. Due to the fact that majority of the respondents had attained some level of education, it implies that they understood whatever was in the interview guides due to the fact they had attained some level of education.

4.2.3 Marital Status

Respondents were asked to reveal their marital status and findings are shown table 3 below.

Table 3. Showing marital status of respondents

Responses	Frequency	Percentage (%)
Married	48	60
Widowed	5	6.25
Single	25	31.25
Divorced	2	2.5
TOTAL	80	100

Source: Field Data 2024

Information presented in the table 3 above indicates that married respondents constituted the majority of the sample size (60%), 31.25% were single. Widowed respondents were 6.25% and divorced respondents were 2.5% of the sample.

Marital status as a variable in this study was an important determinant of work ethics and professionalism because of its teaching on moral standards and sanctify. The study found out that married men and women had sufficient knowledge about teacher motivation and girl's performance in mathematics in primary Schools in Maeфе Sub County.

4.2. Objective one: Effect of teacher motivation on girl’s performance in Mathematics in primary schools

Table 4: Descriptive Statistics

	N	1 (SD)	2 (D)	3 (U)	4 (A)	5 (SA)	Mean	Std. D	Mean Comments
Lack of teacher motivation affect understanding of subject matter	80	5 (3.6%)	5 (3.6%)	10 (15.8%)	40 (50%)	20 (27%)	3.82	1.022	<i>High mean</i>
Lack of teacher motivation contributes to the inefficiency of the educational system and lower subject score in Mathematics by girls	80	0 (0%)	2 (3.5%)	3 (7%)	60 (63.4%)	15 (26.1%)	3.96	0.815	<i>High mean</i>
Motivating teachers improves girl’s performance in Mathematics significantly	80	5 (5%)	5 (5%)	0 (0%)	50 (67.0%)	20 (23%)	4.14	0.600	<i>Very High mean</i>
Teacher motivation improves lesson attendance and understanding of subject matter	80	10 (12.5%)	5 (4%)	5 (4%)	48 (51.1%)	32 (28.4%)	4.01	0.905	<i>High mean</i>
Poor teacher motivation has demotivated their hard work	80	0 (0%)	0 (0%)	18 (10%)	64 (70.3%)	22 (18.2%)	3.93	0.745	<i>High mean</i>
	80								
Overall Mean & Standard Deviation							4.00	0.824	<i>High mean</i>

0.00-1.00 Very Low mean, 1.10-2.00 Low mean, 2.10-3.00 Moderate mean, 3.10-4.00 High mean, 4.10-5.00 Very High mean

The first objective of the study was about the effect of teacher motivation on girl's performance in Mathematics in primary schools: Respondents were asked to reveal if: Lack of teacher motivation affects understanding of subject matter, lack of teacher motivation contributes to the inefficiency of the educational system and lower subject score in Mathematics by girls, Motivating teachers improves girl's performance in mathematics significantly, teacher motivation improves lesson attendance and understanding of subject matter and lastly whether poor teacher motivation has demotivated their hard work.

Respondents were asked to reveal if lack of teacher motivation affects understanding of subject matter and 27% of the respondents strongly agreed that lack of teacher motivation affects understanding of subject matter, 50% of the respondents agreed, 15.8% of the respondents were undecided, 3.6% of the respondents disagreed and lastly 3.6% of the respondents strongly disagreed. A high mean of 3.82 indicated that Lack of teacher motivation affects understanding of subject matter. Even respondents QQM were in agreement with this statement. This study finding was in line with a study conducted by Odiambo (2020) from Kenya who similarly noted that lack of teacher motivation affects understanding of the subject as teachers don't give their students enough time.

Responses on if lack of teacher motivation contributes to the inefficiency of the educational system and lower subject score in mathematics of girls showed that 26.1% of the respondents strongly agreed, 63.4% of the respondents agreed, 7% of the respondents were undecided, 3.5% of the respondents disagreed, and lastly none of the respondents strongly disagreed. A high mean of 3.96 indicated that lack of teacher motivation contributes to the inefficiency of the educational system and lower subject score in Mathematics by girls. This finding was in line with Davis (2020) who noted that in most private schools where teachers are well motivated, performance of girls in mathematics is good.

Responses on if motivating teachers improves girl's performance in Mathematics significantly showed that 23% of the respondents strongly agreed, 67% of the respondents agreed, none of the respondents were un decided, 5% of the respondents disagreed and strongly disagreed. A very high mean of 4.01 indicated that motivating teachers improves girl's performance in Mathematics significantly. This finding was similar to a study conducted by Marvin et al, (2019) from South Africa who noted that teacher motivation brings about best results from students.

Responses on if Teacher motivation improves lesson attendance and understanding of subject matter showed that 28.4% of the respondents strongly agreed, 51.1% of the respondents agreed, 4% of the respondents were undecided and disagreed, and lastly 12.5% of the respondents strongly disagreed. A high mean of 4.01 indicated that Teacher motivation improves lesson attendance and understanding of subject matter

Responses on if poor teacher motivation has demotivated their hard work showed that 18% of the respondents strongly agreed, 70.3% of the respondents agreed, 10% of the respondents were undecided, none of the respondents disagreed nor strongly disagreed. A high mean of 3.93 indicated that poor teacher motivation has demotivated their hard work. This finding was in line with a study conducted by Morris (2019) who conducted a study in Namibia and noted that poor motivation of performing teachers makes them lack inspiration of working hard thus poor grades.

A high overall mean of 4.00 indicated that there are a number of effects of teacher motivation on girl's performance in Mathematics in primary schools.

4.3. Objective two: Challenges affecting teacher motivation and girl's performance in Mathematics in primary schools

Table 5: Descriptive Statistics

	N	1 (SD)	2 (D)	3 (U)	4 (A)	5 (SA)	Mean	Std.D	Mean Comments
Poor work environments that are not favourable	80	1 (2%)	0 (0%)	4 (6%)	25 (30%)	50 (62%)	4.46	1.072	<i>Very High</i>
Lack of privacy for girls also affects performance in mathematics	80	0 (0%)	5 (3%)	10 (7%)	45 (54%)	20 (36%)	4.22	0.668	<i>Very High</i>
Lack of teacher training on how to handle matters.	80	0 (0%)	0 (0%)	5 (10.2%)	55 (67.0%)	20 (22.7%)	4.14	0.600	<i>Very High</i>
Poor remuneration affects teacher motivation	80	2 (1%)	3 (3%)	0 (0%)	25 (38%)	50 (58%)	4.50	0.684	<i>Very High</i>
High standards of living affect teachers standards of living	80	0 (0%)	0 (0%)	0 (0%)	25 (37%)	55 (63%)	4.58	0.509	<i>Very High</i>
	80								
Overall Mean & Standard Deviation							4.34	0.732	<i>Very High</i>

0.00-1.00 Very Low Mean, 1.10-2.00 Low mean 2.10-3.00 Moderate mean, 3.10-4.00 High mean, 4.10-5.00 Very High mean

The second objective of the study was about challenges affecting teacher motivation and girl's performance in Mathematics in primary schools:

Respondents were asked to reveal if poor work environments that are not favourable affect teacher motivation where 62% of the respondents strongly agreed, 30% agreed, 6% were undecided, none of the respondents disagreed and lastly 2% of the respondents strongly disagreed. A very high mean of 4.46 indicated that Poor work environments that are not favourable affect teacher motivation. Even respondents MMM2 and ZZ2 were in agreement with this. This study finding was similar to a study conducted by Ojangole (2020) who conducted a research study in Ghana and noted that most teachers with poor working environments had poor grades for their students mostly in mathematics.

Respondents were also asked to reveal if, lack of privacy for girls also affects performance in mathematics and 36% of the respondents strongly agreed, 54% of the respondents agreed, 7% of the respondents were undecided and lastly none of the respondents strongly disagreed. A very high mean of 4.22 suggested that lack of privacy for girls also affects performance in mathematics this study finding was in line with that of Oburu, (2021) who conducted a research study in slum schools in Kampala and noted that due to lack of privacy for girls some are seen during menstrual times and they become shy dodging classes yet Mathematics are not good to be missed thus the poor performance in the subject

Responses on if lack of teacher training on how to handle matters is a factor affecting performance in mathematics showed that 22.7% of the respondents strongly agreed, 67% of the respondents agreed, none of the respondents were undecided, 3% of the respondents disagreed, and lastly 1% of the respondents strongly disagreed. A high mean of 4.14 indicated that Lack of teacher training on how to handle matters affects performance in mathematics. Respondents TTT2 AND TTT3 noted that some teachers are rough, abusive and this sometimes demotivates girls who hate them and their subjects thus their poor performance. This finding was in line with a study conducted in Ibu et al, (2020) from Nigeria who noted that teachers who not ethically good have high relations with poor performance in their subjects.

Responses in line with if poor remuneration affects teacher motivation and thus poor grades in mathematics showed that 58% of the respondents strongly agreed, 38% of the respondents agreed, none of the respondents were undecided, 3% of the respondents disagreed and lastly 1% of the respondents strongly disagreed. Respondents *ZZZ2* assured that poor teacher remuneration is the leading cause of girls poor performance in mathematics. This finding was in line with that UNICEF (2020) which noted that rural schools were performing badly in mathematics as compared to urban schools due to poor teacher remuneration.

Responses on if high standards of living affect teachers standards of living showed that 63% of the respondents strongly agreed, 37% of the respondents agreed, none of the respondents were undecided, disagreed nor strongly disagreed a very high mean of 4.58 indicated that High standards of living affect teachers standards of living. This finding was similar to that of Tomkins (2021) who conducted a research study in Togo and noted that the high standards of living don't give teachers peace of mind to concentrate on school matters.

A very high overall mean of 4.34 indicated that a number of challenges as illustrated above are affecting teacher motivation and girl's performance in Mathematics in primary schools.

4.4. Objective three: Interventions for enhancing teacher motivation and girl's performance in Mathematics in primary schools in Maeфе Sub County

Table 5: Descriptive Statistics

Responses	N	SD	D	U	A	SA	Mean	Std. D	Mean Comments
Rewarding teachers	80	0 (0%)	0 (0%)	7 (3%)	28 (36%)	45 (60%)	4.46	0.694	<i>Very High</i>
Improving teacher remuneration	80	3 (5%)	5 (7%)	0 (0%)	40 (60%)	32 (28%)	4.12	0.731	<i>Very High</i>
Improving working condition	80	0 (0%)	0 (0%)	9 (10.2%)	51 (67.0%)	20 (22.7%)	4.01	0.875	<i>High</i>
Providing professional development opportunities for teachers	80	0 (0%)	0 (0%)	8 (6.8%)	22 (35%)	50 (58.2%)	4.47	0.647	<i>Very High</i>
Improving parent teacher associations	80	0 (0%)	0 (0%)	2 (4%)	20 (27%)	58 (69%)	4.56	0.562	<i>Very High</i>
Valid N (list wise)	80								
Overall Mean & Standard Deviation							4.34	0.677	<i>Very High</i>

0.00-1.00 Very Low mean , 1.10-2.00 Low mean, 2.10-3.00 Moderate mean, 3.10-4.00 High mean, 4.10-5.00 Very High mean

The third objective to the study was about Interventions for enhancing teacher motivation and girl's performance in Mathematics in primary schools in Maeфе Sub County and responses revealed in line with this are shown below:

Respondents were asked to reveal if Rewarding teachers can work as a measure to improve girls performance in mathematics and 60% of the respondents strongly agreed, 36% of the respondents agreed, 3% of the respondents were undecided, none of the respondents neither disagreed nor strongly disagreed. A very high mean of 4.46 indicated that Rewarding teachers can work as a measure to improve girl's performance in mathematics. This finding was in line

with a study conducted by Caserta (2020) from Zimbabwe who noted that motivation of workers is highly associated with better results.

Respondents were asked if Improving teacher remuneration can help in improving girls performance in mathematics and 28% of the respondents strongly agreed, 60% of the respondents agreed, none of the respondents were undecided, 7% of the respondents disagreed and lastly 5% of the respondents strongly disagreed a very high mean of 4.12 indicated that Improving teacher remuneration can help in improving girls performance in mathematics and this finding was in line with a study conducted by Owino (2022) Who noted that the only way to improve students' performance is through improving teacher remuneration such that they work contented on their jobs.

Respondents were asked to reveal if Improving working conditions can work as a strategy that can improve on students' performance in mathematics and 22.7% of the respondents strongly agreed, 67% of the respondents agreed, 10.2% of the respondents were undecided, none of the respondents disagreed and lastly none of the respondents strongly disagreed a high mean of 4.01 indicated that Improving working conditions can work as a strategy that can improve on students' performance in mathematics

Respondents were asked to reveal if providing professional development opportunities for teachers and 58.2% of the respondents were in agreement with this, 35% of the respondents agreed, 6.85% of the respondents were undecided, none of the respondents strongly disagreed nor disagreed. A very high mean of 4.47 indicated that providing professional development opportunities for teachers

Respondents were asked to reveal if improving parent teacher associations may work as a strategy to improve on girls performance and 69% of the respondents strongly agreed, 27% of the respondents agreed, 4% of the respondents were undecided, none of the respondents disagreed nor strongly disagreed a very high mean of 4.56 indicated that Improving parent teacher associations can improve girls performance in mathematics. This finding was in line with a study conducted by mark (2019) who found out that in situations where teacher parent relations are good students' performance in a number of subjects is good.

A very high overall mean of 4.34 indicated that there are a number of Interventions for enhancing teacher motivation and girl's performance in Mathematics in primary schools.

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the discussion of study findings' conclusions and recommendations revealed about teacher motivation and girl's performance in Mathematics in primary schools in Maefe Sub County Manafwa District.

5.1 Discussion of Findings

5.1.1 Effect of teacher motivation on girl's performance in Mathematics

Findings indicated that Lack of teacher motivation affects understanding of subject matter. This study finding was in line with a study conducted by Odiambo (2020) from Kenya who similarly noted that lack of teacher motivation affects understanding of the subject as teachers don't give their students enough time.

Findings also showed that lack of teacher motivation contributes to the inefficiency of the educational system and lower subject score in Mathematics by girls. This finding was in line with Davis (2020) who noted that in most private schools where teachers are well motivated, performance of girls in mathematics is good.

Findings also showed that motivating teachers improves girl's performance in Mathematics significantly. This finding was similar to a study conducted by Marvin et al, (2019) from South Africa who noted that teacher motivation brings about best results from students.

Findings indicated that Teacher motivation improves lesson attendance and understanding of subject matter

Findings also indicated that poor teacher motivation has demotivated their hard work. This finding was in line with a study conducted by Morris (2019) who conducted a study in Namibia and noted that poor motivation of performing teachers makes them lack inspiration of working hard thus poor grades.

5.1.2. Challenges affecting teacher motivation and girl's performance in Mathematics

Findings indicated that Poor work environments that are not favourable affect teacher motivation. This finding was in line with a study conducted by Ibu et al, (2020) from Nigeria who noted that teachers who not ethically good have high relations with poor performance in their subjects.

Findings also indicated that poor teacher remuneration is the leading cause of girls poor performance in mathematics. This finding was in line with that UNICEF (2020) which noted that rural schools were performing badly in mathematics as compared to urban schools due to poor teacher remuneration.

Lastly findings indicated that High standards of living affect teacher's standards of living. This finding was similar to that of Tomkins (2021) who conducted a research study in Togo and noted that the high standards of living don't give teachers peace of mind to concentrate on school matters.

5.1.3 Interventions for enhancing teacher motivation and girl's performance in Mathematics

Findings indicated that rewarding teachers can work as a measure to improve girl's performance in mathematics. This finding was in line with a study conducted by Caserta (2020) from Zimbabwe who noted that motivation of workers is highly associated with better results.

Fings indicated that Improving teacher remuneration can help in improving girls performance in mathematics and this finding was in line with a study conducted by Owino (2022) Who noted that the only way to improve students' performance is through improving teacher remuneration such that they work contented on their jobs.

Findings also indicated that improving working conditions can work as a strategy that can improve on students' performance in mathematics

Finings indicated that improving parent teacher associations can improve girls performance in mathematics. This finding was in line with a study conducted by mark (2019) who found out that in situations where teacher parent relations are good students' performance in a number of subjects is good.

5.2 Conclusions

5.2.1. Effect of teacher motivation on girl's performance in Mathematics

Findings concluded that lack of teacher motivation affects understanding of subject matter, That lack of teacher motivation contributes to inefficiency of the educational system and lower subject score in Mathematics by girls, that motivating teachers improves girl's performance in Mathematics significantly, that Teacher motivation improves lesson attendance and understanding of subject matter and lastly that poor teacher motivation has demotivated their hard work.

5.2.2. Challenges affecting teacher motivation and girl's performance in Mathematics

Findings concluded that Poor work environments that are not favourable affect teacher motivation, that poor teacher remuneration is the leading cause of girls poor performance in mathematics and Lastly findings that High standards of living affect teacher's standards of living.

5.2.3. Interventions for enhancing teacher motivation and girl's performance in Mathematics

Findings concluded that rewarding teachers can work as a measure to improve girl's performance in mathematics, that improving teacher remuneration can help in improving girls performance in mathematics that improving working conditions can work as a strategy that can improve on students' performance in mathematics and lastly that improving parent teacher associations can improve girls performance in mathematics.

5.3 Recommendations

Basing on the discussion of the study findings and conclusions of this report, the study recommends the following to different stakeholders.

There should be more investments by different Governments in a number of strategies to improve teacher motivation such that student's performance can be improved upon.

There is need for teachers to go for further studies such that they can understand how to ethically handle different children that they teacher's

There is need sensitization the community not to mistreat the sick people in their communities

5.4 Suggested areas for further research

Basing on the study findings, the researcher recommends further research on the following research topics:

Impact of Government on girl's performance in mathematics

Community perceptions and girls performance in mathematics

APPENDICES

APPENDIX I: CONSENT LETTER

Dear Respondents

Ref. Request to Complete Research Questionnaire

I am Mayanza James a student of Uganda Christian University pursuing a Bachelor's Degree in primary education and am currently undertaking a research on a topic '*teacher motivation and girl's performance in mathematics in Maeje Sub County, Manafwa district*'. You are kindly requested to participate in this research and your selection to this effect has been based on random basis. Please feel free as you respond to the study questions because the information you are to give will only be used for academic purposes, confidential and finally held anonymous before any publication.

Thank you

.....

(RESAERCHER)

APPENDIX II: QUESTIONNAIRE GUIDE FOR TEACHERS

SECTION A: REpondent's BIO – DATA

INSTRUCTIONS

Please fill in the blank spaces or tick (✓) in the boxes provided where necessary.

1. Name: (optional)

.....

2. Age: 15 – 30 31 – 45 46 – 60 60 +

3. Sex: Male Female

4. Marital status: Single Married Divorced Separated Widowed

5. Location:

Cell Parish

Sub – county

6. Levels of education:

None Primary Secondary Tertiary and above

Other (please specify)

.....

.....

7. Religion: Protestant Catholics Muslims Born again

Others (please specify).....

APPENDIX III

RESPONSE SCALE

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

SECTION B: Effect of teacher motivation on girl’s performance in mathematics						
1.	Lack of teacher motivation affect understanding of subject matter	1	2	3	4	5
2.	Lack of teacher motivation contributes to the inefficiency of the educational system and lower subject score in Mathematics by girls	1	2	3	4	5
3.	Motivating teachers improves girl’s performance in mathematics significantly	1	2	3	4	5
4.	Teacher motivation improves lesson attendance and understanding of subject matter	1	2	3	4	5
SECTION C: Challenges affecting teacher motivation and girl’s performance in mathematics						
8.	Poor work environment	1	2	3	4	5
9.	Lack of privacy	1	2	3	4	5
10.	Lack of teacher training	1	2	3	4	5
11.	Poor remuneration	1	2	3	4	5
SECTION D: Interventions for enhancing teacher motivation and girl’s performance in mathematics						
16.	Rewarding teachers	1	2	3	4	5
17.	Improving teacher remuneration	1	2	3	4	5
18.	Improving working condition	1	2	3	4	5
19.	Providing professional development opportunities for teachers	1	2	3	4	5

THANK YOU FOR YOUR TIME

APPENDICES IV: INTERVIEW GUIDE FOR DIRECTORS OF STUDIES AND HEAD TEACHERS

1. What is your position?
2. How long have you worked here?
3. What is your level of education?
4. What challenges affect teachers in primary schools?
5. Do girls pass mathematics well? Give reasons for your answer
6. Why do you think teacher motivation is related to girl's performance in mathematics?
7. Explain the challenges affecting teacher motivation and girl's performance in mathematics at primary schools?
8. What interventions can be implemented to enhance teacher motivation and girl's performance in mathematics in primary schools?

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