PARENTAL MOTIVATION, ACHIEVEMENT GOALS AND LEARNING STRATEGIES AS PREDICTORS OF ACADEMIC PERFORMANCE OF PRIMARY SCHOOL PUPILS IN MIGORI COUNTY, KENYA

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A Thesis Submitted in Partial Fulfilment of the Requirements for the Award of the Degree of Doctor of Philosophy in Educational Psychology of Masinde Muliro University of Science and Technology

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DECLARATION

This thesis is my original work prepared with no other than the indicated sources and support and has not been presented elsewhere for a degree or any other award.

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CERTIFICATION

The undersigned certify that they have read and hereby recommend for the acceptance of Masinde Muliro University of Science and Technology a thesis entitled "*Parental Motivation, Achievement Goals and Learning Strategies as Predictors of Academic Performance in Primary Schools of Migori County, Kenya."*

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DEDICATION

I dedicate this research thesis to my late father Josephat Werunga, my mother Imeldah and all the Werunga's family for their love, care and encouragement throughout my studies. May God bless them.

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ABSTRACT

Academic performance of children is a concern in most countries. In Kenya underperformance is associated with a number of factors for example understaffing. In Migori County the average mean score between 2017 and 2019 in Kenya Certificate of Primary Education is 245.54 (49.11%). The Purpose of this study therefore was to examine parental motivation, achievement goals and learning strategies as predictors of academic performance of primary school pupils in Migori County, Kenya. Specific objectives of the study were to: determine the extent to which parental motivation predicts academic performance, establish the extent to which achievement goals predict academic performance, find out the extent to which learning strategies predict academic performance and determine gender differences in academic performance among girls and boys. The study was anchored on achievement motivation theory, social learning theory and a conceptual framework showing the interaction among the constructs. Explanatory sequential mixed methods design was adopted. Population of the study comprised; 570 teachers, 30,600 standard eight pupils and their parents, and one director of education. Sample size was; 60 teachers, 380 standard eight pupils, 40 parents and one county director of education. Purposive sampling was used to select pupils, parents and the director of education. Stratified random sampling and simple random sampling techniques were used to select 190 boys and 190 girls; 30 male and 30 female teachers. Cluster sampling was used to classify sub-counties. Questionnaire, interview schedules, focus group discussion and document analysis guide were employed to collect data. A pilot study was conducted among 10 teachers, 40 pupils and one director of education. Split-half method was used to determine the reliability and its index was 0.83 for teachers' questionnaire and 0.76 for pupils' questionnaire. Content and construct validity were ascertained by the supervisors. Quantitative data was analyzed using Pearson's Product Moment Correlation Coefficient, regression and independent sample t-test. The data was also presented using descriptive statistics such as; frequency counts, percentages and means. Qualitative data was reported as themes and subthemes. The findings revealed that parental motivation is linearly related to academic performance (r=.724) and the relationship was found to be statistically significant at p-value = .000, < .05. The findings also showed a positive association between pupils mean score performance and achievement goals, with a correlation coefficient of .720**, p = .000. The findings further revealed that learning strategies such as seeking help and rehearsal were statistically significant to academic performance (r=.849, p-value = .005, < .05). During FDGs, parents confirmed that provisions and encouragement motivates learners. Finally the findings indicated that pupils' performance based on gender, was not statistically significant. The study concluded that parental motivation, achievement goals and learning strategies improves academic performance. It was recommended that the parents should visit schools to check on pupils' progress. Besides, they should attend school annual meetings. In addition, teachers should put more emphasis on mastery goals when handling learners in class. Not only should they help learners pass exams but also help them handle challenging tasks. Further, cooperative and modelling learning strategies should be adopted and used just like other learning strategies, such as rehearsal and setting targets to improve academic performance. Finally the Ministry of education and other stakeholders should discourage boy child from engaging in small-scale businesses such as fishing, hawking and motorbike riding as they undermine their academic performance. It is hoped that the findings of the study may improve the academic performance of primary school pupils.

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LIST OF ABBREVIATIONS AND ACRONYMS

ANCOVA: Analysis of Covariance

ATBSS: Achievement Test for Basic Science Students

BEA: Basic Education Act

BECF: Basic Education Curriculum Framework

BOM: Board of Management

CATs: Continuous Assessment Tests

CBC: Competence Based Curriculum

CDE: County Director of Education

CEB: County Education Board

DPGS: Directorate of Postgraduate Studies

EMC: Extra -Mural Classes

FGD: Focus Group Discussion

FPE Free Primary Education

FREE: Foundation for Research Education and Empowerment

GAT: Geography Achievement Test

GPA: Grade Point Average

ICT: Information and Communication Technology

KCPE: Kenya Certificate of Primary Education

KCSE: Kenya Certificate of Secondary Education

KICD: Kenya Institute of Curriculum Development

MAT: Mathematics Achievement Test

MMUST: Masinde Muliro University of Science and Technology

MOE: Ministry of Education

NACOSTI: National Council of Science, Technology and Innovation

NCE: Nigeria Certificate in Education

PA: Parents Association

SAPAT: Students' Academic Performance Aptitude Test

SDGs: Sustainable Development Goals

SMART: Specific Measurable Achievable Realistic and Time bound

SPSS: Statistical Package for Social Sciences

TSC: Teachers Service Commission

USA: United States of America

CHAPTER ONE

INTRODUCTION

1.1 Overview

This chapter involves the background of the study, statement of the problem, purpose of the study and specific objectives. The chapter further states the hypotheses, assumptions of the study, scope of the study, limitations and the significance of the study. Moreover, theoretical and conceptual frameworks are presented. Finally the chapter describes operational definition of terms.

1.2 Background of the Study

Academic performance is defined by test results connected with classwork, coursework, and other assessments (Kyoshaba, 2009). Low academic achievement is a worldwide issue that is rarely absent from any local community (Jazmawi, 2008). Various factors may be responsible for poor academic performance such as; student's effort, socio-economic background, self-motivation, tuition trends, learner's cognitive abilities, school and home environment (Chohan & Khan, 2010; Ali, Haider, Munir, Khan & Ahmed, 2013).

In India, poor academic performance among Omani students was related to four macro categories such as student related factors (76.72%), teacher related (5.40%) family and other related factors (8.39%) and (9.49%) respectively (Alami, 2016). Kapur (2018) who conducted a study in India also stated factors that influence students' academic performance in secondary school as a role played by parents,

attitude of students, school resources, leadership skills, class environment and health related factors.

Parents' participation in their children's academic performance has received widespread acceptance. Gottfried, Marcoulides, and Oliver (2009), in a longitudinal study conducted in Washington, DC, found two categories of parental motivational behaviors, one of which is task-intrinsic, which refers to parental promotion of children's enjoyment, engagement, and perseverance in learning. While task-extrinsic refers to parents that provide external rewards or punishments based on their children's task performance.

Cheung and Pomerantz (2012) discovered in a study concentrating on the United States and China that the more active parents were in their children's learning, the more driven the children were to do well in school for parent-related reasons, which contributed to the children's improved self-regulated learning and, consequently, their grades. Katz, Kaplan and Buzukashvily (2011) at Beersheba in Israel, demonstrated the association between parents' perceived competence for help in homework, parent's autonomous motivation and parent's attitudes towards homework and the level of support of their children's psychological needs during involvement in homework. The level of need-supportive behaviour was related to the student's autonomous motivation for homework.

In Pakistan, Ghazi, Ali, Saqib and Hukamdad (2010) in their study indicated that parents who were involved in their children's academic life had a profound effect on

the child's ability to learn and help instil in them an appreciation for learning that can last a life time. For them, children get motivation through praise and appreciation on better performance by their parents. However, children were not helped and encouraged in their homework and in co-curricular activities. This could be explored if parental motivation includes helping children do homework and in co-curricular participation.

Studies have also emphasized the importance of achievement goals for students' behaviour in the classroom (Matos, Lens & Vansteenkiste, 2007; Senko, Hama & Belmonte, 2012; Mupira & Ramnarian, 2018). Achievement goals emerge from different sources including internal factors like dispositional motives and external factors such as classroom or school wide characteristics (Elliot, 2005)

Learners in school may embrace performance or mastery goals, with each defining success and failure differently (Alrakaf, Sainsbury, Rose, & Smith, 2014). A study of bright Chinese students in Hong Kong indicated that those who establish mastery objectives tend to seek out challenges and persevere when faced with obstacles. They seek appropriate assistance, employ strategies for cognitive processing at a deeper level, and confidently approach cognitive activities. While students who set performance objectives are focused on displaying their competence to others (Chan, 2008)

Senko, Hama, and Belmonte (2012) at the State University of New York, United States, investigated whether mastery approach goals predict elaboration learning

strategy and whether performance approach goals predict rehearsal learning strategy. The findings indicated that mastery objectives predicted increased demand for professors who intellectually challenged students and possessed subject-matter competence, whereas performance goals predicted high demand for professors who delivered content effectively and offered success cues.

Matos, Lens, and Vansteenkiste (2007) in a Peruvian school in Latin America expected favorable impacts of mastery goals comprising increased use of learning methods of rehearsal, elaboration, organization, critical thinking, and metacognitive strategy which included goal setting to increase academic accomplishment, and negative effects of performance avoidance objectives to decrease academic achievement. The performance approach objectives that predicted a greater usage of learning strategies yielded mixed results.

Mupira and Ramnarian (2018) conducted a study in South Africa on the effects of inquiry-based learning on the achievement goal orientation of learners in grade 10 physical sciences in township schools. The findings revealed that the experimental group of students who engaged in inquiry-based learning considerably increased their mastery goal orientation, but the control group, who were taught using a standard direct didactic approach, showed no significant change.

Gbollie and Keamue (2017) examined the motivating beliefs and learning practices utilized by junior and senior high school students in Liberia, West Africa, in relation to their academic success. It was discovered that students who employed cognitive

techniques such as elaboration and organizing had a deeper level of engagement with the subject. In addition, Gbollie and Keamue (2017) discovered a gap between parents' desire for their children to receive a quality education and their involvement in their academics.

Kenya has adopted a Competency-Based Curriculum (CBC) in order to enhance the development of abilities and instill positive values in the student. Parents' agency and participation in their children's education are also emphasized because of their centrality to the student's future success. The curriculum views the parent as the child's initial instructor, trainer, and source of authority (KICD, 2017).

Reche, Bundi, Riungu, and Mbugua (2012) conducted a study in Mwimbi, Maara Sub-county, Kenya, and found that parents' refusal to participate in school development (66.7%), parents' failure to help their children with homework (69.2%), and parents' infrequent communication with teachers (62%), all contributed to low academic achievement among primary school students. Mean scores ranged from 200.9 to 178.75 among participating public day elementary schools, placing them below the national average.

Ireri (2015) investigated at the goals of form three pupils in Embu County and found that mastery goals were positively predictive of academic success, while performance goals were adversely predictive. There were observable disparities in performance expectations and academic success between the sexes. Academic success was related favorably to a focus on reaching specific goals. As opposed to

the avoidance and accomplishment goal orientations, the accomplished academic identity status was the most significant predictor of academic success.

Oloo, Juma and Murundu (2014) conducted a study in Rachuonyo South Sub-county to determine whether or not parents closely monitored their children's academic performance. They found that 54.7% of parents did not do so, while 39.4% did so occasionally, and 10.4% did it all the time. It was determined that students in public elementary schools in the Rachuonyo South Sub-county did not perform as well academically as they could have since their parents did not closely monitor their progress in school.

Ouma, Tanui, and Rop (2016) found that in the Uriri Sub-County of Migori County, poor KCPE performance was linked to the management style employed by the school's leadership. According to the data, there is a positive and substantial link between situational leadership and student achievement in schools ($p < .05$). In order to have a beneficial impact on students' academic achievement in public primary schools, it was claimed that principals required to adjust their leadership styles to fit the needs of their schools. Ouma, Tanui, and Rop (2016) narrowed their attention to only one facet of leadership: style. The influence of parental motivation, aspirations, and learning practices on students' academic outcomes was not considered in their research. This prompted the need for the investigation at hand.

The Basic Education Curriculum Framework (BECF) is based on parental engagement and empowerment as one of its guiding concepts in Kenya's new

curriculum CBC. The BECF promotes for increased parental involvement in the education of the learner. The framework also aims to enhance the potential involvement of parents in fostering the potential of the learner. The current research would uncover the motivational factors that parents may employ in their efforts to enhance their children's academic achievement.

1.3. Statement of the Problem

Gakure, Mukuria and Kithae (2013); pointed out that academic under-achievement in Kenya is due to under staffing, inadequate facilities, negative attitude of learners, lack of curriculum supervision, inadequate teaching and learning resources, lack of professional assistance and incomplete syllabus coverage . Ouma, Tanui and Rop (2016); revealed that poor academic performance among primary school pupils in Migori County was due to lack of parental monitoring of children's progress in school and poor leadership styles used in managing public primary schools.

Reports from Migori County's education office, showed that KCPE analyzed results for the three years [2017 (242.18); 2018 (247.73); 2019 (246.73)] had an average score of 245.54 (49.11 %) lagging behind their neighbouring Homabay County [2017 (253.4); 2018(255.96); 2019(258.38)] with a higher average score of 255.91 (51.18%) see Appendix F. Causes stated for low academic performance as reviewed in this study may be similar to most Kenyan primary schools including Migori County. However, there could be a likelihood that Migori County's parents stand aloof in motivating their children to learn. There could be a relationship between parental motivation and learner's academic performance. Achievement goals

especially mastery of content and performance goals thus working hard to outsmart others in grades, twinned with learning strategies as steps taken to complement parental motivation could be explored to improve on academic performance of primary school pupils in Migori County.

Based on the reviewed literature by the researcher has come across, it appears that there is no evidence that a study has been carried out in Migori County on these three constructs namely, parental motivation, achievement goals and learning strategies to contribute to academic performance among primary school pupils. It is against this background that the researcher sought to examine the predictive weight of parental motivation, achievement goals and learning strategies on academic performance of primary school pupils in Migori County.

1.4 Purpose of the Study

The purpose of the study was to examine parental motivation, achievement goals and learning strategies as predictors of academic performance of primary school pupils in Migori County, Kenya.

1.5 Specific Objectives of the Study

The objectives of the study were to;

i. Determine the extent to which parental involvement predict academic performance of primary school pupils in Migori County.
ii. Establish the extent to which achievement goals predict academic performance of primary school pupils in Migori County.

iii. Find out the extent to which learning strategies predict academic performance of primary school pupils in Migori County.

iv. Determine gender differences in academic performance among girls and boys in primary school pupils in Migori County.

1.6 Hypotheses of the Study

The study was guided by the following research hypothesis:

H_{01}: Parental motivation do not have a significant effect on academic performance among primary school pupils in Migori County.

H_{02}: Achievement goals do not have a significant effect academic performance of primary school pupils in Migori County.

H_{03}: Learning strategies do not have a significant influence on academic performance among primary school pupils in Migori County.

$H_{04:}$ There is no significant gender differences in academic performance among girls and boys in primary school pupils in Migori County.

1.7 Assumption of the Study

The assumptions of the study were;

i. Parental motivation, achievement goals and learning strategies can be measured using questionnaire.

ii. The respondents were to be honest when responding to items on the research tools.

iii. Academic performance was a function of parental motivation, achievement goals and learning strategies in primary schools of Migori County.

v. Schools have put in place strategies to be used by teachers to improve academic performance among pupils of primary schools in Migori County

1.8 The Scope of the Study

The study focused on parental motivation, achievement goals and learning strategies as predictors of academic performance of primary school pupils in Migori County. The study aimed at improving academic performance of pupils in public boarding and day primary schools in Migori County. The respondents in the study were; standard eight pupils, their class teachers, their parents and the Migori County Director of Education (CDE). The standard eight pupils were targeted because it was an examination class and therefore parental motivation would be at the peak with the aim of supporting children for higher scores to join national or extra county schools. Standard eight learners too have high reasoning capacity that would enable them go for what they want and therefore be able to set targets, put in place best learning strategies and remain focused for better academic performance.

The researcher limited the study to standard eight boys and girls who had registered for KCPE examination in the year 2020/2021 and had done at least three continuous assessment tests (CATs) in the year. Data was collected in third term (between January and March 2021) just before the candidates did their KCPE examinations. This enabled class teachers to have at least three continuous assessment test mark lists that was used for academic performance. The parents were involved in the study to support or negate the pupils' opinion on parental motivation through provisions and engagement. Teachers were also involved in this study because the predictor

variables of achievement goals and learning strategies would be complimented by the learners' class teachers. The CDE is the overall overseer of learning activities of pupils in the county. Therefore he or she would easily provide the required information on academic performance in the county. The standard eight pupils and their class teachers respondent to a questionnaire to provide the required information. The parents participated in focus group discussion (FGD) and the CDE was interviewed. From the 10 Sub-counties of Migori County, the study was carried out in four sub-counties two from each cluster.

1.9 Limitation of the Study

Some respondents were reluctant to give the required information freely. To mitigate this, the researcher assured the respondents that the information collected would be treated as confidential and would be used for research purpose only.

Some data collection tools that were used in this study were developed for respondents in developed countries and therefore in the process of adopting them, their reliability may have been affected. The researcher therefore modified the data collection instruments to suit the primary school pupils in Kenya and pilot study was carried out to test the reliability of the instruments.

Only grade eight pupils of Migori County participated in this study. This may affect the generalizability of the findings. However, the study may be conducted in a different geographical area.

1.10 Justification of the Study

Based on the prevalence of poor academic performance in Migori County, it is important to emphasize on team work whereby all the stakeholders for example, Ministry of Education personnel, pupils, teachers, parents and guardians should work as a team to make it possible to improve academic performance in the county.

The study was necessary, to ensure that academic performance of primary school pupils in Migori County is improved in order to eradicate poverty, reduce health risk diseases and to make children more so boy child to continue with their studies instead of involving in anti-social behaviours or dropping out of primary school to engage in businesses such as “boda-boda” fishing and money exchange on the border that will not sustain their lives.

Goal 4 of the sustainable development goals is to make sure that all people can get the same education at all levels by 2030. The vision 2030 road map assures that all girls and boys complete a primary and secondary education that is free, egalitarian, and equal, resulting to relevant and successful learning outcomes. Through this study the society would realize that the boy child is endangered because he is being overtaken by the girl child in education undermining the attainment of the SDGs (4). This can also enhance other areas. For instance If primary school pupils continue with their education more so the boy child, the security in terms of availability of food, eradication of poverty, employment among many SDGs. This would enable the county not to lag behind.

Learning strategies such as cooperative learning not only improve the learner's academic performance but also develop and shape the child's social behaviour when working with others in groups. They become more tolerant to each other as they work together. They learn to cope with different personalities and form a better society.

1.11 Significance of the Study

The study findings may contribute to the existing body of knowledge on the predictors of academic performance of primary school pupils. The study also may enable parents to play their role actively especially in motivating their children for high grades.

Further the study may be an eye opener to learners to set goals and have proper learning strategies for better grades. School administrators may use the study to engage parents in the learning of their children. Policy makers may benefit from these findings in the area of teacher training, through relevant instruction in the dynamics of learners' evaluation and behaviour in classroom.

1.12 Theoretical Framework

The study was anchored on two theories; Achievement motivation theory by McClelland (1961) and social learning theory by Bandura (1962). Achievement Motivation theory ascertains that strategic learners are motivated primarily by rewards, that high achievers are influenced by both motive for success and fear of failure and that low achievers like to succeed, although success tends to bring them

relief of having avoided failure (Rathus, 2012). Social learning theory notes that behavioural consequences whether personally experienced or modelled motivate and inform learners of the likely outcomes of their actions (Bandura, 1962).

1.12.1 Achievement Motivation Theory

Achievement Motivation theory was espoused by McClelland (1961). It is an important determinant of aspiration, effort, and persistence of high achievers. High achievers behaviour is achievement-oriented, influenced by both motive for success and fear of failure. Their goal is to succeed and to perform well in relation to a standard of excellence in comparison to others who are competitors. This is in line with the construct of achievement goals especially for learners whose aim is to master content and perform exceptionally well in academic performance. The theory also emphasizes that individual perceptions, family and culture has influence on high achievers (McMahon, Judith, & Tony, 1994). The role of the family particularly parental involvement in children's learning therefore enhances their academic performance.

Rathus (2012) who quoted Mayer and Sutton (1996) emphasized that high achievers tend to strive harder to achieve difficult but realistic goals. Learners who set high targets actively seek to do well, make careful plans in terms of learning strategies, can wait for rewards, and are intensely satisfied with success. Yet if they have tried their best, high achievers are not too upset by failure. Besides, high achievers prefer tasks which provide a challenge without being too difficult and which they feel they could master and so do not set themselves impossible goals.

Achievement Motivation theory also ascertains that strategic learners are motivated primarily by rewards. Therefore, parental motivation helps learners to react well to competition and the opportunity to outsmart others by scoring excellent grades which is a characteristic of performance goals. A learner may also avoid failure that manifests itself in a variety of ways such as refusing to engage in an activity, devalue its importance for himself or herself, set very low expectations or refuse to relinquish prior belief in the face of considerable contradictory evidence. In some situations however learners cannot avoid tasks which they do poorly and so they use alternative strategies to protect their self-worth. They make excuses or do things that undermine their chances of success by setting unattainably high goals and cheating in class by presenting others' work as their own (Rathus, 2012).

To complement the achievement motivation theory which puts emphasis on high achievers' success, good performance, setting of realistic goals and highly motivated learning, Social Learning Theory by Bandura (1962) is also considered in the current study to emphasize direct reinforcement through rewards and social learning that is widely applicable to all learners both at home and in school.

1.12.2 Social Learning Theory

Learning strategies in this study were anchored on Social Learning Theory by Bandura (1962). The theory examines how people learn by observing models and imitating other peoples' behaviours. Bandura noted that behavioural consequences whether personally experienced or modelled motivate and inform learners of the

likely outcomes of their actions. According to Bandura (1962), much of human learning is not shaped by its consequences but it is more efficiently learned directly from a model. For instance, if a learner sees a friend being rewarded for good work done in classroom, he or she may work hard also to be rewarded.

Social Learning Theory (1962) also posits the four major phases of learning as attention, retention, reproduction and motivation. The four phases may be applied to rehearsal learning where a learner repeats words to oneself to recall information, elaboration strategy by paraphrasing and summarising the information learned, and critical thinking by applying previous knowledge to new situations. The learner therefore plays a greater role to improve his or her academic performance.

The above theory also emphasizes the principles of social learning of direct reinforcement provided by external environment. Provision of conducive home environment by parents, and the reinforcement of their children's education through rewards, praise, provision of material required addresses parental motivation in the current study to improve the learner's performance. In school environment, social learning may also be applied to learning strategies such as; discussion, peer learning in study groups, seeking help from teachers and classmates, modelling, observation and imitations. Learners' interaction with others not only improves their academic performance but also cultivates virtues of tolerance, patience, cooperation, and positive attitudes.

Achievement motivation and social learning theories were selected for this study because they emphasize the learners' motivational dynamics achievement goals and learning strategies in academic performance. They support the assertion that since achievement is largely learned, children copy the behaviour of their parents, teachers and other important people who serve as models through observational learning (Bandura & Walters, 1963).

1.13 Conceptual Framework

In this study a conceptual framework was used to show the interaction of variables hypothesised to predict academic performance. The relationship between parental motivation, achievement goals, learning strategies and academic performance is illustrated in Figure 1.1

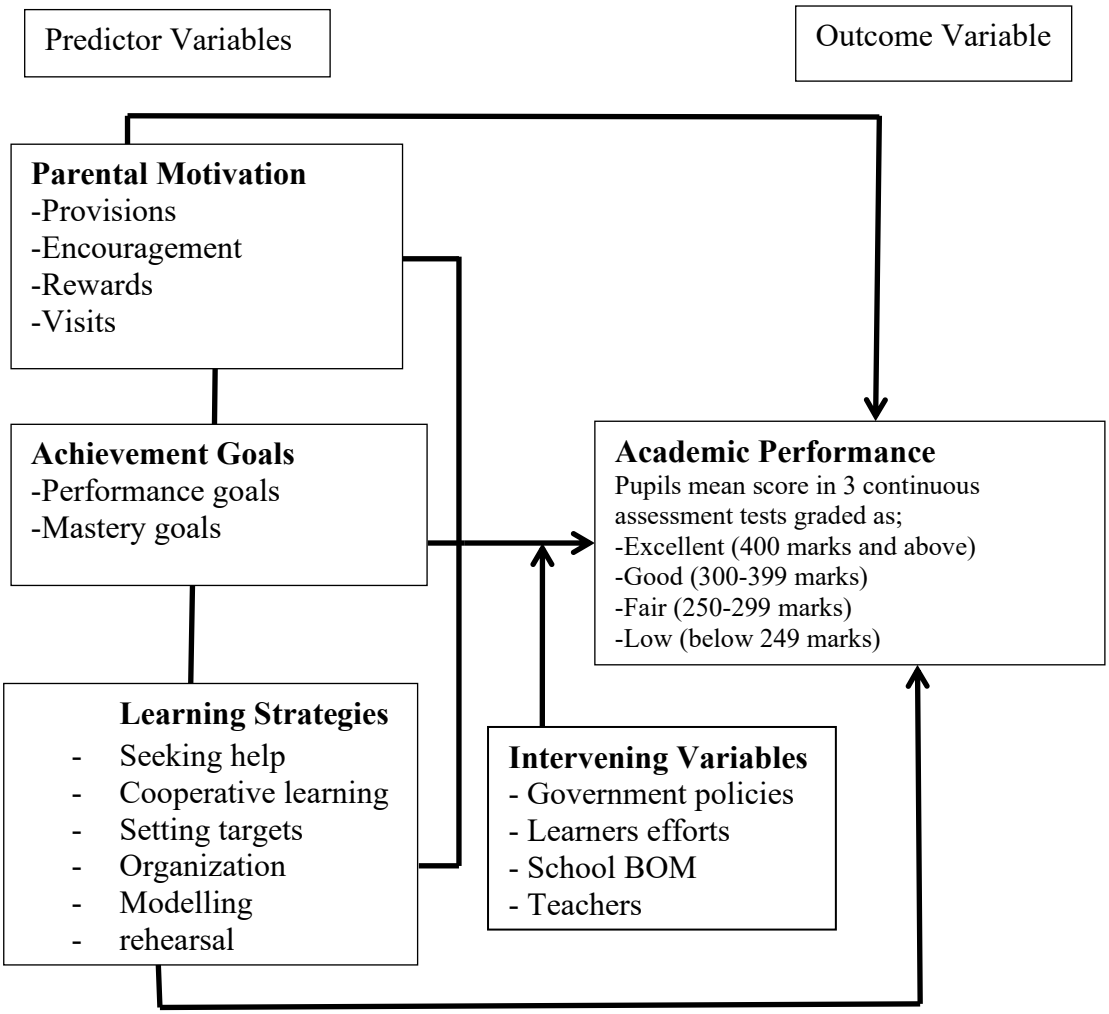

Figure 1.1: Conceptual Framework Showing Relationship among the Variables

As shown in Figure 1.1, parental motivation, achievement goals and learning strategies are predictor (independent) variables while academic performance is the outcome (dependent) variable. In this study, parental motivation involves provision of basic needs such as text books, writing material and conducive home environment. It also involves parents checking pupil's progress at home, during school visits, and reinforcement of pupils learning through rewards and encouragement. Parental motivation improves the child's confidence, self-esteem and positive attitude. The child feels loved, appreciated and cared for. The child therefore reciprocates by working hard in classroom to score either 'excellent' or 'good' grades with the possibility of joining National or Extra County secondary schools. Where there is no parental involvement, there is a likelihood that learners lack motivation hence score low or very low grades.

Achievement goals are set goals or targets that result into rewards in the classroom. This include performance goals where pupils aim at achieving excellent grades to outshines others in class and mastery goals where pupils aim to master what the teacher teaches in class or tries to gain deeper knowledge to understand the content of the topic. The set goals such as performing better than classmates in classroom, aspiration to join National or extra county secondary schools or the inspiration of completing university studies enable the learner to put more effort in what is taught in class to improve their academic performance. At these level of study the learners' focus is on the outcome which is their final result in Kenya Certificate of Primary Education (KCPE). Goal setting would naturally influence the learner to choose

appropriate and better learning strategies to improve on academic performance. Pupils who fail to set goals lose focus and therefore may not perform well in school.

In this investigation, we additionally take into account students' use of various tactics for improving their learning abilities as an independent variable. Learners' beliefs of their own agency, goals, and the role of tools as they apply to knowledge and skill acquisition are all part of the learning strategies they employ. Some learning strategies that learners at primary level use to improve their academic performance include; cooperative learning, modelling, individualised learning, rehearsals, critical thinking, organization, seeking help from teachers and classmates.

Academic performance is the outcome of the pupils learning depending on the level of parental involvement to motivate the child, the child's own effort to set achievable goals and put in place appropriate learning strategies. KCPE is scored out of 500 marks. Excellent performers in most cases, are admitted in National Schools endowed with good learning facilities. The good performers are usually admitted in extra county secondary schools that are highly competitive while the average performers are given chance in county schools. Following the current policy of 100% transition of primary school learners to secondary school, the low performers are all admitted in Sub-county secondary schools. The secondary school that one is admitted to some extent predicts onward performance of learners in high school hence increasing their self-esteem and competition to join tertiary colleges and universities for further studies.

The three independent variables interact to predict academic performance. Parental motivation through provision, visits, encouragement and rewards improves the child's confidence and self-esteem. The child gets motivated and reciprocates by scoring excellent scores. Proper learning strategies become very necessary to enable the learner attain the achievable set goals. Both the learner centred and teacher centred strategies employed may either encourage the learner's active participation in achieving the goals or not.

The intervening variables are intermediaries between the predictors and the outcome. The intervening variables put in place to improve academic performance of primary school pupils in Migori County include: Ministry of Education (MOE) policies, pupil's individual efforts, school Board of Management (BOM) and teachers. The government through the Ministry of Education (MOE) provide school infrastructural materials through Free Primary Education (FPE) as well as trained teachers. For instance provision of text books is helpful to improve the learners' performance especially for the pupils who come from families that are not able to provide extra learning materials. The school BOM promote quality education for all pupils in accordance with the standards set under BEA (2013) and other written laws such as the constitution of Kenya 2010, TSC Act of 2012, (29 BEA, 2013) by advising the County Education Board (CEB) on the staffing needs of the institution, mobilisation of resources for construction and stocking of libraries, computer laboratories for ICT learning, classrooms to decongest the existing ones in order to allow closer teacher and learner interactions.

In addition, teachers occupy the steering wheel in learners' performance. Through reinforcement, learners compete in class, they act as role models from which learners are motivated to emulate. They monitor and evaluate learners performance regularly, they are a link between the school, parent and community. They impart knowledge directly to the children. They help the learners in goal setting and selection of learning strategies. Learners efforts also contribute to their academic performance. For instance learners who engage themselves in doing their own research on areas where they have not understood, to enhance their understanding of the content taught perform better in class than their counterparts.

1.14 Operational Definition of Terms

This section defines the key terms which are used in this study. The terms are defined using the process for specification of concepts outlined in Creswell (2009). The key terms include; academic performance, predictors, achievement goals, learning strategies, parents, parental motivation, primary school and pupils

Academic performance: Refers to Pupils' mean score in three continuous Assessment tests all marked out of 500 marks.

Achievement goals: These refers to mastery and performance approaches where learners set targets to comprehend the subject content and compete in class for excellent grades in both internal and external examinations

Learning strategies: Refers to steps taken by learners to enhance their academic performance such as rehearsal and seeking help

Parents	Refers to one or two persons from whom one is immediately biologically descended; a father, mother or guardian responsible of parenting a child.
Parental:	It is relating to a person's parent. The person here is the school going child
Parental motivation:	Refers to parent's involvement in activities like provision of learning resources, provision of external rewards, praise and appreciation to encourage the child's education.
Primary school:	A learning institution comprising grade 1 to 6 and continues in class 7 to 8 currently in the Kenyan education system
Pupils:	Refers to learners of standard eight in the current Kenyan primary education system
Predictors:	These are independent variables (parental motivation, achievement goals and learning strategies) used to assess the strength and direction of their association with the outcome (academic performance) variable

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter entails literature review on parental motivation, achievement goals, learning strategies and academic performance. It is done under the following sub-headings; parental involvement and pupils' academic performance, achievement goals and academic performance, learning strategies and academic performance; and gender differences in parental motivation, achievement goals and learning strategies.

2.2 Parental Involvement and Pupils' Academic Performance

The first step toward parent engagement and, ultimately, parent collaboration is parental involvement in the school. The impact on students is substantial when parents and educators collaborate to create an engaging learning environment. Students that have involved parents tend to excel in many areas, not just academics. Establishing and maintaining positive relationships between teachers and parents is an integral part of any successful classroom. They play a crucial role in enabling students to realize their full academic potential both individually and collectively (Hill & Tyson, 2009; Macharia, Wairimu & Muiru, 2016).

In the USA, Thornton (2015) of Governors State University Chicago, demonstrated the connection between parental involvement, homework and academic achievement among school aged children. Participants were 120 parents of African and Americans in Chicago urban-elementary schools. Data was analysed to determine if there is significant difference when parents are involved in academic success of their

children. The results indicated that 76.5% of teachers negatively rated parents' involvement as not being excellent. They also indicated by 94.1% the importance of parental involvement in assisting learners. It was concluded that parents were willing to help with assignments and that majority of parents did not favour the thought of non-parental involvement. In Thornton, (2015) study, the emphasis was placed on parental involvement on assisting learners to do their homework. The current study emphasized on how parents motivate learners all round to improve their academic performance which included supportive home environment, provision of learning materials, incentives and encouragement of learners to perform well both in internal and KCPE examinations. The current study also involved learners as participant unlike the study by Thornton's, (2015) where parents and teachers were the main respondents.

Popa (2016) conducted a study on the effect of perceived parental participation on students' achievement at Transylvania University in the United States and discovered that moms are more supportive of their children's educational requirements than fathers. There were 140 students from six classes at three separate high schools in Brasov that participated in the study. The first significant positive connection between dads and mothers was discovered (r=0.28, pI0.001). This relationship demonstrated that dads supported their children's involvement and supported their children's mothers, but did not actively contribute to their children's academic progress. As regards to mothers' support, there was a substantial and positive link with self-esteem (r=0.27, pI0.001). In Popa's (2016) study of high school students in Transylvania, maternal support was connected with self-esteem, whereas the current

study examined the family environment and its influence on academic achievement among standard eight students in Migori County, Kenya.

Omar, Ahmad, Hassan and Samsilah (2017) conducted a study on the relationship between parental involvement and achievement motivation and the findings showed a positive significant relationship. There were 360 participants aged 16 and 17 years selected from 13 vocational colleges in Malaysia. A total of 264 boys and 106 girls responded to the questionnaire. The results showed a positive significant relationship between parental involvement and students achievements (β=.100, P< .05) and achievement motivation (β= .089, P< .05). The study by Omar et al. (2017) was conducted in Malaysia among vocational college students. The current study was conducted in Migori County among primary school pupils of standard eight balanced at 190 boys and 190 girls to guard against gender bias. The current study also involved parents, teachers and county director of education as participants using questionnaire, interview schedule, focus group discussion and document analysis guide to collect data. The triangulation enabled the researcher to reinforce the findings.

In Pakistan, Rafiq, Fatima, Sahail, Saleen and Khan (2013) examined parental involvement and academic achievement among secondary school students of Lahore. Respondents were students of 9th class both boys and girls. The results showed that of the respondents (40.2%) whose parents had high level of involvement in their academic activities, had high level of academic achievement. It was concluded that

the higher the level of parental involvement in their children's academic activities the higher and moderate level of academic activities of their children.

Although Rafiq et al. (2013) evaluated parental participation and academic accomplishment among 9th grade students, the current study aimed to determine the extent to which parental involvement predicted academic performance among standard eight learners in Migori County primary schools. The current study did not include respondents whose parents were comparatively least involved in academic activities of their children.

Akhtar, Ahmad and Saifi (2020) examined the effect of parents' participation in students' academic performance among all government high schools of Faisalabad district, Pakistan. The findings revealed a positive relationship between parents' help in education and students' performance. Participants were 320 ninth class students and 64 compulsory subject teachers. Data collected through survey questionnaire was analyzed and interpreted with statistical inferences. Descriptive analysis showed that parents; provide learning material to their children (93.3 %); focus on children's character building (95.3 %); help in homework (82.8 %). Further it was highlighted that parents felt proud of their children's good grade (98.6 %); give some prize on their children's success (87 %); arrange tuition classes (80.6 %). Parents appreciated children on their good performance (96.9 %) and motivated children on their good grades (97 %). Results also highlighted that the parents and teachers worked together for students learning (77 %), teachers informed parents about school program and activities (71.7 %); that parents talked with teachers about difficulties of students at

school (71.1 %) and sometimes teachers invited parents to visit classroom (60.7 %). Pearson correlation coefficient (r = .132) showed a significant (p = .012) and positive relationship between parents help in education and students' performance indicating that if parents have more help in education then their children have reliable performance. Although the study of Akhtar et al. (2020) examined similar factors on parental involvement, it was carried out in Pakistan among the ninth grade students, while the current study was carried out in Migori County, Kenya, among standard eight pupils in public primary schools. Besides questionnaire, the current study also used interview schedules, FGD and document analysis guide to collect data to ensure triangulation.

Lee, Kim, Kesebir, and Han (2016) in Seoul, South Korea, explored the conditions under which parental praise leads to improved academic performance and psychological health in school-aged children. The findings suggested that parents' assessments of their children's schoolwork being over- or under-praised predicted poorer school performance and greater unhappiness in youngsters. All third-, fourth-, and fifth-grade pupils from a private primary school (337 students; 161 males and 176 females) participated in the study, along with one parent per child. Students evaluated the praise offered by their parents on a seven-point Likert-type scale after completing a questionnaire and making independent evaluations. In comparison to their children's real school achievement, parents were asked to determine whether the praise they offered their children for homework was exaggerated or not. Significant but weak association existed between children's and parents' evaluations of praise accuracy (r = 0.18, p =.002). It was determined that children's judgments of the

correctness of their parents' praise had a greater impact on their results than their parents' opinions of the accuracy of their praise.

Although the study of lee et al. (2016) examined parental involvement, the study was carried out in South Korea among grade three, four and five learners. The questionnaire used was a 7 likert type scale unlike the 5- likert type scale' used in the current study therefore the extent of agreement may be different. Learners compared the mothers' and fathers' praise and how it impacted on their performance and psychological health while in the current study praise is just one of the many factors that were considered as parental motivation to predict academic performance among standard eight pupils in Migori County. The different geographical area and the learners' level of education could affect the findings. Also in the current study 40 parents provided information through FGD in four groups of 10 participants and did not respond to a questionnaire. Due to direct interaction with parents, the researcher was likely to get more information.

Osei-Akoto, Chowa, and Ansong (2012) investigated the correlation between parental involvement and student success in Ghana. One hundred schools were chosen at random from eight of Ghana's ten regions for the YouthSave Ghana Experiment's cluster randomized design. There were eight questions total, four of which measured parental involvement at home and four measuring involvement at school. The data showed that PTA meetings were the most popular venue for parental involvement at schools, with 87% of parents regularly participating. The relationship between parental participation and arithmetic achievement was not

statistically significant. Students whose parents monitored their homework completion actually fared worse in math (M=53.37, SD=16.87) than those whose parents did not monitor their assignment completion (M=53.55, SD=16.24). Similarly, the math performance of children whose parents interacted with teachers and school counselors was worse (M=53.36, SD=17.10) than that of children whose parents did not interact with such professionals (M=53.45, SD=15.84). Parents who often discuss their children's schoolwork with them saw a significant improvement in their children's English proficiency (t=2.21, <p.05). There was shown to be no correlation between parental participation and academic success in English. In their investigation of parental involvement, Osei-Akoto et al. (2012) focused primarily on parental attendance at PTA meetings and student achievement in English and mathematics. The current investigation took into account parental motivation, putting special emphasis on parent-teacher conferences and home visits to check on students' development. The impact of different types of parental motivation on students' overall academic achievement was also investigated.

Kgosidialwa (2010) conducted research on parental participation and expectations of children's academic progress in South Africa. Totaling 16 parents, we spoke with those whose kids were in fifth, sixth, and seventh grades. The parents' impressions of their children's academic progress were checked against the students' official records. The teachers' viewpoints were only utilized to support the parents' perspectives. The parents who participated in the study were strongly interested in their children's academic life. The learners indicated that the parents' presence in the home did not make any impact because parents did not provide any encouragement in their school

work. However, the parents relied on verbal praise and in-person interactions with teachers to stay abreast of their children's academic progress. Kgosidialwa's (2010) study captured what the current study researched on. However his study was conducted in Botswana, South Africa and sought the parental and teachers perception on parental encouragement. The current study was conducted in Migori County of Kenya among standard eight pupils. Pupils, teachers, parents and the CDE were respondents in the current study. To ensure triangulation, the current study used questionnaire, interview schedule, document analysis guide and focus group discussion to collect data.

In Kenya, Mudibo (2014) examined the impact of parents' involvement on academic success in secondary schools. The respondents were 85 form three students all from Magarini Sub-county. A questionnaire was used to collect data and teachers' views were also sought. Data was analysed and the results revealed that only 8.3% of the sampled students within the sub-county had their parents always following up on their homework; Private tutors to enable children recapitulate what was taught at school during the regular sessions had 1.7%. Further results revealed that 52.6% of the students whose parents frequently checked their children's homework rated their performance as good compared to 9.8% whose parents did not check their school work while 31.6% responded that students' good results were associated with parents going to school to discuss their academic progress with their teachers. Analysis of the results also revealed that 52.6% attributed their good performance to parents attending school meetings and academic clinics in schools with 48.8% of the students attributing their below-average performance to their parents not attending school

meetings and academic clinics. About 61% of the sampled students associated below average academic attainment to lack of parents' motivation.

Although the study (Mudibo, 2014) examined similar factors on parental involvement and students' success, respondents were form three students of Magarini Sub-county and data was collected through questionnaire. Teachers' views were sought and descriptive data analysis was done. The current study was conducted in Migori County among standard eight pupils. Respondents responded to other parental motivation factors on provisions such as text books, rewards, encouragement and praise in the current study. Besides questionnaire, the current study used interview schedules, FGD and document analysis guide to ensure triangulation. Both descriptive and inferential analysis were used to analyze data in the current study.

Muola (2010) examined the association between academic achievement motivation and home environment among eighth grade students. Students in grades eight and nine from six different primary schools in Machakos County, Kenya, were surveyed. The student's academic motivation and family life were analyzed using questionnaires and the simple profile. Six of the home environmental elements were found to have a positive link with academic performance motivation, and these were: parents' occupations, parents' education levels, family size, and access to learning resources at home. The only component not significantly ($r = 0.03$) associated to academic achievement motivation was parental encouragement. The study (Muola, 2010) was carried out in Machakos County while the current study was conducted in

Migori County. Difference in geographical set up, social and economic activities may give contradicting results. The current study was carried out in day and boarding schools to find out if school type has effect on parental motivation and academic performance. The current study researched on different home environment which included conducive study environment, encouragement to complete school assignment, parental rewards and parental visits. These factors were not all captured in Muola's (2010) study.

Koskei (2014) found that 90.9% of students whose parents were involved in their education scored below average on standardized tests in a study he conducted to determine the influence of parental involvement on students' academic performance in public mixed day secondary schools in the Kuresoi Sub-county, Nakuru County, Kenya. 180 pupils in grades four and five from six different high schools were included. Students rated their parents' involvement in their education based on their availability to help them with homework, their willingness to discuss their academic performance with them, their encouragement, and their drive to improve their grades when they were struggling. The study's results demonstrated that parental participation had little bearing on pupils' academic success in high school. As indicated by the little value of the contingency coefficient (0.09), the degree of correlation between the two variables was also modest.

Although the factors researched on in Kosikei's (2014) study were similar to the current study, his was conducted in Nakuru County among form four students while the current study was conducted in Migori County among standard eight pupils.

Level of learners and geographical area may give different findings. Whereas ex-post facto research design was employed in Koskei's (2014) study, the current study employed correlation and descriptive survey research methods to determine the relationship between parental motivation and pupils' academic performance. A larger sample size of 380 pupils from 60 primary schools was used in the current study.

Echaune, Ndiku, and Sang (2015) conducted a study in the Teso North Sub-county of Busia to investigate the relationship between parental involvement in homework and academic success in public primary schools. Participants were 30 principals, 30 parents, 192 educators, and 280 students. Using questionnaires, semi-structured interview schedules, and a document analysis guide, data was collected. The connection between school performance and parental engagement in children's homework was poor, r (n=30) =.3444, P =.062. The results for covariates in the full regression model indicated that parental involvement in homework does not have a positive effect on school KCPE mean scores, β=2.054, p=.496, contrary to the study's hypothesis that low school academic performance in the study area would be a function of the level of parental involvement. Results also found that a 0.63 improvement in school KCPE mean scores was projected if all invited parents attended school sessions. The school lunch program was cited as one of the obstacles impeding academic success.

Although Echaune et al. (2015) researched on parental involvement, emphasis was placed on the effect of homework and school academic performance in Busia County and academic success not for individual learners but the school KCPE performance.

The current study researched on parental motivation in line with provisions, encouragement, praise, rewards and their level of prediction on academic performance among standard eight pupils of Migori County. Parents' FGD was also used to collect data in the current study to reinforce the learners' views.

Jeruto (2018) conducted research in Chepalungu Sub-county, Kenya, to determine the effect of parental or guardian participation on pupils' academic achievement. According to the findings, the vast majority of educators (69.8%) felt that both parents/guardians and the school administration keep tabs on students' academic success; 62.7% of educators reported informing parents monthly about their children' academic progress; 84% of educators stated that longer school academic days improved academic performance; and 74.6% of educators believed that parents had given schools with enough learning materials. The results suggested that parental/guardian participation positively influenced the teaching and learning process.

Although Jeruto (2018) examined parental involvement, the study did not exhaustively address all parental activities in education and participants were secondary school students. The study was also conducted in Bomet County. The current study was conducted in Migori County addressing various parental motivation factors clustered under visits, rewards, encouragement and provisions and how this factors jointly predicted academic performance of primary school pupils in Migori County. Besides, participants in the current study were standard eight pupils,

their parents and class teachers who provided information through questionnaire, interview schedules and FGD so that findings are not perceived.

Simba, Agak, and Kabuka (2016) conducted a study to evaluate the extent to which discipline influences the academic performance of Class 8 students in public primary schools in Kenya's Muhoroni Sub-County. The research employed descriptive survey and correlational designs. The study population consisted of 2,450 eighth-grade students attending public elementary schools in the sub-county. 817 students were drawn by stratified random sampling from 34 randomly selected schools. Questionnaires were utilized to gather data, and a regression analysis revealed that R (0.480), R2 (0.230), and the standardized coefficient (0.480) were statistically significant at p .05, and that the regression coefficients were positive. Results indicated a positive relationship between discipline and academic success (R =.480; p <.05). It was determined that an improvement in academic performance is proportional to an increase in academic discipline. The study by Simba et al. (2016) examined only discipline and its effect on academic performance. The current study examined discipline as a set standard by parents for pupils to improve performance a long side other parental motivation factors such as encouragement, visits to school, rewards and checking learners progress.

Owuor and Sika (2019) studied the effect that parental involvement in school funding has on academic achievement in public day secondary schools in Mbita Sub-County. There were a total of 180 pupils and 72 parents and 18 principals that filled out the survey. Data was gathered by questionnaire. Prompt fee payment, funding

implementation of academic programs in the school, funding incentive for teachers and students, funding remuneration for BOM instructors, and parents' involvement in budgets and fund raising were all studied as examples of parental activities. The results indicated a statistically significant correlation between parental funding of extracurricular activities and student achievement (R =.627; p<.001). Students' academic performance was found to be significantly influenced by parental funding of school activities (R2 =.394, F (1, 171) = 155.228, p<.001). Students' academic achievement was found to be substantially influenced by parental funding for school activities (B =.355; p<.001).

Although the study by Owuor and Sika (2019) researched on parental involvement, it was limited to financing school activities and its impact on the student's academic performance. The current study considered parental motivation involving provisions, rewards, visits and encouragement among standard eight pupils of Migori County. Financing as a provision factor in the current study was considered to determine if learners were always sent home to bring these extra funds which could be demotivating to the learner resulting in poor academic performance.

Wainaina, Rugar, and Ndiritu (2016) evaluated the impact of student fees on educational engagement in Kitui County, Kenya. In total, 154 educators (21 school heads, or principals, and 133 classroom teachers) were surveyed. Data was gathered using questionnaires and a document analysis guide. Based on the data, we know that 16.1% of students had to miss school days owing to unpaid fees. Consequently, 55% of the administrators and 49% of the teachers said that the rise in fees and levies

contributed significantly to the poor performance of pupils on classwork tasks. Furthermore, 35% of principals and 38% of teachers believed that student academic performance was negatively impacted by user fees to a significant degree.

The study by wainaina (2016) researched on the effect of user charges to academic performance. The current study considered user charges as the money paid in primary schools to supplement the government FPE. If this money is not paid by parents, the consequences on the pupil may include missing school hence learners' performance compromised. Apart from user charges, the current study also researched on other parental motivation factors such as praise, visiting class teachers, checking pupils' assignment, attending school meetings, rewards and the extent to which each motivates to improve on their academic performance.

Previous studies such as Thornton (2015), Popa (2016), Omar et al. (2017), Akhtar et al. (2020) and Rafiq et al. (2013) emphasized on parental involvement with emphasis on differences in either those involved or not involved, parental gender and ratings for involvement on their children's performance. There was a significant common positive relationship between parental involvement and pupils' performance across these studies. However, these studies were done on different grade levels of learners or in more developed countries. Moreover, some of the important analysis entailing focus group discussions were not used.

Other studies such as Lee, Kim, Kesebir and Han (2016) established negative relationships between parental involvement and performance of learners under different circumstances whereas Osei-Akoto, Chowa and Ansong (2012) found a

non-significant relationship between parental involvement and learners' academic performance. These and more studies such as Mudibo (2014), Muola (2010) unearthed mixed findings, whereas some elicited positive relationship, others revealed negative outcome. In addition, there were differences on the significance of the outcomes, such that while others indicated significant results, some had non-significant results. This observations makes the previous findings inconclusive or somewhat confusing. There was also focus of studies on one methodology either quantitative or qualitative making the findings weak. The current study sought to lead to a conclusive findings through mixed method and paradigm, whereby quantitative, that is both descriptive and inferential were used, and also qualitative method such as FGD was used. This formed a strong result that enhanced conclusions.

2.3 Achievement Goals and Learners' Academic Performance

Students' motivation to complete an academic assignment can be thought of as their achievement goals. Researchers have previously differentiated between mastery goals and performance goals. Unlike performance goals, which focus on outperforming others, mastery objectives encourage students to actually acquire the material and improve their skills. These two ends are connected to distinct modes of education (Elliot & McGregor, 2001; Elliot, McGregor & Gable 1999).

Ghaleb, Ghaith, and Akour (2015) conducted research into the effects of metacognition, mastery goals, and self-efficacy on the academic motivation of college students in Jordan, a country in Western Asia. The study included 145 students from Hashemite University who were chosen at random. Efforts to reach set

objectives were evaluated using the Goals Inventory. The study's results demonstrated that two variables, mastery goals and metacognition, had a substantial interactive effect on academic motivation. According to the results, academic motivation is highest among students whose primary goal is to learn the material thoroughly, while it is lowest among students whose primary goal is to score well on standardized examinations without actually learning the material.

Although Ghaleb, Ghaith and Akour (2015) study investigated impact of achievement goals on academic motivation, it was carried out among university students of Hashemite in Jordan. The current study researched on achievement goals as predictor of academic performance among primary school pupils of Migori County. Since the 8-4-4 education system in Kenya is exam oriented, the current study examined both mastery and performance goals to predict academic performance.

Chumacero, Mardones, and Paredes (2012) conducted a study on competition pressures and academic achievement in Chile in South America. The study examined the impact of public school quality information on parental school selection. The performance information of the schools was regarded to be a crucial consideration in selecting a school. Using an approach that introduces and measures competitive pressures, it was discovered that competitive pressures increased the academic performance of fourth- and eighth-year students in a meaningful and relevant way. It was also discovered that school performance was a significant factor in school selection. Thus, parents chose a school following the quality performance of their

children. The study of Chumacero et al. (2012) was conducted among secondary school students in Chile and the emphasis was on competitive pressures and reliable information for parents to choose quality school for their children. The current study was conducted in Migori County among standard eight boys and girls and the focus was on learners competing to outperform others in order to get chance in National or Extra County schools after KCPE. In the current study competition in class was considered as a performance to achieve the desired goal as opposed to pressure to compete.

Shehzad and Aziz (2019) investigated the relationship between accomplishment goals, learning strategies, and academic performance at Quaid-i-Azam University in Islamabad, Pakistan. The study investigated the function of learning techniques as an explanatory mechanism between accomplishment goals and academic performance. An academic achievement survey was completed utilizing the achievement goals questionnaire, the motivated techniques for learning questionnaire, and real semester scores. The sample consisted of 321 university students (130 men and 191 women). Calculations of Pearson product moment correlations revealed that the indirect influence of mastery-approach aim on academic achievement was significant. In addition, the findings demonstrated that the total indirect influence of performance-approach objective on academic attainment was significant. There is a statistically significant difference between the scores of males (M = 222.07, SD = 35.58) and females (M = 231.57, SD = 35.97) on learning strategies, as determined by a t-test conducted on an independent sample to examine differences along demographic

conditions for gender (males and females) and residence of students (day scholar or boarder).

Although Shehzad and Aziz (2019) examined relationship between achievement goals, learning strategies and academic performance, the study was conducted among the university students in Pakistan. The current study was conducted in Migori County among standard eight pupils to determine the predictive weight of achievement goals on academic performance. The T-test independent was used in the current study to examine the difference in academic performance between boys and girls. Achievement goals questionnaire was modified to suit the learners' level in Kenyan situation. The differences in geographical area, students' level of study and gender academic performance may give different findings

Basit and Rahman (2017) investigated the relationship between students' achievement goal orientations and their English language arts (ELA) test scores at the secondary school level. Students in secondary high schools in Peshawar, Pakistan, both male and female. The PALS (Patterns for Adaptive Learning Scale) items were utilized to gather information for the study. Regression analysis was utilized to uncover significant predictors of success, and the correlation coefficient (r) was employed to quantify the degree to which two variables were related. The results showed that 45% of the students had a high mastery goal orientation (Mean=24.1, SD=0.8) and 55% had a low mastery goal orientation (Mean=19.7, SD=3.3). A statistically significant difference (t=38.4, df=992, p.05) was found between the groups with high and low mastery goals. High performance-approach

goal orientation was found among 51% of students (Mean=23.1, SD=1.1) and low performance-approach goal orientation was found among 49% of students (Mean=16.7, SD=3.8). According to the findings, there was a strong and statistically significant relationship between students' performance and their focus on mastery (r=.417, p.05). Performance-approach goal orientation was favorably and significantly associated to student achievement (r=.169, p.05). While Basit and Rahman's study from 2017 looked at how achievement goals affect how well Pakistani high school students do in English, Basit and Rahman's study did not look at achievement goals. The current research in Migori County, Kenya, analyzed the predictive power of achievement goals on students' academic outcomes in class 8. The data was gathered with the help of a revised version of the accomplishment goals questionnaire. Variations in questionnaire, academic level, and research location may produce varied results.

In Iran, Zare, Rastegar, and Hosseini (2011) examined the relationships between students' accomplishment goals, statistics anxiety, and statistics self-efficacy in order to predict students' academic achievement in statistics. From the University of Fars Payame Noor, 323 people took part. Participants completed a battery of surveys. Path analysis indicated that students' progress in statistics was influenced not directly by their goals for improving their statistics skills, but rather by their levels of worry over and confidence in their ability to use statistics. Moreover, the data showed that mastery goals had a favorable indirect effect on statistical accomplishment. Meanwhile, the current study was conducted in Migori County and the participants were primary school pupils of standard eight, teachers, parents and education

officers. The current study used a questionnaire, interview schedule, document analysis guide and FGD to collect data to ensure triangulation. The findings therefore are likely to be different.

Kord (2018) conducted a study to determine the association between academic accomplishment goals and academic self-efficacy in Mahabad, Iran. Participants were 220 (118 men and 102 women) students from the Islamic Azad University of Mahabad who were selected using a cluster-random selection procedure with multiple stages. Participants answered to a questionnaire. There was descriptive and inferential analysis conducted. To examine the relationship between achievement goals, academic success, and academic self-efficacy as a mediator, Pearson's correlations were used, and the results indicated that the mean mastery goals was 17.34 (SD=11.43), the mean performance approach goals was 11.62 (SD=8.85), and the mean College GPA was 14.25 (SD=4.87). The connection between mastery and performance-approach goals and GPA was moderate (r =.32, p <.01) (r =.28, p <.01). Students with strong mastery and performance-approach objectives had mediocre GPAs. The results of the regression analyses indicated that mastering goals positively predicted academic success (β=.38, p). It was determined that mastery and performance-approach objectives affect academic success both directly and indirectly. Kord's (2018) study however was conducted in Iran among University students, multistage cluster and random sampling was used. The current study was carried out in Migori County among standard eight pupils. The county was clustered in two geographical area. The geographical difference and level of study may yield different results. The current study also determined the relationship between parental

motivation, achievement goals and learning strategies as predictors of academic performance deviating from self-efficacy and success.

Dompnier, Darnon, and Butera (2013) conducted a study on accomplishment goal promotion at the University of Lausanne in Switzerland to demonstrate that performance approach objectives are seen as a way to success. Two hundred and sixty-six French first-year psychology majors participated in the study (232 women and 32men). All respondents filled out a three-item questionnaire three times and disclosed their grade in relation to the baccalaureate. The results of the regression analysis showed that there was a main effect of the participants' grade on the baccalaureate, $b = 1.19$, $F(1, 250) = 20.18$, $p<.0001$, PRE =.07, showing that the students' final grade was positively correlated with their baccalaureate grade. It was determined that the correlation between students' endorsement of performance-approach goals and their test scores weakened the more students viewed those goals as socially desirable.

Although Dompnier et al. (2013) examined achievement goals, the study was conducted in Switzerland among the university students investigating on the perception of performance approach goals as a means to succeed. There was a big difference between male and female participants which could lead to biasness in the findings. The current study was carried out in Migori County among the grade 8 pupils balanced at 190 boys and girls to examine the relationship between achievement goals (mastery and performance) and academic performance. In the current study participants filled a 12-item questionnaire once to provide the needed

information. The findings may help to improve the academic performance in primary schools of Migori County.

Kgosidialwa (2010) researched academic aspirations of Botswanan schoolchildren in South Africa. Parents were shown to have an appreciation for the part they played in their children's academic success, as seen by their desire for their children to achieve academic success (such as achieving straight "A"s) and secure employment following completion of postsecondary education. Although this expectations are likely to be in line with achievements goals based on performance to outsmart other children in class, these expressions in the study were from parents. The current study engaged pupils themselves on how their parents support them, set goals and learning strategies put in place to attain high scores in both internal and external exams.

Musa, Dauda, and Umar (2016) conducted a study on gender variations in attainment objectives and performance in English and Mathematics in Nigeria. There were a total of 414 male and 413 female high school seniors that took part. Overall academic success was measured by calculating the mean score on both tests and using that number to calculate a grade for the course. Results showed that males fared better than girls in both English language and overall academic performance (M=21.41, SD=9.47 vs. M=18.53, SD=9.01). On mathematical tests, neither sexe performed differently. And while there was no difference in students' overall performance based on gender, male students tended to have a more positive learning goal orientation.

Musa, Dauda, and Umar (2016) found that males and females differed in their aspirations for academic success in English and Mathematics. Among eighth-grade students, both boys and girls participated in the current study to identify achievement goals and learning strategies that predict academic performance. A research similar to the one being reported here was undertaken in Nigeria, however this one is from Kenya's Migori County. However, this survey was conducted in elementary schools in Migori County, while the previous one had been conducted with high school pupils.

Mwangi (2018) investigated the relationships between students' confidence in their own abilities, their motivation to succeed, and their anxiety about receiving a poor grade. 203 female and 218 male students, along with 10 educators, were surveyed at 12 secondary institutions in Mombasa County, Kenya. The descriptive data showed that many students had ambitious targets for both mastery and performance. According to a recent study, male students aspire to greater expertise, whereas female students are more focused on improving their performance. Moreover, the research found that mastery goals were a strong indicator of academic success. The mean for male students (M=23.45, SD=3.72) did not differ significantly from the mean for female students (M=23.55, SD=4.18) on mastery goals (t (419) = -.25, P=.800). There was a statistically significant difference in the performance goals of male and female students, with the former reporting a mean of 23.39 (SD=5.15) and the latter reporting a mean of 25.14 (SD=4.38). Targets for academic success were rated as being much higher by female students. However this study (Mwangi, 2018) was conducted in Mombasa County among secondary school students. The current

study was conducted in Migori County among primary school pupils. The geographical area of study and the learners' level of study may show different results. The constructs in the current study determined the relationship between academic performance and parental motivation, achievement goals and learning strategies.

Ng'ang'a, Mwaura, and Dinga (2018) conducted a study in Kiambu County, Kenya, and found that there was a connection between students' accomplishment goal orientation and their academic performance in form three. 665 individuals were chosen by a random, simple-sample process. Data was gathered by questionnaire, and descriptive and inferential statistics were employed for analysis. The results showed that the achievement goal orientation of 67.4% of respondents was moderate, 17.9% was high, and 14.6% was low. The results also showed that there was a statistically significant weak positive relationship between achievement goal orientation and academic achievement, $r(630) = .310$, $p < 0.05$, with the performance approach having the highest mean ($M = 10.88$, $SD = 3.04$) and the mastery approach having the lowest mean ($M = 10.44$, $SD = 2.936$). In addition, a weak negative connection ($r(630) = -.113$, $p < 0.05$) was found between performance approach and academic performance. Students' academic performance was found to be substantially correlated with their accomplishment goal orientation.

Although Ng'ang'a et al. (2018) examined similar constructs as the current study, the study was conducted in Kiambu County among form three students and guided by goal orientation theory. The current study was anchored on achievement motivation

theory and was conducted in Migori County among standard eight pupils. Regression and Pearson Product Moment correlation were used to find the relationship between achievement goals and academic performance .Only mastery and performance goals were researched on in the current study because currently Kenya's education system of 8-4-4 is examination oriented and most teachers tend to guide learners towards this direction.

Ghaleb et al. (2015) discovered that mastery objectives and metacognition had a strong joint influence on academic motivation, however their research was conducted with university students. The academic performance of 4th and 8th year pupils in South America was found to dramatically improve due to competitive pressures by Chumacero et al. (2012). Basit and Rahman (2017) found a strong and statistically significant relationship between student performance and student mastery goal orientation, and Shehzad and Aziz (2019) found a similar pattern. By employing a route analysis, Zare et al. (2011) demonstrated how students' progress in statistics is influenced not directly, but rather indirectly, by their goal attainment, anxiety, and self-efficacy in the subject. Kord's (2018) regression studies revealed that mastering objectives strongly influenced academic success. Dompnier et al. (2013) discovered that the students' final grade was proportional to their baccalaureate grade. All these studies were either carried out in more developed countries or eastern global north countries that have totally different orientation ad settings as compared to Migori in Kenya.

For studies conducted in Africa, such as Kgosidialwa (2010), Musa et al. (2016), Mwangi (2018), Ng'ang'a, et al. (2018), the target group criteria was secondary schools, which have totally different characteristics with primary schools. Some targeted advanced levels while others secondary schools. It can be said that indeed a positive relationship exists between achievement goals and academic performance. Whereas there is consistency on the nature of the relationship, with almost all the studies revealing a positive one, an assumption cannot be made at the primary level. Moreover, the current study differs from the previous ones in terms of methodology, which is requisite for stronger results. Besides, the current study clearly examined both mastery and performance goals to predict academic performance, which is not fully addressed in the previous studies.

2.4 Learning Strategies and Academic Performance

It is not unexpected that kids can employ a wide array of learning methodologies. There are probably as many strategies as there are students. It is due to the fact that each student chooses and utilizes a unique strategy based on instructional variables such as individual differences, types of domains, teaching techniques, amount of time, learning technology, forms of feedback, needed level of mastery, and methods of assessment (Milano & Ullius, 1998; Simsek &Balaban 2010).

Thomas and Tagler (2019) conducted a study in the Midwestern United States to predict academic help-seeking intentions using the reasoned action model. Participants answered to a series of open-ended questions about the perceived benefits and drawbacks of receiving academic assistance. Two studies were done. In

the first study, data were obtained from 125 undergraduate students (N = 125, 91% Female, 85% White) at a Midsized public institution (N = 125, 91% Female, 85% White). In the second study, data were obtained from undergraduate students (N = 176; 81% female; 84% white) at a mid-sized public university in the Midwest. During the elicitation study, 12 potential outcomes related with the utilization of university-based academic services were identified and presented to the participants. Using 7-point bipolar scales, participants rated the chance that utilizing university-based academic services would result in each of the presented outcomes and the perceived desirability of each outcome. The majority of normative attitudes were found to strongly contribute to the felt normative pressure to seek academic support at university. Perceived normative pressure, students who enjoy receiving extra help (peers), students who reside on campus, students who live off campus, students who believe they do not need extra help with course work, and students who are unaware of university-based academic supports were most strongly associated to the opinion that students who are determined to achieve use these resources.

Unlike the study of Thomas and Tagler (2019) that was carried out in Midwestern United States among undergraduate students, the current study was conducted in Migori County, Kenya among primary school pupils. A five likert scale was used to collect data. The current study focused on learners seeking help from classmates and teachers to improve their overall academic performance. The study also involved both boarders and day schooling pupils. These major differences in the two studies are likely to reveal different results on help seeking and academic performance.

Koc and Liu (2016) looked at online classes taken by graduate students at a university in the Midwest of the United States to learn more about the preferences, attitudes, and experiences of these students when it came to seeking help. A total of twenty-six students took part in the investigation, including six men. About 39% of the students had taken exactly one online course at the time of the study, while 27% had taken two or three, 19% had taken four or five, 12% had taken six or seven, and 4% had taken more than eight. Students' help-seeking behaviors and attitudes on asking for assistance were gathered through the use of a questionnaire. The poll found that 92.3% of students prefer to ask questions or express confusion about course material via email, whereas 7.7% of students said they never needed help with following orders or understanding classroom procedures. Students demonstrated a slightly different pattern of preference when it came to asking for aid from their peers. Half of students (53.8% to be exact) said they would rather ask questions and receive answers regarding a difficult topic via email. A large majority of students (84.6%), although not all (15.4%), reported feeling the need to ask classmates for assistance with course material. However Koc and Liu's (2016) study sought to explore graduate students' help-seeking preferences. The current study sought to establish primary school pupils seeking help from teachers and peers as a way of improving their academic performance in primary schools of Migori County.

Luo, Kiewra, and Samuelson (2016) explored the advantages of reviewing lecture notes and posed the question, "Is revision more successful than non-revision?" A total of fifty-nine (59) education majors in the undergraduate program at a large Midwestern US university participated in this study of educational psychology. The

majority of those who took part had GPAs of 3.0 or better. In Experiment 1, participants' grades were compared whether they revised or recopied their lecture notes. Research shows that taking notes is the most common method utilized to retain information. Twenty-four percent of students said they utilized note-taking to better comprehend the material, 23 percent said it helped them better prepare for exams, and 12 percent said it helped them do better academically. Using independent t-tests, we looked for changes in note-taking and test-taking performance between the revisions and recopy groups. The results of a correlation analysis between note-taking indices and performance metrics were found to be statistically significant. Results on the relationship test were better for the revision group than for the control group, suggesting a positive effect of the revision process on performance. During the revising process, revisers naturally contributed 3% more notes than non-revisers. Academically, revisers fared better than non-revisers on relationship items, which served as a measure of associative learning. Researchers found that students who revised their work took more notes overall, which correlated with better grades.

Although Luo et al. (2016) study examined revision of notes and the relationship to performance, the study was conducted among university students in the USA. The current study examined revision of classroom notes just as one factor of learning strategy to improve performance. Other factors including reorganisation of content, elaboration and rehearsal were among the learning strategies that were carried out among standard eight pupils in Migori County, Kenya. The geographical area, level of study and the many factors considered in the current study may give different results.

Luo, Kiewra, and Samuelson (2016) explored the advantages of reviewing lecture notes and posed the question, "Is revision more successful than non-revision?" A total of fifty-nine (59) education majors in the undergraduate program at a large Midwestern US university participated in this study of educational psychology. The majority of those who took part had GPAs of 3.0 or better. In Experiment 1, participants' grades were compared whether they revised or recopied their lecture notes. Research shows that taking notes is the most common method utilized to retain information. Twenty-four percent of students said they utilized note-taking to better comprehend the material, 23 percent said it helped them better prepare for exams, and 12 percent said it helped them do better academically. Using independent t-tests, we looked for changes in note-taking and test-taking performance between the revisions and recopy groups. The results of a correlation analysis between note-taking indices and performance metrics were found to be statistically significant. Results on the relationship test were better for the revision group than for the control group, suggesting a positive effect of the revision process on performance. During the revising process, revisers naturally contributed 3% more notes than non-revisers. Academically, revisers fared better than non-revisers on relationship items, which served as a measure of associative learning. Researchers found that students who revised their work took more notes overall, which correlated with better grades. Meanwhile the current study sought to find the effect of revision of notes as a learning strategy to predict academic performance among standard eight pupils of Migori County. A questionnaire was used to collect data in the current study,

deviating from multiple choice tests. The area of study, the level of learners and data collection procedure may give different findings

Chang and Brickman (2018) conducted a study at a big public university in the Southeastern United States to investigate the learning performance and group work of 246 students enrolled in an introductory biology course for non-science majors. Instructor mini-lectures and daily individual and group exercises that demanded application of the material were used to cover the material covered in class. Homework for this subject culminated in a final examination, and included a set of practice exams. Students worked in groups on both in-class worksheets meant to help students plan and organize their information and outside-of-class projects that forced them to put that knowledge to use. After everyone in the group had finished their individual unit tests, they worked together to complete the same tasks again for a group score. Everyone in the group was given the same grade for their efforts.

The second week of class is when students form their study groups for the remainder of the semester's projects and exams. One student expressed the general sentiment that working in groups is beneficial, saying, "I've definitely learnt better in a group because I got the ability to kind of answer some of their questions which helped me grasp it more." One student who struggled academically but performed well in her group described group work as "a great little support system" that made her feel like she was "not alone in the class." The group members "elaborated on the topic and got into a bit deeper context and attempted to explain in a way that the teacher couldn't

because there were simply so many people," said one student who performed less well overall but better than the class average.

From the analysis of how the difference in scores between individual and group tests was narrowed in high-performance groups, it was clear that low-scoring members of these groups learned more, as shown by their scores on individual tests. Chang and Brickman's (2018) study was conducted in USA among the university students while the current study was conducted in Kenya among the standard eight boys and girls in Migori County. The respondents filled the questionnaire in the current study to provide information how group work assists them in completing assignment and prepare for examination to perform better. This learning strategy is likely to improve pupils' academic performance.

Njenga (2010) conducted research at East Baton Rouge, Louisiana, to see if cooperative learning environments led to better academic outcomes for children. All of the participants were first-year college students taking Algebra 1. The research was place at a single public high school in a city. Fifty-three of the researcher's students took both the pretest and posttest. The control group participated in simply the traditional method of grouping, while the experimental group also engaged in cooperative learning practices. Every day of class lasted for fifty minutes. Both the experimental and control groups had their abilities evaluated at the beginning and end of the study. The control group did not engage in the experiment's organized cooperative learning procedures, but the experimental group participated. The results showed that cooperative learning group had an average raw gain score of 3.81± 0.64

resulting in a 57% net gain in raw score while the non-cooperative group had raw gain of 2.27± 0.73 that resulting in a 37% net gain in raw scores. As a result, the cooperative learners gained more overall than the non-cooperative ones.

Although the study of Njenga (2010) evaluated the effectiveness of learning strategies on students' performance, the study involved secondary school students of ninth grade Algebra (1) in East Baton Rouge and researched on cooperative learning structures. The current study involved standard eight primary school pupils in Migori County. The current researcher used questionnaire, interview schedules, FGD and document analysis guide to collect data but not pre-test and post-test experiment. Besides cooperative learning, the current study examined several learning strategies such as seeking help, rehearsal, setting targets and modelling to improve academic performance.

Sofroniou and Poutos (2016) at the University of West London undertook a study to assess the efficacy of using group work in a university-level mathematics module, both in terms of student performance and students' perceptions of this pedagogical approach to education. Twenty-three pupils, including four women, consistently attended the tutoring sessions. Students of varying academic abilities were put together to form groups. Over the course of four weeks, we dedicated class time to studying Integration in smaller groups. According to the results, everyone who participated in the challenging module's group work felt it was valuable and fun. The students' more in-depth feedback generally agreed that the group activities were beneficial in terms of expanding their knowledge of Integration. Most of the students said that doing math in groups helped them become more independent thinkers and

more prepared for college-level study in the subject. According to the results, students who completed the integration-related questions in small groups outperformed those who completed them alone by about 109% ((1.807-0.863) 0.863 x100 = 109.4%). Additionally, 47.8% of the class had greater scores in Integration when working in groups, compared to only 37.5% when working individually.

Major findings included that students generally agreed that group work is beneficial, that students generally liked participating in group work, and that students generally thought that all group members were given an equal opportunity to contribute to the final output of the group activity. Unlike the study of Sofroniou and Poutos (2016) that was conducted in London targeting university students in mathematics module, the current study targeted the standard eight pupils in Migori County to establish the extent to which group work strategy predicted academic performance by responding to a five Likert type scale questionnaire on the items of completing assignment preparation for examination in groups. These differences in both studies may give different findings.

In Sweden, Hammar(2014) investigated the efficacy of group projects in fostering students' academic growth. A total of 210 students (172 female and 38 male) from two distinct universities in two different cities took part. The four university programs represented included psychology, human resource management and work sciences, social work, and biology at the bachelor's degree level. Study programs informed the grouping of participants. Information was gathered from respondents via a questionnaire designed for this study, which included both closed- and open-

ended questions. The majority of students (97%) reported that their learning, academic knowledge, collaborative ability, or both improved as a result of group work. They learned more than they would have working alone because they discussed and questioned each other's ideas, listened to the contributions of their peers, and therefore obtained new perspectives. Participants did not claim that group work impeded their ability to learn, but they did frequently comment on how inefficient it was. Students report that they acquire new knowledge and skills by collaborating with their peers rather than studying independently. The results of the study showed that when students worked in groups, they received in-depth understanding of the dynamics of group dynamics, their own roles and responsibilities as group members, and the roles and responsibilities of their peers. Unlike the study of Hammar (2014) the current study was conducted in Kenya among the standard eight pupils of Migori County. The current study focused on group discussion in areas of completing class assignment and when preparing for examinations not addressing individual behaviour in group discussion. The outcome of group discussion was the main concern of the current study.

Dotson (2016) conducted research into the effects of setting goals on students' reading comprehension and overall performance in Carter County, Kentucky's public schools. There were 328 fourth- and fifth-graders who took part. Results indicated that 69% improved sufficiently after goal setting was used, up from 60% before goal setting was used. McNemar’s Test results indicated that a significant difference existed in the reading growth performance when comparing the reading growth for the two year period (x^2=9.986, df = 1, p = .0016). In 2014, 60.4% of the students

were classified as making adequate growth, whereas 68.6% received the designation in 2015. Dotson's (2016) study examined goal setting strategy in Kentucky involving grade four and five learners while the current study examined several learning strategies contributing to academic performance in Migori County among standard eight primary school pupils.

Simsek and Balaban (2010) analyzed the most prevalent learning styles employed by undergraduates and their correlation with academic success. The results showed that high achievers employed a wider variety of strategies than their low-achieving counterparts. Two hundred and seventy first-year students from Anadolu University in Turkey were surveyed; they were chosen based on their majors and overall academic performance. Students' success levels were measured using a 60-item Likert scale, and the results showed a statistically significant difference in favor of high achievers [F (1,274) =23, 68; p<.001]. Motivational techniques (d=6, 31) and organizational strategies (d=1, 82) showed the largest and lowest differences, respectively. All differences were statistically significant (p<.001) except for the difference in organizational tactics (p=0,85). The category results showed that the most significant difference occurred during rehearsal (d=4, 39) and the least occurred during elaboration (d=1, 76). It was shown that those who achieved academic achievement employed a wider range of effective learning strategies than those who did not. Simsek and Balaban (2010) study was conducted among university students and only assessed learning strategies and academic performance. While the current study involved standard eight primary school pupils and examined learning

strategies, parental motivation and achievement goals as predictors of academic performance

Arjmandnia, Kakabaraee, and Afrooz (2012) conducted a study in Tehran, Iran, to compare the working memory performance of dyslexic and non-dyslexic pupils and to examine the influence of rehearsal on the working memory performance of dyslexic children. Utilized a quasi-experimental approach to research. 15 dyslexic students comprised the statistical sample, whereas 15 normal students served as the control group. Each pupil was in the third grade. Both groups responded to the battery of working memory tests for children. A rehearsal was conducted with the dyslexic group. On the working memory exam, normal kids fared much better than dyslexics, according to the results. There was no significant effect of practice on working memory performance. The normal children did better than the dyslexic children in terms of working memory. There was a 99.9% chance that the rehearsal strategy had no meaningful influence on the working memory performance of dyslectic children. Meanwhile the current study established how memorization strategy predicts academic performance among standard eight pupils in Migori County. All participants in the current study were normal pupils who provided information through questionnaire.

A Study carried out in Rivers State, Nigeria by Christian and Pepple (2012) explored the impact of cooperative and customized learning styles on students' progress in Chemistry. A total of 370 students in their final year of secondary school from six different public high schools took part in the research. The research followed a quasi-

experimental and control design using a 3x2x2 factorial pre-post test setup. Information was gathered by administering a 35-item multiple-choice test on chemical concepts. The results indicated that there was a statistically significant effect of learning styles on students' performance in chemistry, with the conventional customized cooperative trending upward. However, Christian and Pepple (2012) study was conducted among secondary school students in Nigeria investigating learning methodologies on students' achievement in chemistry. The current study studied learning styles on academic performance of primary school kids in Migori County, Kenya. All disciplines studied at primary level were a determinant of learners of academic achievement in the current study.

Adeyemi, Adejoke, Uwaoma, Anwanane, and Nwangburuka (2019) conducted a study on the influence of peer groups on the academic performance of undergraduate students at Babcock University in Ogun State, Nigeria. The research used a mixed-method approach that included both a descriptive survey and an ex post facto analysis. Questionnaire was administered to 116 students recruited from five departments in the school of education and humanities. This figure was calculated by selecting at random from the pool of all 300-level students in each academic division of the school. The acquired data was evaluated using Pearson product moment correlation coefficient and linear regression analysis. Results (r = .537) suggested that there was a substantial association between peer group influence and academic success. Meanwhile the current study was conducted in Migori County, Kenya, among the standard eight kids to identify the influence of learners' imitation and modelling on academic achievement.

Temitope and Ogunsakin, (2015) examined into how students' social circles affected their grades in high school in Ekiti State, Nigeria. A total of 225 high schoolers from five coed institutions were chosen at random to take part in the research. Each participant filled out a questionnaire. In total, eight conjectures were put to the test. Independent t-test and Spearman Rank correlation co-efficient were used to assess data. Findings indicated that motivation of peers influence academic performance (R (4) = 0.8, P > .05). It was concluded that peers motivation had a great influence in determining academic performance of secondary school students. Meanwhile the current study sought to examine the impact of parents' modelling and colleagues' hard work on academic performance.

Jepketer, Kombo, and Kyalo (2015) conducted a study on ways for improving student performance in the classroom. The purpose of the study was to determine how classroom management practices improved student performance in secondary public schools in Nandi County. Respondents completed a questionnaire and followed an interview schedule. Methods of instruction and education were analyzed. The results suggested that teachers continue to play a significant role in student learning, that classroom instruction must be varied to expose students to a variety of learning situations, and that the classroom remains key to student learning. However, this study of Jepketer et al. (2015) was conducted in secondary schools of Nandi County focusing on the teachers' teaching methods. The current study involved standard eight primary school pupils in Migori County Kenya, researching

on mostly learner centred learning strategies to determine their relationship on the learners' academic performance.

Previous studies used different learning strategies for different levels to determine academic achievement which included university based or other higher learning institution. Thomas and Tagler (2019), Koc and Liu (2016) in USA and Bohay et.al. (2012) explored active engagement and failed to establish relationship between active engagement and academic achievement. Chang and Brickman (2018) examined learning performance and group work but adopted qualitative methods. Other studies such as Njenga (2010), Sofroniou and Poutos (2016), Hammar (2014), Simsek and Balaban (2010) revealed a positive relationship between learning strategies and academic performance but used either qualitative or quantitative methods. None of these studies adopted mixed approach or used learners at standard eight age range. Moreover, most of the studies were done in developed countries and used experimental designs rather than use of questionnaires. It is imperative to note that there is no clarity on the relationship between learning strategies and academic performance of standard eight level of learners in schools in Migori County, which was sought in the current study.

2.5 Gender Differences and Academic Performance

Kupczynski, Brown, Holland, and Uriegas (2014) evaluated the association between gender and academic success online in the United States, and their findings suggested that there was no significant difference between the groups. A sample of 959 education majors was taken from a South Texas college serving the Hispanic community. The study adopted a comparative design to compare the academic

success of male and female students in an online course. To evaluate the correlations between the gender of students and their online course grades, descriptive statistics and analysis of covariance (ANCOVA) were used to analyze the data. Male students had marginally higher online course grades (M = 4.64, SD =.933) than female students (M = 4.55, SD =.958), but the difference between the groups was not statistically significant. Meanwhile the current study sought to establish gender difference in academic performance among primary school pupils in Migori County. The relationship between variables was determined through Pearson product correlation moment.

In Asia, Parajuli and Thapa (2017) examined gender variations in the academic performance of students from both public and private schools in Lekhnath Municipality, Kaski, Nepal, and discovered a large gender gap in academic performance. The data was collected from 240 students who passed the eighth grade district assessment in 2016 and were enrolled in ninth grade. Females held a much higher percentage (38.33%) compared to their male counterparts (23.33%) among standard eight students who achieved distinction on the district-level standard examination. It was also discovered that the percentage of male students who passed with a first-class grade was significantly higher for men (47.50%) than for women (33.33%). The difference between male and female performance below the first division was minimal. The findings also showed a significant association between student's gender and their academic performance ($\lambda 2 = 1.00$, $df=1$, $p<0.05$). The statistical significance with a relatively greater percentage of female scoring first

division and above (71.67%) compared to their male counterparts (70.83%) indicates that female students outperformed male students.

Although Parajuli and Thapa‘s (2017) study examined gender differences in academic performance, students were grade nine students who had done standard eight in Lekhnath Municipality, Kaski, Nepal. The current study sought to examine gender differences in academic performance among public primary school pupils in Migori County in Kenya and participants were standard eight pupils. The current study drew its participants from day and boarding schools deviating from private and public type of schools. These differences may give different findings.

Ghazvini and Khajehpoura (2011) looked at how gender had a role in the variables that affected high school students' grades, and their findings confirmed that there was a difference. Three hundred and sixty-three pupils were chosen at random from ten different Tehran, Iran, public high schools. The relationship between cognitive motivating factors and academic achievement in English and mathematics was investigated. Locus of control, academic self-concept, and learning strategies were the cognitive-motivational variables examined. Girls were shown to have a much higher internal locus of control than males were ($p<.001$). It was also shown that external locus of control was not significantly different between males and girls. The results demonstrated no statistically significant differences in students' perceptions of their own academic abilities. The same was true for students' use of learning strategies; they were found to be more prevalent among female students when it came to attitude, motivation, time management, anxiety, and self-testing, but more

common among male students when it came to focusing on content, processing data, and choosing key points. There were significant differences in the grades pupils received for different subjects, such as Literature and Mathematics. Girls outperformed boys in the Literature topic, while boys outperformed girls in the Mathematics subject.

This study (Ghazvini & Khajehpour, 2011) examined the factors influencing the academic performance of Iranian secondary school pupils in Literature and Mathematics. Examined were cognitive-motivational variables including locus of control, academic self-concept, and learning techniques. The purpose of this study was to compare the academic performance of eighth-grade boys and girls in public primary schools in Migori County, Kenya. As determinants of academic performance, the factors of this study are parental motivation, achievement goals, and learning methodologies.

In their study, Parajuli and Thapa (2017) analyzed the academic performance of students from both public and private schools in Lekhnath Municipality, Kaski, Nepal. Their findings on the type of school indicated that the majority of students scored first division or higher, with private schools performing relatively better than public schools. The academic achievement of 240 pupils was evaluated based on the percentage and/or number of divisions earned on the eighth grade exam administered at the district level. Private school pupils fared higher in terms of task completion, attendance, and assertiveness. The studies also demonstrated that the academic performance of private schools was superior to that of public schools. Significantly

more kids in private schools (98.33%) completed the eighth grade district exam with a first division or higher than in public schools (43.72%). In public schools, more than half of all students (55%) passed in the second division, although this percentage was minimal in private institutions (1.69%). 190 participants from public day or boarding primary schools in Migori County, Kenya, were recruited for the current study, which aimed to determine if the academic performance of girls and boys was comparable.

Goni, Yaganawali, Ali, and Bularafa (2015) conducted a study on the disparity in college performance between male and female students in Nigeria. From two schools of education in Borno State, Nigeria, a random sample of 322 NCE III students was taken. Students' Academic Performance Aptitude Test (SAPAT) was employed in gathering data. The correlation between the variables and the sex distributions were tested using a t-test. There were no statistically significant disparities between the sexes in terms of academic performance in the institutions of education in Borno State, as indicated by the t value of 3.32 compared with the p value of.6680. Although the study by Goni et al. (2015) determined gender difference in academic performance, the investigation was done in Nigeria, among high school pupils. The purpose of this research was to compare the academic performance of eighth-grade boys and girls attending public day and boarding schools in Migori County, Kenya. Indicators may vary according on study level and type of institution.

The gender gap in academic performance in geography among Nigerian secondary school students was investigated by Filgona and Sababa (2017) in the context of the

mastery learning approach and the conventional style of teaching. The study included 207 students, 87 of whom were female and 120 of whom were male, all of whom were in their second year of high school. A 40-item Geography Achievement Test (GAT) was employed to acquire data. Female students fared better than male students when taught Geography using a mastery learning technique, according to the study. A significant interaction effect of therapy and gender on students' achievement in Geography was also identified.

Although the study (Filgona & Sababa, 2017) investigated gender differences in academic achievement, it was limited to the field of Geography. There was also a substantial disparity in the sample sizes of men and women, which could have led to biased results. Additionally, the study was conducted in Nigeria. The purpose of this study was to compare boys' and girls' academic performance in examinable elementary school topics. Equal numbers of boys and girls, 190 in all, were drawn from both day and boarding institutions. These changes may produce distinct outcomes.

Eseine-aloja and Ebahi (2021) looked into how gender affects the academic performance of biology students who take Extra-Mural Classes (EMC) in 13 government-owned public senior secondary schools in Esan central local government area, Edo State, Nigeria. One stratum consisted of biology students and teachers in public schools that perform EMCs, whereas the other stratum consisted of biology students and teachers in public schools that do not conduct EMCs. There were 180 participants from four senior secondary schools. Students self-administered a

structured achievement test to collect data, and the results revealed that male students who attend biology EMCs had a mean achievement test score of 9.54 (47.70%) with standard deviation and standard error of mean values of 3.36 and 0.48 respectively, whereas female students who also attend biology EMCs had a mean achievement test score of 8.03 (40.15%) with standard deviation and standard error of mean values of 3.25 and 0.57 respectively. Furthermore, the results showed that there was a statistically significant difference ($p < 0.05$) between the performance of male and female biology students who attended EMCs, with the former performing better. This study (Eseine-aloja & Ebahi, 2021) studied gender differences in the academic performance of secondary school pupils in Nigeria who attended and did not attend EMCs in the Biology course. The purpose of this study was to compare the academic performance of boys and girls in Migori County's public primary schools. All subjects examined at primary school level constituted an individual's academic performance.

Anumaka and Ssemugenyi (2013) investigated the impact of gender on staff or employee productivity at a selection of private universities in Kampala, Uganda. To determine if males and females perform differently, the performance of males and females was compared, and the results indicated that work productivity did not differ considerably across employees, with the exception of timeliness as a sub-element of work productivity. It was determined that there is a minor variation between male and female production. Males (mean 3.18, Sig = 0.010) were reported to be more punctual than females (mean 3.00, Sig = 0.010) (t-2.579, Sig = 0.010); nevertheless, this difference is insufficient to establish a statistically significant distinction

between the two groups (male and female). Anumaka et al. (2013) conducted a study among male and female university employees in Uganda to assess if there is a gender gap in work productivity. The current study was undertaken in Migori County among eighth-grade boys and girls to identify the academic performance gap between the sexes.

Kashu (2014) conducted a study in Kenya to evaluate gender differences in academic achievement. The study compared the performance of the top twenty performing schools in Kenya over a five-year period. The analysis was based on secondary data received from the Kenya National Examinations Council regarding the Kenya Certificate of Secondary Education (KCSE) examination results. In the years 2007-2011, the total performance of boys on the KCSE examination was higher than that of girls. During the study period, boys did higher in Math, Science, and the Arts. Girls outperformed guys in Technical courses such as Home Science. In linguistic subjects, boys performed better than girls, according to the findings. In conclusion, boys continue to outperform girls on the KCSE in terms of overall performance and across all courses.

While Kashu (2014) explored gender differences in academic performance, the study was conducted over a period of five years in the top twenty best-performing schools, and secondary sources were used to get KCSE exam results. Using class progress data, the current study aimed to assess the difference in academic achievement between boys and girls. Schools' questionnaires and document analysis guides were used to collect data.

Wangu (2014) conducted research to determine whether or not gender played a role in the academic success of pupils in Ndumberi Division, Kiambu County. She found that while girls exceeded boys in the languages, boys lead girls in the sciences, and male students scored much better overall. In five secondary schools, 40 pupils, 30 teachers, five directors, and five principals participated in the study. Using questionnaires to collect information, it was determined that male students (20.1%) did significantly better than their female counterparts (13.8%) in higher grades. At the topic level, girls had a higher mean average score in languages, while boys had a higher mean average score in the sciences. It was determined that there were gender inequalities in overall performance, with more boys receiving higher marks than girls, and that girls scored better in languages than boys did in sciences. Wangu (2014) examined gender differences in subject-level performance among secondary school students in Kiambu County. The purpose of this study was to identify gender differences in academic performance among Migori County, Kenya, primary school students. All disciplines taught at the elementary level contributed to students' overall success.

Mwihia (2020) conducted a research study on the gender gap in academic accomplishment of pupils in Kinangop Sub-county, Nyandarua County, and found that there was a considerable gender gap in academic achievement. The study utilized an ex post facto research methodology. Using multistage stratified random sampling, 37 schools in the sub-county of Kinangop were selected. The study included 2,470 student participants. The Sub county education offices were consulted

for secondary data. Male students (Mean = 67.89, SD = 4.92) had significantly higher academic success scores than female students (Mean = 64.11, SD = 3.3). It was discovered that male students outperformed their female counterparts. There was a statistically significant difference [t (45) = 3.161, p=.003] between how well boys and girls did in school [t (45) = 3.161, p=.003].

Although Mwihia's (2020) study explored gender disparity, it focused on academic accomplishment among secondary school students in Kinangop Sub-county and utilized an ex post facto research approach. Using an explanatory sequential mixed method research design, the current study attempted to investigate gender differences in academic performance among eighth-grade students in Migori County. Using questionnaires, interview schedules, and a document analysis guide, the current study collected data from primary sources.

Mutai (2011) examined the gender inequalities in mathematics achievement among secondary school pupils in Bureti, Kericho County. 430 kids in all responded to a five-item Mathematics Achievement Test (MAT). The study indicated a significant correlation between gender and mathematics achievement (r = 0.9880, p 0.05). Consequently, boys' schools outperformed girls' schools. Boys demonstrated a greater affinity and passion for maths. Mutai (2011) determined gender inequalities in mathematics achievement in his study. The present study examined gender disparities in academic accomplishment in relation to parental motivation, achievement goals, and learning strategies. The survey was done among secondary

school students in Kericho County. The current study was undertaken at primary schools in Migori County.

Wanakacha, Aloka, and Nyaswa (2018) determined the gender inequalities in academic achievement among returnee students enrolled in Kenyan secondary schools in the Rachuonyo Sub-county. There were 170 returning students, 20 principals, 100 instructors, and one education officer among the attendees. The results suggested that there was a statistically significant difference between gender and academic success [t (168) = -2,317, p =.022]. The majority of respondents stated that guys returned to school significantly better prepared than girls. It was also observed that girls fared poorly because they faced numerous obstacles at school, such as attachment issues that prevented them from concentrating in class. It was determined that there was a substantial difference in academic achievement among returnee students, with male returnee students having higher academic achievement scores (Mean = 6.06, SD=1.73 and SE= 0.23) than their female counterparts (Mean = 5.46, SD=1.50 and SE= 0.14) However, the current study intended to evaluate gender disparities in academic performance among primary school students based on parental motivation, achievement goals, and learning methodologies.

Previous studies on gender disparities and academic performance, such as Kupczynski et al. (2014), discovered non-significant gender differences in academic performance in the United States, however Parajuli and Thapa (2017) discovered significant gender differences in Nepal. Ghazvini and Khajehpoura (2011) examined gender difference factors influencing academic achievement as opposed to academic

performance itself and discovered substantial variations. Goni et al. (2015) and Filgona and Sababa (2017) determined gender inequalities in academic performance in college and high school settings, respectively. Eseine-aloja and Ebahi (2021) studied in secondary school and focused on a single subject, but Anumaka and Ssemugenyi (2013) investigated the effect of gender on staff or employee productivity, which does not apply to learners. In Kenya, Kashu (2014) discovered that the overall performance of boys on the KCSE examination was superior to that of girls, whereas Wangu (2014) conducted a subject-specific study and discovered that girls outperformed boys in the languages, while boys outperformed girls in the sciences and overall performance.

It is worth to note that all these studies show existence of relationship between gender and academic performance. However, they are inconsistent in findings, such that some found that boys perform better than girls while others found the opposite, leading to a difficult conclusion. Moreover, some studies were done out of scope to the staff of higher level learning, whose findings cannot be generalized on standard eight pupils. This mixed findings justified the current study which sought to determine gender differences in academic performance basing on parental motivation, achievement goals and learning strategies among primary school pupils in Migori County.

2.6 Summary of Literature Gaps

It is evident from the previous researchers that studies have been conducted on the relationship between parental motivation, achievement goals, learning strategies and

academic performance. However, much of the research focused on secondary schools, colleges and university samples. Given that primary school is the foundation of all higher levels of learning, the current study was essential and the findings are likely to disagree or agree with the previous studies given that the geographical area, level of study, and data collection tools differed from one study to another.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research paradigm, research design, study variables, study area, study population, sampling techniques and sample size. It also deals with data collection instruments, pilot study, validity and reliability of research tools, data collection procedures, data analysis, data presentation and ethical issues.

3.2 Research Paradigm

In social research, the term Paradigm is used to refer to the philosophical assumptions or to the basic set of beliefs that guide the actions and define the worldview of the researcher (Lincoln, Lynham & Guba. 2011). The study was guided by positivist and interpretivist or constructivist research paradigms. The positivist research paradigm underpins quantitative methodology. The nature of social reality for positivists is that empirical facts exist apart from personal ideas, explains how variables interact, shape events that cause outcomes and tests hypotheses linked to general causal explanation. The best option which the philosophers proposes is fully engaging the learner in the teaching and learning processes so that his or her engagement would enable him or her personally discover the knowledge or truth. Setting goals and cooperative learning in this study may enable the learner to become "expert" in knowledge production for high academic performance (Adom, Yeboah & Ankrah, 2016).

Interpretivist or constructivist - philosophical paradigm is associated with the qualitative research approach. The paradigm seeks to understand a phenomenon under study from the experiences of the participants using different data collecting agents such as interviews and document analysis. The constructivist philosophy portrays the idea that learning does not just happen from the traditional method of teachers standing in front of the class and lecturing. In this study the researcher's assumption was that academic performance is a function of parental motivation. By involving the parents in the study, the researcher's findings are likely to educate the parents who still have the traditional way of thinking that learning is between the learner and the teacher and that learning ends in the classroom. They may discover that their involvement improves the learners' academic performance (Adom, Yeboah & Ankrah, 2016).

3.3 Research Design

The study adopted explanatory sequential mixed methods design. This design involved two phases: Phase one involved collection of quantitative data and analyzing the results, while phase two involved collecting qualitative data to explain the quantitative data obtained in the first phase (Creswell, 2014). The rational for this approach was that the results for quantitative data provided a general picture of the research problem. Qualitative data collection was therefore needed to refine and explain the general picture of the quantitative data results. The predictor variables in this study which are parental motivation, achievement goals and learning strategies required further description. In the second phase, qualitative data was obtained from parents through focus group discussion and CDE' interview. This phase

complemented the explanations of quantitative data obtained in the first phase of the study.

3.4 Variables of the Study

A variable is a concept which can take on different quantitative values. If one variable depends upon or is a consequence of the other variable it is termed as a dependent variable, and the variable that is antecedent to the dependent variable is termed as an independent variable (Kothari & Garg, 2014). In this study, parental motivation, achievement goals and learning strategies are independent or predictor variables and were measured by interval scale. Parental motivation was transformed into continuous variable through addition of data values on parental involvement. Achievement goals were measured at two levels: Mastery and performance goals while learning strategies were measured at the levels of learning and teaching strategies. Academic performance is the dependent or outcome variable which was measured on interval scale at four levels: High, moderate, low and very low (excellent, good, fair, and poor). Intervening variables included government policies, learner's efforts, teachers and school's BOM.

3.5 Study Area

This study was conducted in Migori County. The County profile report shows that it covers an area of approximately 2,586.4 km^2 (998.6 square metres) with a population of about 1.3 Million. Migori County is located in Western Kenya and borders Homabay County to the North, Kisii County on the North East, Narok on the South East, Tanzania on the South and Lake Victoria to the West. The elevation is

approximately 1,500 meters above sea level. The County has both urban and rural settlements and the residents are engaged in various socio-economic activities such as agriculture, fishing and mining. Gold mining is practiced in Nyatike and Suna West Sub-Counties. Administratively, schools are divided into 10 Sub- counties; Migori (Suna East constituency), Suna West, Rongo, Awendo, Nyatike, Kuria West, Uriri, Mabera, Ntimaru and Kuria East, see appendix M.

There were 634 public primary schools and 271 secondary schools. The enrolment in the 634 public primary schools was 266,878 pupils (County Director of Education [CDE] office Migori, 2019) and KCPE candidates 2020/2021 were 34,005. The KCPE average mean score in Migori County for the years 2017, 2018 and 2019 is 245.54 (49.11 %) as shown in appendix F. Migori County was selected for the current study based on its performance trends in KCPE for the last three years, the cultural practices of early marriages initiated by some parents especially in Kuria area for their personal gain of material wealth in form of dowry denying girl child education and for the small businesses along the Kenya-Tanzanian border such as money exchange, 'boda boda' transport and the fishing activities in lake Victoria. All these activities are carried out in Migori County and calls for greater parental motivation to ensure that children not only attend school but also maintain discipline to excel in their studies.

3.6 Study Population

Population of the study was 30,600 standard eight pupils from public primary schools with their respective parents or guardians, 570 class teachers, 570 public primary schools and one County Director of Education (CDE).

3.7 Sampling Techniques and Sample Size

Sampling was done using the following sampling techniques

3.7.1 Sampling Technique

Cluster or area sampling, stratified random sampling, purposive sampling and simple random sampling were used in this study. Cluster sampling is also known as area sampling when random segments are chosen from a large area of population distribution (Goodwin, 2005). There are 10 sub-counties in Migori County and were sub-divided into two clusters as follows; Ntimaru, Kuria East, Kuria West and Mabera formed cluster one; Suna West, Uriri, Awendo, Rongo, Migori and Nyatike formed cluster two. The clusters were created to ensure geographical representativeness of all schools. Rotary method was used to select two sub-counties from each cluster and schools.

Stratified random sampling technique is generally applied in order to obtain a representative sample if a population from which a sample is to be drawn does not constitute a homogeneous group. The population is divided into two or more distinct groups called strata and then from each stratum a sample is constituted (Kothari & Garg, 2014). Stratified random sampling was used to select 190 boys and 190 girls of

standard eight and 30 male and 30 female teachers from the selected schools alongside simple random sampling. This technique was used to select schools for inclusion in the study as day and boarding balancing at 28 day and two boarding schools respectively from each cluster. Simple random sampling was used to give public primary schools, standard eight pupils and their class teachers an equal probability of being picked to be included in the sample (Kothari & Garg, 2014).

Purposive sampling is done with a purpose in mind where the researcher chooses the sample based on who would adequately answer the research objectives (Lyons& Doueck, 2010). Standard eight pupils were purposively selected because they are frequently examined through internal CATs and external mocks hence they strive to compete in class, set targets and lay strategies to study. Also parents are keen on motivating standard eight pupils to work hard to secure vacancy in national or extra county secondary schools. Participants' selection was based on standard eight pupils who had done at least three CATs or mocks in the year 2020/2021, having been graded in those exams by their teachers and who are motivated by their parents in education. Further, parents who were actively involved and engaged in the learning of their children were purposively selected to participate in FGD to compliment the quantitative data collected. Finally, the CDE was purposively selected

3.7.2 Sample Size

Sample size refers to the number of items to be selected from the universe to constitute a sample (Kothari & Garg, 2014). Based on Krejcie and Morgan's (1970) table for determining sample size, a population of 30,000 to 50,000 gives a sample

size of 380 (Appendix L), and an ideal sample should be between 10% and 30% of the target population (Kerlinger, 2004). The study therefore, used 380 pupils and 60 (10%) class teachers. The most recommended size of the focus group is 10 to 12 participants or five to eight for non-commercial research. The focus group should not have more than 10 participants because a large group is difficult to control and they limit each person's opportunity to share their insight and observation ((Walliman, 2011). Therefore 40 parents in groups of 10 participants were selected in this study, four sub-counties and one CDE. Further, 60 (10%) public primary schools comprising five boarding schools and 55 day schools participated in the study. Study population and the sample size for the current study are presented in Table 3.1

Table 3.1: Sample Matrix

Respondents	Population (N)	Sample Size	Percentage (%)
Grade eight pupils	30,600	380	1.24
Teachers	570	60	10.53
Standard eight parents	30,600	40	0.13
County director of education	1	1	100.00
Sub-counties	10	4	40.00
Schools	570	60	10.53

Source: Field data, (2020)

3.8 Instrumentation

Data was collected using a questionnaire, interview schedule, focus group discussion and document analysis guide. These research tools ensured triangulation of information gathered during data collection. A Five point Likert scale was used in

questionnaire formulation. Likert scales are away of participants to respond to questions. For example, with a level of agreement, disagreement and satisfaction. On its own, Likert appear ordinal and has a tendency to rise when opinion sway towards the higher anchor and fall when opinion sway toward the lower anchor. Although these scales are technically ordered categories, there are several authors who have researched this trait of Likert type data and found consistent support for the use of these variables as approximately continuous. It is done in two ways. First, the rational centres on the fact that Likert, or ordinal variables with five or more categories can often be used as continuous without any harm to analysis plan you have (Johnson & Creech, 1983; Norman, 2010; Sullivan & Artino, 2013; Zumbo & Zimmerman, 1993). In these cases, researchers usually refer to the variable as an "ordinal approximation of a continuous variable" and cite five or more categories used.

3.8.1 Questionnaire for Standard Eight Pupils

The questionnaire consists of a number of questions printed or typed in a definite order or set of forms (Kothari & Garg, 2014). A questionnaire was an appropriate tool to collect data from pupils in this study that allowed the researcher to collect information from a large sample. Closed ended questionnaire focused on parental motivation, achievement goals and learning strategies (See appendix A).

3.8.2 Questionnaire for Teachers

Standard eight class teachers responded to both structured and unstructured items on parental motivation, achievement goals, learning strategies and their influence on

academic performance. Structured items enabled the researcher to collect the teachers' views and opinions while unstructured items enabled the researcher to collect more information to assist in explaining and interpreting the findings of the quantitative data (Creswell, 2003). See appendix B

3.8.3 Document Analysis Guide

Document analysis guide was used to collect information that was documented in the schools. The researcher used registers to determine standard eight pupils' enrolment. Three mark lists of standard eight pupils' Continuous Assessment Tests (CATs) were provided by their respective class teachers. For easy recording the researcher developed a pro forma summary at the end of the questionnaire to record pupils' individual marks. Before the researcher collected the questionnaire, respondents were assigned unique codes which they filled on the questionnaire. The teacher then read through the three mark lists as pupils recorded their marks. The average score of each pupil contributed to the 380 participants' mean score that formed a basis of academic performance. KCPE performance for schools was obtained from the head teacher's office. Parents' attendants register was used to ascertain parents' annual meetings and visits in the school as shown in appendix A and C.

3.8.4 Interview Schedule for County Director of Education

Interview schedule is collecting data by engaging in dialogue and asking questions (Richard and Grinnell, 2001). The interview schedule was used to seek the information from the Migori County Director of Education (CDE) on general academic performance, parental motivation and programs put in place to improve

academic performance. The CDE was asked to give his opinion on academic performance disparity between day and boarding schools. He was also asked to give his opinion on quantitative analyzed results especially on parental involvement statements where learners had low percentage approval, see appendix D

3.8.5 Parents' Focus Group Discussion

Focus group discussion (FGD) is a type of group interview, but one that tends to concentrate in depth on a particular theme or topic with an element of interaction. The group is often made up of people who have particular experience or knowledge about the subject of the research (Walliman, 2011). Parents were brought on board at the end of quantitative data analysis. Their participation was narrowed down to those questions in which they could give more appropriate answers. They were asked to clarify more on why some reasonable percentage of the pupils felt that parents were not getting involved in their education as a way of motivating them. As shown in appendix E, participants provided information on parents' involvement as directed by the researcher.

3.9 Pilot Study

Pilot study was carried out among 40 pupils and 10 teachers from 10 schools, which was chosen randomly. The schools and respondents who were considered in the pilot study were not included in the final study. This applied to standard eight pupils and class teachers. The validity and reliability of the research tools are presented in the next sub-sections.

3.9.1 Validity of the Research Instruments

Validity is described as the degree to which an instrument measures what it is supposed to measure (Kothari & Garg, 2014). The study employed content and construct validity. Content validity is the extent to which a measuring instrument provides adequate coverage of the topic under study and study objectives. While construct validity refers jointly to whether a test truly measure some hypothetical construct and whether the construct truly exists (Goodwin, 2005). As indicated by Kothari and Garg (2014) the researcher determined construct validity by associating a set of other propositions with the results received from the devised scales for the measurements to correlate between 0.34 and 0.70. Content validity of an instrument was improved through expert judgment. According to Kothari and Garg (2014) content validity is done by experts who have sufficient information on the study subject and hence one of the best method of ensuring the items of the study questionnaire confirms to the theory as well as subject of study.

The instruments were scrutinized by the researcher's peers as well as the supervisors who judged the items on the appropriateness of content, and suggested areas that required modification so that the objectives of the study and the constructs were adequately addressed. To ensure that qualitative data was genuine and not influenced, the researcher involved a skilled moderator who helped to overcome personal bias by analyzing the data collected. The researcher also employed strategy of triangulation by conducting research from multiple perspectives and involving multiple individuals analyzing the same data to ensure credibility and of accuracy of qualitative data.

3.9.2 Reliability of the Research Instruments

In quantitative research, reliability is the degree of accuracy, or precision of the measurements an instrument provides (Richard & Grinnell, 2001). The reliability of the instrument was determined through pilot study which was conducted among 10 standard eight class teachers, 40 pupils and one education officer. The split-half test method was used to determine the internal consistency of the instrument. The results are as shown in Table 3.2.

Table 3.2: Pilot Test for Teachers' and Pupils' Questionnaire

Objective variables	N of Items	Guttmann Split-Half Coefficient	
		Teachers	Pupils
Parental involvement	12	0.823	0.786
Achievement of goals	16	0.733	0.672
Learning strategies	14	0.931	0.806
Performance	3	-	0.784
overall reliability index		**0.829**	**0.762**

Key: N is the number of items in the objective question

Source: Research Data (2021)

Table 3.2 shows that the overall reliability index for quantitative data was 0.829(82.9%) and 0.762 (76.2%) for teachers and pupils respectively. Cronbach alphas of above 0.70 indicate that the instruments were reliable for this study (Creswell, 2009). However the reliability coefficient index of achievement goals was 0.672(67.2%) indicating that it was slightly below the threshold of 0.70. The researcher identified areas, questions, and terminologies that were ambiguous and

modified or removed them to yield accurate results. The final number of achievement goals items were 12.

Reliability in qualitative research includes very diverse paradigms, where the aspect itself is epistemologically counter-intuitive along with having a very difficult definition to establish reliability and maintain consistency (Russell, 2014). However to establish the authenticity of data collected the researcher was careful with the wording of interview questions, established rapport with the interviewers and was honest when carrying out the qualitative data.

3.10 Data Collection Procedures

To collect data, the researcher sought permission from the National Council of Science, Technology and Innovation (NACOSTI) through the Directorate of Post Graduate Studies (DPGS) of Masinde Muliro University of Science and Technology (MMUST). Upon receiving the research permit from NACOSTI as shown in appendix G and H, the researcher obtained the research permission from the County Commissioner (CC) and CDE of Migori County as shown in Appendix I and J respectively. The researcher also obtained mobile phone contacts of the head teachers of the sampled schools from the CDE's office, called them and briefed them about the intended research. Consent was sought from parents through the Head teachers for pupils to participate in the study and possible dates for data collection were set. Participants' rights to be informed about the study, to freely decide whether to participate or to withdraw from the study at any time without penalty was upheld by the researcher, see appendix K.

Data was collected in two phases. Phase one involved collection of quantitative data. The researcher made the intended visitation to the selected schools and developed a rapport by introducing herself and briefing respondents about the research. Depending on the standard eight pupils' enrolment, the researcher selected the required number through lottery method. Thereafter copies of questionnaire were distributed to the selected respondents and to the class teachers who responded accordingly. Class teachers had three mark lists of internal examinations and read out marks to respondents who had been assigned code numbers. Once the respondents were through with providing data, the researcher collected the questionnaires and kept them for analysis.

The second phase of qualitative data collection was carried out after the analysis of the quantitative data. The CDE and the parents were the main participants in this phase. The parents' participation was narrowed to questions which the pupils had a lot of disagreement with the statement even though over a half agreement from the pupils was registered. The parents were invited through the head teachers whose schools participated in the study. On the data collection day for both parents and the CDE, the researcher re-introduce herself, and thanked the informants for agreeing to be interviewed. From each cluster, the researcher divided parents into two groups of English speakers and Kiswahili speakers for easy communication. The purpose of the FGD was explained to participants and were reassured of confidentiality. The researcher sought the consent of the participants to use the recorder which was granted. She then asked if there were any questions or clarification before the interview began. The researcher maintained neutral attitude, recorded verbatim and

noted observed behaviours. Before closing the interview, the researcher again asked participants for questions and or for clarification. Thereafter traveling expenses were given by the researcher and they all left for a meal. The researcher sought permission from the relevant authorities to collect the needed information from county, sub-county and school documents.

3.11 Data Analysis

Quantitative data collected was sorted, edited, coded, classified and tabulated for analysis. Data was scored consistently from “strongly agree” to “strongly disagree” as a “5” to a “1” respectively. Quantitative data analysis was done in two parts; descriptive statistics which concentrated on the opinion of the respondents and the inferential statistics which deeply looked into the statistical influence of the independent variable on the dependent variable. For easy analysis of data, Statistical Package for Social Sciences (SPSS) version 26 was used. Cleaning the data was done to inspect errors before presentation of the results.

Data was also transformed to be continuous. The most common method is taking the same or mean of two or more ordinal variables to create approximately continuous variable. This is common in surveys where participants respond to Likert type questions and the administrator must either sum all responses or calculate a mean response a cross a set of questions. For this study, all the ordinal Likert scale datasets from all factors making up the three predictors (parental motivation (12 factors), achievement goals (12 factors) and learning strategies (14 factors), were transformed into continuous variables through addition of all factors under each variable which

made up three of the four objectives of this study. On this basis, the derived predictor variables were subjected to correlation tests to confirm if there existed any association between each of them and academic performance. Further, the tests also verified if existence of such association is statistically significant or just due to chance.

Quantitative data was explored further by carrying out a qualitative study. Qualitative data was transcribed, put into various categories and reported as themes and sub-themes (Creswell, 2009). To enhance the accuracy and credibility of the study, information was drawn from multiple sources such as documents analysis, interviews and from individuals who included teachers, parents, CDE and reported appropriately. The researcher used the audio to record parents' FGD and the CDE's interview and the findings were reported thematically. Thereafter, the researcher ensured that there was no bias in the collected data by sharing information with a small group of participants who openly discussed whether the description was complete and realistic, if the themes were accurately reported and if the verbatim reports were properly captured reflecting their responses. The researcher made additions and changes to her thematic discussion to report the qualitative data. For the analysis of quantitative data, Pearson product-moment correlation coefficient, simple linear regression and independent t-test inferential statistical tests were chosen because they met the following assumptions.

3. 11.1 The Pearson Product-moment Correlation Coefficient.

It is a measure of the strength and direction of association that exists between two variables measured on at least an interval scale. This test attempts to draw a line of best fit through the data of two variables, and the correlation coefficient indicates how far away all these data points are from this line of best. (Norman, 2010; Sullivan & Artino, 2013; Zumbo & Zimmerman, 1993). Pearson product-moment correlation test was chosen because after transforming predictor variables, they met the following assumptions: variables measured at the interval or ratio level (i.e., they are continuous); there was a linear relationship between the two variables being tested; there were no significant outliers on datasets; and the variables were approximately normally distributed. (Johnson & Creech, 1983; Norman, 2010).

It is the best method of measuring the association between variables of interest because it is based on the method of covariance. It gives information about the magnitude of the association or correlation as well as the direction of the relationship. In this study, the dependent variable (academic performance) is continuous variable and so it met the criteria of data required to run this kind of correlation test. The predictor variable (parental motivation) met the criteria after transformation into continuous variable through addition of data values representing each factor.

3.11.2 Linear Regression

It is a statistical method that allows us to summarize and study relationships of variables (independent and dependent) that is one predictor and outcome variable.

(Moore, Notz & Flinger, 2013). Simple linear regression was chosen for this study because of the following assumptions; that the independent variables were of nominal ratio, dependent variable was continuous (academic performance), dependent variable would be normally distributed, the sample was a representative of a population and that the X-Y relationship would be linear. Analysis of Variance (ANOVA) was done and crosschecked using F test, to ensure that the model was significantly reflecting the true population measure.

3.11.3 Regression Diagnostics

Together with p-value, a number of regression diagnostics were run to check whether there is a linear relationship in the data. Model diagnostics tests such as, histogram, normal Q-Q plots and scatter plots were plotted to increase surety of conducting simple regression analysis. The following regression diagnostics tests were run to ascertain the linearity between dependent and independent variable.

3.11.3.1 Histogram

The histogram diagnostic between pupils mean score (academic performance) and parental motivation was run. This was done to test the normality distribution of the data (Moore et al., 2013) and the results are presented in Figure 3.1.

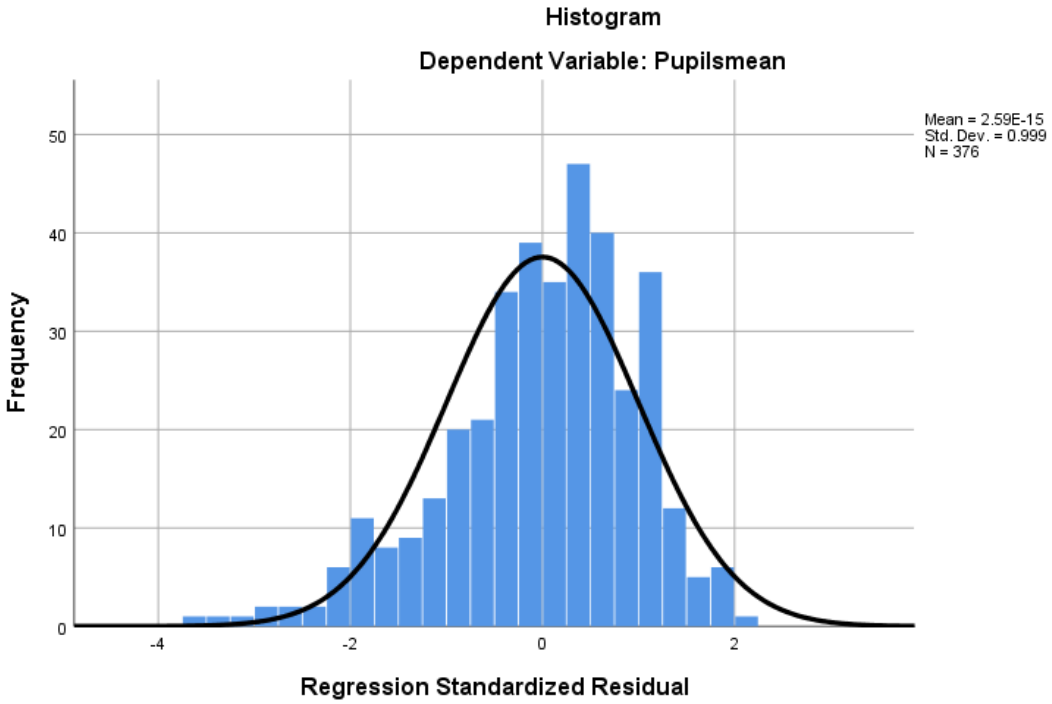

Figure 3.1: Histogram Plot for Pupils Mean Score against Parental Motivation

Source: Field Data (2021)

Results in Figure 3.1 shows that the plot was exactly symmetric and bell shaped, with a few outliers on the right side of the center. This means that the datasets distribution was normal. Therefore, academic performance linearly relate with parental motivation.

The histogram diagnostic between pupils mean score the academic performance (outcome) variable and achievement goals (predictor) variable was run and results are presented in Figure 3.2.

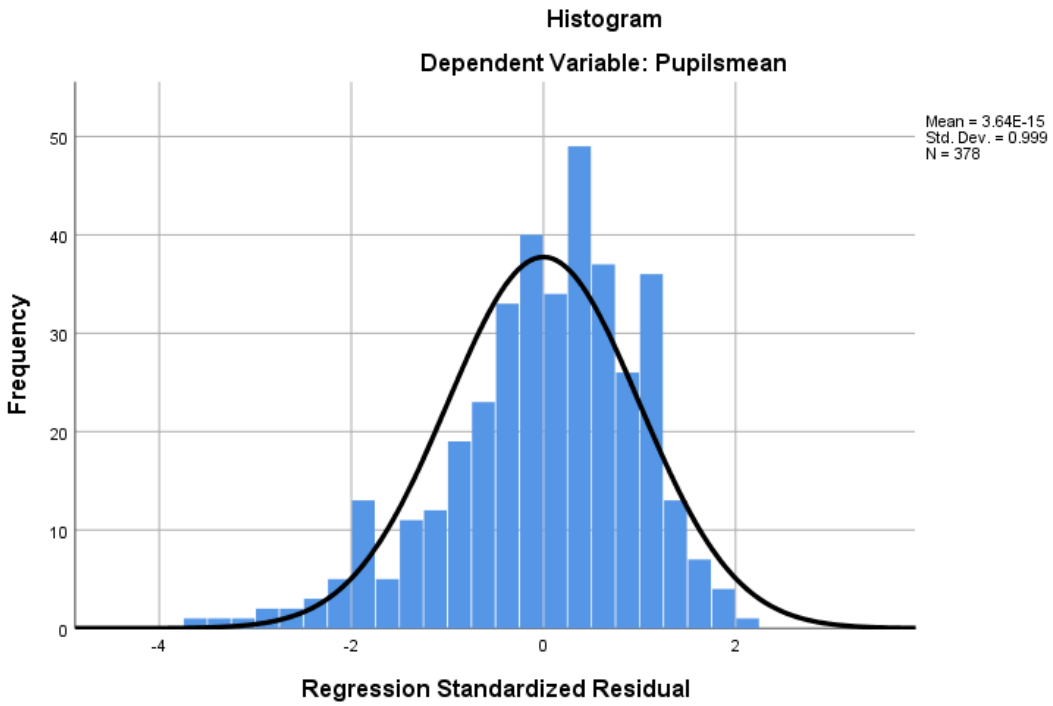

Figure 3.2: Histogram Plot (Pupils Mean Score ~ Achievement Goals Residuals)
Source: Field Data (2021)

Data in Figure 3.2 shows that the plot was exactly symmetric and bell shaped, with a few outliers on the right side of the center. This means that the datasets distribution was normal, and so, academic performance linearly related with achievement goals.

The histogram diagnostic between pupils mean score the academic performance (outcome) variable and learning strategies (predictor) variable is presented in Figure 3.3.

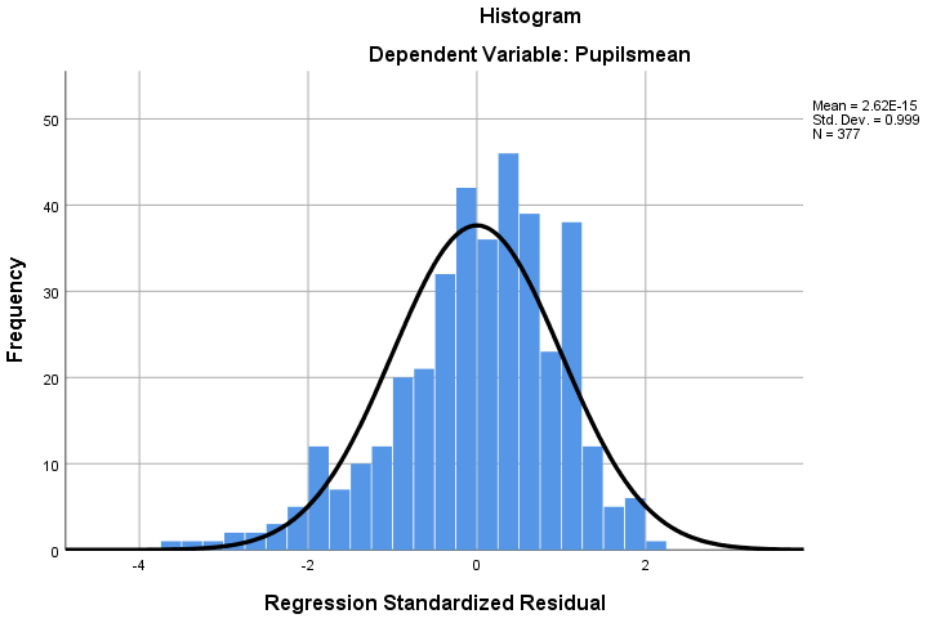

Figure 3.3: Histogram Plot (Pupils Mean Score ~ Learning Strategies)
Source: Field Data (2021)

Results in Figure 3.3 shows that the plot was exactly symmetrical and bell shaped with a few outliers on the right side of the center. Meaning, the datasets distribution was normal, and so, academic performance linearly related with learning strategies.

3.11.3.2: Normal Q-Q Plot

Normal Q-Q Plot was plotted to show the distribution of the data against the expected normal distribution and also establish whether the residuals were normally distributed, (Moore et al., 2013; Zikmund, 2000). The results are presented in Figure 3.4.

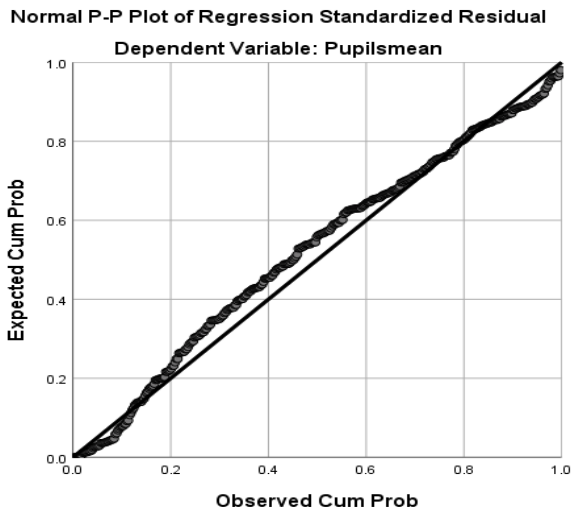

Figure 3.4: Normal Q-Q Plot of Standardized Residuals (Expected Vs. Observed)

Data in Figure 3.4 shows that almost all the points are falling along a straight line in the Q-Q plot, which provides strong evidence that these numbers truly did come from a uniform distribution. This means that academic performance and parental motivation linearly relate. Checking on the normality for pupils mean score and achievement goals residuals were also presented as shown in Figure 3.5.

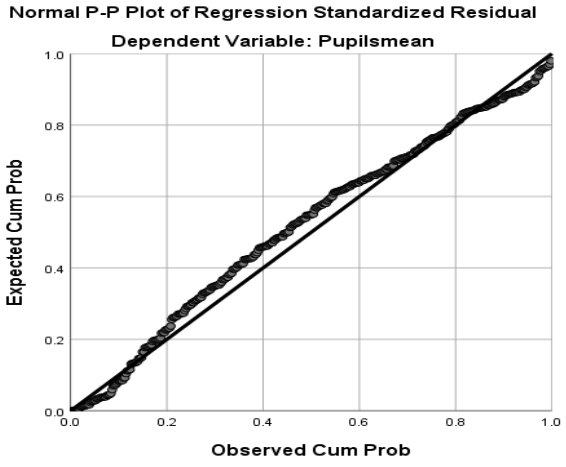

Figure 3.5: Normal Q-Q Plot (Pupils Mean Score ~ Achievement Goals Residuals)
Source: Field Data (2021)

As shown in Figure 3.5, almost all the points are falling along a straight line in the Q-Q plot, which provide strong evidence that these numbers truly did come from a uniform distribution. This means that academic performance and achievement goals linearly relate. The normal probability plot for pupils mean score verses learning strategies residuals were also presented as shown in Figure 3.6.

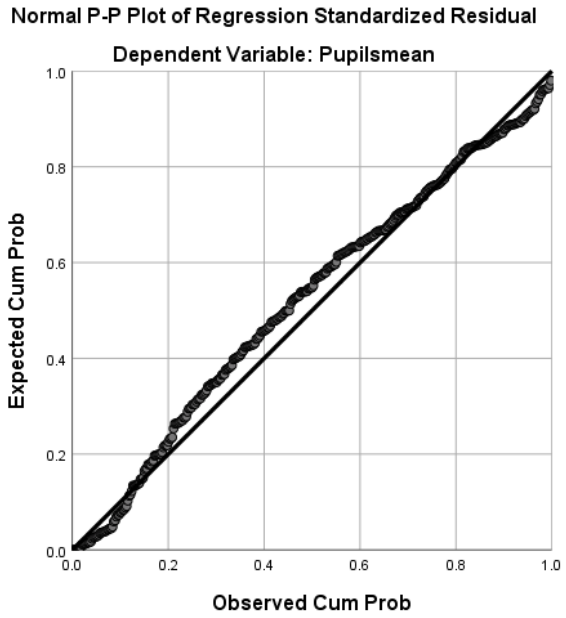

Figure 3.6: Normal Q-Q Plot (Pupils Mean Score ~ Learning Strategies Residuals)

Source: Field Data (2021)

As shown in Figure 3.6, almost all the points are falling along a straight line in the Q-Q plot, which strongly indicate that these numbers truly did come from a uniform distribution. This means that academic performance and learning strategies linearly relate.

3.11.3.3 Scatter Plot

Scatterplot was plotted to establish the linear relationship between parental motivation (predictor variable) and academic performance (outcome variable). The results are presented in Figure 3.7. According to Moore et al. (2013); Zikmund (2000) linear relationship between independent and dependent variables are requirement for regression model.

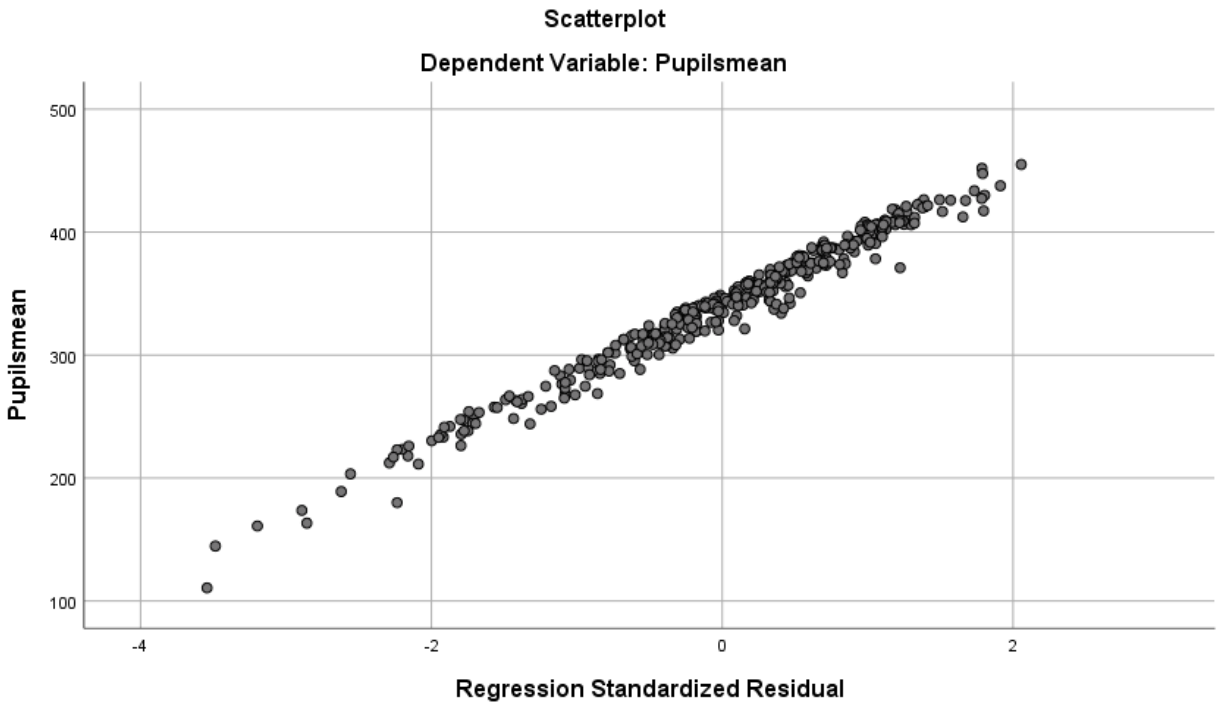

Figure 3.7: Scatterplot of Pupils Mean Score against Parental Motivation (Standardized Residuals)

Source: Field Data (2021)

From the results presented in Figure 3.7, the scatterplot of pupils mean score against parental motivation (standardized residual) revealed a linear tendency because most of the points are concentrated along a straight line. Clearly, it gives a strong direction to the fact that academic performance and parental motivation linearly relate.

The scatterplot of pupils mean score against achievement goals (standardized residual) was plotted to determine linearity. The results are presented in Figure 3.8.

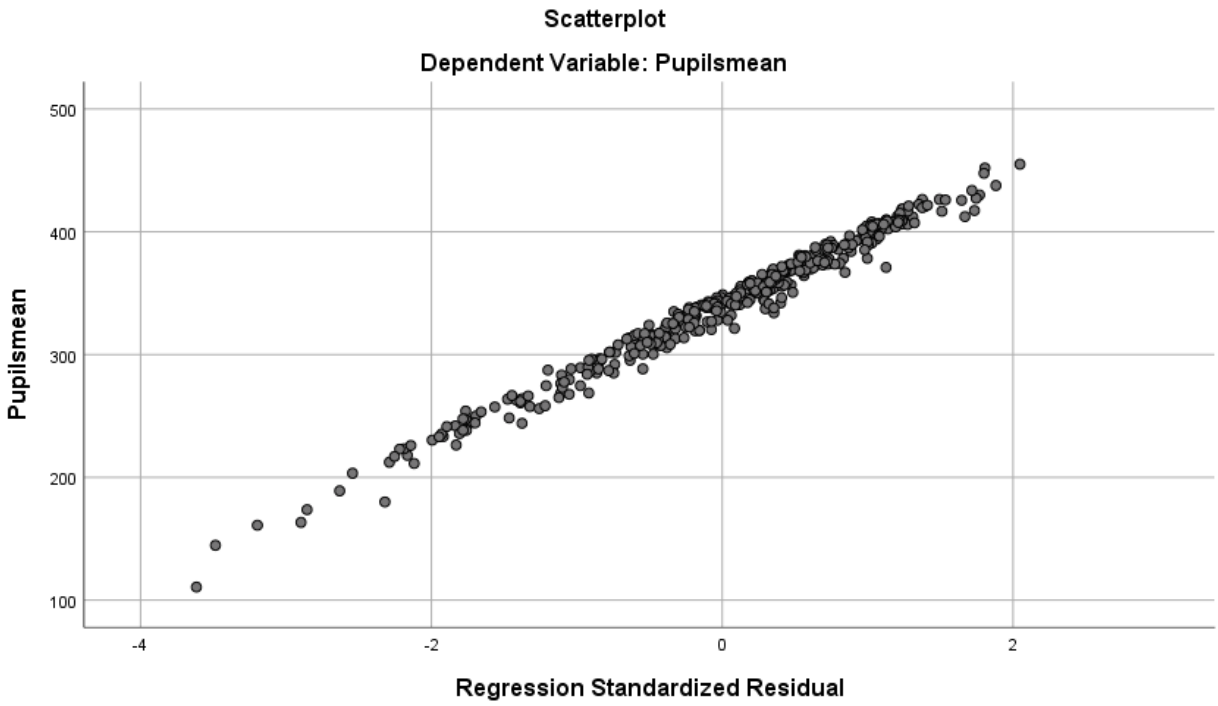

Figure 3.8: Scatterplot (Pupils Mean Score ~ Achievement Goals Residuals)

Source: Field Data (2021)

The results in Figure 3.8 revealed a linear tendency because most of the points are concentrated along a straight line. Clearly, it gives a strong direction to the fact that academic performance (outcome variable) and achievement goals (predictor variable) linearly relate, which supports Moore et al. (2013), Zikmund (2000) assertions.

Scatterplots of pupils mean score against learning strategies (standardized residual) was plotted to determine linearity. The results are presented in Figure 3.9.

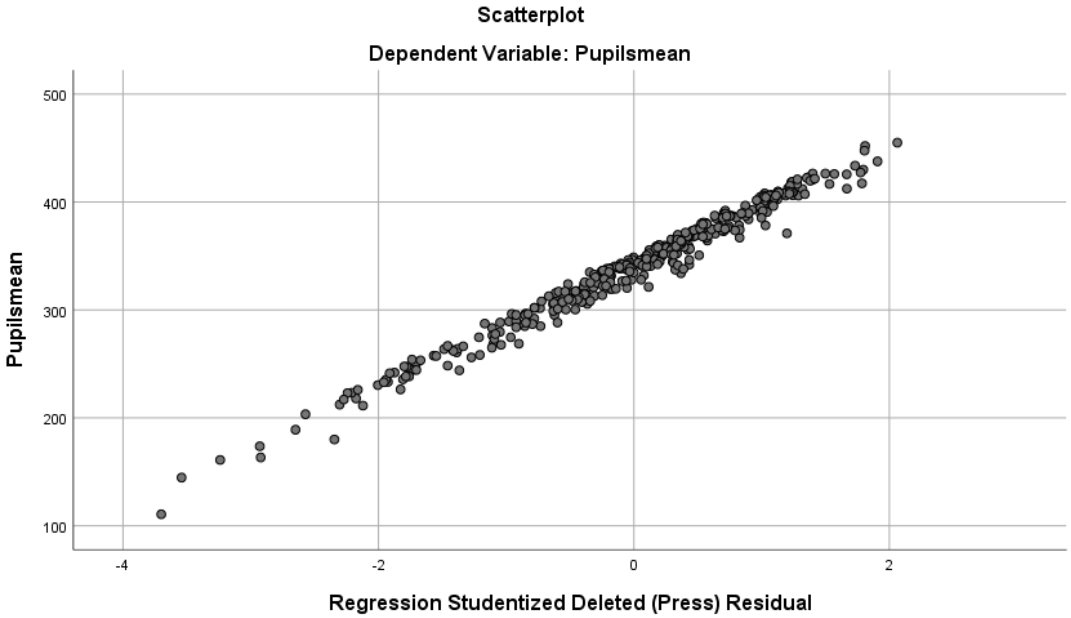

Figure 3.9: Scatterplot (Pupils Mean Score ~ Learning Strategies Residuals)

Source: Field Data (2021)

The results in Figure 3.9 showed a linear tendency because most of the points are concentrated along a straight line. Clearly, it gives a strong direction to the fact that academic performance (outcome variable) and learning strategies (predictor variable) linearly relate.

3.11.4 The Independent t-test

Also called the two sample t-test, independent samples t-test or student's t-test is an inferential statistical test that determines whether there is a statistically significant difference between the means in two unrelated groups. The significance level (also called alpha) that allows for the assessment and consequently, either rejecting or

accepting the null hypothesis, was set at 0.05. The independent t-test was chosen for this study because it had one independent categorical variable that had two levels or groups (boys and girls), having one continuous dependent variable (academic Performance). This test was used determine the mean score difference between girls and boys. The homogeneity of variance between female pupils and male counterparts was assessed by Levene's test (Levene 1960)

The findings were presented, interpreted and discussed as per the specific objectives of the study as summarized in Table 3.3.

Table 3.3: Summary of how Data was analyzed

Objectives	Instruments	Method of Analysis
i. To determine the extent to which parental involvement predicts academic performance	Open and closed ended questionnaire, FGD, interview schedule, document analysis guide	Means, standard deviation, Pearson correlation, simple linear regression
ii. To establish the extent to which achievement goals predicts academic performance	Questionnaire, interview schedule, document analysis guide	Means, standard deviation, Pearson correlation, simple linear regression.
iii. To find out the extent to which learning strategies predicts academic performance	Questionnaire, interview schedule, document analysis guide	Means, standard deviation, Pearson correlation, simple linear regression.
iv. To determine gender differences in academic performance among girls and boys	Questionnaire, document analysis guide	Means, standard deviation ,independent sample t-test, simple linear regression

The following null hypotheses were tested at $\alpha = .05$

H_{01}: Parental motivation does not have a significant effect on academic performance among primary school pupils.

H_{02}: Achievement goals do not have a significant effect on academic performance of primary school pupils.

H_{03}: Learning strategies do not have a significant influence on academic performance among primary school pupils.

H_{04}: There is no significant gender differences in academic performance among girls and boys in primary school pupils.

3.12 Ethical Considerations

Ethical considerations are vital for any research study. In this study the researcher sought permission of the people whom she intended to carry research on and maintained originality in her work. Since children were involved in the study, the researcher sought the consent from the parents of the respondents and their respective head teachers for data collection. Permission was also sought from class teachers to respond to the questionnaire and to provide academic performance of standard eight pupils' respondents. The researcher sought consent from parents and the CDE before audio recording the interviews. The researcher ensured confidentiality, and privacy of the data collected. The respondents were protected by keeping the information anonymous. Participants were informed about the study that it is purely for academic purposes, that they were free to decide whether to participate or not and that they had the right to withdraw from the study at any time without penalty. Any sensitive statements that would provoke emotional reactions on the part of respondents were avoided. The researcher also ensured that personal bias, feelings and opinions did not get in the way of research.

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

The purpose of the study was to examine parental motivation, achievement goals, and learning strategies as predictors of academic performance of primary school pupils in Migori County, Kenya. Data analysis, presentation, interpretation and discussion of the study findings is presented. The analyzed data is presented in tabular and graphical form.

4.2 Respondents' Demographic Information

This section presents the demographic data of the respondents.

4.2.1 School Type

The distribution of pupils and teachers by school type is presented in Table 4.1.

Table 4.1: Distribution of Respondents by School Type

	Pupils		Teachers	
Type of school	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Day school	190	50	42	70
Boarding school	190	50	18	30
Total	**380**	**100**	**60**	**100**

Source: Field data (2021)

Data in Table 4.1 shows that there was an equal number of pupils, 190 each drawn from both day and boarding schools accounting for 50% each and making up a total

of 380 pupils as respondents. As for the teachers, majority (70%) were drawn from day schools representing 42 teachers while those from boarding schools accounted for 30% representing 18 teachers to make up a total of 60 teachers. There are fewer boarding schools in Migori County compared to day schools, meaning day schools have more teachers than boarding schools. In order to avoid study bias between the teacher respondents, more teachers were drawn from day schools than those from boarding schools.

4.2.2 Gender

The distribution of respondents by gender is presented in Table 4.2.

Table 4.2: Respondents Gender

	Pupils		**Teachers**	
Gender	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Male`	190	50	30	50
Female	190	50	30	50
Total	**380**	**100**	**60**	**100**

Source: Field data (2021)

Data in Table 4.2 shows that there was an equal proportion of male and female pupils accounting for 50% (190), to make up a total of 380 pupils. Likewise an equal proportion of male and female teachers accounting for (50%), to make up a total of 60 teachers were also brought on board as respondents. This again was done to avoid biasness towards any gender. Demographic information is important to the study by virtue of assessing the responding background to ensure that the targeted respondents give the required information. According to Kothari (2014), before proceeding with

data analysis, demographic information is useful to ensure that the sampled respondents provide required data. The current demographic data indicates that the respondents meet the criteria for the target population.

4.3 Parental Motivation

Parental motivation is one of the variables from which this study was set to test and evaluate how it affects pupils' performance. It had 12 factors with the likelihood to influence its overall effect on academic performance. These factors were put up in a questionnaire in form of statements, which respondents were meant to answer either by strongly agree, agree, undecided, disagree or strongly disagree. This was the same set up for the teachers' questionnaire, with a little change, but maintaining the overall objective. The analysis of the results for this objective was done in two parts; descriptive statistics which concentrated on the opinion of the respondents about each statement. The inferential statistics deeply looked into the statistical influence or effect of parental motivation on academic performance. Parents were also brought on board at the tail end for quantitative data analysis of this objective. Their participation was narrowed down to those questions in which the pupils had a lot of disagreements with the statements. "Strongly agree and agree" were combined for agreement or approval of the statement while "strongly disagree and disagree" were combined for disagreement or disapproval of the statement.

The first objective of the study was to determine the extent to which parental involvement predicts academic performance of primary school pupils in Migori County.

4.3.1 Keeping Pupils in Good Health

The respondents were asked if their parents ensure that they are of good health always to enhance their academic performance. The results are presented in Table 4.3.

Table 4.3: Responses on Keeping Pupils in Good Health

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	2	0.6	7	11.7
Disagree	-	-	12	20.0
Not decided	3	0.7	3	5.0
Agree	55	14.5	26	43.3
Strongly agree	320	84.2	12	20.0
Total	**380**	**100**	**60**	**100**

Source: Field data (2021)

Results in Table 4.3 show that when pupils were asked whether their parents made sure that they are in good health, most of them accounting for 98.7% agreed with the statement. Only 0.6% of them disagreed while 0.7% were not decided. On the strength of their responses, it means that an overwhelming majority of pupils felt keeping them in good health was enough motivation to enhance their academic performance. The teachers were asked whether parents provide lunch for pupils at school to ensure good health and high class concentration. Most of the teachers accounting for 63.3% of the sample agreed. However, 31.7% of the teachers disagreed with this statement while 5% were not decided on the statement. Hunger

and illness may cause fatigue to the learner's mind hence low concentration in class. Therefore good health improves academic performance.

4.3.2 Parents Giving Pupils Gifts and Cash as Reward for Good Results

The second item sought to establish whether pupils were always given gifts or cash prizes by their parents on good academic performance. The results are presented in Table 4.4

Table 4.4: Parents Motivate Pupils through Gifts and Cash when they do Well in Exams

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	34	8.9	5	8.3
Disagree	71	18.7	21	35.0
Not decided	40	10.5	9	15.0
Agree	166	43.7	16	26.7
Strongly agree	69	18.2	9	15.0
Total	**380**	**100**	**60**	**100**

Source: Field data (2021)

Results in Table 4.4 show that 61.9% of pupils indicated that gifts and cash motivate them to do well in exams. A significant percentage of pupils, that is, 27.6% disagreed while 10.5% were not decided. In the opinion of majority pupils, giving gifts or cash in some way act as a motivation for them. On the contrary, most of the teachers accounting for 43.3% disagreed with the statement that most parents motivate learners through gifts and cash when they perform well in CATs. Whereas 41.7% of

teachers agreed with the statement, 15% of them were undecided. From the responses given, it can be deduced that gifting children on good performance seemingly is not a regular practice among parents. While most children support the idea, most teachers view it otherwise.

4.3.3 Discipline Set by Parents

The third item sought to establish how discipline standards set for children by parents help them perform better. The results are presented in Figure 4.1

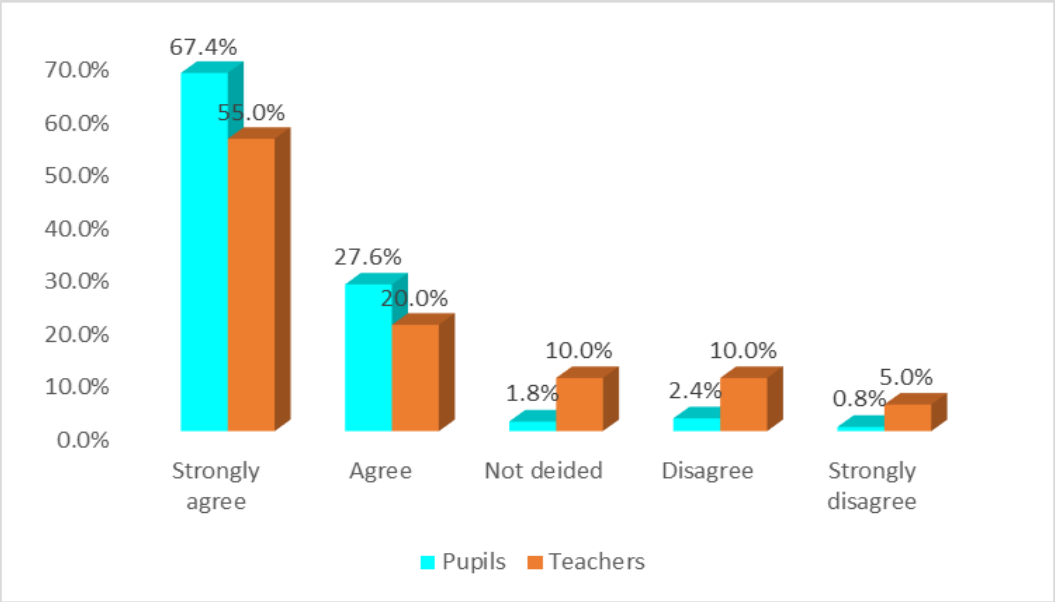

Figure 4.1: Responses about How Discipline Helps Pupils do Well in Exams
Source: Field data (2021)

Findings in Figure 4.1 show that when pupils were asked how discipline standards set to them by parents help then perform better, 95% of the pupils felt that; high level of discipline set by their parents was key to success in their studies, with only 3.2% of them disagreeing, and 1.8% undecided. Whereas 75% of teachers agreed with the statement, 15 disagreed with the statement while 10% of them were

undecided. From the findings to a larger extent, parents may be displaying good discipline for children to emulate them. Pupils are aware that discipline greatly contributes to good performance. Therefore good role models in the society support children's learning

4.3.4 Text Books and Writing Materials from Parents

Respondents were also asked whether their parents always provide for them all the required text books and writing materials. The results are presented in Table 4.5.

Table 4.5: Parents Motivate Pupils by Providing Text Books

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	5	1.3	-	-
Disagree	16	4.2	11	18.3
Not decided	20	5.3	5	8.3
Agree	144	37.9	27	45.0
Strongly agree	195	51.3	17	28.4
Total	**380**	**100**	**60**	**100**

Source: Field data (2021)

Data in Table 4.5 shows that most of the pupils accounting for 89.2% that, their parents always provide them with required textbooks and writing materials which assist them to perform well in class examinations. Only 5.5% of them disagreed and 5.3% were not decided. This was the same for most teachers, with 73.4% of them agreeing that; most pupils in their classes have supplementary text books and enough writing materials provided by parents, while 18.3% disagreed and 8.3% were not

decided. The findings reveal that, provision of text books is helpful to learners to reinforce the content taught by teachers in class for greater understanding of the concept learnt. Although the government of Kenya provides text books, they are used and kept in school. Therefore, it is necessary that parents provide supplementary text books for children's use when they are at home.

4.3.5 Encouragement by Parents

The fifth item entailed parental encouragement to their children. Respondents were asked whether their parents always encourage them to improve in class performance. The results are presented in Figure 4.2.

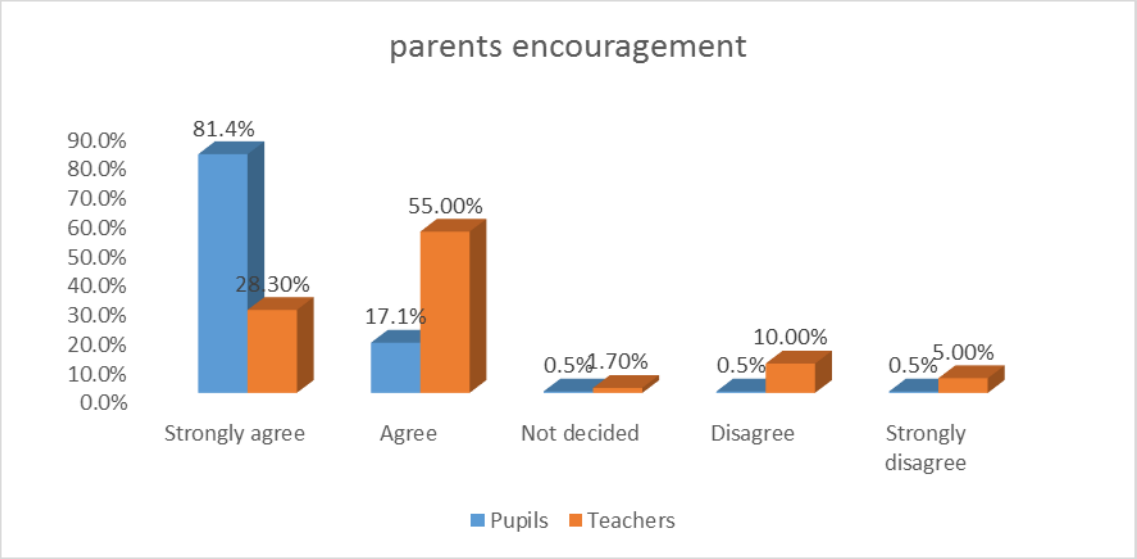

Figure 4.2: Responses on Parental Encouragement to Pupils
Source: Field data (2021)

Results in Figure 4.2 show that most of the pupils accounting for 98.5% agreed that their parents always encourage them to improve in class performance, with only 1.0% disagreeing and only 0.5% were undecided. Most of the teachers who agreed with the statement accounted for 83.3%, 15% disagreed with the statement while

1.7% of them were undecided. From the finding, it is clear that most parents in Migori County always encourage their children to improve in class performance. When parents give positive and encouraging remarks to their children, they are likely to improve in their exams.

4.3.6 Parents Pay School Levies on Time

Further findings were sought on payment of levies at school. Respondents were asked if they are never sent home because their parents always pay school levies in good time. The results are presented in Figure 4.3.

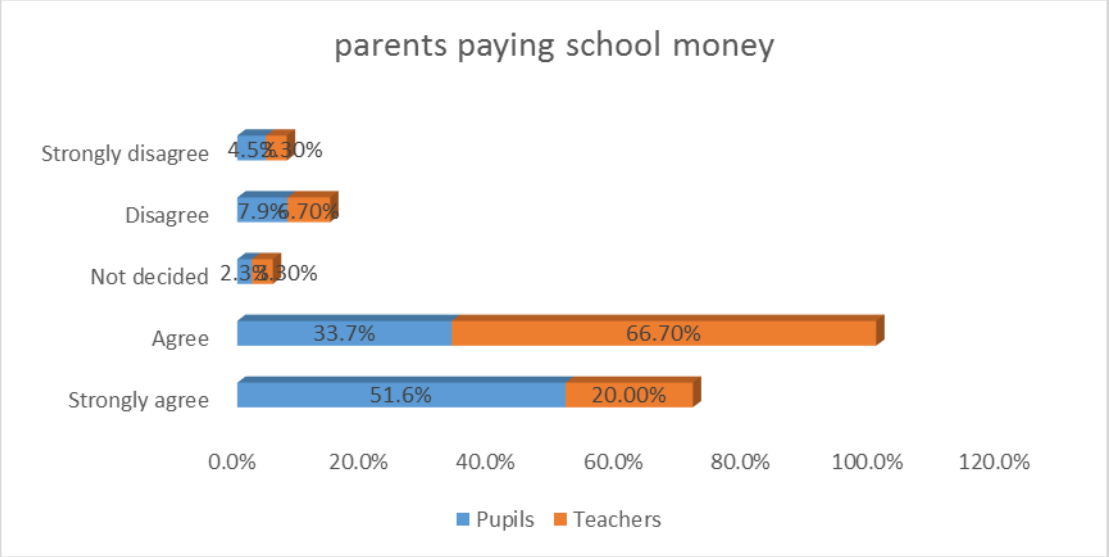

Figure 4.3: Parents Paying School Levies on Time
Source: Field data (2021)

The findings in Figure 4.3 show that most of the pupils accounting for 85.3% agreed that they are rarely sent home because their parents always pay school levies in good time. However, 12.4 % of the pupils disagreed and 2.3% were undecided. Likewise, most of the teachers accounting for 86.7% reinforced this statement by confirming that most of the pupils' parents make the required payments in good time for learners

not to miss lessons. Ten percent of the teachers disagreed with the statement while 3.3% of the teachers were undecided. These findings imply that parents valued school policies of paying levies on time and therefore children were not sent home more often.

4.3.7 Parents Paying Visits to Class Teachers to Discuss Pupils' Performance

The seventh item entailed parents Paying Visits to Class Teachers to Discuss Pupils' Performance. Respondents were asked if parents do make visits to class teachers to check on the performance of their children. The results are presented in Table 4.6.

Table 4.6: Responses about Parents' Visits to Class Teachers

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	22	5.8	4	6.7
Disagree	47	12.4	6	10.0
Not decided	15	3.9	2	3.3
Agree	155	40.8	39	65.0
Strongly agree	141	37.1	9	15.0
Total	**380**	**100**	**60**	**100**

Source: Field data (2021)

From Table 4.6, results show that most of the pupils accounting for 77.9% affirmed that their parents do make visits to class teachers to check on their performance. Whereas 18.2% disagreed with the statement, 3.9% were undecided. As for the teachers, majority of them accounting for 80% approved the statement while 16.7%

disagreed and 3.3% were undecided. The teachers observed that they sometimes hold meetings with class eight parents to discuss individual pupil's academic progress.

4.3.8 Parents Attending School Meetings

Respondents were also asked if parents attend parents meeting every time they are invited. The results are presented in Table 4.7.

Table 4.7: Responses on Parents' attending School Meetings

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	9	2.4	2	3.3
Disagree	35	9.2	3	5.0
Not decided	13	3.4	1	1.7
Agree	122	32.1	39	65.0
Strongly agree	201	52.9	15	25.0
Total	**380**	**100**	**60**	**100**

Source: Field data (2021)

Data in Table 4.7 shows that most of the pupils accounting for 85% agreed that their parents do attend parents meeting every time they are invited. Whereas 11.6% of the pupils disagreed with the statement, 3.4% were undecided. As for the teachers, most of them accounting for 90% agreed that most parents do attend school meetings and actively contribute to the learners' progress when invited, 8.3% disagreed while 1.7% were undecided. In most schools, it is common that at least once every term, parents are invited to attend parents meeting in schools. Such meetings are meant to

discuss progress of pupils as well as matters that directly or indirectly affect the pupils' academic performance.

-

4.3.9 Parents Appreciating and Praising Pupils

The study also sought information on parents' appreciation and praise. The respondents' were asked if they always get motivated to do well in examination every time their parents appreciate and praise them for better performance. The results are presented in Figure 4.4.

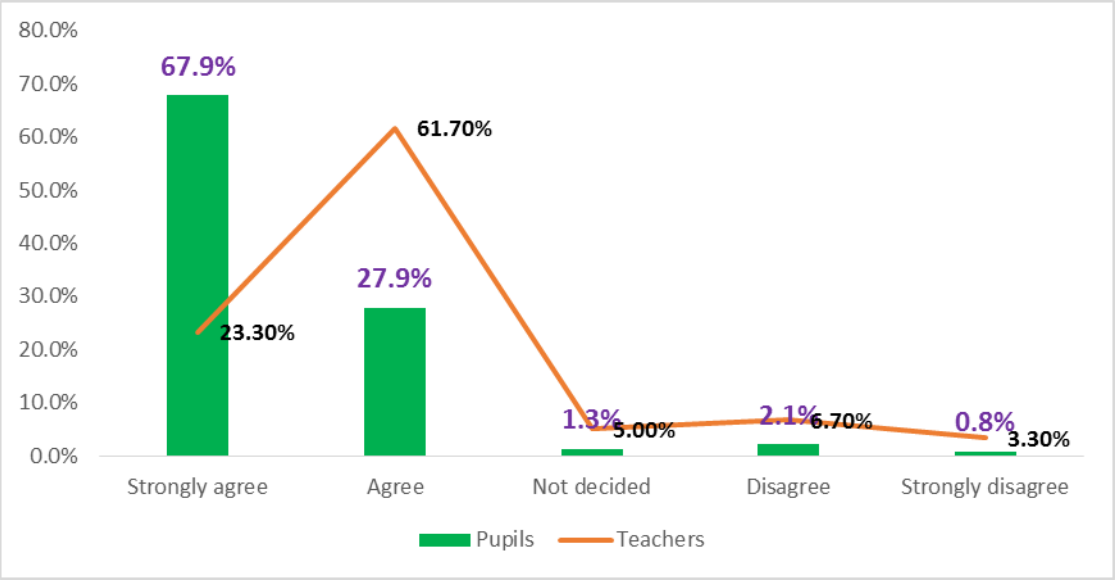

Figure 4.4: Responses on Parents' Appreciation
Source: Field data (2021)

Data in Figure 4.4 shows that most of the pupils accounting for 95.8% agreed with the statement that they always get motivated to do well in examination every time their parents appreciate and praise them for better performance. Only 2.9% felt otherwise and 1.3% were undecided. On the other hand, most teachers accounting for 85% affirmed that learners get motivation through praise and appreciation on better

performance by their parents, 7.5% of them disagreed and 5% were undecided. From the findings, it is evident that pupils in Migori County always get motivated to do well in examination every time their parents appreciate and praise them for their good performance.

4.3.10 Conducive Environment for Studies at Home

In addition, the study also sought information on provision of conducive environment at home. Respondents were asked if their parents always provide a conducive environment at home for their studies. The results are presented in Figure 4.5.

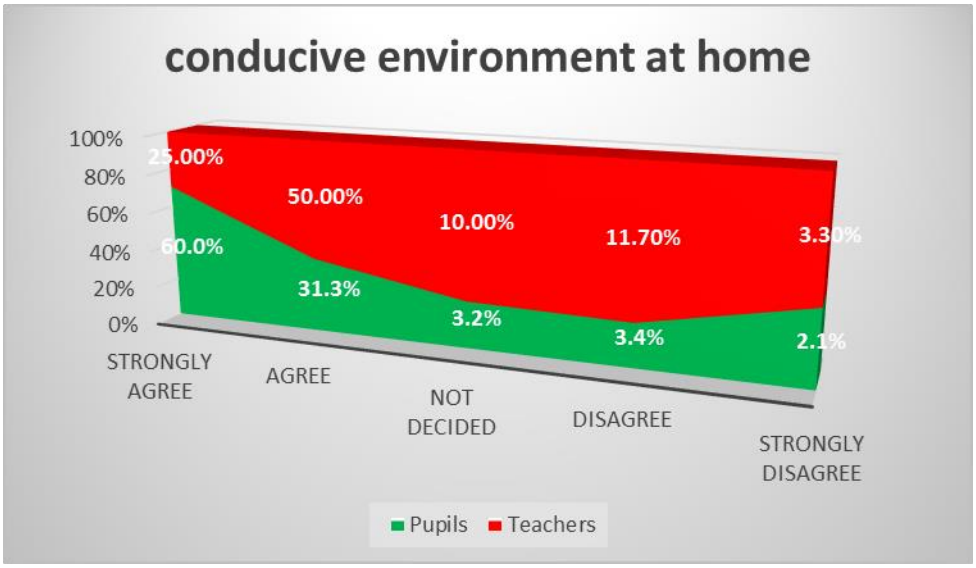

Figure 4.5: Responses on Provision of Conducive Environment at Home by Parents
Source: Field Data (2021)

Data in Figure 4.5 shows that most of the pupils accounting for 91.3% agreed with the statement that their parents always provide a conducive environment at home for their studies. Whereas 5.5% of the pupils disagreed with the statement, 3.2% were

undecided. Majority of teachers accounting for 75% confirmed that most of their learners have conducive learning environments at home. Those who disagreed with the statement accounted for 15% and 10% were undecided. From the results it is reasonable to conclude that most parents in Migori County always provide a conducive learning environment at home for their children's studies.

4.3.11 Parents Ensure Pupils do Assignments

A question on whether parents helped their children carry out their assignments was also presented to the respondents, who were asked if every time their teachers give them home assignments, their parents always make sure that they have done them. The results are presented in Figure 4.6.

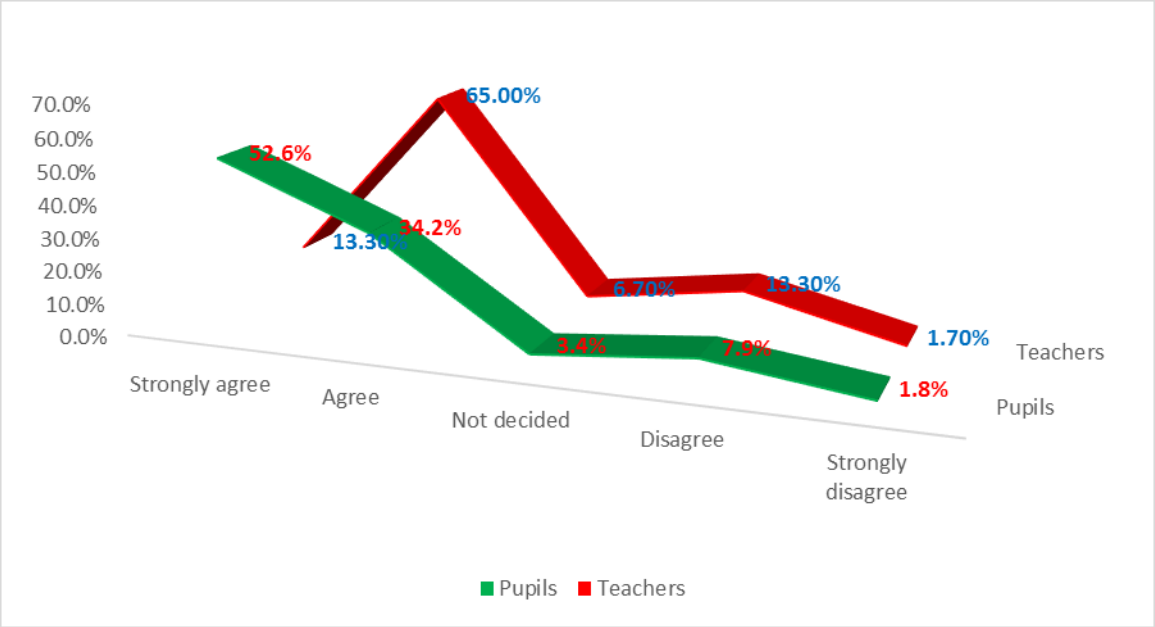

Figure 4.6: Responses about Parents Making Sure Pupils Do Assignments
Source: Field Data (2021)

Results in Figure 4.6 show that most of the pupils accounting for 86.8% affirmed their agreement with the statement that every time their teachers give them home

assignments, their parents always make sure that they have done them. Whereas 9.8% disapproved the statement, 3.4% were undecided. On the other hand, most of the teachers accounting for 78.3% affirmed their agreement with the statement that every time teachers give them home assignments, their parents always make sure that they do them, while 20% disagreed and 1.7% were undecided. From the results it is clear that most parents in Migori County always make sure that every time teachers give learners home assignments, they always make sure that they have done them.

4.3.12 Parents Request Teachers to Assist Pupils in Areas they are Weak

The study further explored whether parents request teachers to assist pupils on areas they are weak .Respondents were therefore asked if their parents sometimes request teachers to assist them in subjects they do not perform well in class. The results are presented in Figure 4.7.

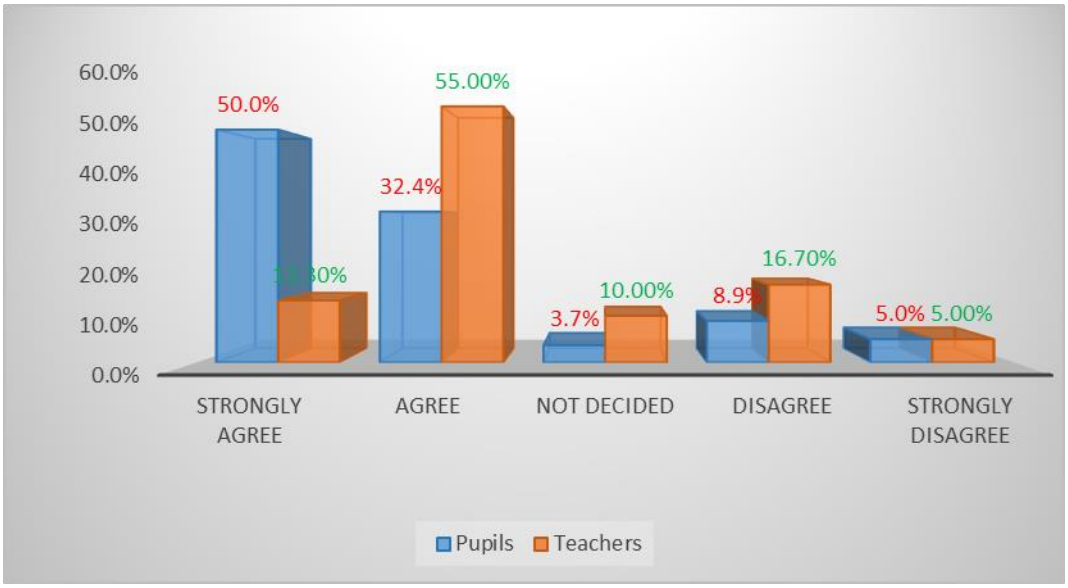

Figure 4.7: Responses on Parents Requesting Teachers to assist Pupils in Areas they are Weak
(Source: Field Data (2021)

Results in Figure 4.7 show that most of the pupils accounting for 82.4% agreed that their parents sometimes request teachers to assist them in subjects they do not perform well in class. Whereas 13.9% disagreed with the statement, 3.7% were undecided. On the other hand, most of the teachers accounting for 68.3% affirmed parents of slow learners organize for the remedial lessons to improve their examination scores. Only 21.7% of them disagreed, while 10% were not decided on the statement. Parents ought to work together with teachers to assist their children in subject areas where they do not perform well in school. Some even arrange for teachers to visit their homes to conduct private tuition for their children.

4.3.13 Parental Motivation Factors Summary

Parental motivation as one of the objectives of this study, had 12 factors upon which its effect on pupils' academic performance was evaluated. Individually or collectively, these factors to some extent were hypothesized to contribute to the overall significance of parental motivation predictor in influencing or improving pupils' academic performance. The specific objective from this construct was to determine the extent to which parental involvement predict academic performance of primary school pupils in Migori County. The descriptive statistics results indicated strong approval for this objective as put forward in a number of factor statements. However, to confirm the statistical significance that parental motivation predict pupils' academic performance, a number of inferential statistics tests were run and their results plus interpretations leading to either validation or rejection of descriptive results are explained in subsequent section. The 12 parental motivation factors were grouped into four clusters namely, provision factors, encouragement factors, reward

factors and visit factors. These clusters and their combined factors and the influence on academic performance are discussed below.

4.3.14 Relationship between Parental Provision and Pupils' Academic Performance

The provision factors included the following statements: My parents make sure I am of good health always; my parents have set high levels of discipline as a key to success in my studies; my parents always provide all required text books and writing materials that assist me to perform well; I am rarely sent home because my parents always pay school levies in good time; my parents always provide a conducive environment at home for my studies and my parents sometimes request teachers to assist me in subjects I don't perform well in class.

The statement, ' my parents make sure I am of good health always, was the highest with 98.7% approval rating among the six factors making up provision cluster as indicated in Table 4.3. The second highest rated factor indicated in Figure 4.1 was the statement that; my parents have set high levels of discipline as a key to success in my examinations which received 95% approval from the pupils. From Figure 4.5, the statement that; my parents always provide a conducive environment at home for my studies was third most approved factor with 91.3% of the pupils' agreement. The fourth highest factor under provision cluster shown in Table 4.5 was, my parents always provide all required text books and writing materials that assist me to perform well with 89.2% of the pupils approving the statement. From Figure 4.3, the statement that 'I am rarely sent home because my parents always pay school levies in

good time', was fifth factor with 85.3% of the pupils confirming so. Finally the statement that 'my parents sometimes request teachers to assist me in subjects I don't perform well in class' as shown in Figure 4.7 was the least approved factor under the provisions with 82.4% of the pupils agreeing with the statement.

The high agreement ratios were basically opinion approvals which cannot be taken to be statistically correct as such. To confirm statistical significance of their influence, all the six factors were transformed through addition and their sum used to run a Pearson product moment correlation test against pupils mean score and the results were as in the Table 4.8.

Table 4.8: Correlation Matrix (provision factors ~ pupils mean score)

		provisions	pupils mean
Provisions	Pearson Correlation	1	.153**
	Sig. (2-tailed)		.003
	N	378	378
Pupils mean	Pearson Correlation	.153**	1
	Sig. (2-tailed)	.003	
	N	378	378

**. Correlation is significant at the .05 level (2-tailed).

Source: Field Data (2021)

From the correlation matrix results presented in Table 4.8, it was established that there was a weak positive correlation between provision factors and pupils mean scores, which was statistically significant (r = .153**, n = 378, p = .003). This means that all the six factors of provisions cluster collectively have significant influence or effect on the academic performance of pupils.

4.3.15 Relationship between Encouragement and Pupils' Academic Performance

The encouragement factors included the following statements: I am always encouraged by my parents to improve in class performance; I always get motivated to do well in examination every time my parents appreciate and praise me on better performance; and every time our teachers give us home assignment, my parents always make sure that I have done them. From the results Figure 4.2 the statement 'I am always encouraged by my parents to improve in class performance with 98.5% approval from the pupils, was the first factor under encouragement cluster. The second highest approved factor indicated in Figure 4.4 was 'I always get motivated to do well in examination every time my parents appreciate and praise me on better performance with 95.8 % of the pupils agreeing with the statement. Finally from Figure 4.6, the statement 'every time our teachers give us home assignment, my parents always make sure that I have done them', was the least with 86.8% of the pupils noting its influence on their academic performance.

The high agreement ratios established on factors under encouragement cluster of parental motivation predictor, were basically opinion approvals which cannot be taken to be statistically correct that they truly and precisely influence academic performance in one way or another. To confirm statistical significance of their influence, all the three factors were transformed through addition and their sum used to run a Pearson product moment correlation test against pupils mean score. The results are presented in Table 4.9.

Table 4.9: Correlation Matrix (Encouragement Factors ~ Pupils Mean Score)

		Encouragement	Pupils Mean
Encouragement	Pearson Correlation	1	.186**
	Sig. (2-tailed)		.000
	N	378	378
Pupils Mean	Pearson Correlation	.186**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the .05 level (2-tailed).

Source: Field Data (2021)

Results in Table 4.9 show that there was a weak positive correlation between encouragement factors combined and pupils mean score, which was statistically significant (r = .186**, n = 378, p = .000). From the result it is evident that all the three factors of encouragement cluster collectively have significant influence or effect on academic performance.

4.3.16 Relationship between Reward factors and Pupils' Academic Performance

The cluster for rewards factor statement was: I am given gifts or cash money by my parents when I do well in examinations. This factor was affirmed by 61.9% (See Table 4.4) of the pupils. Its rating by pupils was slightly above average. It was put on correlation test against pupils mean score and the results are presented in Table 4.10.

Table 4.10: Correlation Matrix (Rewards Factor ~ Pupils Mean Score)

Correlation		Rewards	Pupils Mean
Rewards	Pearson Correlation	1	.108*
	Sig. (2-tailed)		.035
	N	378	378
pupils mean	Pearson Correlation	.108*	1
	Sig. (2-tailed)	.035	
	N	378	378

*. Correlation is significant at the .05 level (2-tailed).

Source: Field Data (2021)

From the correlation matrix results in Table 4.10, it was established that there was a weak positive correlation between rewards factor and pupils mean score which was statistically significant ($r = .108^*$, $p < .05$). From the results it is evident that the rewards factor - I am given gifts or cash money by my parents when I do well in examinations, had significant influence on academic performance of the pupils.

4.3.17 Relationship between Visits factors and Pupils' Academic Performance

The visits cluster factors included the following statements: My parents always make visits to the class teacher to check on my class performance and my parents attend school parents' meetings every time they are invited. The factor – my parents attend school parents meeting every time they are invited had the best approval by pupils in this cluster with 85% of them agreeing with the statement as indicated in Table 4.7. With 77.9% approval ratio, my parents always make visits to the class teacher to check on my class performance was the least and last factor under visits cluster, see Table 4.6. However, these agreement ratios were basically opinion approvals which cannot be taken to be statistically correct that the two factors under visits cluster of

parental motivation predictor truly and precisely influence academic performance in one way or another.

To confirm statistical significance of their influence, the two factors were transformed through addition and their sum used to run a Pearson product moment correlation test against pupils mean score and the results are presented in Table 4.11.

Table 4.11: Correlation Matrix (Visit Factors ~ Pupils Mean Score)

		Visits	pupils mean
Visits	Pearson Correlation	1	.056
	Sig. (2-tailed)		.275
	N	378	378
Pupils Mean	Pearson Correlation	.056	1
	Sig. (2-tailed)	.275	
	N	378	378

*. Correlation is significant at the .05 level (2-tailed).

Source: Field Data (2021)

From the correlation matrix results in Table 4.11, there was no correlation between visit factors combined and pupils mean score, the result was not statistically significant ($r = .056$, $n = 378$, $p = .275$). This means that the two factors of visit cluster collectively have no significant influence on academic performance. This does not mean the two visit factors are not important, chances are that they could improve on their influence when many more factors which are statistically significant are brought on board and combined with them.

4.3.18 Relationship between Parental Motivation and Pupils' Academic Performance

The Pearson Product Moment correlation between pupils' mean score performance (academic performance) against parental motivation predictor variable data sets was run and the results are presented in Table 4.12.

Table 4.12: Correlation Matrix Results between Parental Motivation and Pupils Mean Score

		Parental motivation	Pupils mean
Parental motivation	Pearson Correlation	1	.556
	Sig. (2-tailed)		.002
	N	378	378
Pupils mean	Pearson Correlation	.556	1
	Sig. (2-tailed)	.002	
	N	378	378

**. Correlation is significant at the .05 level (2-tailed).

Source: Field Data (2021)

Results in Table 4.12 show that there is a positive association, with a correlation coefficient of .556, p = .002. Compared upon the confidence level of 95% with confidence significance level set at 5% (.05), it was established that the association was statistically significant (r = .556, n=376, p = .002). These findings imply that pupils' performance is positively associated with parental motivation.

4.3.19 Hypothesis Testing: Effect of Parental Motivation on Academic Performance

Analysis was done to test the first null hypothesis.

H_{01}: Parental motivation does not have a significant effect on academic performance among primary school pupils in Migori County.

Regression model was carried out to help validate or reject the null hypothesis. Simple regression analysis between academic performance (outcome variable) and parental motivation (predictor variable) was conducted. The results of p-value arising from the regression analysis was used to determine the statistical significance of hypotheses. Together with p-value, a number of regression diagnostics were run to check whether there is a linear relationship in the data.

4.3.19.1 R-Squared and Adjusted R-Squared

R-Squared and Adjusted R-Squared were run to evaluate the scatter of the data points around the fitted regression line. The results are presented in Table 4.13.

Table 4.13: Model Summary (Pupils Mean Score ~ Parental Motivation)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.724[a]	.524	.523	.37009	.524	414.689	1	376	.000

a. Predictors: (Constant), parental motivation

Findings in Table 4.13 show that R-Squared equals to .524, or 52.4%. This means that parental motivation as predictor variable explain about 52% of variation in academic performance. This is slightly above 0.5 and therefore it clearly reveals that parental motivation has moderate effect level on academic performance. It further shows that there is a small difference between observed data and fitted values hence

a better fitting regression model and therefore, academic performance linearly relate to parental motivation.

4.3.19.2 Analysis of Variance (ANOVA)

The one-way Analysis of Variance test was run to establish if parental involvement has no difference on academic performance. The results are presented in Table 4.14.

Table 4.14: Analysis of Variance for Pupils Means against Parental Motivation

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	56.799	1	56.799	414.689	.000[a]
	Residual	51.500	376	.137		
	Total	108.300	377			

a. Predictors: (Constant), Parental Motivation

b. Dependent Variable: Pupils Mean Score

Results in Table 4.14 show that mean square regression is greater than the mean square residuals. This means that the null hypothesis which stated that, "parental motivation does not have a significant effect on academic performance among primary school pupils in Migori County" is rejected. In addition, the p-value in the ANOVA output = .000 < .05, is smaller than the significance level (.05) set for this study to assess the null hypothesis. This means the difference between mean square regression and mean square residuals is statistically significant.

4.3.19.3 F – Statistics

The F-test of overall significance was run to establish whether academic performance linearly relate with parental motivation predictor variables. The results from the

ANOVA Table 4.14 $F\ (1,\ 376) = 414.689,\ p < 0.05$; an indication that, academic performance linearly relate with parental motivation. The assessment of the existence of linear relationship between academic performance (response variable) and parental motivation predictor, through all the model diagnostic tests, revealed that, these two variables relate linearly. Likewise, some diagnostic tests revealed more information which showed failure to uphold or validate null hypothesis which stated that parental involvement does not have significant effect on academic performance among primary school pupils of Migori County, thereby pointing to the rejection of null hypothesis. Therefore, the p-value output of the simple regression analysis between academic performance response variable, and parental motivation predictor variable, must be evaluated against significance level of 0.05 for which null hypothesis was assessed.

4.3.20 Simple Regression Analysis between Pupils Mean and Parental Motivation

A simple linear regression model was carried out to establish the model effect of parental motivation on pupils' academic mean scores. The findings are presented as shown in Table 4.15

Table 4. 15 : Regression Coefficient (Pupils Mean Score ~ Parental Motivation)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.529	.120		12.713	.000
	Parental Motivation	.637	.031	.724	20.364	.000

a. Dependent Variable: pupils mean score

Source: Field Data (2021)

Data in Table 4.15 shows that parental motivation linearly relate to academic performance. This relationship is statistically significant at p-value=.000 < .05 significant level set for assessing the null hypothesis. In which case the null hypothesis: $\mathbf{H_{01}}$ parental involvement does not have significant effect on academic performance among primary school pupils in Migori County is rejected. This simple regression model would be represented in the equation as;

Academic performance = **1.529** + **.637** (Parental motivation) + .120 (error) Where; 1.529 is the y intercept and .637 is the coefficient of parental motivation in the equation.

From the foregoing discussion, it is evident that all the model diagnostic tests revealed that there exists a linear relationship between parental motivation (predictor variable) and academic performance (outcome variable). This relationship is statistically significant at p-value = .000, < .05. Therefore, the null hypothesis which stated that parental motivation does not have a significant effect on academic performance among primary school pupils in Migori County was rejected.

4.3.20 Parents Responses on their Role in Motivating Pupils

Parents were brought on board at the tail end of quantitative data analysis of this objective. Their participation was narrowed down to those statements with which the pupils had a lot of disagreements which included parents giving pupils gifts and cash as reward for good results, parents pay school levies on time, parents attending school meetings, parents paying visits to class teachers to discuss pupils' performance, conducive environment for studies at home and parents making sure their children have completed home assignment when given by teachers. These are presented in Table 4.16 and discussed in the subsequent sections.

Table 4. 16: Parents Response during Focus Group Discussion

No	Statements	Frequency	Percentage
1	Parents give pupils gifts and cash as reward for good results.	38	95.0
2	Parents provision of text books and writing material	34	85.0
3	Parents pay school levies on time.	36	90.0
4	Parents visits and meetings.	33	82.5
5	Conducive environment for studies at home	32	80.0
6	Parents ensuring children have completed home assignment.	39	97.5
7	Parents request teachers to assist weak pupils.	37	92.5

4.3.20.1 Parents Response on Giving Pupils gifts and Cash Money when they do well in Examinations

During the focus group discussions as indicated in Table 4.16, 85% of the parents confirmed that they do not give out gifts or cash as a motivation, when their children

do well in exams. They referred to parents who are not concerned about what their children do in schools since they hardly follow the progress of their children in schools. This is what one of the parents said:

> *"We parents lack awareness and connectivity with the teachers. This is because of the low level of education from some of us parents."*

Parents testified that they normally don't follow the school programmes that include examination schedules like continuous assessment tests. The tests they know is end term and end year tests. This explains why they are not able to prepare gifts for their children when CAT results are released. Another group of parents felt that it is not appropriate to give children gifts or cash when they perform well in exams. One of the parents reported:

> *"I don't give gifts because it is just a CAT, the reason being, it is not the end of tests, meaning I still expect the child to perform well in final exam. So I just encourage the child."*

Therefore according to the parents, the end is greater than the means. Most (95%) of the parents reported that given the high levels of poverty, many of them struggle to earn a living and so even getting money to buy gifts or cash to reward their children is a big problem as indicated in Table 4.16. One participant explained:

> Most of the parents do struggle to pay school levies. They don't therefore see the reason why they should give their children gifts to perform. Moreover, some parents are just ignorant. They don't see why they should gift their children, when they themselves were not given gifts and money during their schooling days.

The participants felt that children fear talking to their parents, because some parents have no time for them. The parents are too busy to even think about their children's education. One of the participants retorted:

> Children cannot talk to their parents. About 70% of parents have no time for their children. They neither check on pupils' books when they are at home nor look into their children's well-being academically. They are less concerned to know what their children learn in schools daily. They even don't know if their children lack provisions for their studies. They just don't care at all.

To further support the observation that some parents have no time for their children, one of the parents said:

> *"Some parents are drunk most of the time. They spend most of their time drinking illicit brews in villages and so have no time to discuss issues relating to the education of their children."*

Other participants felt that giving money to children for good performance is not the best. They were of the opinion that alternative forms of motivation should be adopted. This point was echoed by a number of parents. One parent protested:

> *"mtoto huwezi kumpatia pesa. Akifanya vizuri, unampa kitu ambacho atakuwa anaona kila siku na anafurahia, kwa mfano, nunulia mtoto nguo au mchinjie kuku na atafurahia sana" (do not give the child cash money. If a child performs well give him or her a present that can last longer and keep him or her happy. A gift of a dress or a special diet can have a long lasting effect compared to cash money)."*

Another parent added that gifts can be given when children meet their targets saying:

> As a parent, if I want my child to do well in exams, I first set a target with him or her and give a promise. If the target is met, I reward with a gift but not money. That is why the child works towards improving his or her scores. Again, parents should not abuse or should not be too harsh to their children. If they do so, children would withdraw desperately.

Another parent confirmed the importance of parental motivation through rewards when he said:

> Ni vizuri kuzawadisha watoto wawe na motisha ya kufanya vizuri shuleni. Kwa mfano, mtoto wangu alinijia na kuniuliza, mama nikifanya vizuri kwa mtihani, utanipa nini? Nikamjibu, nitakununulia nguo. Mtoto alipofanya vyema, nikamununulia nguo ili wengine waone ya kwamba nimefurahi na wengine pia watie bidii masomoni". (It is important to motivate children when they perform well in school. My kid asked me, mum what will you give me if I perform well in examination? I answered, I will buy you a dress. When the kid performed well I bought her a dress for others to see and work hard as well).

4.3.20.2 Response on Provision of Text Books and Writing Material

On provision of text books, participants observed that most rural schools do not have enough books for all learners and so parents should support by buying supplementary books. Notably, parents are aware that the government disburses funds for textbooks in public schools, most of them, (85.0%) are not bothered to buy any supplementary books. The participants noted that in as much as there were parents who genuinely wanted their children to succeed in their studies, their economic status would not enable them afford extra text books for their children. A few participants also felt that the teachers are failing to advise parents accordingly on the right text books to buy. According to one of the participants:

> *"The teacher is the one who should advise the parents the right books to buy and parents will respond accordingly. So teachers should offer guidance to the parents on what to do."*

On the contrary, Migori county director of education responded that:

> Teachers are instructors and researchers as well. They must look for extra materials to supplement what the ministry provides. They should not limit their scope to just one text book. They must research elsewhere for additional information on the topics in each subject. Schools have been receiving money from the government to buy course books but they have not been doing so diligently. Each year they are supposed to buy books for each class so as to reduce the pupil-book ratio. They should be doing this by

buying different books from different publishers in each subject for each class. However, they have not been honest.

Concerning encouragements, parents supported that positive feedback improves academic performance. One participant explained:

> Ni vizuri mzazi kuangalia kazi ya mtoto akitoka shuleni. Mtoto kama ameshinda hata mtoto mmoja, mpigie makofi. Akishinda hata mmoja tena, mwambie amefanya vizuri sana. Hata akiwa mwisho, mwambie umefanya vizuri sana, tia bidii umpite huyu mwingine mbele yako. Ukiendelea hivyo kwa kila mtihani, utapata kwamba mtoto anakuwa na moyo wa bidii (it is important to check your child's school work daily." (If he/she has improved however small the distance, clap him or her. If they beat another one, tell them you have performed well. Should he or she be last in examination, still encourage them and say, you have done well but try beat at least one. Through this kind of encouragement, you will find that the child improves.)

4.3.20.3 Response on Payment of Extra Levies in School

Although basic education is free in Kenya, some schools charge the parents little levies at least each term, to supplement what the government gives. When respondents were asked how such levies affect the learning processes in schools, most of them said they were unable to pay the levies due to poverty. From Table 4.16, the findings showed that at least 90.0% of parents even went ahead to say that they cannot pay any levies since the government gives tuition money to schools. One of the respondents revealed:

> *"We trust local leaders, who tell us in rallies and public forums that the government gives schools enough money but teachers are misusing the money for their own well-being but not for the benefit of the schools."*

To further support this assertion, another parent reiterated:

> In most government schools, parents know that basic education is free, however, there are many things the government does not provide to schools

> and pupils. Out of ignorance, some parents do not know about this. They feel that teachers are out to swindle money from them and use for personal gain. Therefore, there should be meetings between teachers and parents, so as to sensitize them on the importance of such payment. Otherwise, their children are likely to suffer from the consequences of non-compliance resulting from the standoff between their parents and the school.

Lack of trust between couples in families was also cited as a major obstacle to paying school levies. In some cases, mothers are left with the burden of taking care of the education needs of their children. According to the respondents, some of the parents have adopted the 'I don't care' attitude towards the education of their children. Likewise, laziness was also put forward by the respondents as a reason as to why some parents fail to attend important meetings where important decisions are made and ratified. Decisions such as paying extra levies outside government funding are usually proposed and discussed during such meetings. However, the parents who do not attend the meetings are often the first to complain and turn against any decisions involving parents paying extra school levies. Parents do not know that payment of such monies increases learners' self-esteem and improves performance because their learning is not interfered by being sent home.

The County Director of Education however, felt that some teachers have commercialized so many things in schools including internal exams, which teachers can just set and write on the chalk board for pupils to take. He said:

> The constitution makes it compulsory that all children must go to school. Teachers have commercialized exams. They even buy exam papers which they administer as CATs. Some of these papers bought are not standardized. They sometimes lack content validity since some questions are set from topics which the pupils have not covered. The Ministry of Education is in the

process of reviewing free primary education to see if capitation fees per child can be increased.

4.3.20.4 Response on Visits and Meetings

Majority of parents, 82.5% confirmed their role of visiting class teachers to enhance performance. One participant said:

> *"Wazazi tuwajibike kwa kumtembelea mwalimu wa darasa wa mtoto wako ili kujadili uwezo wa mwanafunzi na maendeleo yake darasani" (Parents let's be responsible by visiting the class teacher of the child to discuss the ability of the child and his or her ability in the class)*

Most of the respondents observed that some parents do not visit class teachers because, they are negligent and think it is the teachers' responsibility to take care of their children and guide them towards academic excellence. In addition, they observed that some parents lack confidence in themselves either because they did not complete their education or did not go to school at all. So they suffer from inferiority complex for they can neither communicate effectively in Kiswahili nor English.

Further, it was noted by most of the respondents 82.5% that the parents with huge fees balance as well as those who have not paid extra school levies are the ones who fear visiting teachers in schools to check on the progress of their children. Moreover, some of them do this as a way of evading their obligation to pay such levies. Distance from school was also put forward as a reason preventing some parents from visiting teachers. Respondents felt that a few parents who come from far normally do not see the need to make such visits. Besides, age was also cited by some of the respondents as a barrier to visiting teachers in schools so as to get updates on their children's progress. Lastly, some of the respondents observed that parents in some

cases do not visit teachers because their children are reluctant to see them visit teachers in their schools' probably because of their poor performance.

Parents visiting children at school to check their progress is an important parental motivation that enables parents to assess learners' academic performance. For some reasons, some parents fail to understand their children's ability. They are sometimes harsh to their children when discussing their performance. Positive feedback should be the main purpose of parents' visit to check on the children's progress. They should understand that children learn differently, therefore they should play their part of provision, encouragement, giving incentives and let children learn freely and at own pace. According to the respondents, ignorance also plays a big role in some parents' reluctance to visit class teachers for updates on their children's academic progress. The respondents opined that lack of education makes some parents attach no value to the education of their children. One of the respondents said:

> Such parents just send their children to schools because it is the trend everywhere in villages. Since they do not value education, they don't even check their children's work after school. To them, education should just happen. I think parents must take responsibility and develop interest in what their children do while in schools. This is the only way through which parents will know about their children's academic progress in school.

Tight work schedules and busy programs each week was also cited as another reason why some parents do not visit class teachers to get updates on their children's academic progress. Participants observed that, some parents attach too much time on their daily hustles and work that they have little or no time to visit teachers in schools so as to follow up on their children's academic performance. It was further observed that school meetings were not well attended because poverty pushes some parents

from attending school meetings, given that they survive from hand to mouth, they prefer working to source for their basic needs to attending school meetings. One of the parents reported:

> *"Some parents are just lazy or have a negative attitude. They see no need to attend parents meetings in schools arguing that it is a waste of time. Besides, some value their work more than attending school meetings."*

According to the respondents, some parents avoid incurring expenses such as using money to travel to school meetings, pay school fees and buy the children things like snacks, milk and fruits. Participants observed that schools usually have very high expectations from parents during such meetings. On such days, parents are expected to clear fee balances that they owe the school. Those who are unable to clear the huge balances deliberately avoid attending the meetings. This position was supported by one of the respondents who revealed that:

> Some parents fear attending school meetings because they have not paid the required school levies. Such parents usually ask their children to lie to their teachers that their parents are not at home, because they know that if they attend the meetings, they will be asked to pay what the owe the school.

Some of the respondents argued that they were never visited in schools, during their school days. They also cited that their parents did not attend school meetings and so they do not see any value in attending meetings. From the FGDs, it emerged that most parents lack role models in the society whom they can emulate. Besides, some schools lack clear guidelines on how to handle parents and children whose parents fail to attend such meetings. Some respondents suggested that punitive measures like sending their children back home should be used. Reason being, it has the potential to make parents change their attitude on visiting schools. This suggestion is

diametrically opposed to the government policy on school attendance. Therefore, parents should be sensitized to actively participate in their children's education by attending school meetings where they meet other stakeholders and discuss important issues of the school.

The respondents further cited poor communication channels between parents and teachers as a major hindrance to parents attending the school meetings. Therefore, messaging mechanisms should improve to ensure parents are involved in decision making in schools. In the opinion of participants, attendance of school meetings by the parents should be mandatory. Finally, the respondents were of the view that when schools perform well in national examinations, parents are motivated to attend school meetings. This will further create close attachment between parents and the school. One participant stressed that:

> *"Wazazi tunafaa tufike shuleni pindi tuitwapo kuhudhuria mikutano ili kujadili maswala muhimu kwa manufaa ya shule na wanafunzi. (As parents, we should come to school whenever we are called to attend meetings to discuss issues that pertains to pupils' welfare in school."*

On his part, the county director of education observed that most parents do not know their role in education. He said:

> For most parents, sending children to schools is all that matters. This is mainly because some of the parents lack basic education or are just ignorant. Seminars should be organized by churches to help sensitize the parents on the value of attending school meeting to discuss the progress of their children with the teachers. In some cases, those who attend meetings in schools are not the real parents of the learners. As a government, we shall always try to make parents understand that they have a role to play in the academic progress of their learners.

4.3.23.5 Provision of Conducive Home Environment as a Motivating Factor

While conducive environment supports pupils' learning, 80.0% of the parents' participants observed that some pupils are disadvantaged when they leave school for their homes since they lack a conducive environment for their studies. Participants observed that girls were the most affected. Their mothers leave them with the responsibility of doing the entire house chores when they get back home in the evening. Boys too have their share of chores to be done. Some of them are left to take care of cattle when back at home. This was aptly captured by one of the participants who reported that:

> *"Once children return from schools, their parents leave all responsibilities of looking after cattle, house chores such as fetching water, fetching firewood and cooking. So children have very little time left for studies and this is usually before retiring to bed."*

Further, another participant observed that:

> *"Some parents take advantage of their children being at home, and so they see it as an opportunity for them to rest from daily activities. They abandon all the work at home to their children."*

In addition another participant observed that:

> *"Wazazi tupunguze majukumu tunayowapa watoto pindi watokapo shuleni ili kuwatengezea mazingira mazuri ya kujisomea wakiwa nyumbani" (Parents let's reduce responsibilities we are giving children when they are from school so that we create for them a conducive environment for self- study while at home)*

The participants observed that some parents also engage children in selling goods and merchandize to provide for the family. This behavior has transformed children into hawkers who sell on behalf of the family. They are make to run small business for their families when at home. This denies them adequate time for study. Participants observed that, some parents are very careless, irresponsible, insensitive

and inconsiderate. They do not provide their children with light to help them study when at home. However, they allow their children a lot of time to watch TV programs at the expense of studies. They do not even care about what their children are watching. One of the participants said:

> *"Some parents do not monitor the movements and behaviors of their children when at home, so some children, for example girls, end up being pregnant. Boys also do get involved in criminal activities due to bad peer influence."*

This was also reinforced by another participant who observed that;

> *"Some children don't like education and going to school generally and so when they close schools, they feel like they are out of jail."*

The participants reported that such children can only be helped by their parents when they become strict with them while at home. Parents therefore need to team up with teachers at school to help learners to get engaged, empowered and ethical citizens as per the CBC's vision for the 21st century for learners.

4.3.23.6 Ensuring Pupils Complete Home Assignments

From further analysis during the focus group discussions, most of the respondents, 97.5%, observed that some parents either did not attend school or did not complete studies. Therefore, they are limited on what to tell their children as far as education, learning and assignments are concerned. Further, some of the respondents opined that a few parents always use fatigue as an excuse for not making follow up on their children's compliance in doing assignments. To support this finding, one of the respondents said:

> *"True, when the child is given assignment, even me, I rarely follow up or check at all whether my child has completed the assignments."*

Rather than help their children with assignments, it was observed that some parents are always busy watching television. By the time the parents are done with the watching, the children are already tired and sleepy. There are a few parents –who smoke tobacco- with a lot of carelessness. They pluck out pages from learners' books so as to make rolls of cigarettes which they smoke.

The respondents further observed that some parents are very busy at work to the extent that they leave the children with house helps, most of whom are illiterate and cannot help the children with their assignments. It was also noted that, some children who are either lazy or weak in some subjects do not want their parents to check their homework. One of the respondents said:

> *"There are some children who do not want parents to see their homework. Even when you ask them if they were given assignments, they deny. Some of them even hide their books from parents."*

It was observed that a good number of parents do not bother about their children's homework. As a result most pupils fail to do them immediately they step out of school compounds. It is therefore important that parents encourage their children to do assignments while at home so as to make them feel cared for as was finalized by one participant:

> *"Ni jukumu la mzazi kuangalia kazi la ziada ya mtoto pindi anapotoka shuleni na kuhakikisha kuwa mtoto amefanya kazi aliyopewa na mwalimu kwa usahihi" (It is the responsibility of a parent to check the homework assignment for his or her child given at school. It is his or her duty to ensure that the child does the work he or she was given by the teacher effectively.)*

Parental involvement in ensuring that the child has done homework makes it easier for the teachers to monitor the learners' behaviour particularly of laziness and assist

them in good time. The blame game would be minimized and the learner would take studies seriously.

4.3.23.7 Parents Request Teachers Assist weak pupils in Class

Remedial lessons for weak or slow learners are sometimes encouraged because the teacher engages the child one on one. Most of our Kenyan primary schools are over enrolled and therefore difficult for teachers to cater for every learner's individual needs. Parents need to be aware that tuition is a booster to slow learners and if well taken, it impacts positively on the child's academic progress. It was further observed that some parents in some schools do not care and they are not motivated at all to engage teachers to assist their children in areas where they are weak. From the results in Table 4.16, it emerged that most respondents, 92.5% felt that, for some parents, education is not a priority hence the idea of requesting or approaching teachers to assist their children on subjects where the children are weak is a total waste of time. In the opinion of some participants, some parents fear going to schools to present their request to teachers due to ignorance.

From the foregoing discussions, it is evident that parents of Migori County Motivate pupils to improve in academic performance. The correlation matrix results presented in Table 4.8, indicated that there was a weak positive correlation between provision factors and pupils' mean scores, which was statistically significant ($r = .153^{**}$, $n = 376$, $p = .003$). These findings are in consonance with that of Akhtar et al. (2020) in Pakistan and Jeruto (2018) in Kenya who established that parental provisions positively influenced the teaching and learning outcomes of children. This finding

corroborates with that of Echaune, Ndiku and Sang (2015) who also established that in Busia County, Kenya, lunch program was among the factors that contributed to good school performance. When the basic needs of pupils are catered for, their level of concentration in class and overall good health improves academic performance. The reason for similarity of findings could be that both studies examined lunch program as a parental provision factor that improves academic performance.

The findings showed that parents in Migori County provide pupils with the required text books and writing materials. These findings are supported by the study of Jeruto (2018) in Kenya and Akhtar et al (2020) in Pakistan who established that provision of adequate learning materials by parents positively influenced the teaching and learning process. However, some parents do not buy any supplementary books for their children. When children are facilitated with the relevant learning materials and put them into good use, they will most likely improve their academic performance. This observation is not supported by Echaune et al. (2015) who confirmed that in Kenya, parental involvement in the provision of supplementary reading materials does not have a significant relationship with school academic performance among public primary schools in Busia County.

It was also evident that if parents fail to pay extra levies in good time, pupils are likely to stay home for a long time looking for such monies and in the process miss many lessons which may affect their academic performance. Due to high poverty levels, many parents in Migori County struggle to pay extra levies. These findings are supported by the findings of Wainaina, Rugar and Ndiritu (2016) who ascertained

that in Kenya, the fees and levies charged, to a high extent contributed to poor performance in class work assignments among secondary school students. Principals and Head teachers send learners at home, which affects their class attendance, assignment completion or even lead to school dropout. The current study confirmed that in Migori County, parents embrace payment of extra levies to avoid frequenting of their children to their homes to look for these monies. The government, however, should consider increasing capitation in schools.

The finding that parents in Migori County always provided a conducive learning environment at home for their children's studies corroborates with that of Muola (2010) who found a positive relationship between home environmental factors and academic achievement motivation among standard eight pupils in Machakos, Kenya. The findings of the current study concurs with the findings of Muola (2010) probably because both considered home environment as a parental factor that contributes to children's learning. An unconducive home environment such as study room with television, radios or home theatre playing loud music, noisy home environment and heavy house chores among others may impact negatively on the learners' performance. For this reason, it is important that parents provide a conducive home environment to enable children do personal studies and revision comfortably.

The correlation matrix results in Table 4.10, revealed that there was a weak positive correlation between rewards factor and pupils mean score which was statistically significant ($r = .108^*$, $n = 378$, $p = .035$). From the results, it is evident that the rewards factor - I am given gifts or cash money by my parents when I do well in

examinations had significant influence on academic performance of the pupils. This finding agrees with that of Akhtar, Ahmad and Saifi (2020) who established that in Pakistan, parents give prize on their children's success in examination as a way of motivation. The findings concurred because the reviewed study and the current study researched on the parental motivation through rewards for good performance. Also the research tool used to collect data in the current study and the study by Akhtar et al (2020) were similar. Therefore parents need to be sensitized that appreciating their children's performance motivates them to perform better in class and incentives should be looked at as a way of encouraging learners but not as a bribe.

Results in Table 4.9 indicated a weak positive correlation between encouragement factors and pupils mean score, which was statistically significant ($r = .186^{**}$, $n = 378$, $p = .000$). The findings that positive and encouraging remarks of parents to their children are likely to enhance improvement of children in their exams corresponds to that of Kgosidialwa (2010) in South Africa who established that parents believed in verbal encouragement to motivate learners. However Muola (2010) established that in Kenya, parental encouragement was the only factor that was not significantly related to academic achievement motivation. The current study concurred with that of Kgosidialwa (2010) because data collection tools in both studies researched on verbal encouragement as a motivating factor to learners. As mentioned by some parents during FGD, some parents constantly encourage their children for any slight improvement in class. A parent's positive attitude towards learning reflects itself in the words they use when a child performs better or worse. Encouragement is not costly like material rewards therefore parents should embrace encouragement as a

way of motivating learners. The findings of Muola (2010) however differed with the current study because Muola's study focused on encouragement, parents' occupation, Education, family size, learning facilities at home which were not closely related to verbal encouragement. In case a parent's occupation draws a lot of income or the family size is small, a learner may not comprehend why a parent should use verbal encouragement instead of giving him or her a material gift.

In addition, discipline is an important factor to learners in Migori County because activities carried out on the Kenya-Tanzanian border such as Boda boda, money exchange and fishing can easily lead to school dropouts, if the learners are not disciplined and focused. The findings also revealed that children in Migori County appreciate the high standards of discipline at home set by their parents because they are likely to improve in their academic performance. This finding is supported by Simba, Agak and Kabuka (2016) in Kenya who showed that increase in discipline has corresponding increase in academic performance. Also Akhtar, Ahmad and Saifi (2020) in Pakistan found out that parents focusing on their children's character building improved academic performance. The two studies concurred with the current study because they focused on parental involvement in character and behaviour formation. The data collection instrument measured discipline and its effect on academic performance.

It was further found that pupils are motivated to do well in examination every time their parents appreciate and praise them for their good performance. This finding corresponds with that of Lee et al. (2016) who espoused that in South Korea, when

parents praise was slightly embraced but not majorly overstated it had some beneficial effect on children's school work. Generally, from the human behavior perspective, people will always respond well to praise and appreciation stimuli that makes them feel good when they are appreciated and praised for what they do or for what they have achieved in life or a given task. Similarly, pupils also feel motivated when they are praised mostly by their parents hence are encouraged to do much better in subsequent examinations. However, the praise and appreciation should be done in a balance not be overdone. If it is overdone, it becomes superfluous and eventually ineffective and thus failing to serve as a stimulus for improving academic performance. Parents should therefore use praise to appreciate their children's performance to a reasonable degree.

Finally, it was clear that most parents in Migori County always make sure that their children complete school assignments from their teachers. It is important that parents encourage their children to do assignment while at home so as to make them feel cared for. Parental involvement in ensuring that the child has done homework makes it easier for the teachers to monitor the learners' behavior particularly of laziness and assist them in good time. This finding corresponds with that of Mudibo (2014) which established that students whose parents check on their homework rated their performance as good compared to those whose parents did not check their work.

The parents checking on pupils' progress by visiting schools is very crucial since it enables them to keep track of their children's performance so as to address the need for remedial programme. The correlation matrix results in Table 4.11, indicated that

there was no correlation between visit factors and pupils mean score. The result was not statistically significant ($r = .056$, $n = 378$, $p = .275$). The results from correlations correspond with that of Kgosidialwa's (2010) in South Africa and Mudibo (2014) in Kenya who established that school visits were not associated with good academic performance. This could also be as a result of issues pointed out during FGD that parents are ignorant, fear to be asked about school fee balances and taking school visits as women's work among others. Both parents therefore should take the education of their children as their responsibility but not as a one parent's work. This finding however, is not supported by Jeruto (2018) who avers that the teachers in Bomet Kenya, advised parents on the progress of their students' academic achievement on monthly basis in their schools enabling the parents' regular visits that improved students' academic achievement. Akhtar et al. (2020) in Pakistan also confirmed that parents talked with teachers about difficulties of students at school. Mudibo (2014) attributed students' good performance to parents attending school meetings and academic clinics in Magarini Sub-county schools, Kenya.

The findings in Table 4.13 indicated that parental motivation as a predictor variable explained 52% of variation in academic performance. This implies that parental motivation accounts for a significant variance in academic performance. It further shows that academic performance linearly relate with parental motivation. Therefore, the null hypothesis which stated that parental motivation does not have a significant effect on academic performance among primary school pupils in Migori County was rejected.

These findings concurs with those of Omar et al. (2017); Rafiq et al. (2013); Akhtar et al. (2020); Mudibo (2014); Muola (2010) who established that there was a positive significant relationship between parental motivation and student's achievement. It also confirms the conceptual framework which shows that when parents motivate their children in education then they are likely to obtain improved performance in their academic performance. The findings also qualifies that parental engagement and empowerment (PEE) is indeed an important guiding principle in education and learning as espoused in the Basic Education Framework (BEF) of Kenya's new CBC involvement of parents contributes greatly to holistic development of learners. Parents empower learners with provisions, encouragements and reward which are key for higher academic performance. The study findings however differ with that of Osei-Akoto et al. (2012); Koskei (2014) whose findings showed that parental motivation has no significance relationship with academic performance. Probably because parents in Migori County have taken their role of motivating learners to a higher extent than parents in Ghana and Nakuru County respectfully.

4.4 Achievement Goals and Pupils Academic Performance

The second objective of the study was to establish the extent to which achievement goals predict academic performance of primary school pupils in Migori County. Achievement goals had 12 factors likely to influence its overall prediction strength on academic performance. These factors were put up in a questionnaire in the form of statements which respondents were required to answer either by 'strongly agree', 'agree', 'undecided', 'disagree', or 'strongly disagree'. This was the same set up for the teachers' questionnaire with a little change, but the overall objective maintained.

The analysis of the results for this objective was done in two parts beginning with descriptive statistics which basically concentrated on the opinion of the respondents about each statement followed by the inferential statistics which deeply looked into the statistical influence or effect of achievement goals on academic performance.

4.4.1 Mastery of Subjects Taught

For the first item, respondents were asked if they aim to master everything taught in every subject in class. The results are presented in Table 4.17.

Table 4. 17: Responses about pupils' mastery of subject content

	Pupils		**Teachers**	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	-	-	1	1.6
Disagree	7	1.9	7	11.7
Not decided	11	2.9	6	10.0
Agree	138	36.3	34	56.7
Strongly agree	224	58.9	12	20.0
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

Results in Table 4.17 show that a larger percentage of the respondents 95.2%, agreed with the statement that they aim to master everything taught in every subject in class. Only 1.9% of the pupils disagreed with this statement and 2.9% were undecided. Moreover, 76.7% of the teachers affirmed their approval of the statement by saying their learners aim to master the contents of the topic taught while 13.3% of the

teachers disagreed with the statement. The fewest number of respondents, that is 10%, were undecided. From the findings it is evident that most pupils aim to master content of every topic and sub topic taught in every subject. When teachers teach in class, focused pupils aim to get the content of the topic taught because topics are linked or related and they cut across all subjects taught at primary school level. Therefore a learner who concentrates to master the content taught gains deeper knowledge for easy application in other subjects and in Examinations. The conceptual frame work showed that learners who are well motivated strive to master difficult tasks to enable them achieves higher goals or excellent scores.

4.4.2 Pupils aim to Score High in Examinations

To establish whether pupils' aim was to score high in exams, respondents were asked if they aim to get excellent scores in class examinations. The results are presented in Table 4.18.

Table 4. 18: Responses about pupils' targeting high score in exams

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	1	0.3	-	-
Disagree	1	0.3	-	-
Not decided	2	0.5	3	5.0
Agree	61	16.0	39	65.0
Strongly agree	315	82.9	18	30.0
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

Results indicated in Table 4.18 show that an overwhelming majority of the pupils accounting for 98.9% approved the statement that they aim to get excellent scores in class examinations. Whereas 0.6% disagreed with the statement, 0.5% were undecided. This statement was supported by 95% of teachers when they said that it is important for our learners to get excellent scores in examination but 5% were undecided. The drive and passion to pass highly in examinations is likely to make pupils set goals and targets they aim to achieve in exams. This is a performance goal where the learner concentrate on what would enable him or her score high in examinations such as use of past papers and memorization. Such learners may not gain deeper knowledge because passing of exams may be in itself an achievement. The KCPE examination is meant to place standard eight learners in secondary school which is determined by the excellent or high scores as indicated on the conceptual frame work. Those who score between 400 and 500 marks have the possibility of joining national schools and those who score between 350 and 399 marks are likely to join extra county secondary schools. Excellent performance in examination seems to be the main aim of standard eight pupils.

4.4.3 Pupils Set Targets to Understand Subject Content

The study also targeted to know if pupils set targets to understand subject content. Respondents were asked if they set goals in class to learn as much content as they can so as to gain more knowledge. The results are presented in Figure 4.8.

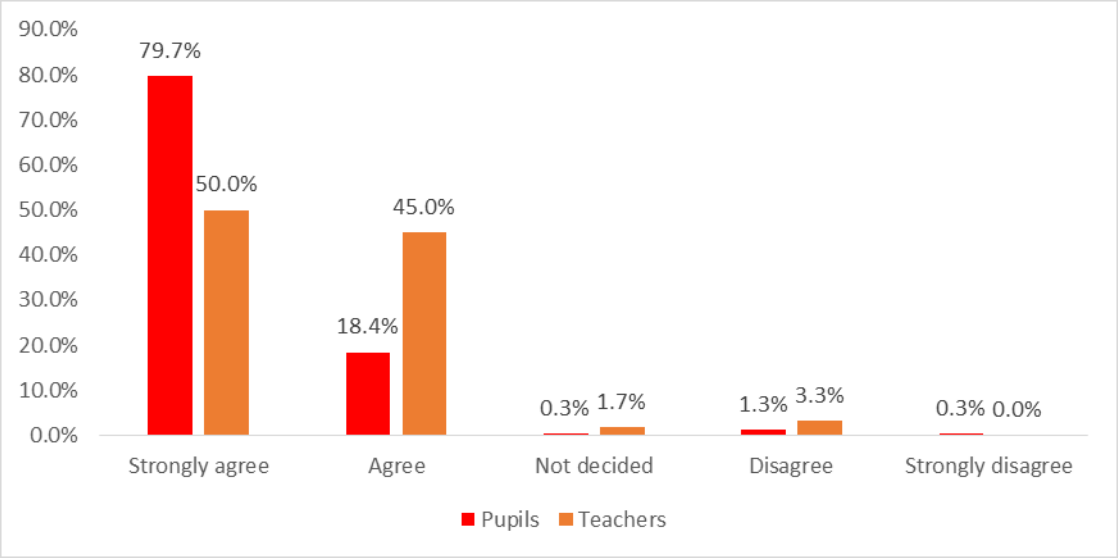

Figure 4.8: Responses about Pupils Studying Much to Gain More from Subjects
Source: Field Data (2021)

From Figure 4.8, it is clear that most of the pupils accounting for 98.1% that they set goals in class to learn as much content as they can so as to gain more knowledge with 1.6% disagreeing and 0.3% undecided respectively. On the other hand, 95% of the teachers agreed with the statement while 3.3% disagreed and 1.7% were undecided. Setting targets to understand what is being taught in class is the desire of every pupil. The learner's quest for knowledge is an indication that they have the zeal to pass in their examinations. This mastery goal assists learners not only to pass exams but also to understand what is taught. This level of learning enables learners to handle difficult questions especially those on synthesis or analysis because the knowledge gained here is deeper than that of memorization.

4.4.4 Pupils Aim to Outperform Classmates in Class

It was also important to establish whether pupils aimed to outperform counterparts in class. Therefore respondents were asked if their focus is on outperforming other pupils in their class. The results are presented in Figure 4.9.

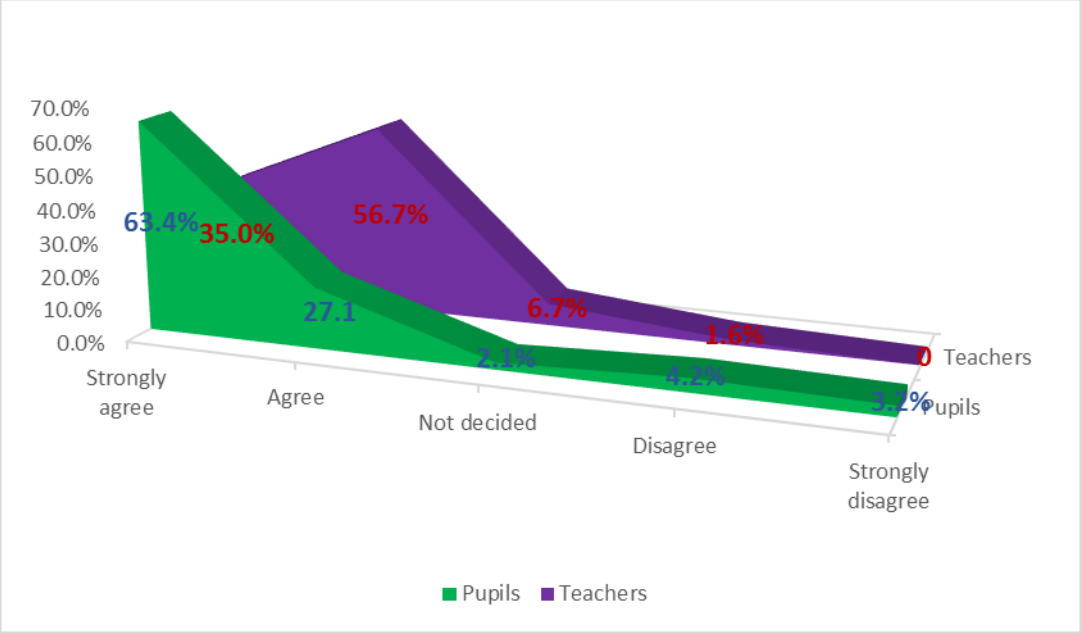

Figure 4.9: Responses about Pupils Aiming to Outperform Classmates

Source: Field Data (2021)

From Figure 4.9, it is evident that most of the pupils accounting for 90.5% affirmed that their focus is on outperforming other pupils in their class. Whereas 7.4% of them disagreed with the statement, 2.1% were undecided. On the other hand, most of the teachers accounting for 91.7% approved the statement while 1.6% of them disagreed and 6.7% were not decided. Having healthy competition among pupils in exams is a way of excelling in academic performance for it motivates pupils into seeking high grades in examinations. Pupils focus more on improving on their previous scores.

4.4.5 Pupils Understanding Class Work is what is Important to them

Further findings on importance of understanding of class work by pupils were sought. Respondents were asked if understanding how to do the work in class is very important for them. The results are presented in Table 4.19.

Table 4. 19: Responses about pupils' understanding work in class

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	3	0.8	-	-
Disagree	8	2.1	2	3.3
Not decided	5	1.3	5	5.1
Agree	97	25.5	35	58.3
Strongly agree	267	70.3	20	33.3
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

Data in Table 4.19 shows that most of the pupils accounting for 95% of the pupils agreed with the statement that understanding how to do the work in class is very important for them while 2.9% did not agree. Only 5% of them were undecided. Likewise, majority of the teachers accounting for 91.6% supported this by saying that understanding how to do work in class is very important for their learners. Those who disagreed accounted for 3.3% while 5.1% were undecided .In most cases teachers give learners class work after every lesson, and so it is very important that each pupil understands how to go about every class activity given to them by the

teachers. This is a very important mastery goal which pupils must strive to achieve, for it shapes how they finally perform in exams.

4.4.6 Pupils Aim to Perform Better than Classmates Each Term

Pupils' aim to perform better than classmates each term was also important to goal achievement in the study. Therefore, respondents were asked if their goal each term is to perform better than their classmates. The results are presented in Table 4.20.

Table 4.20: Responses about Pupils' Competing in Class

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	4	1.1	-	-
Disagree	16	4.2	1	1.7
Not decided	6	1.5	5	8.3
Agree	99	26.1	30	50.0
Strongly agree	255	67.1	24	40.0
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

Results presented in Table 4.20 reveal that most of the pupils accounting for 93.2% agreed with the statement that their goals each term is to perform better than their classmates with only 5.3% of them disagreeing and 1.5% undecided. Majority of the teachers accounting for 90% affirmed the statement while only 1.7% of them disagreed and 8.3% were undecided. Healthy competition among pupils keep them on toes. It encourages academic discipline, better time management, learning by discovery and concentration among the learners.

4.4.7 Pupils Aim at Learning New Ideas

The respondents were also asked if their purpose for doing their class work is to learn new things. The results are presented in Table 4.21

Table 4. 21: Responses about pupils trying to learn new ideas by doing classwork

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	9	2.4	1	1.7
Disagree	19	5.0	2	3.3
Not decided	6	1.6	2	3.3
Agree	124	32.6	31	51.7
Strongly agree	222	58.4	24	40.0
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

Results in Table 4.21 show that most of the pupils accounting for 91% approved the statement that the purpose of them doing their class work is because they like to learn new things. Only 7.4% did not agree with the statement while 1.6% were undecided. Most of the teachers accounting for 91.7% supported the statement by saying that the main reason why their pupils do their class work is because they like to learn new ideas. Whereas 5% did not agree with the statement, 3.3% were undecided. Education is about learning from known to unknown. It involves learning new concepts hence gaining new knowledge, skills and attitudes that enables the learner to adjust to their environment

4.4.8 Improve Overall Marks in KCPE

Further findings on improvement in overall KCPE were sought. The respondents were asked if the most important thing for them right now is improving their overall marks in KCPE. The results are presented in Figure 4.10.

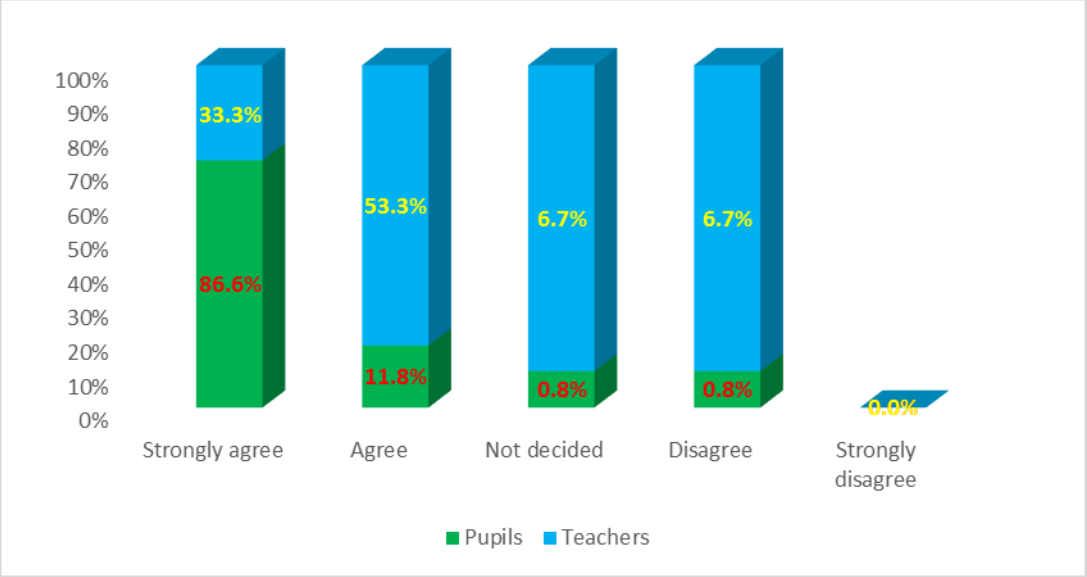

Figure 4.10: Responses about Pupils Improving Marks in KCPE

Source: Field Data (2021)

From Figure 4.10, results show that most of the pupils accounting for 98.4% agreed with the statement that the most important thing for them right now is improving their overall marks in KCPE. Whereas 0.8% of the pupils disagree, a similar percentage was undecided. Most of the teachers accounting for 86.6% supported this statement by emphasizing that pupils in their classes generally feel they can improve their overall performance in KCPE. Whereas 6.7% of them disagreed, another 6.7% were undecided. From the results, it is clear that all other set goals are geared towards improving the overall marks in final national examination. For a standard eight pupil, to join a secondary school, be it national, extra county, county or sub-

county school is determined by the overall marks in KCPE. This performance goal is the final stepping stone or bridge for primary education to high performing or low performing secondary school. This is very important to all learners especially those in standard eight.

4.4.9 Pupils Reading Class Notes to Master Content Taught

Another important aspect of goals achievement was pupils reading class notes to master content taught. Respondents were therefore asked if they always make efforts to read their class notes to help them master the content taught. Figure 4.11 presents the results.

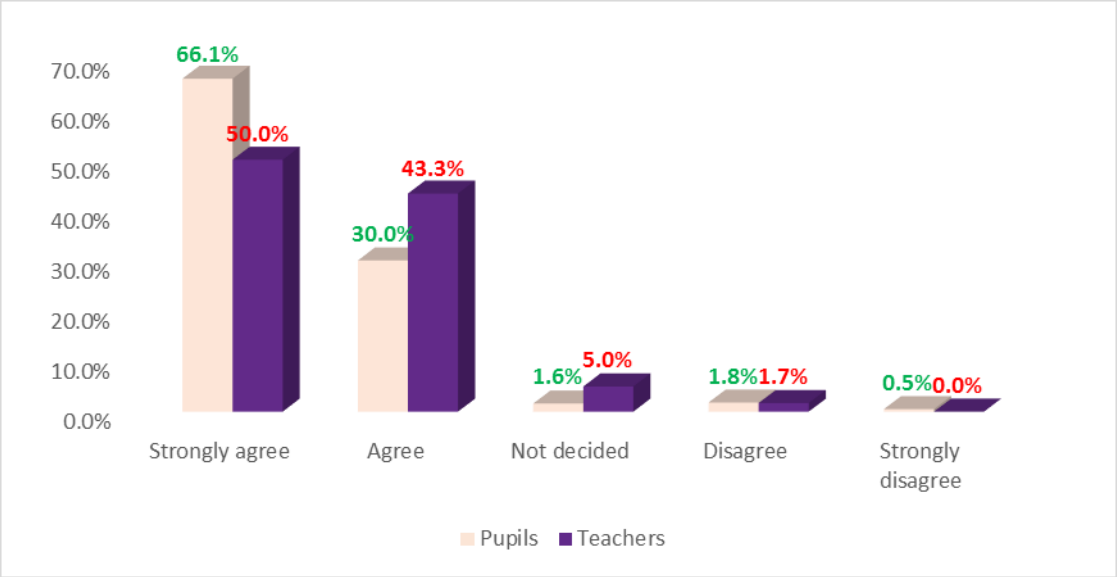

Figure 4.11: About Pupils Reading Class Notes to Master Content

Source: Field Data (2021)

Results in Figure 4.11 reveal that most of the students accounting for 96.1% affirmed their agreement with the statement that they always make efforts to read their class notes to help them master the content taught while 2.3% of them disagreed. Only

1.6% were undecided. Most of the teachers accounting for 93.3% affirmed that their pupils always make effort to read class notes to help them master the content taught. Whereas 1.7% disagreed, 5.0% were undecided. At primary school level, teachers summarize the topic content as notes for learners to revise at their own time. Notes given are an added advantage because not all pupils may access text books. Teachers' notes are a way of bringing all learners in the classroom at the same level where all can access the topics' content. Reading or revising these class notes depends on the individual's effort.

4.4.10 Pupils Target to Join the National or Extra County Secondary Schools

Analysis was sought on pupils target to join the best secondary schools. Respondents were asked if their aim of study is to join national or extra county schools. The results are presented in Table 4.22.

Table 4. 22: Responses about pupils aiming to join national or extra county schools

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	1	0.3	-	-
Disagree	7	1.7	-	-
Not decided	5	1.3	2	3.3
Agree	59	15.6	34	56.7
Strongly agree	308	81.1	24	40.0
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

From Table 4.22, it is evident that most of the pupils accounting for 96.7% agreed with the statement that their aim of study is to join national or extra county schools while only 2% felt otherwise and 1.3% were undecided. Teachers also felt that learners target to join good secondary school with majority of them accounting for 96.7% affirming that their learners aim to join national or extra county secondary schools. Only 3.3% of them were undecided. Generally speaking, most pupils aim to score high marks in exams which eventually propel them to the best national schools or extra county schools in the country. This desire inevitably drives them to set high targets of scoring high marks in KCPE exams.

4.4.11 Preference for Challenging Topics which Promote Critical Thinking

Respondents were asked if they prefer topics that really challenge them to critically think and to understand the subject well. Table 4.23 presents the results.

Table 4.23: Responses about pupils preferring challenging topics

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	4	1.1	-	-
Disagree	9	2.4	1	1.7
Not decided	5	1.3	2	3.3
Agree	119	31.3	29	48.3
Strongly agree	243	63.9	28	46.7
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

Data presented in Table 4.23 shows that most of the pupils accounting for 95.2% affirmed that they prefer topics that really challenge them to critically think and to understand the subject well. Whereas 3.5% of them disagreed with the statement, 1.3% were undecided. Almost the same proportion of teachers accounting for 95% supported the statement by saying that their pupils prefer topics that really challenge them to understand the subject well. On the contrary, 1.7% of the teachers disagreed with the statement while 3.3% were undecided. This mastery goal is in line with career selection. Challenging topics and difficult tasks challenge high achievers who strive to do what most learners would avoid. For instance, learners who aspire to be medical practitioners will have the determination to struggle to get any content that is in line with this profession. Same applies to those who want to be engineers and lawyers. Difficult tasks instil confidence, steers pupil critical thinking capacities that is essential for academic problem solving, using the 21st Century skills like digital literacy among others.

4.4.12 Pupils Aspiration to Complete University Education

Findings on university completion were also sought. The respondents were asked if they aspire to complete university education. The results are presented in Figure 4.12.

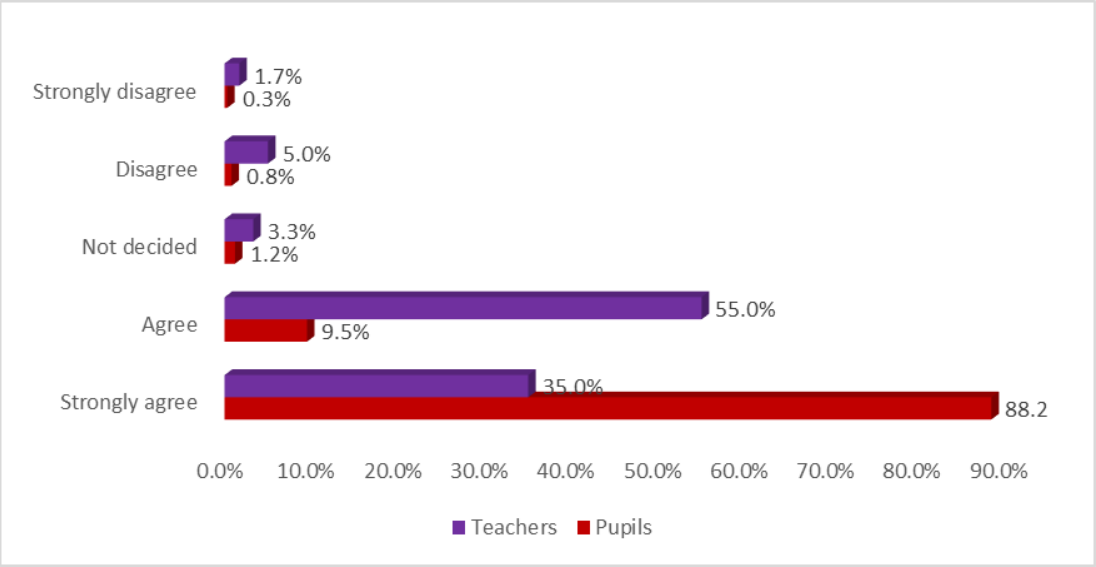

Figure 4.12: Responses on Pupils' Aspirations to Complete University Education

Source: Field Data (2021)

From Figure 4.12, results show that most of the pupils accounting for 97.7% affirmed that they aspire to complete university education while only 1.1% of them felt otherwise and 1.2% were undecided. On the other hand, most of the teachers accounting for 90% approved that many pupils aspire to complete university education while only 6.7% disagreeing with the statement and 3.3% were undecided. The 8-4-4 education system prepares a child's learning for eight years in primary school; at this level learners are given KCPE examinations for secondary school placement. Majority of learners make it to secondary school, some join vocational training colleges and others drop out of the system completely. At the end of the 2nd level of learning that is secondary school, learners are again examined for placement into the university or tertiary colleges. At this level, majority don't make it to the universities because of the high cutoff points which is currently (C+) in Kenya.

Therefore all learners work hard in standard eight with great determination to get into good secondary schools which can enable them successfully complete the course at the University. Good secondary schools are an assurance to learners to the next step of their learning.

4.4.13 Achievement Goals Factors Summary

Achievement goals had 12 factors upon which its effect on pupils' academic performance was evaluated. Individually or collectively, these factors to some extent were meant to contribute on the overall significance of achievement goals predictor in influencing or improving pupils' academic performance. The specific objective from this construct was to establish the extent to which achievement goals predict academic performance among primary school pupils in Migori County. From this, 12 questions in the form of statements measured on a five point Likert scale were framed and asked to a sample of 380 pupils and 60 teachers. The descriptive statistics results presented in form of frequency tables, percentages, bar graphs, column graphs, pie charts, area graphs and line graphs, all indicated strong approval for this objective as put forward in a number of factor statements. However, these approvals are just but opinions of the pupils and teachers who responded in one way or the other. So, to confirm the statistical significance of these approvals that; achievement goals predict pupils' academic performance, a number of inferential statistics tests were run and their results plus interpretations leading to either validation or rejection of descriptive results, alongside null hypothesis. The 12 achievement goals factors were grouped into two clusters namely, performance goals and mastery goals. These

clusters and their combined factors have influence on academic performance as discussed in the subsequent section.

4.4.14 Relationship between Performance Goals and Academic Performance

Performance cluster factors were, 'I aim to get excellent scores in class examinations'; 'my focus is to study hard to outperform other pupils in this class'; 'my goal this term is to perform better than my classmates'; 'the most important thing for me right now is improving my overall marks in KCPE'; 'my aim of study is to join national or extra county school'; and 'I aspire to complete university education.' The statement 'I aim to get excellent scores in class examinations', had 98.9% approval rating as shown in Table 4.18, followed by 'the most important thing for me right now is improving my overall marks in KCPE' with 98.4% of pupils agreeing as indicated in Figure 4.10. From the results in Figure 4.12, the third most approved statement was, 'I aspire to complete university education', which received 97.7% approval from the pupils. Furthermore, Table 4.22 statement 'my aim of study is to join national or extra county school', was fourth with 96.7% approval. The fifth best rated factor under performance cluster was, 'my goal this term is to perform better than my classmates' with 93.2% agreement ratio as shown in Table 4.20; and the least approved under this cluster was, 'my focus is to study hard to outperform other pupils in this class this term', which had 90.5% of the pupils agreeing as indicated in Figure 4.9

These high agreement ratios were opinion approvals which cannot be taken to be statistically correct that; the six factors under performance goals cluster of

achievement goals predictor truly and precisely influence academic performance in one way or another. To confirm statistical significance of their influence, all the six factors were transformed through addition and their sum used to run a Pearson product moment correlation test against pupils mean score. The results are presented in Table 4.24.

Table 4. 24: Correlation Matrix (Performance Factors ~ Pupils Mean Score)

Correlation		Performance	pupils mean
Performance	Pearson Correlation	1	.191**
	Sig. (2-tailed)		.001
	N	378	378
pupils mean	Pearson Correlation	.191**	1
	Sig. (2-tailed)	.001	
	N	378	378

****. Correlation is significant at the .05 level (2-tailed).**
Source: Field Data (2021)

From the correlation matrix results in Table 4.24, it is evident that there was a weak positive correlation between performance goals factors and pupils mean score, which was statistically significant (r = .191**, n = 378, p = .001). This means that all the performance goals factors, had significant influence on academic performance.

4.4.15 Relationship between Mastery Goals and Academic Performance

Mastery goals cluster factors were, ‘I aim to master everything taught in every subject in class’; ‘my goal in this class is to learn as much as I can to gain deeper knowledge’; ‘understanding how to do the work in class is very important for me’;

‘the purpose of doing my class work is because I like to learn new things’; ‘I always make efforts to read my class notes to help me master the content taught’; and ‘I prefer topics that really challenge me to understand the subject well’.

From Figure 4.8, the statement ‘my goal in this class is to learn as much as I can to gain deeper knowledge’ received the best approval rating of 98.1% among the six mastery cluster factors. ‘I always make efforts to read my class notes to help me master the content taught’ was second best with an approval of 96.1% as presented in Figure 4.11. The statements ‘I aim to master everything taught in every subject in class’ and ‘I prefer topics that really challenge me to understand the subject well’ shared third best rating from the pupils with each getting an approval rating of 95.2% as indicated in Tables 4.17 and Table 4.23 respectively. The statement, ‘understanding how to do the work in class is very important for me’ was the fifth rated factor of mastery cluster with 95% of the respondents agreeing with the statement as shown in Table 4.19. Furthermore, the statement from Figure 4.20 that, ‘the purpose of doing my class work is because I like to learn new things’ received 91% of the pupils’ approval being the least in this cluster.

These high agreement ratios were but opinion approvals and cannot be taken to be statistically correct to show that the six factors under mastery cluster of achievement goals predictor truly and precisely influences academic performance in one way or another. To confirm statistical significance of their influence, all the six factors were transformed through addition and their sum used to run a Pearson product moment correlation test against pupils’ mean score and the results are presented in Table 4.25.

Table 4. 25: Correlation Matrix (Mastery Factors ~ Pupils Mean Score)

		Mastery	pupils mean
Mastery	Pearson Correlation	1	.055
	Sig. (2-tailed)		.285
	N	378	378
Pupils mean	Pearson Correlation	.055	1
	Sig. (2-tailed)	.285	
	N	378	378

** Correlation is significant at the .05 level (2-tailed).

Source: Field Data (2021)

From the correlation matrix results in Table 4.25, it is evident that there was no correlation between mastery factors combined and pupils' mean scores. The results were not statistically significant ($r = .055$, $n = 378$, $p = .285$). This means that the six factors of mastery cluster collectively had no significant influence on academic performance. This does not mean these six mastery factors are not important. Chances are that they could improve on their influence when many more factors are brought on board and combined with them. These were achievement goals that required learners to apply content in their learning. At primary level, learners' mind is limited to fewer concepts. They can't hold deep and heavy contents. It is recommended that teachers should introduce this level of learning into the children's system as they develop through structured questions, essay writing and research on topics.

4.4.16 Relationship between Achievement Goals and Academic Performance

The Pearson product moment correlation between pupils' mean score performances (academic performance) and achievement goals predictor variable data sets was run and the results are presented in Table 4.26.

Table 4. 26: Correlation Matrix (Pupils Mean Score~ Achievement Goals)

		Pupils Mean Score	Achievement Goals
Pupils Mean Score	Pearson Correlation	1	.720**
	Sig. (2-tailed)		.000
	N	378	378
Achievement Goals	Pearson Correlation	.720**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field Data (2021)

From the results in Table 4.26, the Pearson product moment correlation between pupils' mean score performances (academic performance) and achievement goals predictor variable data sets produced positive association with a correlation coefficient of .720**, p = .000. Compared upon the confidence level of 95% with significance level set at 5% (.05), it was established that the association was statistically significant (r = .720**, n=378, p = .000).

4.4.17 Hypothesis Testing

The second null hypothesis in this study stated that achievement goals do not have a significant effect on academic performance of primary school pupils. A number of tests were carried out to help validate or reject the null hypothesis. Simple regression

analysis between academic performance (response variable) and achievement goals (predictor variable) was conducted using SPSS version 26. The results of p-value arising from the regression analysis, was used to determine the statistical significance of the hypotheses.

4.4.17.1 R-Squared and Adjusted R-Squared

R-Squared also called the coefficient of determination or the coefficient of multiple determination for multiple regression was run to evaluate the nature of the data points around the fitted regression line as supported by Moore et al. (2013) and Zikmund (2000). The results are presented in Table 4.27.

Table 4. 27: Model Summary (Pupils Mean Score ~ Achievement Goals)

Model Summary

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.720[a]	.518	.517	.37255	.518	404.288	1	376	.000

a. Predictors: (Constant), Parental Motivation

Source: Field Data (2021)

Results in Table 4.27 show that R-Squared equals to 0.518, or 51.8%, to mean that achievement goals predictor variable explain about 51.8% of variation in academic performance. This is slightly above 0.5 so, it clearly shows that achievement goals have moderate effect level on academic performance. Certainly, it revealed that, there is a small difference between observed data and fitted values. Thus, a better fitting regression model. Therefore, academic performance linearly relate with achievement goals.

4.4.17.2 Analysis of Variance (ANOVA)

The sums of squares SS-Regression and SS-Residuals are used to form two mean squares, one for regression and another for residuals. The results are as displayed in Table 4.28.

Table 4. 28: Analysis Of Variance (Pupils Mean Score ~ Achievement Goals)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	56.113	1	56.113	404.288	.000[a]
	Residual	52.187	376	.139		
	Total	108.300	377			

a. Predictors: (Constant), Parental Motivation

b. Dependent Variable: Pupils Mean Score

Source: Field Data (2021)

The ANOVA results in Table 4.28 show that mean square regression is greater than the mean square residuals. Meaning the null hypothesis that stated that achievement goals do not have a significant effect on academic performance of primary school pupils is rejected at p-value = .000 < .05 level of significance. This means that the difference between mean square regression and mean square residuals is statistically significant which is supported by Zikmund (2000) that for analysis to qualify for regression, there must be statistically significant difference between mean square regression and mean square residuals.

4.4.17.3 F-Statistics

The F-test of overall significance was run to establish whether academic performance linearly relate with achievement goals predictor variable. The results from the

ANOVA Table 4.27, F (1, 376) = 404.288, p=.000 < .05; is proof that academic performance linearly relate with achievement goals predictor variable. The assessment of the existence of linear relationship between academic performance (outcome variable) and achievement goals (predictor variable), through all the model diagnostic tests, revealed that these two variables relate linearly. Likewise, some diagnostic tests revealed more information indicating failures to uphold or validate the null hypothesis which stated that achievement goals do not have a significant effect on academic performance of primary school pupils thereby pointing to the rejection of null hypothesis. Therefore, p-value output of the simple regression analysis between academic performance outcome variable, and achievement goals predictor variable, must be evaluated against significance level of .05 for which null hypothesis was assessed.

4.5.18 Regression Analysis between Pupils Mean and Achievement Goals

Diagnostic evidence and the p-value results are provided in the model summary presented in Table 4.29 (academic performance against achievement goals).This simple regression model would be represented in the equation as;

Academic performance = **1.545** + **.633** (Achievement goals) + **0 .121**(error);

Table 4. 29: Model Coefficients (Academic Performance Against Achievement Goals)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.545	.121		12.766	.000
	Parental Motivation	.633	.031	.720	20.107	.000
a. Dependent Variable: Pupils Mean Score						

Source: Field Data (2021)

Results in Table 4.29 reveal that achievement goals relate linearly to academic performance. This relationship is statistically significant at p-value = .000, < .05 significance level set for assessing null hypothesis. In which case the null hypothesis; **H_{02}**: Achievement goals do not have a significant effect on academic performance of primary school pupils in Migori County is rejected.

In addition to the aforementioned analyses, further analysis entailing responses from interviews were carried out. During interview, the CDE quoted that,

> Performance must come from learning. Target setting is a result of competition, but if we simply teach the pupils based on what they learn, then mastery of content is not a measure of knowledge, but just a means of passing exams. Learning should shift from being teacher centred to learner centred, where the learners do all the learning activities while the teacher should act as a facilitator.

Teachers with great exposure and experience should be encouraged to mentor the younger teachers through team teaching and internal workshops. The current Competence Based Curriculum (CBC) is geared towards addressing the CDE's

concerns. The teachers should let learners explore their abilities in school. This, however, cannot be possible without the teacher's guidance.

From the foregoing discussions, it is evident that performance goals predict academic performance of pupils in Migori County. The correlation matrix results in Table 4.24 revealed a weak positive correlation between performance goals factor and pupils mean score, which was statistically significant ($r = .191^{**}$, $p < .05$). Having healthy competition among pupils in exams is a way of excelling in academic performance. Such healthy competitions motivate pupils into seeking high grades in examinations. It makes pupils focus more on improving on their previous scores. The findings further indicated that healthy competition among pupils, keep them on their toes as it encourages academic discipline, better time management, learning by discovery and concentration among the learners. This finding is supported by Chumacero, Mardones and Paredes (2012) in South America who established that competitive pressure improved significantly and in a relevant way the academic performance of 4^{th} and 8^{th} year students. The similarity in the findings could be that, both studies researched on examination grades

Education is about learning from known to unknown. It involves learning new concepts hence gaining new knowledge, skills and attitudes that enable the learner to adjust to their environment. This view is supported by Ghaleb, Ghaith and Akour (2015) in Asia who posits that students with intent to deeply comprehend information tend to have good academic motivation. The concurrence of the findings

could be because both studies researched on the importance of learners' deeply comprehending information as a way of motivating self to perform better in exams.

Findings have also indicated that those who read the notes have good mastery of the content learnt in different subjects and are likely to post better grades in the examinations. This observation is supported by Luo, Kiewra and Samuelson (2016) who established that revision increased the number of additional notes and was associated with higher achievement. The similarity is brought about by the fact that both studies examined the impact of learners revising instructors' notes before examinations.

It is evident that combined factors of performance and mastery goals predict academic performance. The results in Table 4.26 based on Pearson product moment correlation revealed a positive significant correlation coefficient ($r= .720^{**}$, $p<.05$) between academic performance and achievement goals. This implies that academic performance is positively associated with achievement goals. Moreover, the results in Table 4.27 indicated that achievement goals explain 51.8% of variation in academic performance ($R^2= .518$, $p<.05$). Therefore achievement goals account for a significant amount of variance, more than half, in academic performance.

In addition, the F-test results from the ANOVA shown in Table 4.28, $F\ (1, 376) = 404.288$, $p< 0.05$ is a proof of significant relationship between achievement goals and academic performance. Therefore, the null hypothesis; **"H_{02}**: Achievement goals

do not have a significant effect on academic performance of primary school pupils in Migori County" is rejected.

The conclusion that achievement goals have effect on academic performance concurs with that of Shehzad and Aziz (2019) in Pakistan who showed that mastery approach and performance approach on academic achievement was significant. The study also agrees with that of Zare, Rastegar and Hosseini (2011) who showed that there was a positive effect of mastery goals on statistical achievement. Further, these study findings are in consonance with that of Basit and Rahman (2017) who indicated that a student's performance was highly and significantly correlated with mastery goal orientation and performance goal orientation. Additionally, Ng'ang'a, Mwaura and Dinga (2018) established that different levels of achievement goal orientation was significantly related to students' academic achievement. The finding is also in consonance with the conceptual framework which states that the learners set achievable goals or targets that would enable them achieve excellent or good grades (400-500 marks) to outshine others in scores with the possibility of them joining national or extra- county secondary schools.

4.5 Learning Strategies and Academic Performance

The third objective of this study was to establish the extent to which Learning strategies predict academic performance of primary schools in Migori County. This construct had 14 factors likely to influence its overall prediction strength on academic performance. These factors were put up in a questionnaire in the form of statements which respondents were meant to answer either by 'strongly agree',

'agree', 'not decided', 'disagree', or 'strongly disagree'. This was the same set up for the teachers' questionnaire, with a little changes, but the overall objective maintained. The analysis of the results for this objective was done in two parts with descriptive statistics which concentrated on the opinion of the respondents about each statement followed by the inferential statistics which deeply looked into the statistical influence or effect of learning strategies on academic performance.

4.5.1 Pupils Engaging Teachers on Concepts they don't get well in Class

The first item sought to establish if pupils engage teachers on concepts they don't get well in class. The results are presented in Table 4.30

Table 4. 30: Responses about Pupils asking Teachers to Clarify Concepts

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	7	1.8	-	-
Disagree	11	2.9	1	1.7
Not decided	12	3.2	3	5.0
Agree	159	41.8	38	63.3
Strongly agree	191	50.3	18	30.0
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

Results in Table 4.30 show that of the respondents accounting for 92.1% of pupils were in agreement with the statement that, they ask the teacher to clarify concepts they don't understand well in class. However, 4.7% disagreed with the statement and 3.2% were undecided. Teachers felt the same with 93.3% of them saying their learners ask the teachers to clarify concepts they don't understand, just about 1.7% of the teachers disagreed with the statement while 5% of them were undecided.

Meaning most teachers felt that, seeking help enable learners to deeply understand concepts better than what they learnt in classrooms. It is therefore clear from the findings that teachers are the drivers of knowledge transfer to learners at all stages of learning. It is imperative that learners engage and inquire more from them on concepts they fail to understand during normal lesson time.

4.5.2 Pupils Testing their Mastery of Content

In the second item, learners were asked if they aim to test their mastery of content. The results are presented in Figure 4. 13

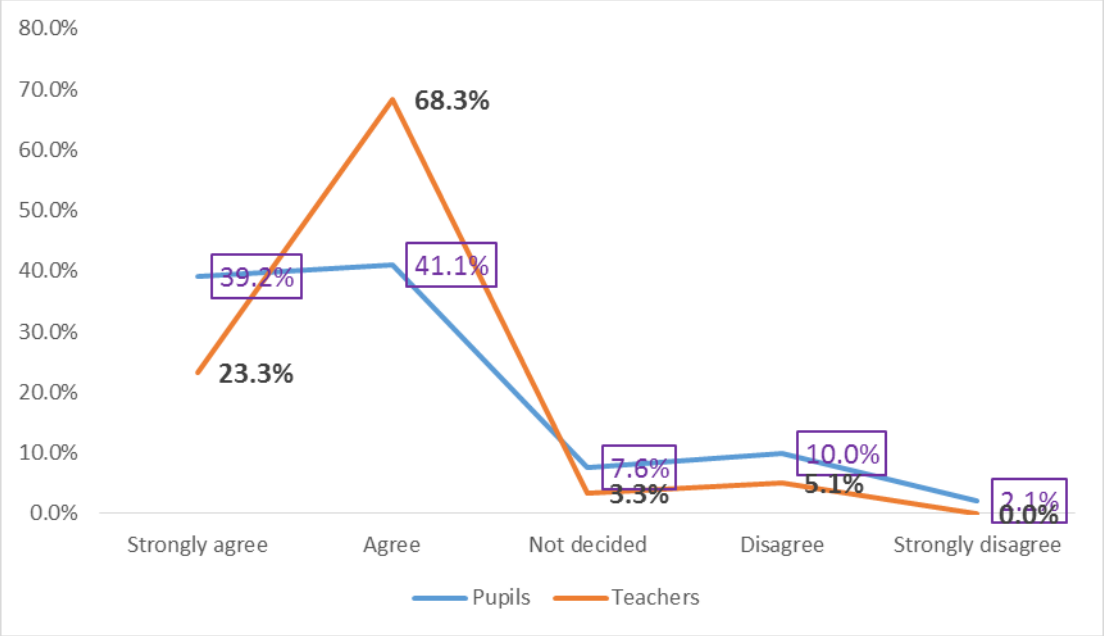

Figure 4.13: Responses on Pupils explaining what they Read to Classmates

Source: Field Data (2021)

Data in Figure 4.13 shows that 80.3% of pupils affirmed the statement that after study, they often try to explain what they have read to a classmate or a friend as a way of testing their mastery of content. However, 12.1% of them disagreed and

about 7.6% of them were undecided. Teachers supported this statement with overwhelming 91.6% of them saying after study, their pupils often try to explain what they have read to a classmate or a friend. Only 5.1% of teachers disagreed, while about 3.3% were undecided. Learners trying to master subject content by all possible means is not new. Some go as far as taking the role of a teacher and do the teaching to their groups or peers. Others close the books after reading and use a black paper to note down what they have read, all in the name of learning strategy to better their academic performance.

4.5.3 Pupils Forming Questions when Reading to enhance Focus

Respondents were also asked if they form questions when reading to enhance their focus. The results are presented in Figure 4.14.

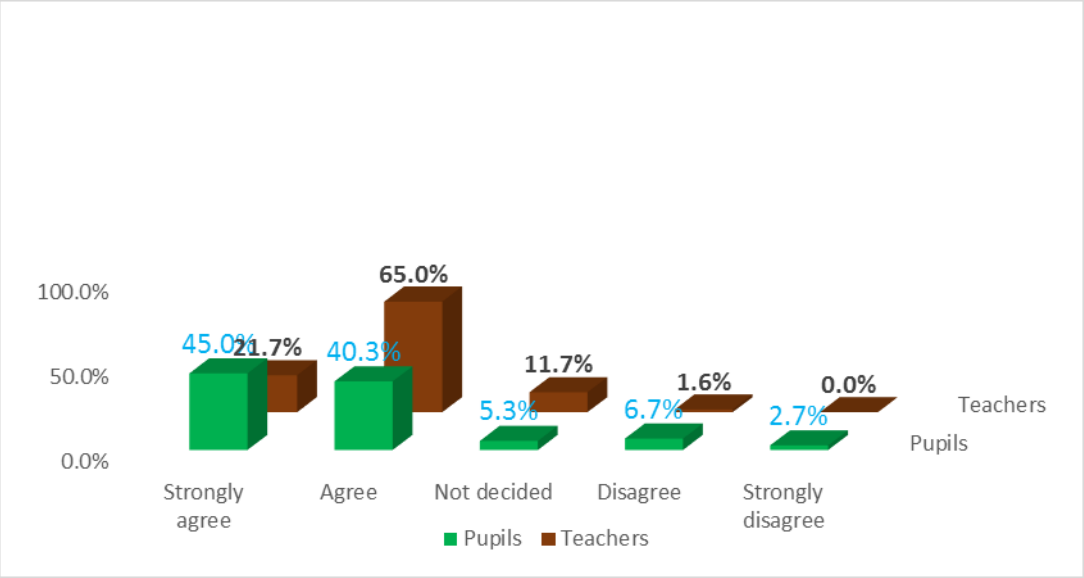

Figure 4.14: Responses on Pupils Forming Questions when Reading

Source: Field Data (2021)

From Figure 4.14, it is clear respondents accounting for 85.3% of pupils approved the statement that, when reading, they make up questions to help them focus their

reading. About 9.4% of them did not feel so and 5.3% were undecided. Teachers also affirmed this by saying that their learners make up questions to help them focus on their reading, with 86.7% agreeing, whereas only 1.6% of teachers disagreed and another 11.7% were undecided. Clearly, sometimes reading in the form of answering questions not only enhance learners focus but also improves their mastery of the content. This strategy makes it easier for learners to recall better what they learnt. May be reading by forming possible questions make it easier for learners to understand concepts better or it could be that this strategy helps them memorize concepts and key points about topics in every subject. Besides, forming questions according to most teachers assist the learners more as part of their rehearsals for future exams and making them ready for examinations any time.

4.5.4 Pupils Practice Concept Learnt Repeatedly

In addition, respondents were asked if they practice concepts they learnt repeatedly and the results are presented in Table 4.31.

Table 4.31: Responses about Pupils Practising Materials Repeatedly

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	6	1.5	1	1.7
Disagree	17	4.5	3	5.0
Not decided	9	2.4	5	8.3
Agree	147	38.7	38	63.3
Strongly agree	201	52.9	13	21.7
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

Results in Table 4.31 indicate that majority of the pupils accounting for 91.6% affirmed that; after studying they practise saying the material to themselves over and over to boost their understanding and mastery. Only 6% of the pupils registered disapproval on the statement while 2.4% were undecided. Accordingly, teachers accounting for 85% affirmed their approval of the statement by saying, after study their learners practice saying the material to themselves over and over again, but about 6.7% did not think so, and 8.3% were undecided. The drive to pass exams is likely to make pupils practise what they learn repeatedly for content to stick in their brains. Repetition of learnt content enhances retention of learnt concepts that is easily retrieved from memory when required.

4.5.5 Pupils working in Groups to Complete Assignment

The study also sought to establish if pupils work in groups to complete assignments and the results are presented in Figure 4.15.

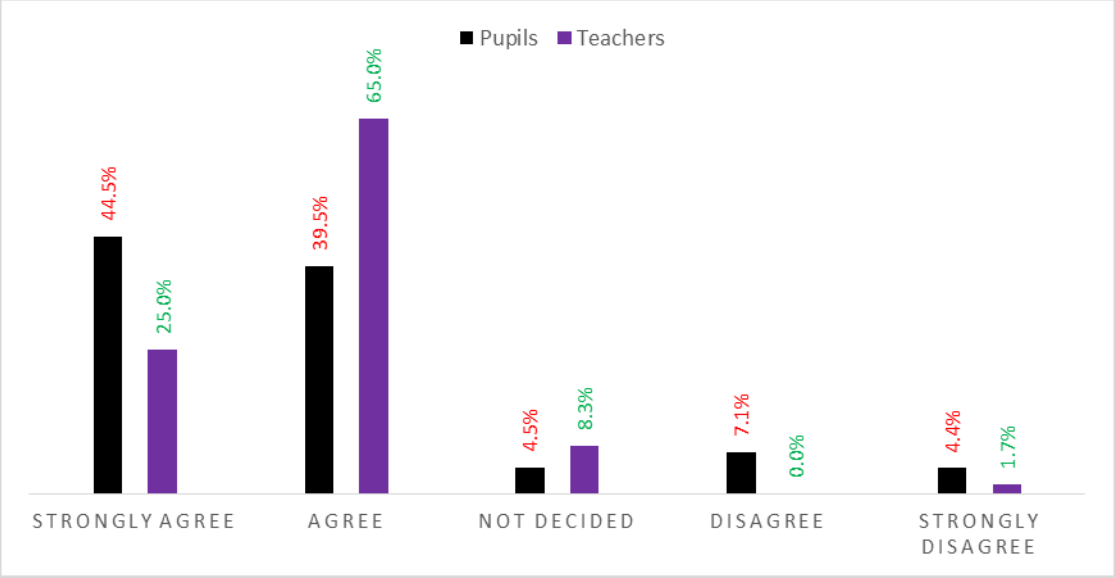

Figure 4.15: Responses on Pupils Working in Groups to Complete Assignments
Source: Field Data (2021)

As results show in Figure 4.15, many respondents accounting for 84% of the learners said they try working with other pupils from their class to complete the assignments, while just 11.5% were not in agreement with the statement and another 4.5% were undecided. On the same breath, 90% of the teachers affirmed this learning strategy by saying, their learners try to work with each other in their class to complete the assignments. But 1.7% of teachers disagreed while 8.3% were undecided. Working in groups or with others is one way by which learners get to share knowledge and also learn from others what they did not understand in class. There is strength in sharing knowledge as well as learning from others. This strategy has to be used cautiously so that learners don't end up copying from one another.

4.5.6 Learners Engaging in Group Discussions

Learners' engaging in group discussions was also part of the learning strategies, therefore respondents were asked if they do group discussions and the results are presented in Figure 4.16.

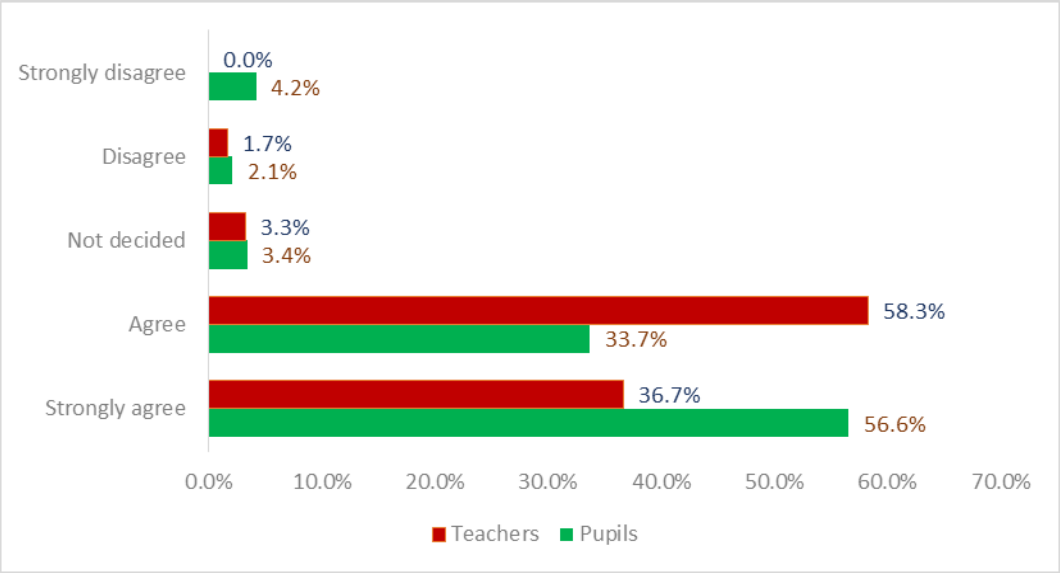

Figure 4.16: Responses on Pupils Discussing Class Materials in Groups

Source: Field Data (2021)

Going by evidence in Figure 4.16, it is clear that most pupils accounting for 90.3% affirmed their agreement with the statement that; when studying for exams, they often set aside time to discuss class materials with a group of pupils from the class, only 6.3% did not feel so, while 3.4% were undecided. Teachers too felt the same with 95% of them saying; when studying for examinations, their pupils often set aside time to discuss class materials in groups, while just about 1.7% of the teachers were not in agreement, and another 3.3% of teachers were undecided. This means that, pupils value group discussions as one of the ways to help them pass their exams.

4.5.7 Pupils Asking Classmate to clarify what they don't understand

The respondents were also asked if they ask colleagues to clarify for them what they don't understand. The results are presented in Table 4.32.

Table 4. 32: Responses about Pupils Asking Classmates For Help

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	1	0.3	-	-
Disagree	2	0.5	1	1.7
Not decided	5	1.3	3	5.0
Agree	99	26.1	32	53.3
Strongly agree	273	71.8	24	40.0
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

Results in Table 4.32 show most of the pupils accounting for 97.9% affirmed the statement that; when they can't understand, they ask other pupils in the class to help them out. On the contrary, about 0.8% of them responded by disagreeing, while just 1.3% of them were undecided. On this learning strategy, teachers also felt the same considering 93.3% of them said that when their learners don't understand any concept, they ask one another in class for help. However only 1.7% of teachers disagreed and 5% of them were undecided. The approach of peer to peer learning enhances learning because of the language used and the free environment of sharing. It also promotes the competency of communication and collaboration among learners as they freely discuss ideas at their level.

4.5.8 Pupils Memorizing Concepts in Class

More information was also sought on other learning strategies. Respondents were asked if they memorize concepts in class and results are presented in figure 4.17.

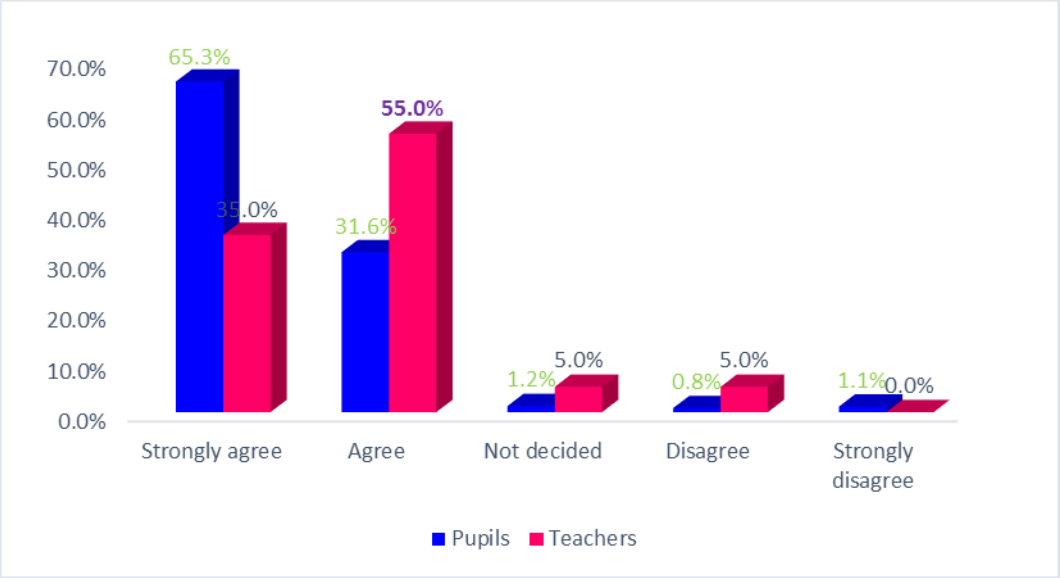

Figure 4.17: Responses on Pupils Memorizing Concepts in Class

Source: Field Data (2021)

From Figure 4.17, results show that most of the pupils accounting for 96.9% of pupils said they try to memorize key words to remind themselves of important concepts in the class, while just 1.9% were not in agreement with the statement and another 1.2% were undecided. Moreover, 90% of teachers also felt the same by saying, their learners memorize key words to remind themselves of important concepts in class, and just 5% disagreed with this statement, while 5% were undecided. Memorizing concepts is central and key for pupils when they are writing their examinations. For it is through memorizing that they are able to recall what they learnt earlier when required to do so in an examination set up.

4.5.9 Pupils' Set Goals for their Class Activities

Further findings on pupils setting goals for their class activities were sought. Respondents were asked if they set goals for their class activities and results are presented in figure 4.18.

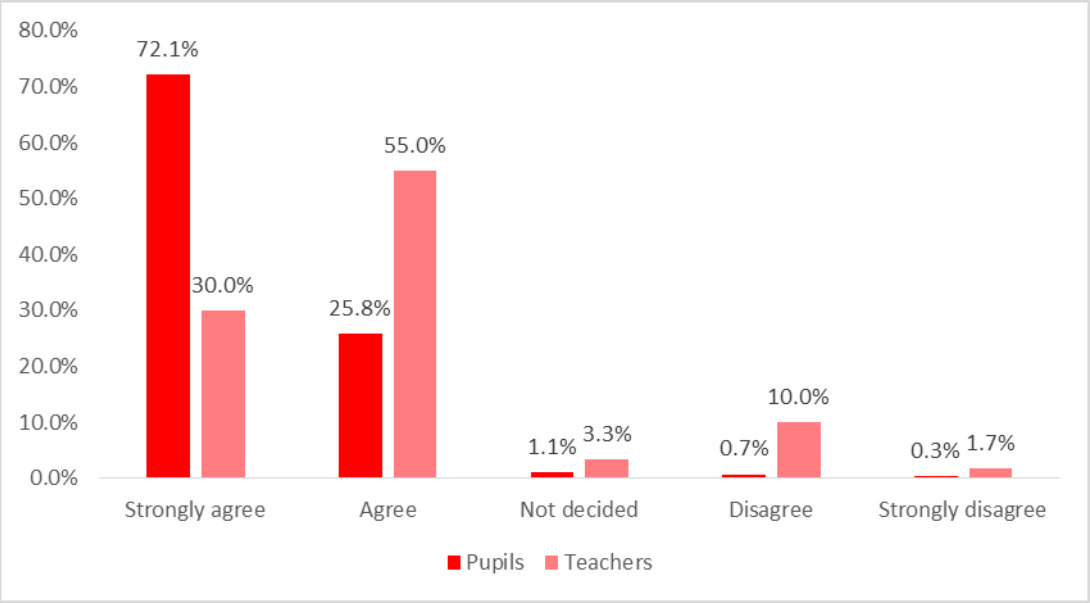

Figure 4.18: Responses on Pupils Setting Goals to Direct Class Activities

Source: Field Data (2021)

Results in Figure 4.18 show that most of the pupils accounting for 97.9% affirmed their agreement that when they study in their class, they set goals for themselves in order to direct their activities in each period. Only 1% did not agree with the statement while 1.1% were undecided. On the other side, 85% of the teachers believed so by saying that, when their learners study, they set goals for themselves in order to direct their class activities, but about 11.7% registered their disagreement, while 3.3% were undecided. It is important for pupils to set goals for each activity they carry out in their classes. Such goals will direct them on when to do what, how to do it and what they aim to achieve after each and every activity. Clearly, setting goals for class activities assist the learners to stay focused on the subject matter throughout the course.

4.5.10 Pupils Revising for Exams by Reading Notes and Text Books

It was also important to establish information on pupils' revision for exams. The respondents were asked if they do revise for their examinations and the results are presented in Table 4.33.

Table 4. 33: Pupils Preparing for exams by Reading Notes and Text Books

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	5	1.3	-	-
Disagree	11	2.9	-	-
Not decided	8	2.1	4	6.6
Agree	105	27.6	31	51.7
Strongly agree	251	66.1	25	41.7
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

The results as presented in Table 4.33, show majority respondents accounting for 93.7% agreeing that, when preparing for exams they revise their class notes and text books repeatedly to help them master the concepts well. Just 4.2% of the pupils objected to this statement, while 2.1% were undecided. Teachers were not far in their support for this learning strategy as 93.4% of them felt that; their pupils revise their class notes and text books over and over when preparing for examinations and only 6.6% of the teachers were undecided. This is very important learning strategy, for it refreshes pupils memories before they finally write their exams.

4.5.11 Reorganizing Study Skill to Perform Better in Subsequent Exams

Information on reorganizing study skills to perform better in subsequent exams were also presented. Respondents were asked if they reorganize study skills to perform better in subsequent exams. The results are presented in Table 4.34.

Table 4. 34: Pupils reorganizing study skills for better performance in exams

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	1	0.3	-	-
Disagree	7	1.8	2	3.3
Not decided	10	2.7	1	1.7
Agree	110	28.9	36	60.0
Strongly agree	251	66.3	21	35.0
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

From Table 4.34, it is clear that most of the pupils accounting for 95.2% confirmed that after every examination, they reorganize their study skills for better performance. While pupils accounting for 2.1% did not agree and about 2.7% were undecided. Interestingly, about the same proportion of teachers; 95% were in agreement with the pupils by saying; after every examination, learners reorganize their study skills for better performance. But a small proportion of teachers accounting for 3.3% disagreed while 1.7% of them were undecided. Every single exam presents learners with a reality of the outcome for each effort they put forward in their studies. Those who perform better would enhance strategies already working and delivering for them while those who fail adopt new strategies or improve on the

strategies. Naturally, most pupils aim to excel in their exams and this will necessitate their desire to reorganize their study skills for better exams performance.

4.5.12 Influence from Hardworking Classmates

Respondents were also asked if they are normally influenced by their hardworking classmates. Table 4.35 presents the results.

Table 4. 35: Responses on Pupils Getting Influenced by Hardworking Classmates

	Pupils		Teachers	
Scale	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Strongly disagree	8	2.1	-	-
Disagree	10	2.6	1	1.7
Not decided	12	3.2	2	3.3
Agree	124	32.6	30	50.0
Strongly agree	226	59.5	27	45.0
Total	**380**	**100**	**60**	**100**

Source: Field Data (2021)

Data presented in Table 4.35 shows that most pupils accounting for 92.1% of the pupils approved the statement that, they have been influenced by their hard working classmates in class and their parents too and so they emulate what they do. Those who disagreed were just 4.7% while 3.2% were not decided. Teachers too were in agreement with 95% of them confirming that learners have been influenced by their hard working classmates and their parents as well. Only 1.7% of teachers disagreed as another 3.3% of them were undecided. Learners normally try to follow in the footsteps of their best performing classmates in class. In most cases some even try to

be good friends with them just to tap into their intelligence, strategies and studying skills. Besides, back at home, pupils try their best to follow advice and good examples of how to study from their parents. This led them imitating what their hardworking classmates and parents do to enhance their success in examinations.

4.5.13 Pupils Elaborating Concepts from Topics

In addition, respondents were asked if they normally elaborate concepts from topics and the results are presented in Figure 4.19.

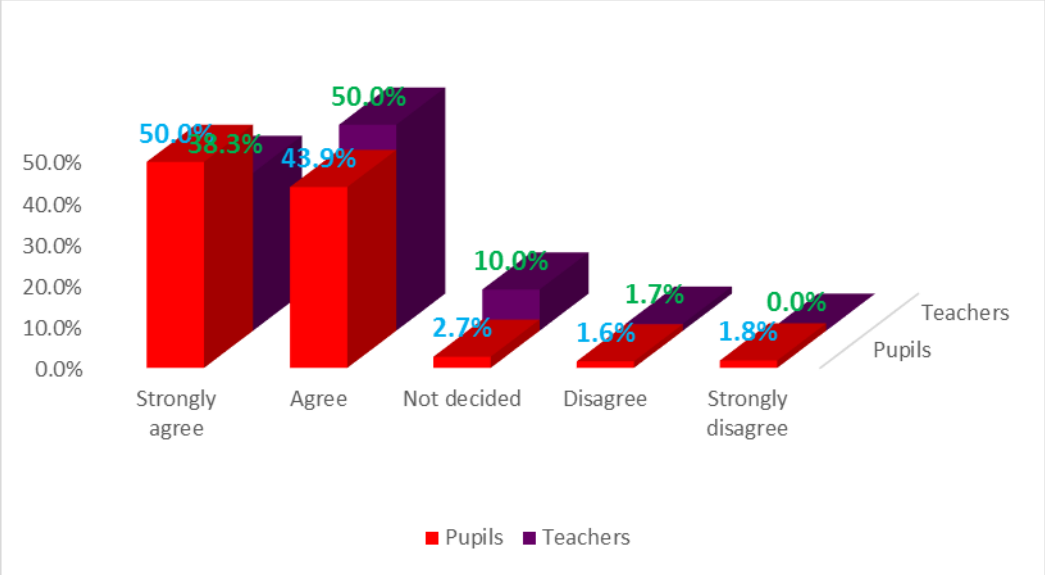

Figure 4. 19: On Pupils Elaborating Concepts from Topics in Class

Source: Field Data (2021)

From Figure 4.19, results indicate that pupils accounting for 93.9% affirmed that they are able to elaborate the given concepts in class after a given topic. Those who disapproved this learning strategy were just 3.4% and just 2.7% of them were undecided. On the other hand, teachers accounting for 88.3% also supported this strategy by saying their learners are able to elaborate the given concepts in class after

a given topic, but about 1.7% disagreed and another 10% were undecided. Most pupils sampled for this study felt they were able to explain, summarize, match, paraphrase and describe concepts better in class after a given topic is learnt.

4.5.14: Pupils are determined and Self-driven in their Studies

Findings on whether pupils were determined and self-driven are presented in Figure 4.20.

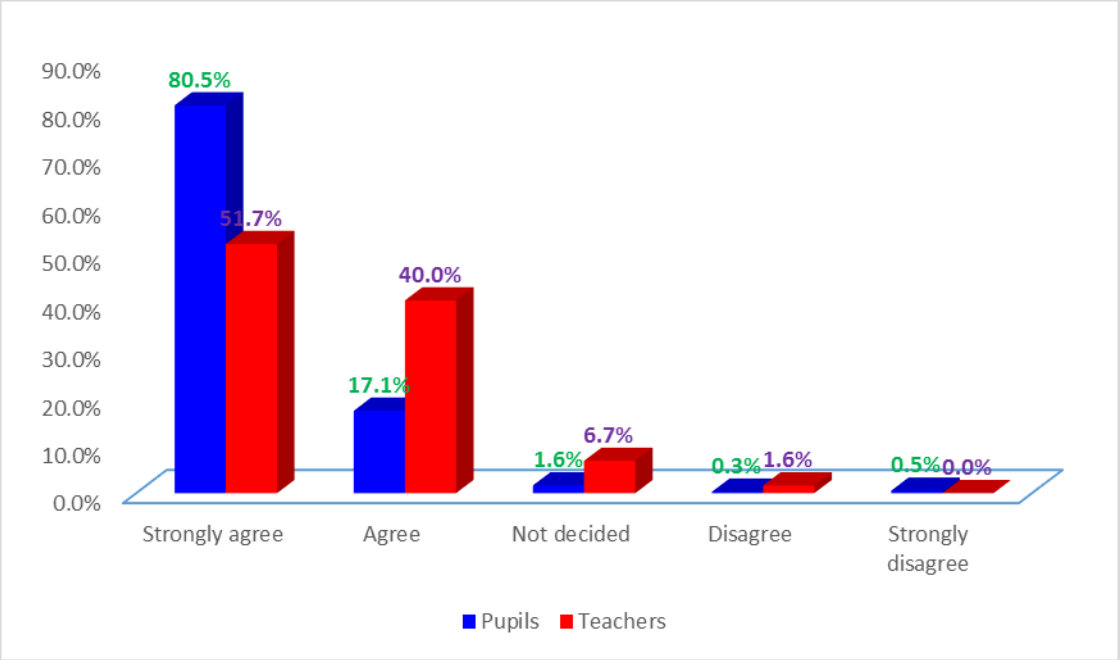

Figure 4.20: Responses on Pupils Determination and Self-Drive in their Studies

Source: Field Data (2021)

Results presented in Figure 4.20 reveal that overwhelming majority of pupils accounting for 97.6% approved the statement that they are determined to do well and therefore self-driven in their studies. However, about 1.6% of them were not decided while only 0.8% disapproved the statement. It was the same scenario with the teachers as 91.7% opined that their learners are determined to do well and therefore

self-driven in their studies. Only 1.6% of the teachers did not feel so, while another 6.7% of them were undecided. Clearly, determination is key to pupils' success in exams. It is one of the ingredients which drives them to study harder.

4.5.15 Learning Strategies Factors Summary

Learning strategies had 14 factors upon which its effects on pupils' academic performance was evaluated. Individually or collectively, these factors to some extent were meant to contribute to the overall significance of learning strategies predictor in influencing or improving pupils' academic performance. The specific objective from this construct was to find out the extent to which learning strategies predict academic performance among primary school pupils in Migori County. From this, 14 statements measured on Likert scale were presented to a sample of 380 pupils and 60 teachers. The descriptive statistics results presented in form of frequency tables, percentages, bar graphs, column graphs, pie charts, area graphs and line graphs, have all indicated strong approval for this objective as put forward in a number of factor statements. However, these approvals are based on opinions of the pupils and teachers who responded in one way or the other. To confirm the statistical significance of these approvals that; learning strategies predicts pupils' academic performance, a number of inferential statistics tests were run and their results plus interpretations leading to either validation or rejection of descriptive results alongside null hypothesis are discussed in next section.

4.5.16 Test on Association between Learning Strategies and Pupils' Academic Performance

The 14 learning strategies factors were grouped into six clusters namely, seeking help factors, cooperative learning factors, setting targets factors, organization factors, modelling factors and rehearsal factors. Tests on association between learning strategies and pupils academic performance are discussed in clusters and their combined factors in the subsequent section.

4.5.16.1 Seeking Help Strategy

Of the two seeking help factors, the statement, 'when I cannot understand, I ask another Pupil in this class to help me' received the highest approval of 97.9% as shown in Table 4.32. The statement, 'I ask the teacher to clarify concepts I don't understand well in class', was the least with 92.1% approval as shown in Table 4.30. To confirm statistical significance of their influence on academic performance, the two factors were transformed through addition and their sum used to run a Pearson product moment correlation test against pupils mean score. The results are presented in Table 4.36.

Table 4. 36: Correlation Matrix (Seeking Help Factors ~ Pupils Mean Score)

		Seeking Help	Pupils Mean Score
Seeking Help	Pearson Correlation	1	.122*
	Sig. (2-tailed)		.017
	N	378	378
Pupils Mean Score	Pearson Correlation	.122*	1
	Sig. (2-tailed)	.017	
	N	378	378

*. Correlation is significant at the .05 level (2-tailed).

Source: Field Data (2021)

From the correlation matrix results in Table 4.36, it is clear there was a weak positive correlation between seeking help factors combined and the pupils' mean score, which was statistically significant (r = .122*, n = 378, p = .017). This means that all the seeking help factors collectively had significant influence or effect on academic performance.

4.5.16.2 Cooperative Learning Strategy

In this cluster, the statement that, 'when studying for exams, I often set aside time to discuss class materials with a group of pupils from the class', received the best approval of 90.3% from the pupils as indicated in Figure 4.16. In addition, results from Figure 4.15 on the statement that 'I try to work with other pupils from this class to complete the assignments' was the least approved with 84% of the pupils agreeing with the statement. To confirm statistical significance on their influence on academic performance, the two factors were transformed through addition and their sum used to run a Pearson product moment correlation test against pupils mean score and the results are presented in Table 4.37.

Table 4. 37: Correlation Matrix (Cooperative Learning Factors ~ Pupils' Mean)

		Cooperative learning	Pupils Mean Score
Cooperative learning	Pearson Correlation	1	-.074
	Sig. (2-tailed)		.153
	N	378	378
Pupils Mean Score	Pearson Correlation	-.074	1
	Sig. (2-tailed)	.153	
	N	378	378

*. Correlation is significant at the .05 level (2-tailed).

Source: Field Data (2021)

The correlation matrix results in Table 4.37 show that there is no correlation between co-operative learning factors combined and pupils mean score, the result was not statistically significant (r = -.074, n = 378, p = .153). Meaning that the two factors of making up cooperative learning cluster collectively had no significant influence or effect on academic performance. This does not mean these two cooperative learning factors are not important. Chances are that they could improve on their influence when many more factors which are statistically significant are brought on board and combined with them

4.5.16.3 Setting Targets

From the Figures 4.18 and 4.20 respectively, setting targets cluster factors as indicated by the statements 'when I study for this class, I set goals for myself in order to direct my activities in each study period' with 97.9% approval from the pupils; whereas 'I am determined to do well and therefore self-driven in my studies' was the least approved with 97.6%. To confirm statistical significance of their influence all the two factors were transformed through addition and their sum used to run a Pearson product moment correlation test against pupils' mean scores and the results are presented in Table 4.38.

Table 4. 38: Correlation Matrix (Setting Targets ~ Pupils Mean Score)

		Setting targets	Pupils Mean Score
Setting targets	Pearson Correlation	1	.130*
	Sig. (2-tailed)		.012
	N	378	378
Pupils Mean Score	Pearson Correlation	.130*	1
	Sig. (2-tailed)	.012	
	N	378	378

*. Correlation is significant at the .05 level (2-tailed).

Source: Field Data (2021)

The correlation matrix results in Table 4.38 show that there is a weak positive correlation between setting target factors combined and pupils' mean score which was statistically significant (r = .130*, n = 378, p = .012). This means that all the factors of setting targets cluster, collectively had significant influence on academic performance.

4.5.16.4 Organization Strategy

Organization cluster factors were, 'after every examination, I reorganize my study skills for better performance' which was the best rated with 95.2% as indicated in Table 4.34; and 'when reading I make up questions to help me focus my reading' being the least approved with 85.3% which is shown in Figure 4.14. To confirm statistical significance of their influence, all the two factors were transformed through addition and their sum used to run a Pearson product moment correlation test against pupils' mean score and the results are presented in Table 4.39.

Table 4. 39: Correlation Matrix (Organization Factors ~ Pupils Mean Score)

		Organization	Pupils Mean Score
Organization	Pearson Correlation	1	.116*
	Sig. (2-tailed)		.024
	N	378	378
Pupils Mean Score	Pearson Correlation	.116*	1
	Sig. (2-tailed)	.024	
	N	378	378

*. Correlation is significant at the .05 level (2-tailed)

Source: Field Data (2021)

From the correlation matrix results in Table 4.39, it is evident that there was a weak positive correlation between organization factors combined and the pupils' mean score which was statistically significant (r = .116*, n = 378, p = .024). This Means that all the two factors of organization cluster, collectively had significant influence on academic performance.

4.5.16.5 Modelling Strategy

Modelling cluster factors were, 'I have been influenced by my hard working classmates in class and parents and so I imitate what they do', with the least approval ratio of 92.1% as indicated in Table 4.35; and 'I am able to elaborate the given concepts in class after a given topic' which was the best approved by pupils under this cluster with 93.9% as shown in Figure 4.19. To confirm statistical significance of their influence, the two factors were transformed through addition and their sum used to run a Pearson product moment correlation test against pupils mean score and the results are presented in Table 4.40.

Table 4. 40: Correlation Matrix (Modelling Factors ~ Pupils Mean Score)

		Modelling	Pupils Mean Score
Modelling	Pearson Correlation	1	.072
	Sig. (2-tailed)		.165
	N	378	378
Pupils Mean Score	Pearson Correlation	.072	1
	Sig. (2-tailed)	.165	
	N	378	378

*. Correlation is significant at the .05 level (2-tailed).

Source: Field Data (2021)

The correlation matrix results in Table 4.40, shows that there is no correlation between modelling factors combined and the pupils' mean score. The result was not statistically significant (r = .072, n = 378, p = .165). This means that the two factors of modelling cluster collectively had no significant influence on academic performance. This does not mean that the two modelling factors are not important. Chances are that they could improve on their influence when many more factors which are statistically significant are brought on board and combined with them.

4.5.16.6 Rehearsal Strategy

The best approved factor under rehearsal cluster with 96.9% rating as shown in Figure 4.17 was the statement, 'I memorize key words to remind me of important concepts in this class'. This was followed by the statements in Tables 4.33 and 4.31, 'when preparing for exams, I read my class notes and text books over and over' which had 93.7% and 'after study I practise saying the material to myself over and over' with 91.6% respectively. To confirm statistical significance of their influence, all the four factors were transformed through addition and their sum used to run a Pearson product moment correlation test against pupils' mean score and the results are presented in Table 4.41.

Table 4. 41: Correlation Matrix (Rehearsal Factors ~ Pupils Mean Score)

		Rehearsal	Pupils Mean Score
Rehearsal	Pearson Correlation	1	.116*
	Sig. (2-tailed)		.024
	N	378	378
Pupils Mean Score	Pearson Correlation	.116*	1
	Sig. (2-tailed)	.024	
	N	378	378

*. Correlation is significant at the .05 level (2-tailed)

Source: Field Data (2021)

From the correlation matrix results in Table 4.41, there was a weak positive correlation between rehearsal factors combined and the pupils' mean score which was statistically significant (r = .116*, n = 378, p = .024). Meaning, all the four factors of rehearsal cluster collectively had significant influence on academic performance**.**

4.5.16.7 Correlation between Learning Strategies and Pupils Mean Score

The Pearson product moment correlation between pupils means score performance (academic performance) and learning strategies predictor variable data sets was run and the results are presented in Table 4.42.

Table 4. 42: Correlation Matrix (Pupils Mean ~ Learning Strategies)

		Pupils Mean Score	Learning Strategies
Pupils Mean Score	Pearson Correlation	1	.849**
	Sig. (2-tailed)		.000
	N	378	378
Learning Strategies	Pearson Correlation	.849**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field Data (2021)

From the results in Table 4.42, the Pearson product moment correlation between pupils means score and learning strategies produced positive association with a correlation coefficient of .849, p = .000. Compared with confidence level of 95%. Confidence interval/significance level was set at 5% (0.05). It revealed the association was statistically significance (r = .849**, n=378, p = .000).

4.5.17 Hypothesis Testing

The third null Hypothesis testing in this study was that learning strategies do not have a significant influence on academic performance among primary school pupils. A number of tests were carried out to help validate or reject the null hypothesis. Simple regression analysis between academic performance (outcome variable) and learning strategies (predictor variable) was run using SPSS version 26. The results of the p-value arising from the regression analysis, was used to determine the statistical significance hypotheses: null against the alternative.

4.5.17.1 R-Squared and Adjusted R-Squared

R-Squared also called the coefficient of determination or the coefficient of multiple determinations for multiple regressions was run to evaluate the scatter of the data points around the fitted regression line. The results are presented in Table 4.43.

Table 4. 43: Model Summary (Pupils Mean Score ~ Learning Strategies)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.849[a]	.720	.719	.28401	.720	966.669	1	376	.000

a. Predictors: (Constant), learning strategies

Source: Field Data (2021)

As shown in Table 4.43, R-squared being equal to 0.720, or 72.0% means that learning strategies predictor variable explains about 72.0% of variation in pupils' academic performance. This is above 0.7, so it clearly shows that learning strategies have a strong effect on academic performance, and certainly, revealing that, there is a

small difference between observed data and fitted values indicating a better fitting regression model; and so academic performance linearly relate with learning strategies.

4.5.17.2 Analysis of Variance (ANOVA)

The sums of squares SS-Regression and SS-Residuals are used to form two mean squares, one for regression and the other for residuals. The results are as displayed in Table 4.44.

Table 4. 44: Analysis Of Variance (Pupils' Means ~ Learning Strategies)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	77.971	1	77.971	966.669	.000[a]
	Residual	30.328	376	.081		
	Total	108.300	377			

a. Predictors: (Constant), Learning Strategies

b. Dependent Variable: Pupils Mean Score

Source: Field Data (2021)

The ANOVA results in Table 4.44 indicate that the mean square regression is greater than the mean square residuals. Meaning the null hypothesis that stated that learning strategies do not have a significant influence on academic performance among primary school pupils is rejected at p-value = .000 < .05, the significance level. This means the difference between mean square regression and mean square residuals is statistically significant.

4.5.17.3 F- Statistics

The F-test of overall significance was run to establish whether academic performance linearly relate with learning strategies predictor variable. The results from the ANOVA Table 4.44, $F\ (1, 376) = 966.669,\ p < .05$; is a proof that academic performance linearly relate with learning strategies predictor variable. The assessment of the existence of linear relationship between academic performance (response variable) and learning strategies (predictor variable), through all the model diagnostic tests revealed that, these two variables relate linearly. Likewise, some diagnostic tests revealed more information indicating failure to uphold or validate the null hypothesis which stated that, Learning strategies do not have a significant influence on academic performance among primary school pupils in Migori County and pointed to the rejection of the null hypothesis. Therefore, p-value output of the simple regression analysis between academic performance outcome variable and learning strategies predictor variable, must be evaluated against significance level of .05 for which null hypothesis was assessed

4.5.18 Simple Regression between Pupils Mean and Learning Strategies

A simple linear regression model was also carried out to establish the model effect of learning strategies on pupils' academic mean scores. The findings are presented as shown in Table 4.45 that follows.

Table 4. 45: Model Coefficients (Pupils Mean ~ Learning Strategies)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.884	.100		8.870	.000
	learning strategies	.791	.025	.849	31.091	.000

a. Dependent Variable: pupils mean score

Source: Field Data (2021)

Data in Table 4.45 shows that learning strategies, linearly relate to academic performance. This relationship is statistically significant at p-value = .000, < .05 significant level set for assessing the null hypothesis. In which case the null hypothesis; H_{03}: Learning strategies do not have a significant influence on academic performance among primary school pupils in Migori County, is rejected. This simple regression model would be represented in the equation as; Academic performance = .884 + .791 (Learning strategies) + 0.100 (error).

Teachers reported that the best learning strategies are those that learners themselves employ to enhance their performance. The county director was however, not convinced about how teachers perform the duties in schools. He reported that;

> *"Teachers are functionally illiterate. They don't read. They go to schools late and don't research on topics. They are not reading extensively to improve on their knowledge and learn new things".*

In addition, the director of education revealed that,

> Teachers are not refreshing their knowledge and skills. They have ignored the fact that they need to undergo some refresher courses or capacity building on their subject areas to catch up with the trends. The teachers have got themselves involved in so many activities aside from teaching which eat too much into their time and so they do not research or refresh on their

> knowledge. With time, many of them have become redundant. They should be taken to workshops to refresh their teaching methods and strategies.

This means that teachers need refresher courses to update their teaching strategies regularly. The current Teacher Professional development (TPD) would be of great help to teachers if it is well rolled out for the benefit of all.

The correlation matrix results in Table 4.36, showed a weak positive correlation between seeking help factors combined and the pupils' mean score, which was statistically significant ($r = .122^*$, $n = 378$, $p = .017$). This demonstrates that, pupils understand the strength in sharing knowledge and seeking help from others, to help them pass their examinations. This findings corroborate with that of Chang and Brickman (2018) who conducted a study in South Eastern United States where students reported that colleagues in class helped them understand course concepts as they elaborated on the concepts and explained closely in a way that the teacher could not do due to large numbers in class. The findings further support those of Thomas and Tagler (2019) who established that in Midwestern United States, students who were driven to succeed used university based academic supports and received extra help from peers. The findings further concurs with those of Koc et al. (2016) who reported that in USA, the students sought help from their instructors and classmates privately through emails when they did not understand a subject matter concept and content. The findings by Chang and Brickman(2018);Thomas and Tagler (2019); Koc et al. (2016) and the current study concurred because these studies had one form or the other on seeking help and its effect on academic performance at all levels of learning. Learners therefore need to be assisted to embrace help seeking either from

classmates, colleagues or teachers and instructors to enhance their academic performance.

The correlation matrix results in Table 4.37 showed that there was no correlation between cooperative learning factors combined and pupils' mean score, the result was not statistically significant (r = -.074, n = 378, p = .153). Meaning that the two factors of making up co-operative learning cluster collectively had no significant influence or effect on academic performance. This findings are not in agreement with those of Hammar (2014) in Sweden who established that group discussion enhanced academic learning; Chang and Brickman (2018) who reported that group work assisted students in South Eastern USA understand class concepts better; Sofroniou and Poutos (2016) who established that in West London University, students achieved better marks in Mathematics through group work. The slight difference could be as a result of level of study of learners in the current study where primary school pupils depend mostly on the teachers for knowledge unlike their counterparts in secondary schools and university who can get into the library or internet, get information and fully participate in group discussion. Primary school pupils also have limited time for group discussion as majority are day scholars.

The correlation matrix results in Table 4.41, showed that there was a weak positive correlation between rehearsal factors combined and the pupils' mean score which was statistically significant (r = .116*, n = 378, p = .024). This means that, all the four factors of rehearsal cluster collectively had significant influence on academic performance. This is a very important learning strategy, for it refreshes pupils

memories before they finally write their exams. The findings in this study support that of Luo et al. (2016) who reported that in Midwestern, USA, the group of students who took notes during lecture lessons and revised them, improved their memory hence scored higher than the non-revision group of students. The findings are also in agreement with that of Bohay et al. (2011) who confirmed that at the university of Notre dame, students who took lecture notes and revised them performed better than those who did not review their lecture notes. This findings however differ with those of Arjmandnia et al. (2012) who established that rehearsal approach had no significant effect on the working memory performance of dyslectic children in a study conducted in Iran. This could be due to the fact that dyslexic students are in the category of special needs and they were compared to normal children whose IQ is naturally higher than dyslexic learners.

Modelling entails learning through observation and imitation during the FGD, Parents pointed out some anti-social behaviour like taking illicit brews and failing to attend school visits because they have huge fee balance. This acts are negative and therefore children have nothing of importance to imitate from their parents. Elaborating difficult concepts in classroom may also be challenging for learners to apply, probably because they are used to specific learning strategies such as rehearsal and setting targets. Teachers therefore need to help learners to use elaboration strategy like any other strategy to improve their academic performance. Parents too should strive to be role models for learners to emulate. A family unit influences children's career selection. Therefore, parents should be supportive to their learners.

From the results in Table 4.42, Pearson product moment correlation revealed a positive and significant association (r=.744, p<.005) between pupils mean score and learning strategies which was significant at 5 % level. The findings in Table 4.43 using regression model also revealed that learning strategies explain 72.1% variance in academic performance of pupils (R^2= .721, p<.05). This implies that learning strategies account for a large amount of variance in academic performance. In addition, the model coefficient results in Table 4.44 indicated a positive effect of learning strategies on academic performance, which is represented in the equation;

Academic performance=.884+.791 Learning strategies +.100 Error

These findings imply learning strategies have a positive effect on academic performance and hence would positively influence academic performance. Further findings from the ANOVA results as indicated in Table 4.45, the mean square regression is greater than the mean square residuals with overall significant F test *F (1, 376)* = 966.669*, p< 0.05*, which is a proof that academic performance linearly relate with learning strategies and the model is significant. In this case, the null hypothesis; "H_{03}: Learning strategies do not have a significant influence on academic performance among primary school pupils in Migori County", is rejected. These findings corroborate with those of Chang and Brickman (2018), Thomas and Tagler (2019), Koc et al. (2016)); who all agreed that learning strategies have effect on academic performance. Learners therefore need to be assisted in order to enhance their academic performance.

These findings are also in agreement with those of Hammar (2014), Chang and Brickman (2018), Sofroniou and Poutos (2016), Luo et al. (2016) and Bohay et al. (2011) who found a significant effect of learning strategies on academic performance. However, Arjmandnia et al. (2012) established that some strategies had no significant effect on academic performance, which was also attributed to other factors. Comparing these studies, it is observed that majority of them supported the finding of a positive influence of learning strategies on academic performance, whereas few indicate non-significant effect on the same. Moreover, the current study is supported by majority of the previous findings, hence it can be concluded that learning strategies have a positive and significant influence on academic performance of pupils in Migori County in Kenya

4.6 Gender Difference in Students Academic Performance

The fourth objective of the study was to determine gender difference in academic performance among girls and boys in primary schools in Migori County.

4.6.1 Performance between Girls and Boys

The results showing variation in performance of pupils in Migori County based on gender are presented in Table 4.46.

Table 4. 46: Pupils Mean Score Based On Gender

Gender	Mean	N	Std. Deviation
Male	338.46	189	52.139.
Female	341.27	189	61.665
Total	**339.86**	**378**	**57.042**

Source: Field Data (2021)

Results in Table 4.46 show that the average mean score for both male and female combined of 339.86 marks, was not far from the average scores given by teachers where; 18 teachers representing 30% said their pupils scored above 350 marks; 23 teachers representing 38.3% said their pupils scored between 300-349 marks; 12 (20%) said between 250-299 marks; and 7 (11.7%) said between 200-249 marks. The female students outperformed their male counterparts by; 341.27 ± 61.67 to 338.46 ± 52.14, this means that the female pupils did better or are doing better based on the three exams. Looking at the standard deviations for both gender, it seems female pupils' scores were too much spread or dispersed from the center than male pupils' scores. This actually could mean that, either there were some scores among female pupils skewed far to the left or right of the center, or so many scores were not close to the center (mean).

The above variation in results between female and male pupils is evident that, there exists a difference in pupils' performance arising from gender difference. This may have come as a result of having more female pupils learning in pure Girls' Boarding Schools where they have more time to study and may have learnt in the boarding from lower classes. Unlike their male counterpart, there was only one pure Boys' Boarding School in Migori County. The rest of the boys came from mixed day and boarding schools. In such cases, boys may have been accommodated in boarding when in standard eight or when approaching standard eight. However, the statistical significance of this difference must be tested using independent t-test statistics.

4.6.2 Performance between Boarding Schools and Day Schools

The performance of 380 pupils sampled for this study had a variation, both in terms of type of school (day schools and boarding schools) and gender. The results of school type are as shown in table 4.47

Table 4. 47: Pupils Mean Score Based on Type Of School

Type of school	Mean	N	Std. Deviation
Day school	315.13	188	55.764
Boarding school	364.34	190	46.937
Total	**339.735**	**378**	**57.042**

Source: Field Data (2021)

Results as shown in Table 4.47, indicate that those pupils who enrolled in boarding schools outperformed their counterparts in day schools by; 364.34 ± 46.94 to 315.13 ± 55.76; and looking at both standard deviations, the pupils in boarding schools performance were not too far away from the mean compared to the spread of scores for those pupils in day schools. This indicates that performance for most pupils in boarding, were close to the central point (mean) of the data. Pupils in day schools had some scores too far away from the center (mean) and could be low below the mean or too high above the mean. However, Independent t-test was run to confirm if the difference in performance based on school was statistically significant and can be generalized or was just due to chance.

4.6.3 Hypothesis Testing -Independent t-test

The fourth null hypothesis in this study stated that there is no significant gender difference in academic performance among boys and girls in primary schools in

Migori County. Independent t-test was run to validate or reject the null hypothesis. The independent t-test also called the two sample t-test, independent-samples t-test or student's t-test is an inferential statistical test that determines whether there is a statistically significant difference between the means in two unrelated groups. The null hypothesis for the independent t-test is that the population means from the two unrelated groups are equal, and in the case for this study: **H_{04}:** $u_1 = u_2$.

4.6.4 Independent T-test on Performance between Girls and Boys

The independent t-test to ascertain whether the difference in academic performance between girls and boys is significant is presented in Tables 4.48 and 4.49

Table 4. 48: Analysis Of Variance (Pupils Mean Score ~ Gender)

			Sum of Squares	df	Mean Square	F	Sig.
Pupils mean * Pupils gender	Between Groups	(Combined)	744.992	1	744.992	.228	.633
	Within Groups		1225947.632	376	3260.499		
	Total		1226692.624	377			

Source: Field Data (2021)

The results in Table 4.48 indicate that female pupils outperformed their male counterparts as shown by mean scores and standard deviations. However, the between groups mean was not significant with p-value = .633 > .05, the significance level set to reject the null hypothesis that stated “there is no significant gender differences in academic performance between girls and boys among primary school pupils in Migori County”. In addition, the mean square between the groups (744.992) is too small compared to mean square within groups (3260.499). This means the

difference in pupils' performance based on gender of the pupils was not statistically significant and could be due to chance hence the difference cannot be generalized.

The homogeneity of variance between female pupils and male counterparts was assessed by Levene's test for equality of variances. The results are presented in table 4.49.

Table 4. 49: Independent Samples Test (Pupils Mean Score ~ Gender)

		Levene's Test for Equality of Variances		t-test for Equality of Means					
								95% Confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Pupils mean	Equal variances assumed	1.873	.172	-.478	376	.633	-2.80776	5.87389	-14.35756	8.74204
	Equal variances not assumed			-.478	365.888	.633	-2.80776	5.87389	-14.35859	8.74307

Source: Field Data (2021)

Results in Table 4.49, reveal that the mean score of female pupils (341.27 ± 61.67 marks) was not statistically significantly higher than the mean score of male pupils (338.46 ± 52.14. marks) (t (376) = .478, p = .172) with a difference of 2.81 marks). This shows the difference in academic performance between female and male pupils could be due to chance and cannot be generalized. The null hypothesis; "**H_{04}:** There is no significant gender difference in academic performance, among boys and girls of primary schools in Migori County" is thus not rejected.

4.6.5 Independent T-test on Performance between Boarding and Day Schools

The independent t-test to ascertain whether the difference in academic performance between boarding schools and day schools is significant is as presented in Tables (4.50 and 4.51).

Table 4. 50: Analysis of Variance (Pupils Mean Score ~ Type Of School)

			Sum of Squares	df	Mean Square	F	Sig.
Pupils mean * Type of school	Between groups	(Combined)	228796.663	1	228796.663	86.209	.000
	Within Groups		997895.961	376	2653.979		
	Total		1226692.624	377			

Source: Field Data (2021)

The results in Table 4.50 show that pupils in boarding schools outperformed their counterparts in day schools when looked through the mean scores and standard deviations. The between groups mean was significant with p-value = .000 < .05, the significance level set to reject the null hypothesis. Besides, the mean square between the groups (288796.66) was too large compared to mean square within groups (2653.98). Clearly, the mean difference in pupils performance based on school type (boarding schools and day schools), was statistically significant and not due to chance. This Means, the difference can be generalized to a larger population outside study area.

Further, homogeneity of variance between pupils in boarding schools and day schools was assessed by Levene's (1960) test for equality of variances. The results are presented in table 4.51.

Table 4. 51: Independent Samples Test (Pupils Mean Score ~ Type of School)

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Pupils mean	Equal variances assumed	4.309	.039	-9.285	376	.000	-49.20566	5.29955	-59.62612	-38.78519
	Equal variances not assumed			-9.276	364.061	.000	-49.20566	5.30435	-59.63666	-38.77465

Source: Field Data (2021)

The results from Table 4.51, revealed that the mean score of pupils in boarding schools (364.34 ± 46.94 marks) were statistically significantly higher than the mean scores of pupils in day schools (315.13 ± 55.76 marks), (t (376) = 9.285, p = .39) with a difference of 49.21 marks). The reason for the difference may be that pupils in the boarding schools have more time to study than day school pupils. Day school pupils may be having heavy house chores at home and unconducive learning environment.

Further on the school type and gender difference in academic performance, the county director of education felt that the school type and gender influence in academic performance should not suffice. He said;

> It does not matter whether the child is in boarding or day school. May be those in boarding are given more attention and have more time to study and those in day schools lack time and conducive environment, so parents need proper sensitization to change their mind set. The type of school should not be a factor in determining pupils' performance. Some parents have no time to look at their children's school work because they are busy. Parents are busy looking for means to sustain their families' livelihoods, so there is no time for them to check on their children's work.

Results in Table 4.49, revealed that the mean score of female pupils (341.27 ± 61.67 marks) were not statistically significantly higher than the mean scores of male pupils (338.46 ± 52.139 marks, t (376) = .478, p = .172) with a difference of 2.81 marks. This shows that the difference in academic performance between female and male pupils could be due to chance and cannot be generalized. This findings are in tandem with that of Kupczynski, Brown, Holland and Uriegas (2014) who established that the difference between male and female students' academic success was not significant. It is also in line with that of Goni, et al. (2015) in Nigeria who indicated that there were no significant differences between gender and academic performance in Colleges of Education in Borno State. The reason for concurrence of findings could be that African countries have embraced education for girl child who for many decades was left behind in education. Boys and girls are now to a greater extent treated equally. However, these findings do not concur with that of Parajuli and Thapa (2017) who found that there was a significant gender difference in academic performance. The findings failing to concur could be the difference in geographical area where either gender is considered superior.

It was further observed that although the gap between girls and boys academic performance in Migori County has been sealed, there exists a difference in academic

performance between pupils who learn in boarding schools and those in day schools. The results from Table 4.51, revealed that the mean score of pupils in boarding schools (364.34 ± 46.94 marks) were statistically significantly higher than the mean scores of pupils in day schools (315.13 ± 55.76 marks), (t (376) = 9.285, p = .39) with a difference of 48.21 marks. The reason for the difference may be that pupils in the boarding schools have more time to study than pupils in day schools. Day school pupils take part in household chores at home therefore, unconducive learning environment. Other possible reasons for the difference may include better infrastructure, teaching and learning resources and parental involvement in pupils' education through payment of extra money in boarding schools. These finding corroborates with that of Parajuli and Thapa (2017) who established that the type of school has impact on academic performance.

The findings as indicated in Table 4.48 disagree with previous findings Ghazvini and Khajehpoura (2011) who found significant difference although on factors affecting academic performance between boys and girls, while Filgona and Sababa (2017), Eseine-aloja and Ebahi (2021), Mwihia (2020) found significant gender differences in performance. However, they concur with the previous study findings by Kupczynski, Brown, Holland and Uriegas (2014), Goni, Yaganawali, Ali and Bularafa (2015) which revealed that there is no significant gender difference in academic performance. It can thus be concluded that there is no significant gender difference academic performance of pupils in Migori County.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of the main study findings, conclusion, and recommendations made from the findings and the suggestions for further research.

5.2 Summary of Research Findings

The purpose of the study was to examine parental motivation, achievement goals and learning strategies as predictors of academic performance of primary school pupils in Migori County, Kenya. The objectives of the study were to; determine the extent to which parental involvement predicts academic performance of primary school pupils in Migori County. To establish the extent to which achievement goals predict academic performance, and to find out the extent to which learning strategies predict academic performance. Lastly, to determine gender differences in academic performance among girls and boys of primary school pupils in Migori County. The independent variables were parental motivation, achievement goals and learning strategies. The dependent variable was academic performance. The findings of the study are summarized below.

5.2.1 The Extent to which Parental Motivation Predict Academic Performance

The descriptive statistics results revealed that, all the 12 factors of parental motivation construct had positive influence on pupils' academic performance. The parental motivation factors were grouped into four clusters namely, provision factors, encouragement factors, reward factors and visit factors.

5.2.1.1 Parental Motivation through Provisions

According to the study findings, the key parental motivating factor predicting academic performance in the provisions was; parents making sure learners are of good health with 98.7% approval rating as indicated in Table 4.3, the parents having set high levels of discipline as a key to success in examinations with 95% as shown in Figure 4.1 and parents always providing a conducive environment at home for studies with 91.3% as indicated in Figure 4.5. The least motivation factors in provision cluster were parents providing required text books and writing materials to assist learners at 89.2% as shown in Table 4.5, being rarely sent home for fee because parents pay school money in good time had 85.3% as shown in Figure 4.3. Lastly, parents requesting teachers to assist their children in subjects they don't perform well had 82.4% as indicated in Figure 4.7. The provision factors on average had a high agreement ratio of 90.3% from the pupils which was confirmed to be statistically significant as shown in Table 4.8. From the findings, it is evident that all the six factors of provision cluster collectively had significant influence and they improved pupils' academic performance.

5.2.1.2 Parental Motivation through Encouragement

The most important parental motivation in the encouragement cluster was; having pupils encouraged by parents to improve in class performance with 98.5% see Figure 4.2 and getting motivated to do well in examination when parents appreciate and praise learners with 95.8% as indicated in Figure 4.4. The least parental motivation factor in this cluster was when teachers give take-home assignment where parents make sure that it is done with 86.8%, see Figure 4.6. The encouragement factors on

average had a high agreement proportion of 93.7% from the pupils, which was confirmed to be statistically significant as shown in Table 4.9. The results reveal that all the three factors of encouragement cluster, collectively had significant difference and they improved pupils' academic performance.

5.2.1.3 Parental Motivation through Rewards

The findings of parental motivation through rewards indicated that being given gifts or cash money by parents when they do well in examinations had 61.9% of the pupils agreeing as indicated in Table 4.4. Its rating by pupils was slightly above average, but when put on correlation test against pupils mean score, its influence on academic performance proved significant. From the correlation matrix results, there was a weak positive correlation between rewards factor and pupils mean score which was statistically significant as indicated in Table 4.10. From the results, it is reasonable to conclude that all the reward factors of being given gifts or cash money by parents after examinations had significant effect on academic performance.

5.2.1.4 Parental Motivation through Visits

The findings on the visits showed the key parental motivation factor as parents attending school parents meeting when invited with 85%, which is revealed in Table 4.7 and parents making visits to the class teacher to check on the child's performance was least with 77.9% of the respondents agreeing as shown in Table 4.6. The relationship between visit factors and pupils mean score was confirmed as not statistically significant as indicated in Table 4.11. From the results it is evident that

the two factors of visits cluster collectively had no significant influence on academic performance, and so did not improve pupils' academic performance.

The 12 parental motivation factors were transformed into one continuous predictor variable, the derived variable was then used to run correlation test against pupils mean score. Pearson product moment correlation between academic performance and parental motivation revealed a positive association, as shown in Table 4.12, which was significant. From the results it is reasonable to conclude that all the 12 parental motivation factors, collectively improved pupils academic performance.

Based on the diagnostic evidence and the p-value results provided in the model summary Table 4.13, parental motivation related linearly with academic performance (r=.724). This relationship was found to be statistically significant at p-value = .000, < .05. The null hypothesis; "**H_{01}:** Parental motivation does not have a significant effect on academic performance among primary school pupils in Migori County", was rejected.

5.2.2 The Extent to which Achievement Goals Predict Academic Performance

The descriptive statistics results revealed that, all the 12 factors of achievement goals construct had positive influence on pupils' academic performance. The achievement goals factors were grouped into two clusters namely, performance goals factors and mastery goals factors.

5.2.2.1 Performance Goals Factors

The most prominent performance goals predicting academic performance are; aiming to get excellent scores in class examinations with 98.9% respondents' approval as indicated in Table 4.18, the 'most important thing for them was improving their overall marks in KCPE with 98.4% as shown in Figure 4.10, 'aspiring to complete university education with 97.7% as indicated in Table 4.12 and the 'aim of study is to join a national or extra county school with 96.7% as indicated in Table 4.22; the least predicting factors are; the goal of study in the term was to perform better than the classmates, with 93.2% as shown in Table 4.20 and the 'focus of study is to outperform other pupils in the class with 90.5% of pupils' approval as indicated in Figure 4.9. The performance goal factors on average had, a high agreement ratio of opinion of 95.9% from the pupils which was confirmed to be statistically significant as indicated in Table 4.24. The results revealed that all the six factors of performance goals cluster collectively had significant influence and they improved pupils' academic performance.

5.2.2.2 Mastery Goals of Learners

According to the findings, the key mastery goals predicting academic performance are; the goal of being in class is to learn as much as they can to gain deeper knowledge with 98.1% as shown in Figure 4.8, making efforts to read class notes to master the content taught in class' had the second best rating with 96.1 as shown in Figure 4.11. The 'aim of study is to master the content taught in class' and the 'preference of topics that challenge pupils to understand the subject well' shared third best rating with 95.2% as shown in Tables 4.17 and 4.23 respectively . From the

results in Table 4.19, the statement that 'understanding how to do the work in class is very important for them' had 95% approval and 'the purpose of doing my class work is because I like to learn new things' received 91% being the least rating from the pupils as shown in Table 4.21. The mastery factors on average had an agreement ratio of 95.1% from the pupils which was confirmed as not statistically significant as shown in Table 4.25. From the findings, it is evident that all the six factors of mastery cluster collectively had no significant influence or effect on academic performance. Therefore, mastery factors may have improved academic performance in some way or another, but that cannot be generalized scientifically.

The 12 achievement goals factors were transformed into one continuous predictor variable. And the derived variable used to run correlation test against pupils' mean score. The Pearson product moment correlation between pupils' mean score (academic performance) and achievement goals predictor variable data sets produced positive association with a correlation coefficient of .720**, p = .000. Compared with the confidence level of 95% with confidence interval or significance level set at 5% (0.05), it revealed the association was statistically significant as shown in table 4.26. From the results, it is reasonable to conclude that all the 12 achievement goals' factors collectively improved pupils'' academic performance. Besides, it seems mastery cluster factors improved on their relevance and effect when put together with performance factors.

From the diagnostic evidence and the p-value results as provided in the model summary Table 4.27, (academic performance against achievement goals)

achievement goals predictor, related linearly to academic performance response variable. This relationship was found to be statistically significant at p-value = .000, < .05. In which case the null hypothesis; **H_{02}:** Achievement goals do not have a significant effect on academic performance of primary school pupils in Migori County was rejected.

5.2.3 The Extent to which Learning Strategies Predict Academic Performance

Learning strategies had 14 factors upon which its effect or impact on pupils' academic performance was evaluated. Individually or collectively, these factors to some extent were meant to contribute on the overall significance of learning strategies predictor in influencing or improving pupils' academic performance. The 14 learning strategies factors were grouped into six cluster namely, seeking help factors, cooperative learning factors, setting targets factors, organization factors, modelling factors and rehearsal factors. The findings of these combined factors and their influence on academic performance are as follows.

5.2.3.1 Seeking Help Strategy

According to the study findings, the most important seeking help factors are; when pupils do not understand the topic, they ask another student in class to help them with 97.9% as indicated in Table 4.32 and asking the teachers to clarify concepts they don't understand well in class was the least approved with 92.1% (See Table 4.30). Therefore statements on seeking help factors on average had a high agreement ratio of opinion, of 95% from the pupils which was confirmed to be statistically significant with, (r = .122*, n = 378, p = .017). The results in Table 4.36 revealed

that all the two factors of seeking help cluster collectively had significant influence on pupils' performance therefore they improved pupils' academic performance.

5.2.3.2 Cooperative Strategy

The key cooperative learning factors as indicated in Figure 4.16 are; when pupils study for exams, they often set aside time to discuss class materials with a group of students from the class with an approval of 90.3% from the pupils and trying to work with other pupils in the class to complete the assignments with 84% approval as indicated in Figure 4.15. The cooperative factors on average had an agreement ratio of 87.2% which was confirmed as not statistically significant with, ($r = -.074$, $n = 378$, $p = .153$). From the results in Table 4.37, it is evident that the two factors making up cooperative learning cluster collectively had no significant influence on academic performance.

5.2.3.3 Setting Targets Strategy

The findings show that the core factor on setting targets as shown in Figure 4.18 is, when pupils study in the class, they set goals for themselves to direct their activities in each study period with 97.9% approval from the pupils and the least is that they are determined to do well and therefore self-driven in their studies with 97.6%, as indicated in Figure 4.20. Setting targets learning strategies factors on average had a high agreement ratio of opinion of 97.8% from the pupils which was confirmed to be statistically significant with, ($r = .130^*$, $n = 378$, $p = .012$). From the findings in Table 4.38, it is evident that the two factors making up setting targets cluster

collectively had significant influence on pupils' performance and so they improved their academic performance.

5.2.3.4 Organization Strategy

The findings in Table 4.34 indicate that the most important organization learning strategy is; after every examination, pupils reorganize their study skills for better performance, with 95.2%; and when reading, they make up questions to help them focus on reading with 85.3% of the pupils agreeing as shown in Figure 4.14. Organization factors on average had an agreement ratio of opinion of 90.3% from the pupils, which was confirmed to be statistically significant with, ($r = .116^*$, $n = 378$, $p = .024$). From the results in Table 4.39, it is reasonable to conclude that organization learning strategies collectively had significant influence on pupils' performance and so, they improved pupils' academic performance.

5.2.3.5 Modelling Strategy

According to the findings, the key modelling learning strategies is; pupils are able to elaborate the given concepts in class after a given topic with 93.9% approval, as indicated in Figure 4.20, from pupils and the 'pupils have been influenced by their hard working classmates in class and parents and so, they imitate what they do' with the least ratio at 92.1% as shown in Table 4.35. The modelling learning strategies on average had an agreement ratio of 93% from the pupils, which was confirmed as not statistically significant with, ($r = .072$, $n = 378$, $p = .165$). From the results as shown in table 4.40 it is evident that modelling learning strategies cluster collectively had no significant influence on academic performance.

5.2.3.6 Rehearsal Strategy

The findings showed that rehearsal learning strategies, shown in Figure 4.17, play an important role as indicated by the fact that many respondents agreed that pupils memorize key words to remind them of important concepts in class with 96.9%, when preparing for exams, pupils read their class notes and text books over and over with 93.7% after study as shown in Table 4.33. Pupils rehearse over and over when preparing for exam with 91.6% as shown in Table 4.31. Rehearsal learning strategies on average had high agreement ratio of opinion of 94.6% from the pupils which was confirmed to be statistically significant with, ($r = .116^*$, $n = 378$, $p = .024$). From the results in Table 4.41, it is reasonable to conclude that all the four factors making up rehearsal learning strategies collectively, had significant influence on pupils' performance hence they improved pupils' academic performance.

The 14 learning strategies were transformed into one continuous predictor variable. And the derived variable used to run correlation test against pupils' mean score. The Pearson product moment correlation between pupils' mean score (academic performance) and learning predictor variable data sets produced positive association with a correlation coefficient of $r = .744^{**}$, $p = .005$. Compared upon the confidence level of 95% with confidence interval or significance level set at 5% (0.05), it revealed the association was statistically significant ($r = .744$, $n=378$, $p = .005$). From the findings in Table 4.42 it is evident that all the 14 learning strategies factors collectively improved pupils' academic performance. Accordingly, it seems modelling cluster factors and cooperative cluster factors improved on their relevance

and effect on pupils' performance, when put together with rehearsal, seeking help, organization and setting targets factors.

Based on the diagnostic evidence and the p-value results as provided in the model summary Table 4.43, (academic performance against learning strategies), learning strategies predictor related linearly with academic performance response variable (r=.849). This relationship was found to be statistically significant at p-value = .000, < .05. In this case, the null hypothesis; H_{03}: Learning strategies do not have a significant influence on academic performance among primary school pupils in Migori County was rejected.

5.2.4 Academic Performance of Boys and Girls

Based on type of school (day schools and boarding schools) and gender, the findings in Table 4.47 indicated that those pupils enrolled in boarding schools outperformed their counterparts in day schools by; 364.34 ± 46.94 to 315.13 ± 55.76; and looking at both standard deviations, the pupils in boarding schools performance were not too far away from the mean compared to the spread of scores for those pupils in day schools. Results in Table 4.50 from independent t-test revealed the between groups mean was significant with p-value = .000 < .05. Besides, the mean square between the groups was too large compared to mean square within groups. The findings clearly indicated that the mean difference in pupils performance based on school type (boarding schools and day schools), was statistically significant and not due to chance. The findings show that, the difference is scientific and can be generalized anywhere. On gender factor, female students outperformed their male counterparts

by; 341.27 ± 61.67 to 338.46 ± 52.14, indicating that the female pupils did better or are doing better based on the three exams used. Results as indicated in Table 4.48 from independent t-test, revealed, the between groups mean score was not significant with p-value = .633 > .05. Besides, the mean square between the groups (744.992) was too small compared to mean square within groups (3260.499). From the results it is evident that the mean difference in pupils' performance based on gender of the pupils was not statistically significant. So we fail to reject the null hypothesis; **H_{04}:** There is no significant gender difference in academic performance among boys and girls of primary schools in Migori County.

5.3 Conclusions

The study concluded that parental motivation based on provisions to support the pupils in their education, encouragement through praise and appreciation when pupils perform better in examinations, rewards such as material gifts and cash money improves academic performance of primary school pupils in Migori County. Therefore, the null hypothesis that; parental motivation does not have a significant effect on academic performance among primary school pupils in Migori County was rejected.

The study also established that achievement goals (mastery and performance) influence academic performance of primary school pupils in Migori County as the pupils strive to master subject content to gain deeper knowledge for excellent scores in internal exams and in KCPE exams as a bridge not only to joining good national schools but also for the completion of university education. Thus, the null hypothesis

that; parental motivation does not have a significant effect on academic performance among primary school pupils in Migori County was rejected.

The study further indicated that learning strategies such as seeking help from teachers and classmates in class, setting of achievable targets to direct study activities, reorganization of study skills, revision of class notes and memorization of key concepts when preparing for examinations impact positively on the pupils' academic performance of primary school pupils in Migori County. So, the null hypothesis that; learning strategies do not have a significant influence on academic performance among primary school pupils in Migori County was rejected.

Finally, the findings revealed that despite the fact that the gap difference between boys and girls has been narrowed in academic performance, it was established that there exists the difference in academic performance of pupils who learn in boarding schools and days schools. Therefore we fail to reject the null hypothesis that; there is no significant gender differences in academic performance among boys and girls in primary school pupils in Migori County.

The study therefore concluded that parental motivation, achievement goals and learning strategies improve academic performance of primary school pupils in Migori County.

5.4 Recommendations

The following recommendations were made based on the findings and conclusions of the study that were discussed and explained in the light of the study objectives:

i. Apart from the parental involvement through provisions, encouragement and rewards, it is recommended that parents visit schools to check on pupils' academic progress and attend annual general meetings so that they get involved in what takes place in schools and the pupils' learning activities as this may improve learners' academic performance.

ii. Teachers should put more emphasis on mastery goals while handling learners in class for better academic outcome. They should help the learners to gain deeper knowledge and understand the subject content as a basis for academic excellence. They should not only help learners pass exams (performance goals) but also help them to handle challenging and difficult tasks in class since primary education lays basis for secondary, collages and university education.

iii. The commonly used learning strategies in Migori County are seeking help, rehearsal, setting targets and organization of learning skills. It is in the light of this that it is recommended that cooperative learning and modelling be adopted at the primary school level by teachers and pupils like any other learning strategy to improve academic performance.

iv. Despite the fact that gender difference in performance between boys and girls has been narrowed, the Ministry of Education and parents should encourage boy child to embrace learning and not to engage in small business such as money exchange, fishing and boda boda (motorbike) transport services.

5.5 Suggestions for Further Research

The following suggestions were made for further research based on the findings of this study:

Firstly, the study was carried out among standard eight pupils of the 8-4-4 system. With the introduction of the new education system CBC, in Kenya, where parents have been empowered to actively participate in the learning process of their children, a similar study should be carried out in the current CBC grade four, five or six, to establish the extent to which parental motivation predicts academic performance.

Secondly, a study can be done in another geographical area to establish whether mastery goals predict academic performance in public primary schools to verify how much the varied environmental setting would impact on the parameters provided for in this study.

Thirdly, further studies can be carried out to establish whether cooperative and modelling influences academic performance in primary schools and the degree to which the two approaches can be adopted sustainably.

Finally, the study was conducted in public primary schools, similar studies should be carried out in private primary schools to determine gender difference in academic performance among boys and girls.

REFERENCES

Adeyemi, F. B., Adejoke, B.A., Uwaoma, C. O., Anwanane, B. B., & Nwangburka, K. (2019). Peer group influence on academic performance of undergraduate students in Babcock University, Ogun State. African Educational Research Journal, vol 7(2) 81-87

Adom, D., Yeboah, A., & Ankrah, A. K. (2016). Constructivism Philosophical Paradigm: Implication for Research, Teaching and Learning. Global Journal of Arts, Humanities and Social Sciences, Vol 14, (10), 1-9.

Akhtar, Z., Ahmad, D., & Saifi, I. L. (2020). Effect of Parents Participation in Students' Academic Performance. Kashmir Journal of Education, 1(II), 11-24

Alami, M. (2016). Causes of Poor Academic Performance among Omani Students. International Journal of Social sciences Research. ISSN 2327-5510, vol. 4 (1) doi:10.5296/ijssr.v4i1.8948

Ali, S., Haider, Z., Munir, F., Khan, H., & Ahmed, A. (2013). Factors contributing to student's academic performance: A case study of Islamia University Sub campus. American Journal of Educational Research, 1(8), 283-289.

Alrakaf, S., Sainsbury, E., Rose, G., & Smith, L. (2014). Identifying achievement goals and their relationship to academic achievement in undergraduate pharmacy students. American journal of pharmaceutical education, 78(7), 1-8. 133.

Anumaka, I. B. & ssemugenyi, F. (2013). Gender and Work-Productivity of Academic Staff in Selected Private Universities in Kampala City, Uganda. International Journal of Research in Business Management ISSN 2321-886X Vol. 1 (3) 29-36

Arjmandnia A. A, Kakabaraee K., Afrooz, G.A. (2012). The effect of rehearsal strategy on the performance of dyslexic student's working memory. Procedia Social and Behavioral Sciences. 46:2620-4. [DOI:10.1016/j.sbspro.2012.05.535]

Bandura, A. (1962). Social learning through imitation. In M. R. Jones (Ed.), Nebraska Symposium on Motivation, 1962 (pp. 211–274). Univer. Nebraska Press.

Bandura, A., & Walters, R.H. (1963) Social learning and personality development. New York: Holt, Rinehart & Win-ston.

Bankole E. T., and Ogunsakin F. C. (2015). Influence of peer group on academic performance of secondary school students in Ekiti State. International Journal of Innovative Research and Development, 4(1): 324-331.

Basit, A. & Rahman, F. (2017). Achievement Goal Orientations and Performance in English: A study of Secondary School Students. Haripur Journal of Educational Research, Vol. 1, (1), 2017

Bohay, M., Blakely, D. P., Tamplin, A. K., & Radvansky, G. A. (2011). Note taking, review, memory, and comprehension. American Journal of Psychology, 124(1), 63-73. doi:10.5406/amerjpsyc.124.1.0063.

Chan, D. W. (2008). Goal orientations and achievement among Chinese gifted students in Hong Kong. High Ability Studies, 19(1), 37-51.

Chang, Y. & Brickman, P. (2018). When group work doesn't work: Insights from students. CBE Life Sciences Education, 17(3). https://doi.org/10.1187/cbe.17-09-0199

Chesimet, M. C., Githua, B.N. & Ng'eno, J.K. (2016). Effects of Experiential Learning Approach on Students' Mathematical Creativity among Secondary School Students of Kericho East Sub-County, Kenya. Journal of Educational Practice. 7(23):51-56.

Cheung, C.S., & Pomerantz, E.M. (2012). Why does parents' involvement enhance children's achievement? The role of parent oriented motivation. Journal of Educational Psychology, 104(3), 820–832.

Chohan, B.I & Khan, R. (2010). Impact of Parental Support on the Academic Performance and Self Concept of the Student, Journal of Research and reflections in Education, Vol.4, No.1, pp 14 -26

Christian, J. &Pepple, M. (2012). Cooperative and individualized learning strategies as predictors of students' achievement in secondary school chemistry in Rivers State. Journal of Vocational Education & Technology, 9(2), 35-41

Chumacero, R., Mardones, J., & Paredes, R. (2016). Competition Pressures and Academic Performance in Chile. Estudios De Economía, 43(2), 217-232.

Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, Calif: Sage Publications.

Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches 3rd ed. Thousand Oaks, CA: Sage.

Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: Sage.

Dompnier, B., Darnon, C., & Butera, F. (2013). When performance-approach goals predict academic achievement and when they do not: A social value approach. British Journal of Social Psychology, 52, 587-596. DOI: 10.1111/bjso.12025

Dotson, R. (2016). Goal setting to increase student academic performance. Journal of School Administration Research and Development, 1(1), 44–46.

Echaune, M., Ndiku.J.M. , Sang, A., & Ejakait, E. (2015).The influence of parental involvement in provision of teaching learning resource on educational outcomes: An empiririical study of Teso North Sub County primary school. Advances in Social Sciences Research Journal, 2(1) 4353

Elliot, A. J. (2005). A conceptual history of the achievement goal construct. In A. J. Elliot, & C. S. Dweck (Eds.), Handbook of competence and motivation (pp. 52-72). New York: Guilford Press.

Elliot, A. J., & McGregor, H. A. (2001). A 2 × 2 achievement goal framework. Journal of Personality and Social Psychology, 80(3), 501–519. https://doi.org/10.1037/0022-3514.80.3.501

Elliot, A. J., McGregor, H. A., & Gable, S. (1999). Achievement goals, study strategies, and exam performance: A mediational analysis. Journal of Educational Psychology, 91(3), 549–563. https://doi.org/10.1037/0022-0663.91.3.549

Eseine, A., & Ebahi, C. (2021). Effects of gender on the academic performance of public-school Biology students participating in school organised extra-mural classes. Sapientia foundation Journal of education, sciences and gender studies, Vol.3 (1) 337 – 349

Filgona, M., &, Sababa, L. K. (2017). Effect of gender on senior secondary school students' academic achievement in geography in Ganye educational zone, Nigeria. European Journal of Education Studies, Vol 3 (4), 394- 410.

Gakure, R. W., Mukuria, P. & Kithae, P. P. (2013). An evaluation of factors that affect performance of primary schools in Kenya: A case study of Gatanga district. Educational Research and Reviews, 8(13), 927-937.

Gbollie, C. & Keamu , H. P. (2017): Student Academic Performance: The Role of Motivation, Strategies, and Perceived Factors Hindering Liberian Junior and Senior High School Students Learning, Education Research International DOI :10.1155/2017/1789084

Ghaleb, A., Ghaith, S. & Akour. M. (2015): Self-efficacy, Achievement Goals, and Metacognition as Predictors of Academic Motivation. Procedia - Social and Behavioural Sciences Vol. 191, pp. 2068-2073

Ghazi, S. R., Ali, R., Saqib, S., & Hukamdad, H., (2010). Parental Involvement in Children Academic Motivation, Journal of Asian Social Science, Vol 6(4) p 93

Ghazvini, S., & Khajehpoura, M. (2011). Gender differences in factors affecting academic performance of high school students, Procedia Social and Behavioral Sciences, 15, 1040–1045.

Goni, U., Yaganawali S.B., Ali, H.K., Bularafa, M.W. (2015). Gender differences in students' academic performance in Borno State, Nigeria: Implications for counselling. Journal of Education and Practice, 6(32):107-114.

Goodwin, C.J. (2005). Research in Psychology Methods and Design. Wheeling Jesuit University 4th ed. John Wiley and Sons, Inc.

Gottfried, A. E., Marcoulides, G. A., Gottfried, A. W., & Oliver, P. (2009). A latent curve model of parental motivational practices and developmental decline in math and science academic intrinsic motivation. Journal of Educational Psychology, 101, 729-739.

Hamburg, M. (1977). Statistical Analysis for Decision Making (2nd Ed.). New York: Harcourt Brace Jovanovich, Inc., pp. 219 538.

Hammar, C. E. (2014) Group work as an incentive for learning – students' experiences of group work. Front. Psychol. 5:558. doi:10.3389/fpsyg.2014.0055

Henze, J., & Zhu, J. (2012). Current research on Chinese students studying abroad, Research in Comparative and International Education, 7(1), 90-104.

Hill, N. E, & Tyson, D. F. (2009). Parental Involvement in Middle School: A Meta-analytic Assessment of the Strategies that Promote Achievement. Developmental Psychology 45 (3): 740–763

Homabay County Education Office. (2019). County Government of Homabay

https://www.researchgate.net/publication/258340450_gender_and_work_productivity_of_academic_staff_in_selected_private_universities_in_kampala_city_uganda [accessed Jun 20 2021].

https://www.researchgate.net/publication/290604893_School_choice_and_information [accessed Jun 08 2021].

https://www.researchgate.net/publication/291811658_Revising_lecture_notes_how_revision_pauses_and_partners_affect_note_taking_and_achievement [accessed Jun 05 2021]

Ireri, A. M. (2015). Academic identity status and achievement goal orientation as predictors of academic achievement among form three students in Embu County, Kenya. (Unpublished Ph.D thesis). Kenyatta University, Kenya.

Jazmawi, A. (2008). Underachievement and Low Success Rate of Jordanian Students in Secondary Schools, Home Economics. Arab Open University, Jordan.

Jepketer, A., Kombo, K., & Kyalo, D. (2015). Teachers' class-room strategy for enhancing students' performance in public secondary schools in Nandi County, Kenya. IOSR Journal of Humanities and Social Science, 20(7, Ver. II), 61-73. Available from www.iosrjournals.org

Jeruto, K. B. (2018). Selected strategies that influence students' academic performance in public secondary schools in Chepalungu Sub-County, Bomet County, Kenya (Unpublished Theses, Moi Univesity).

Johnson, D.R., & Creech, J.C. (1983). Ordinal measures in multiple indicator models: A simulation study of categorization error. American Sociological Review, 48, 398-407.

Kapur, R. (2018). Factors influencing the students‟ Academic Performance in Secondary Schools in India. Retrieved from https://www.researchgate.net/publication/ 324819919. Date accessed: 15th December 2019.

Kashu, J. N. (2014). Survey on gender and academic performance in secondary schools in Kenya. http://hdl.handle.net/11295/77693

Katz, I., Kaplan, A., & Buzukashvili, T. (2011).The role of parents' motivation in students' autonomous motivation for doing homework. Journal of Learning and Individual Differences, Vol, 21 DOi: 10.1016/j.lindif.2011.04.001

Kenya Institute of Curriculum Development – KICD (2017).Basic Education Curriculum Framework (pp.20).

Kerlinger, F. N. (2004). Fundamentals of Behavioural Research 7thed. New York: Holt Rinehart and Wiston Inc.

Kgosidialwa, T.K. (2010). Parental involvement and expectations of children's academic achievement goals in Botswana: Parent's perceptions. (Unpublished PhD dissertation) Faculty of Education Studies. University of Northern Colorado.

Klassen, A. C., J. Creswell, V. L. P. Clark, K. C. Smith, & Meissner, H. I. 2012. "Best Practices in Mixed Methods for Quality of Life Research." Quality of Life Research 21 (3): 377–380.

Koc, S., & Liu, X. (2016). An investigation of graduate Students' help-seeking experiences, preferences and attitudes in online learning. Turkish Online Journal of Educational Technology. 15(3), 27–38.

Kord, B. (2018). The Relationship between Achievement Goals and Academic Success: The Investigation of Mediating Role of Academic Self-efficacy. Iranian Journal of Learning and Memory 2018, 1(2)

Koskei, B. (2014). Influence of parental involvement on students‟ academic performance of public mixed day secondary schools In Kuresoi Sub-County, Nakuru County, Kenya. International Journal of Education and Research 2 (12), 505-516.

Kothari, C. R., & Garg, G. (2014). Research methodology methods and techniques. (3rded.). New Dellhi: New Age. International (P) Ltd.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30, 607-610. Retrieved June 2020

Kupczynski, L., Brown M., Holland G., & Uriegas B. (2014). The Relationship between Gender and Academic Success Online. Texas A&M University-Kingsville

Kyoshaba, M. (2009). Factors affecting academic performance of undergraduate students at Uganda Christan University .Available at: http://mak.ac.ug/documents

Lee, H., Kim, Y., Kesebir, P., & Han, D.E. (2016) Understanding When Parental Praise Leads to Optimal Child Outcomes: Role of Perceived Praise Accuracy. Social Psychological and Personality Science 1-10

Levene, H. (1960). Contributions to Probability and Statistics (pp. 278-292). Redwood City, CA: Stanford University Press.

Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited in N. Denzin and Y. S. Lincoln (Eds.), The Sage handbook of qualitative research (pp. 97–128). Thousand Oaks, CA: Sage

Luo, L., Kiewra, K. A., & Samuelson, L. (2016). Revising Lecture Notes: How Revision, Pauses, and Partners Affect Note Taking and Achievement Instructional Science: An International Journal of the Learning Sciences, Vol 44(1) 45-67

Lyons, P. & Howard, J., & Doueck H. J. (2010). The Dissertation: From Beginning to End. Front Cover. Oxford University Press.

Matos, L., Lens, W., & Vansteenkiste, M. (2007). Achievement goals, learning strategies and language achievement among Peruvian high school students. Psychological Belgic, 47, 51-70.

McClelland, D. C. (1961). The achieving society. New York: The Free Press.

McMahon, W. J., McMahon, B. F., & Romano, T. (1994). Psychology and you 2nd ed: West Publishing Company USA

Migori County Education Office. (2019). County Government of Migori

Migori County. (2019). County Government of Migori Profile. Available at; https://migori.co.ke

Milano, M., & Ullius, D. (1998). Designing powerful training: The Sequential Iterative Model (SIM). San Francisco, CA: Jossey-Bass.

Mobark, W. M. (2014). Effect of using cooperative learning strategy on graduate students' academic performance and gender difference. Journal of Education and Practice. 5(11), 64-70.

Moore, D. S., Notz, W. I, & Flinger, M. A. (2013). The basic practice of statistics (6th Ed.). New York, NY: W. H. Freeman and Company. Page (138).

Mudibo, S.O. C. (2014). Impact of parents' involvement on students' academic success in secondary schools in Kenya. (Unpublished thesis, University of Nairobi) http://hdl.handle.net/11295/77697.

Muola, J. M. (2010). A Study of the Relationship between Academic Achievement Motivation and Home Environment among Standard Eight Pupils in Machakos. Educational Research and Reviews. 5(5), 213-217.

Mupira, P., & Ramnarain, U. (2018). The effect of inquiry-based learning on the achievement goal-orientation of grade 10 physical sci-ences learners at township schools in South Africa. Journal of Reseach in Science Teaching, (55), 1–16.

Musa, A. K. J., Dauda, B., & Umar, M. A. (2016). Gender Differences in Achievement Goals and Performances in English Language and Mathematics of Senior Secondary Schools students in Borno State, Nigeria. Journal of Education and Practices, 7(27), 165–175.

Mutai, C.C. (2011). Gender Differences in Mathematics Performance among Secondary School Students in Bureti Sub-County, Kericho County Kenya. (Published Thesis). Kenyatta University, Nairobi Kenya

Mwangi, J.M. (2018): Ability Believes, Achievement Goals and Fear of Negative Evaluation as Predictors of Academic Achievement Among Form three Students in Mombasa County, Kenya. (Unpublished Ph.Dthesis). Kenyatta University, Nairobi, Kenya

Mwangi, N. I. & Nyagah, G. (2013). Determinants of academic performance in Kenya Certificate of Secondary Education in public secondary schools in Kiambu County, Kenya. Journal of Education and Practice, 4(12), 38-43.

Mwihia, C. (2020). Gender difference in academic achievement of students in Kinangop Sub County, Nyandarua County, Kenya. European Journal of Social Sciences Studies, ISSN 2501-8590

Ng'ang'a, M. W., Mwaura, P. A. M., & Dinga, J. N. (2018). Relationship between Achievement Goal Orientation and Academic Achievement among Form Three Students in Kiambu County, Kenya. International Journal of Innovative Research and Advanced Studies (IJIRAS) Volume 5 Issue

Njenga, J. 2010. Evaluation of the effectiveness of cooperative learning structures in improving students' performance. (LSU Master's Theses). Retrieved from: https://digitalcommons.lsu.edu/gradschool_theses/1607

Norman, G. (2010). Likert scales, levels of measurement and the "laws" of statistics. Advances in Health Sciences Education, 15(5), pp.625-632.

Odenyo, A. (2021) Demands and Rewards of CBC in the Eyes of Parents. The Star Newspaper, 28 September, 2021

Oloo, C. O., Juma, S, & Murundu, Z. (2019). Influence of Parental Involvement on Academic Achievement of Pupils in Public Primary Schools in Rachuonyo South Sub-County, Kenya. International Journal for Research in Educational Studies (ISSN: 2208-2115), 5(5),

Omar, R., Ahmad, N.A., Hassan, S.A. & Roslan, S. (2017). Parental Involvement and Achievement Motivation: Association with Students' Achievement in Vocational Colleges, Malaysia. International Journal of Academic Research in Business and Social Sciences. 7(4): 11-24.

Osei-Akoto, I., Chowa, G. & Ansong, D. (2012) Parental involvement and academic performance in Ghana. Youth save Research Brief, CSD publication No. 12-42.

Ouma, P., Tanui, E. & Rop, N. K (2018) Influence of situational leadership style on pupils' performance in Kenya Certificate of Primary Education in Public primary schools in Uriri Sub County, Kenya. http://hdl.handle.net/123456789/10089

Owuor, O. P. & Sika, J. O. (2019). Parental financing and their influence on academic performance of secondary schools in Mbita Sub-County, Kenya. International Journal of Innovative Social and Science Education Research, 7(1), 102-108.

Parajuli, M., & Thapa, A. (2017). Gender Differences in the Academic Performance of Students. Journal of Development and Social Engineering, 3(1), 39-47.

Popa, D. (2016). The impact of perceived parental involvement on student success. Journal Plus Education, 16(2016), 185-198.

Rafiq, H. M. W., Fatima, T., Sohail, M. M., Saleem, M., & Khan, M. A. (2013). Parental Involvement and Academic Achievement: A Study on Secondary School Students of Lahore, Pakistan. International Journal of Humanities and Social Science, 3(8), 209-223.

Rathus, A. S. (2012). Psychology Concepts and connections 10th ed: Cen gage learning books. Wadsworth.

Reche, G.N., Bundi, T. K., Riungu, J.N., Nthia, J., &Mbugua, Z.K. (2012). Factors Contributing to Poor Performance in Kenya Certificate of Primary Education in Public Day Primary Schools in Mwimbi Division, Mara District Kenya. International journal of. Humanities and Social Science, 2(5), 127-133.

Republic of Kenya. (2013). Basic education act 2013 No. 29 of 2013. Nairobi.

Republic of Kenya. (2015). County statistical abstract: Migori county, 2015. Kenya National Bureau of Statistics.

Richard, M., & Grinnell, Jr. (2001). Social Work Research and Evaluation: Quantitative and Qualitative Approaches: Illinois State University: Wadsworth.

Russell, S. T., Toomey, R. B., Ryan, C., & Diaz, R. M. (2014). Being out at school: The implications for school victimization and young adult adjustment. American Journal of Orthopsychiatry, 84(6), 635–643.

Senko, C., Belmonte, K., & Yakhkind, A. (2012). How students' achievement goals shape their beliefs about effective teaching: A "Build-A-Professor" study. The British Journal of Educational Psychology, 82, 420–435.

Shehzad, M.O., & Aziz, M. (2019). Achievement goals and academic achievement: The mediating role of learning strategies. Foundation University Journal of Psychology, 2019, vol. 3, no. 1, 1-23.DOI: 10.33897/fujp3.11

Simba, N. O., Agak, J. O., & Kabuka, E. K.(2016) Impact of discipline on academic performance of pupils in public primary schools in Muhoroni Sub-County, Kenya. Journal of Education and Practice, Vol 7 (6), 164-173

Simsek, A., & Balaban, J. (2010). Learning strategies of successful and unsuccessful university students. Contemporary Educational Technology, 1(1), 36-45

Sofroniou, A. & Poutos, K. (2016). Investigating the effectiveness of group work in Mathematics. Journal of Education Science; 6(4), 30-36.

Sullivan, G. & Artino Jr., A. R. (2013). Analyzing and Interpreting Data from Likert – Types Scales. Journal of Graduate Medical Education. 5(4), 541- 542.

Temitope, B. & Ogunsakin, F. C. (2015). Influence of peer group on academic performance of secondary school students in Ekiti State. International journal of innovative research and development .Vol 4(1).

Thomas, C. L., & Tagler, M. J. (2019). Predicting academic help-seeking intentions using the reasoned action model. Frontiers in Education, 4(59).

Thornton, R. (2015). Parental Involvement and Academic Achievement. (Unpublished Maters thesis). Governors State University, USA.

Wainaina,V. W., Rugar, T., and Ndiritu, J. (2016) Effect of user charges on participation in education among students in public secondary schools in Kitui County, Kenya. http://ir-library.ku.ac.ke/handle/123456789/20178

Wairimu, M. J., Macharia, S. M., & Muiru, A. (2016). Analysis of Parental Involvement and Self-Esteem on Secondary School Students in Kieni West Sub-County, Nyeri County, Kenya. Journal of Education and Practice, Vol 7 (27), 82-98

Walliman, N.S.R. (2011). Research Methods the Basics. Routledge Taylor and Francis Group: London; New York

Wanakacha, K., C., Aloka,J., P., & Nyaswa, P. (2018). Gender differences in motivation and teacher performance in core functions in Kenyan secondary schools. Academic Journal of Interdisciplinary Studies, 7(1), 89 –95.

Wangu, M.J. (2014). The impact of gender differences on student's academic performance in secondary schools in Ndumberi, Kiambu County, Kenya. (Unpublished thesis, University of Nairobi)

Wanja, G.M. (2014) The Role of Parents In Resolving Students' Discipline Problems In Public Day Secondary Schools In Kikuyu Sub County, Kiambu County, Kenya. Masters Thesis, Kenyatta University (pp.35)

Zare, H., Rastergar, A., & Hosseini, S.M.D. (2011). The relation among achievement goals and academic achievement in statistics: the mediating role of statistics Self-Efficacy. Procedia-Social and Behavioural Sciences vol. 30, 1166-1172. Doi: org?101016/j.sbspro.2011.10.227

Zikmund, W. G. (2000). Business research methods (6th Ed). Fort Worth: Harcourt College Publishers

Zumbo, B. D., & Zimmerman, D. W. (1993). Is the selection of statistical methods governed by level of measurement? Canadian Psychology, 34, 390-400.

APPENDICES

Appendix A: Pupils Data Collection Questionnaire

Introductory Letter

Dear Respondent

I am a student pursuing PhD Degree in Educational Psychology at Masinde Muliro University of Science and Technology (MMUST). I am conducting a research on "Parental motivation, achievement goals and learning strategies as predictors of academic performance of primary school pupils in Migori County". The purpose of this questionnaire is to collect data for research. You have been identified as a potential respondent. I wish to request you to kindly respond to all items in this questionnaire. Information you give will be treated with confidentiality and will not be used for any other purpose other than the purpose for which the study was meant. Your co-operation and assistance will be highly appreciated.

Yours sincerely
Sr. Sussy Nafula Werunga

Guidelines for filling in the Questionnaire:

i. You are kindly asked to answer ALL the items in this questionnaire carefully and honestly.
ii. All the information collected in this Questionnaire will be treated with Confidentiality and will only be used for purposes of the research.
iii. Check to ensure that this questionnaire has 3 pages
iv. Do NOT write your name or school anywhere on this paper

Section A: Demographic Information

Place a tick (√) in one of the given categories

1. School: Day ☐ Boarding ☐ Day/ Boarding ☐

2. Gender: Male ☐ Female ☐

Section B. Parental Motivation

Here are a number of statements designed to find out what your parent's or guardian's do to you as you prepare for your KCPE examinations. There are no right or wrong answers. Please indicate with a tick (√) to show the extent of your agreement with each of the following statements that is true or is not true of you.

Key: SD= Strongly Disagree; D= Disagree; ND=Not Decided; A=Agree;
SA= Strongly Agree

	SD	D	ND	A	SA
1. My parents make sure I am of good health always					
2. I am given gifts or cash money by my parents when I do well in examinations					
3. My parents have set high levels of discipline as a key to success in my studies					
4. My parents always provide all required text books and writing materials that assist me to perform well					
5. I am always encouraged by my parents to improve in class performance					
6. I am rarely sent home because my parents always pay school money in good time					
7. My parents always make visits to the class teacher to check on my class performance					
8. My parents attend school parents meeting every time they are invited.					
9. I always get motivated to do well in examination every time my parents appreciate and praise me on better performance					
10. My parents always provide a conducive environment at home for my studies					
11. Every time our teachers give us home assignment, my parents always make sure that I have done it.					
12. My parents sometimes request teachers to assist me in subjects I don't perform well in class					
Section C: Achievement Goals Questionnaire The following items describe the extent to which you set your academic goals as you study. For each statement					

below, give your extent of agreement by placing a tick (√) to show what is true or is not true of you.	SD	D	ND	A	SA
1. I aim to master everything taught in every subject in class					
2. I aim to get excellent scores in class examinations					
3. My goal in this class is to learn as much as I can to gain deeper knowledge.					
4. My focus is to study hard to outperform other pupils in this class					
5. Understanding how to do the work in class is very important for me					
6. My goal this term is to perform better than my class mates					
7. The purpose of doing my class work is because I like to learn new things					
8. The most important thing for me right now is improving my overall marks in KCPE					
9. I always make efforts to read my class notes to help me to master the content taught					
10. My aim of study is to join national or extra county school					
11. I prefer topics that really challenge me to understand the subject well					
12. I aspire to complete university education					
Section D: Learning Strategies The following statements asks about your learning strategies and study skills. For each statement, give your extent of agreement using the scale given of what is true or not true of you	**SD**	**D**	**ND**	**A**	**SA**
1. I ask the teacher to clarify concepts I don't understand well in class					
2. After study I often try to explain what I have read to a classmate or a friend					
3. When reading I make up questions to help me focus my reading					
4. After study I practice saying the material to myself over and over					
5. I try to work with other pupils from this class to complete the assignments					
6. When studying for exams, I often set aside time to discuss class material with a group of students					

from the class.					
7. When I can't understand, I ask another student in this class to help me					
8. When preparing for exams, I read my class notes and text books over and over.					
9. I memorize key words to remind me of important concepts in this class					
10. When I study for this class, I set goals for myself in order to direct my activities in each study period.					
11. After every examination, I reorganize my study skills for better performance					
12. I have been influenced by my hard working classmates in class and parents and so I imitate what they do.					
13. I am able to elaborate the given concepts in class after a given topic					
14. I am determined to do well and therefore self-driven in their studies					

Appendix B: Teachers' Questionnaire

Guidelines for filling in the Questionnaire:

i. You are kindly asked to answer ALL questions in this questionnaire carefully and honestly.

ii. All the information collected in this questionnaire will be treated with Confidentiality and will only be used for purposes of the research.

iii. Check to ensure that this questionnaire has FIVE pages

iv. Do NOT write your name or school anywhere on this paper

Section A: Demographic Information

Place a tick (√) in one of the given categories

1. School: Day ☐ Boarding ☐ Day/ Boarding ☐

2. Gender: Male ☐ Female ☐

3. School average mean score for the last three years:

Above 350 ☐ 300-349 ☐ 250-299 ☐ 200-249 ☐ below 200 ☐

Section B: Parental Involvement

Here are statements designed to find out the extent to which parents motivate pupils of standard eight in your school. There are no right or wrong answers. Please indicate with a tick (√) to show the extent of your agreement with each statement.

Key: SD= Strongly Disagree; D= Disagree; ND=Not Decided; A=Agree;
SA= Strongly Agree

		SD	D	ND	A	SA
i.	Parents provide lunch for pupils at school to ensure good health and high concentration					
ii.	Most parents in our school motivate pupils through gifts and cash when they perform well in CATs					
iii.	Our parents have set high levels of discipline to help their children to improve their performance					
iv.	Most pupils in my class have supplementary					

	text books and enough writing materials provided by parents					
v.	Our parents are a source of encouragement to our pupils for good performance					
vi.	Most of our parents make the required payments in good time for pupils not to miss lessons					
vii.	I sometimes hold meetings with standard eight parents to discuss individual pupils academic progress					
viii.	Most parents attend school parents meeting and actively contribute to the pupils' progress every time they are invited					
ix.	Pupils get motivation through praise, and appreciation on good performance by their parents					
x.	Most of our pupils have good conducive learning environment at home					
xi.	Our parents ensure that their children do their home assignment					
xii.	Parents of slow pupils organize for the remedial lessons to improve their examination scores					
Section C: Achievement Goals Questionnaire The following items describe the extent to which your pupils set their academic goals as they study. For each statement below, give your extent of agreement by placing a tick (√) to show what is true of your standard eight pupils		**SD**	**D**	**ND**	**A**	**SA**
i.	Our pupils' aim to master the contents of the topic taught					
ii.	It is important for our pupils to get excellent scores in examination					
iii.	Our pupils' goals in this class is to learn as much as they can to gain deeper knowledge					
iv.	The focus of our pupils is on outperforming each other in class					
v.	Understanding how to do the work in class is very important for our pupils.					
vi.	The goal of our pupils this term is to perform better than their classmates					
vii.	The main reason why our pupils do their class					

	work is because they like to learn new ideas					
viii.	Pupils in this class generally feel they can improve their overall performance in KCPE					
ix.	Our pupils always make efforts to read class notes to help them to master the content taught					
x.	Our pupils aim is to join national or extra county secondary schools					
xi.	Our pupils prefer topics that really challenge them to understand the subject well					
xii.	Our pupils aspire to complete university education					
Section D: Learning Strategies The following statements asks about your pupils' learning strategies and study skills. For each statement, give your extent of agreement using the scale given of what is true or not true of your pupils in your school		**SD**	**D**	**ND**	**A**	**SA**
1.	Our pupils ask the teachers to clarify concepts they don't understand well in class					
2.	After study our pupils often try to explain what they have read to a classmate or a friend					
3.	When reading our pupils make up questions to help them focus on their reading					
4.	After study our pupils practice saying the material to themselves over and over again					
5.	Our pupils try to work with each other in this class to complete the assignments					
6.	When studying for examination, our pupils often set aside time to discuss class material in groups					
7.	When our pupils don't understand any concept, they ask one another in class for help					
8.	When preparing for examination, our pupils read their class notes and text books over and over					
9.	Our pupils memorize key words to remind themselves of important concepts in class					
10.	When our pupils study, they set goals for themselves in order to direct the class activities					
11.	After every examination, pupils reorganize their study skills for better performance					
12.	Pupils have been influenced by their hard					

working classmates and parents and so imitate what they do.					
13. Our pupils are able to elaborate the given concepts in class after a given topic					
14. Our pupils are determined to do well and therefore self- driven in their studies					

1. What ways do parents in this school use to motivate the learning of their children? ----------
---

What are the parents not doing that could improve academic performance of pupils in this school? ----------
---
---
2. Explain briefly how pupils' mastery of content given in class subjects has contributed to their current progress ----------
---
----------Do they strive to compete with other pupils for excellent scores? How has this contributed to their current learning progress records?

---

3. Briefly explain the extent to which the following learning strategies contribute to academic performance in your school?

Seek help……

Peer discussion……

Collaboration……...

Setting target……...

Rehearsal…….

Imitation……..

Organization……

Memorization……..

Appendix C: Document Analysis Guide

School enrolment: boys ☐ Girls ☐ Total ☐ Staff establishment: ☐

Standard eight pupils 2020/2021 Boys ☐ Girls ☐

KCPE average means score for the last three years ☐

Parents meeting schedules: Available ☐ Not Available

Pro-former Performance Summary of Pupil's Respondent Marks

Code number ☐

Exam paper one ---------- marks

Exam Paper two ----------marks

Exam Paper three ----------marks

Appendix D: Interview Schedule for County Director of Education's

i. What programs have the Ministry of education put in place to involve parents in the education of pupils in primary schools in Migori County?

ii. Assessing the county's KCPE performance would you say that pupils master content as they study or they strive only to score high marks in examination?

iii. Following the county's KCPE trend for the last three years, which learning strategies do you think are put in place and how do they contribute to the pupils general performance

iv. It was evident from the results that boarding schools perform better than day schools. What is your contribution on this?

Appendix E: Focus Group Discussion for Parents

Parents were brought on board at the end of quantitative data. The following are the statements from which the parents participating in FGDs were asked to clarify more on why some reasonable proportion of the pupils felt they were not getting involved as a way of motivating them.

i. I am given gifts or cash by my parents when I do well in my studies,
ii. I am rarely sent home because my parents always pay school levies in good time,
iii. My parents always make visits to the class teacher to check on my class performance,
iv. My parents attend school parents meeting every time they are invited,
v. My parents always provide conducive environment at home for my studies,
vi. Every time our teachers give us home assignments, my parents always make sure that I have done it
vii. My parents sometimes request teachers to assist me in subjects I don't perform well in class

Appendix F: Migori and Homa Bay KCPE Analyzed Results

Migori County KCPE Results Analysis

SUB-COUNTY	2019	2018	2017
Rongo	247.74	212.32	205.03
Suna West	258.64	256.97	257.07
Awendo	262.7	258.05	249.75
Nyatike	246.55	255.96	252.8
Kuria West	259.71	255.86	254.16
Uriri	254.86	251.00	246.53
Mabera	249.57	248.82	250.07
Migori	243.9	247.43	247.99
Ntimaru	226.07	227.95	218.49
Kuria East	215.99	219.85	205.44
Migori County	**246.73**	**247.73**	**242.18**

Source: Ministry of Education Migori County (2020)

Homa Bay County KCPE Results Analysis

SUB COUNTY	2019	2018	2017
Mbita	267.7	262.41	262.45
Rangwe	262.88	256.23	259.39
Rachuonyo South.	262.15	266.21	259.74
Rachuonyo East	261.9	257.2	253.15
Rachuonyo North.	257.97	251.98	249.42
Homabay Town	256.2	253.04	253.73
Suba	252.52	255.24	247.08
Ndhiwa	245.74	245.33	242.82
Homabay County	**258.38**	**255.96**	**253.4**

Source: Ministry of Education Homabay County (2020)

Appendix G: Research Authorization Letter from NACOSTI

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

1. The License is valid for the proposed research, location and specified period
2. The License any rights thereunder are non-transferable
3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
4. Excavation, filming and collection of specimens are subject to further necessary clearence from relevant Government Agencies
5. The License does not give authority to tranfer research materials
6. NACOSTI may monitor and evaluate the licensed research project
7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one year of completion of the research
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice

National Commission for Science, Technology and Innovation
off Waiyaki Way, Upper Kabete,
P. O. Box 30623, 00100 Nairobi, KENYA
Land line: 020 4007000, 020 2241349, 020 3310571, 020 8001077
Mobile: 0713 788 787 / 0735 404 245
E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke
Website: www.nacosti.go.ke

Appendix H: Research Permit from NACOSTI

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **721026**

Date of Issue: **29/January/2021**

RESEARCH LICENSE

This is to Certify that Sr.. Sussy Nafula Werunga of Masinde Muliro University of Science and Technology, has been licensed to conduct research in Migori on the topic: PARENTAL MOTIVATION, ACHIEVEMENT GOALS AND LEARNING STRATEGIES AS PREDICTORS OF ACADEMIC PERFORMANCE OF PRIMARY SCHOOL PUPILS IN MIGORI COUNTY, KENYA for the period ending : 29/January/2022.

License No: **NACOSTI/P/21/8710**

721026

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

Appendix I: Authorization From County Commissioner

APPENDIX I: AUTHORIZATION FROM COUNTY COMMISSIONER

THE PRESIDENCY

MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telephone: (059) 20511
FAX (059)20361
Email:
countycommissionermigori@yahoo.com

OFFICE OF THE COUNTY COMMISSIONER
MIGORI COUNTY
P.O. BOX 2 - 40400
SUNA- MIGORI.

When replying please quote

Ref. No: CC ED.12/19VOLIII/154

Date: 4th February, 2021

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION

This is to confirm that Sr. Sussy Nafula Werunga of Masinde Muliro University of Science and Technology, NACOSTI/P/21/8710 has been authorized to carry out research on ***"Parental motivation, achievement goals and learning strategies as predictors of academic performance of primary school pupils," in Migori County***, for the period ending 29th January, 2022.

Accord her the necessary assistance.

JOHN K. MAGUTA
FOR: COUNTY COMMISSIONER
MIGORI COUNTY

CC:
County Director of Education
MIGORI COUNTY

Appendix J: Authorization Letter from CDE

APPENDIX J: AUTHORIZATION LETTER FROM CDE

MINISTRY OF EDUCATION
State Department of Early Learning and Basic Education

Telephone: (059) 20420
Fax: 05920420
When replying please
quote

COUNTY DIRECTOR OF EDUCATION
MIGORI COUNTY
P.O. Box 466-40400
SUNA – MIGORI

REF: MIG/CDE/ADMN./73/VOL.I/175

DATE: 4th February, 2021

Sr. Sussy Nafula Warunga
Masinde Muliro University

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on **"Parental Motivation, Achievement Goals and Learning Strategies as Predictors of Academic Performance of primary School Pupils in Migori County, Kenya"** and subsequent approval by **NACOSTI** vide research license no.: **NACOSTI/P/21/8710.** I am pleased to inform you that you have been authorized to undertake research in **Migori County** for a period ending **29th January, 2022.**

During the research, you are expected to exercise high levels of research integrity.

COUNTY DIRECTOR OF EDUCATION
MIGORI
P. O. Box 376-4400,
SUNA, MIGORI.

Elizabeth Otieno (Mrs.)
County Director of Education
MIGORI COUNTY

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Appendix K: Informed Consent Form

Title: Parental Motivation, Achievement Goals and Learning Strategies as Predictors of Academic Performance of Pupils in Migori County, Kenya.

I invite you and your child to take part in a research study being conducted. I am a student pursuing PhD Degree in Educational Psychology at Masinde Muliro University of Science and Technology (MMUST), conducting a research on "Parental motivation, achievement goals and learning strategies as predictors of academic performance in public primary schools of Migori County". The following information is provided to help you decide whether you and your child wish to participate in this study. You are free to decide not to participate or to withdraw at any time without affecting your relationship and your child's relationship with the researcher. The purpose of this study is to examine parental motivation, achievement goals and learning strategies as predictors of academic performance of pupils in Migori County. Your child will respond to a questionnaire. The children's answers will not be associated with their names. Rather, each child will be given an identification number on the questionnaire.

You as a parent will participate in FGD. The audiotape will be used during the FGD and will be destroyed after the information has been transcribed. Do not hesitate to ask questions about the study before participating or during the study. I would be happy to share the findings with you after the research is completed. Your name too will not be associated with the research findings in any way, and only the researcher will know your identity. There are no known risks or discomforts associated with this study. The expected benefits associated with your participation and your child's

participation are the information about parental motivation, achievement goals and learning strategies on academic performance.

Please sign this consent form. You are signing it with full knowledge of the nature and purpose of the procedures. A copy of this form will be given to you to keep.

I agree to have you audiotape me during this study. I understand this audio will only be used for the purposes of research and will not be available to anyone aside from the researcher:

Signature _____ date_____

Informed Consent Statement

I, _____, give permission for my child, _____ to participate in the research study entitled, "Parental Motivation, Achievement Goals and Learning Strategies as Predictors of Academic Performance of Primary School Pupils in Migori County." The study has been explained to me and my questions answered to my satisfaction. I understand that my child's right to withdraw from participating or refuse to participate will be respected and that his or her responses and identity will be kept confidential. I give this consent voluntarily.

Parent/Guardian: Signature:_____date_____

Sr. Sussy Nafula Werunga

Masinde Muliro University of Science and Technology

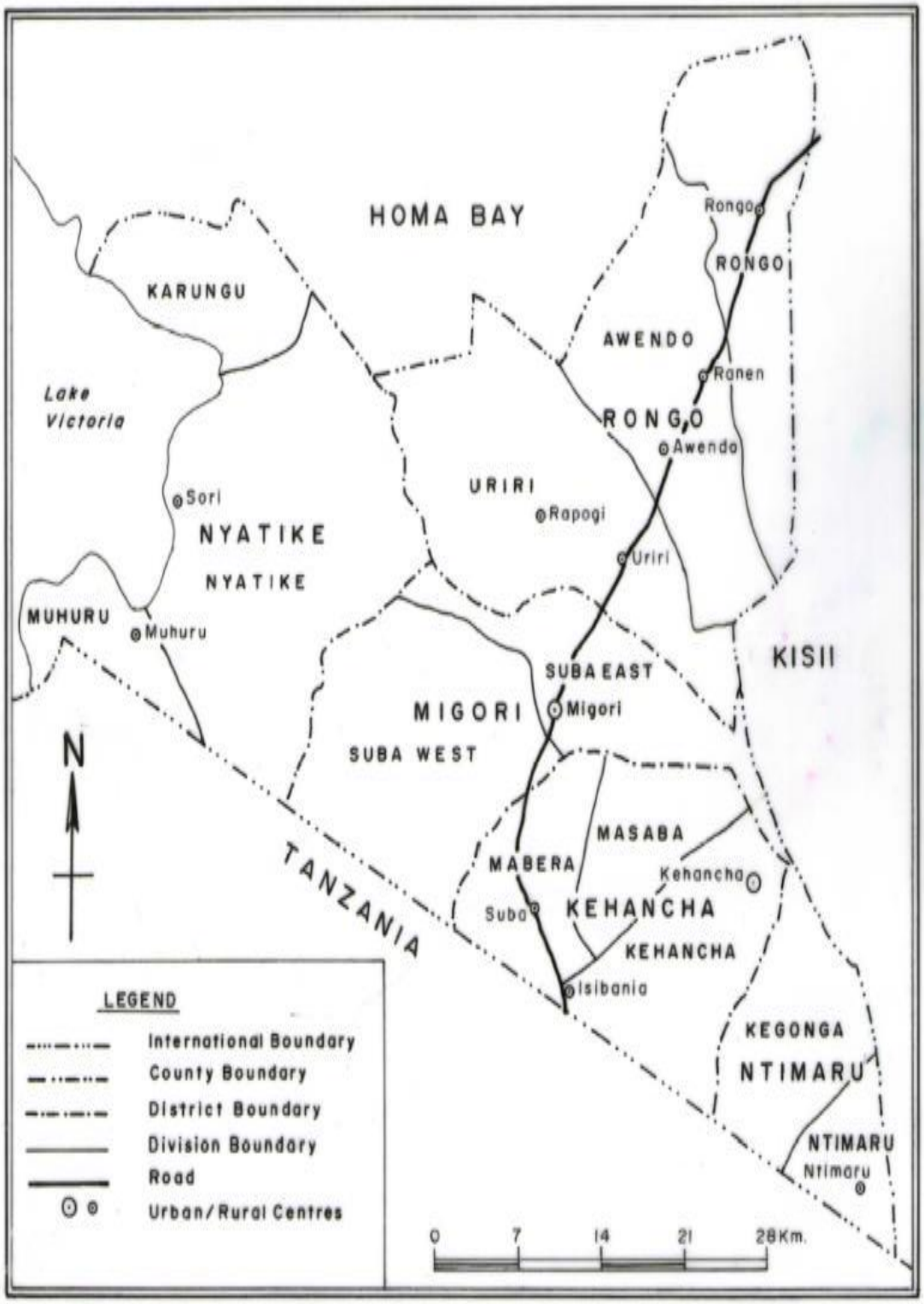
Appendix L: Krejcie & Morgan (1970) Table for Determining Sample Size

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	40000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	750000	382
210	136	1100	285	1,000,000	384

Note: N is population, S is sample size

Source: Krejcie and Morgan (19700 table of sample size.

Appendix M: Map of Migori County (Study Area)



https://sonkonews.com/wp-content/uploads/2019/12/Migori-county.jpg