IOSR Journal Of Humanities And Social Science (IOSR-JHSS)
Volume 27, Issue 3, Series 5 (March. 2022) 25-34
e-ISSN: 2279-0837, p-ISSN: 2279-0845.
www.iosrjournals.org

Achievement Goals as Predictors of Academic Performance of Primary School Pupils in Migori County, Kenya

SussyNafulaWerunga& Peter Odera
Department of Educational Psychology, Masinde Muliro University of Science & Technology
School of Education, Kenya
Corresponding author's e-mail: sussywerunga@yahoo.com

Abstract
Academic performance of children is a global concern. Various factors may be responsible for academic performance such as cognitive abilities, school and home related factors. In Kenya underperformance is associated with a number of factors for example understaffing and inadequate learning resources. 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 the study was to examine achievement goals as predictor of academic performance of primary school pupils in Migori County, Kenya. The objective of the study was to determine the extent to which achievement goals predict academic performance. The study was anchored on achievement motivation theory, social learning theory and a conceptual framework showing the relationship of the variables. Explanatory sequential mixed research design was adopted. Population of the study comprised; 570 teachers, 30,600 standard 8 pupils and 1 director of education. Sample size was 441 of which 60 were teachers, 380 standard eight pupils and 1 county director of education. Purposive sampling was used to select pupils 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 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 of research instruments and their index was 0.83 for teachers and 0.76 for pupils. Content and construct validity were ascertained by the supervisors. Quantitative data was analysed using Pearson's product moment correlation coefficient and regression. 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 showed a positive association between pupils mean score performance and achievement goal with a correlation coefficient of 0.537**, p = 0.007. The study concluded that achievement goals improves academic performance of primary school pupils in Migori County. It was recommended that teachers should put more emphasis on mastery goals when handling learners in class. Not only should they help learners to pass exams but also help them handle challenging tasks related to learning activities encountered by pupils.

Key Words: Achievement Goals, Academic Performance, Mastery Goals, Performance Goals and Primary School Pupils

---

Date of Submission: 02-03-2022 Date of Acceptance: 16-03-2022

I. Introduction

The academic excellence of learners is characterized by performance on tests associated with classwork, course work, and other types of examinations (Kyoshaba, 2009). Globally, poor academic performance is an issue in almost all communities (Jazmawi, 2008). This is attributed to many factors like students' efforts, socio-economic background, self-motivation, tuition trends, learners' cognitive abilities, school, and home environments (Chohan& Khan, 2010; Ali, Haider, Munir, Khan & Ahmed, 2013). To be able to perform, learners normally set goals or targets for themselves in various subjects and study activities. Achievement goals help in enhancing students' behaviour and discipline in the classroom (Matos et al., 2007; Senko et al., 2012; Mupira&Ramnarian, 2018). The desire to set goals to achieve in academics by the learners comes from different sources like dispositional motives and external factors such as the classroom or school characteristics (Elliot, 2005). Therefore, the pupils may adopt these goals either in the form of performance or mastery of the subject content or both which then determine their success or failure.

Learners in school may adopt performance or mastery goals and each determines and defines success and failure (Alrakaf, Sainsbury, Rose, & Smith, 2014). A study among the Chinese gifted students in Hong Kong revealed that students who set mastery goals tend to seek challenges and persist when they encounter difficulties. They seek appropriate help, use deeper cognitive processing strategies and approach cognitive tasks with confidence. While students who set performance goals are concerned with demonstrating their ability to others (Chan, 2008). Nevertheless, Senko, Hama, and Belmonte (2012) in State University of New York, USA examined if mastery approach goals predict elaboration learning strategy and if performance-approach goals predict rehearsal approach. The findings showed that mastery goals predicted greater demand for professors who intellectually challenged students and possess topic expertise, whereas performance goals predicted high demand for professors who presented material clearly and provided cues on how to succeed in the course.

Matos, Lens, and Vansteenkiste (2007) in a Peruvian school in Latin America predicted positive effects of mastery goals including more use of learning strategies of rehearsal, elaboration, organization, critical thinking, and metacognitive strategy that included goal setting to higher academic achievement and negative effects of performance-avoidance goals to lower academic achievement. There were mixed findings for performance-approach goals, which showed greater use of learning methods. However, Mupira and Ramnarian (2018) carried out a study in South Africa on the effects of inquiry-based learning on the achievement goal-orientation of the grade 10 physical sciences learners at township schools. The findings showed that the experiment group of learners who experienced inquiry-based learning significantly gained a mastery goal orientation while the control group that was taught through a traditional direct didactic scheme had no effect on their mastery goal orientation.

In Kenya, Ireri (2015) found mastery and performance goals positively and negatively respectively predicting academic achievement among form three students in Embu County. Gender variations were realized in performance and academic achievement. There was a positive association between achievement goal orientation and academic achievement. However, achieved academic identity status had the highest significant predictive value on academic achievement compared to avoidance and achievement goal orientation. However, in Migori County, Kenya, Ouma, Tanui and Rop (2016) attributed poor KCPE performance to the leadership style used in managing public primary schools in Uriri Sub-county. The analyzed results showed a positive and significant correlation between situational leadership and the academic performance of the schools ($p < 0.05$). It was reported that the head teachers needed to effectively adapt to the situations in their schools to positively influence the academic performance of pupils in public primary schools through the most appropriate leadership style

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%). Causes stated for low academic performance as reviewed in this study may be similar to most Kenyan primary schools including Migori County. However, Achievement goals especially mastery of content and performance goals could be explored to improve on academic performance of primary school pupils in Migori County. Based on the literature the researcher has come across, it appears that there is no evidence that a study has been carried out in Migori County to evaluate the predictability power of achievement goals on the learners' academic performance. This study, therefore, sought to explore the possibility of achievement goals predicting the learners' academic performances. The study set the null hypothesis that: there is no significant difference between achievement goals and academic performance among primary school pupils in Migori County.

II. Literature Review

Achievement goals represent the purpose or reason the students engage in an academic learning task. In previous studies, researchers differentiated between two types of achievement goals: mastery and performance goals. In mastery goals, learners are motivated to understand the content of the topic and develop skills, while in performance goals learners are concerned with performing better than others. Both goals are linked to different patterns of learning (Elliot & McGregor, 2001; Elliot, McGregor & Gable 1999). In Jordan achievement goals, and metacognition on academics was found to have a significant joint effect on academic motivation. Additionally, students who normally comprehend information tend to have good academic motivation; whereas students who seek to simply perform well on the tests without understanding the information do not necessarily have good academic motivation (Ghaleb et al., 2015).

In Pakistan, Shehzad and Aziz (2019) carried out a study to investigate the relationship between achievement goals, and academic achievement at Quaid-i-Azam University, Islamabad. The survey was conducted using an achievement goals questionnaire, and actual semester scores as academic achievement. The sample consisted of 321 (130 male and 191 female) students of the University. Pearson product-moment correlations were calculated and the results showed that the total indirect effect of performance-approach goal

on academic achievement was significant. Another study by Basit and Rahman (2017) on the effects of achievement goals orientation on the learners' performance in English at secondary level showed that 45% of students had high mastery goal adaptation (Mean=24.1, SD=0.8), and 55% of students had low mastery goal adaptation (Mean=19.7, SD=3.3). The results indicated that students' performance was highly and significantly correlated with students' mastery goal orientation ($r=0.417$, $p<0.05$). Further, students' performance was also positively and significantly correlated with students' performance-approach goal orientation ($r=0.169$, $p<0.05$). In this study data was collected using Shehzad& Aziz (2019) modified achievement goals questionnaire.

Kord (2018) carried out a study to identify the relationship between achievement goals and academic self-efficacy with academic success in Mahabad, Iran. Participants were 220 (118 men and 102 women) students from Islamic Azad University of Mahabad, who were selected by multistage cluster random sampling method. The findings revealed that mastery and performance-approach goals had a modest correlation with GPA ($r = .32$, $p < .01$) ($r = .28$, $p < .01$). Further, the regression analyses showed that academic success was positively predicted by mastery goals ($\beta=.38$, p). The study concluded that mastery and performance-approach goals influence academic success directly as well as indirectly. Dompnier, Darnon, and Butera (2013) conducted a study on achievement goal promotion at the University of Lausanne, Switzerland, to show that performance-approach goals are perceived as a means to succeed. The findings revealed an effect of the participants' grades on the baccalaureate, $b = 1.19$, $F (1, 250) = 20.18$, $p < .0001$, $PRE = .07$, indicating the higher the students' grade on the baccalaureate, the higher their grade.

In Kenya, Mwangi (2018) conducted a study on achievement goals as predictors of academic achievement. Descriptive findings revealed that many students reported both high mastery and performance goals. Further, the study revealed that mastery goals positively predicted academic achievement. A study conducted by Ng'ang'a, Mwaura, and Dinga (2018) determined a relationship between achievement goal orientation and academic achievement among form three students in Kiambu County. The findings revealed that 67.4% of respondents had a moderate achievement goal orientation, 17.9% had a high level, and 14.6% had a low achievement goal orientation level. Further, the findings indicated that the highest mean was for the performance approach ($M= 10.88$, $SD= 3.04$) followed by the mastery approach ($M =10.44$, $SD = 2.936$). The hypothesis testing results indicated that there was a statistically significant weak positive relationship between achievement goal orientation and academic achievement, $r (630) = .310$, $p<0.05$. Also, there was a statistically significant weak negative relationship between performance approach and academic achievement, $r (630) = -.113$, $p<0.05$.

The reviewed literature in this study across the world, in Africa, and in some Counties of Kenya examined similar constructs as the current study. However, most of these studies were carried out either in Secondary Schools, Colleges, or Universities. The reviews that the researcher came across, none of the studies particularly in the Kenyan context had been done in Migori County to evaluate the association between achievement goals and academic performance. Also given that primary school is the foundation of all levels of learning, the current study was essential. These study's findings could disagree or agree with the previous studies given that the geographical area, level of study, and data collection tools differed.

III. Research Methodology

The study employed an explanatory sequential mixed-method research design. The research 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). In this study, quantitative data was correlated to predict the dependent variable for inferences and generalizability. Correlational design was used to describe and measure the degree of association between two achievement goals and academic performance. This design is concerned with identifying the antecedents of a present condition where no attempts are made to manipulate the variables under study as the events of interest have already occurred or are occurring naturally (Klassen, Creswell, Clark, Smith &Meissner, 2012). The correlation design was appropriate for this study since the researcher had no direct control over the independent variables (achievement goals) but only used them to correlate with the dependent variable (academic performance).

This study was conducted in Migori County. The County profile report shows that it covers an area of approximately 2,586.4 km2 (998.6sq meters) 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.

Cluster sampling, stratified random sampling, purposive sampling, and simple random sampling were used in this study. Cluster sampling was used because the study area had a large population which is distributed in the county (Goodwin, 2005). There are 10 sub-counties in Migori County. These are subdivided into two clusters as follows: Ntimaru, Kuria East, Kuria West, and Mabera, which formed cluster one; Suna West, Uriri, Awendo, Rongo, Migori, and Nyatike, which formed cluster two. The clusters were created to ensure the geographical representativeness of all schools. The rotary method was used to select two sub-counties from each cluster and school.

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 days and two boarding schools respectively. 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). This reduced the biases which could otherwise compromise the study results.

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 the class, set targets, and lay strategies to study. Besides, parents are keen on motivating standard eight pupils to work hard to secure vacancies 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. Finally, the CDE was purposively selected as she or he was the only one.

The sample size is 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 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. One County Director of Education was selected for interview.

Data was collected using a questionnaire, interview schedule, and document analysis guide. These research tools ensured the triangulation of information gathered during data collection. A questionnaire was an appropriate tool to collect data from pupils and class teachers in this study because the researcher was able to gather information from a large sample. The closed-ended questionnaire focused on achievement goals. On the other hand, standard eight class teachers responded to both structured and unstructured items on achievement goals 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). On the other hand, an interview schedule is used to collect data by engaging in dialogue and asking questions (Richard & Grinnell, 2001). The interview schedule was used to seek information from the Migori County Director of Education (CDE) on general academic performance 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 the teaching approaches of mastery and performance goals in primary schools

Quantitative data collected was sorted, edited, coded, classified, and tabulated for analysis. The analysis of the results was done in two parts; descriptive statistics which concentrated on the opinion of the respondents and inferential statistics which deeply looked into the statistical effect of the predictor variable on the dependent variable. For easy analysis of data, Statistical Package for Social Science (SPSS) version 26 was used. Pearson product-moment correlation coefficient and simple linear regression inferential statistical tests were used to validate or reject the null hypotheses, and for checking the association between the achievement goals and academic performance. Qualitative data were transcribed, put into various categories, and reported as themes and sub-themes (Creswell, 2009). The researcher used the audio to record the CDE's interview and the findings were reported thematically.

IV. Results and Discussion

Achievement goals had 12 factors upon which its effect or impact on pupils' academic performance was evaluated. These 12 achievement goals were grouped into two clusters namely, performance goals factors and mastery goals factors.

Performance Goals Factors

Performance goals 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 the study is to join national or extra county school'; and 'I aspire to complete university education'. For approval rating results from 'strongly agree' and 'agree' were both considered in the discussion as shown in Table 1.

Table 1: Responses of Pupils on Performance Goals

	Strongly Agree		Agree		Not Decided		Disagree		Strongly Disagree	
Statements	Freq	**%**	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**
My focus is to study hard to outperform counterparts in class	241	63.4	102	27.1	8	2.1	16	4.2	13	3.2
I aim to get excellent scores in class examination	315	82.9	61	16.1	2	0.5	1	0.3	1	0.3
My goal this term is to perform better than my classmates	255	67.1	99	26.1	6	1.5	16	4.2	4	1.1
I aim at improving overall marks in KCPE	329	86.6	45	11.8	3	0.8	3	0.8	0	0
My aim of study is to join National or Extra County school	308	81.1	59	15.6	5	1.3	7	1.7	1	0.3
I aspire to complete University Education	335	88.4	36	9.5	5	1.2	3	0.8	1	0.3

Source: Field Data, 2021

Results in Table 1 show that the statement 'I aim to get excellent scores in class examinations', had a 99% approval rating followed by 'the most important thing for me right now is improving my overall marks in KCPE' with 98.4% of pupils agreeing. The third most approved statement was, 'I aspire to complete university education, which received 97.9% approval from the pupils; 'my aim of the study is to join national or extra county school', was fourth with 96.7% approval. The fifth best-rated factor underperformance cluster was, 'my goal this term is to perform better than my classmates' with 93.2% agreement ratio; and the least approved under this cluster was, 'my focus is to study hard to outperform other pupils in this class, which had 90.5% of the pupils agreeing.

The results show that an overwhelming majority of pupils accounting for 99% approved the statement that they aim to get excellent scores in-class examination. The drive and passion to pass highly in examinations are likely to make pupils set goals and targets they aim to achieve in exams. This is a performance goal where the learner concentrates on what would enable him/her to score high in examinations such as the use of past papers and memorization. Such learners may not gain deeper knowledge because the passing of exams may be in itself an achievement. The KCPE examination is meant to place standard eight learners in a secondary school which is determined by the excellent or high scores. Excellent performance in examination seems to be the main aim of standard eight pupils.

From the results, the respondents indicated that the most important thing for them was improving overall marks in KCPE' with 98.4% of pupils agreeing. It is clear that all other set goals are geared towards improving the overall marks in the final national examination. Whereas the government policy for admission to secondary school is 100% transition, admission into different categories of schools, namely, National, Extra County, and County are based on cut-off marks for each level hence greater competition among learners for high scores.

The third most approved statement was, 'I aspire to complete university education, which received 97.9% approval from the pupils. 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. The 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 in secondary school, learners are again examined for placement into the university or tertiary colleges. At this level, a majority don't make it to the universities because of the high cut-off points which are 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.

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 as presented in Table 2.

Table 2: Correlation matrix (performance factors ~ pupils mean score)

		Performance	pupils mean
Performance	Pearson Correlation	1	.191**
	Sig. (2-tailed)		.001
	N	380	378
pupils mean	Pearson Correlation	.191**	1
	Sig. (2-tailed)	.001	
	N	378	378

Source: Field Data, 2021

The results in Table 2, revealed a weak positive correlation between performance goals factor and pupils' mean score, which was statistically significant (r = .191**, n = 378, p = .001). Meaning performance goals improve academic performance among primary school pupils in Migori County.

Mastery Goals Factors

Mastery 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 classwork 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. . For approval rating results from 'strongly agree' and 'agree' were both considered in the discussion as shown in Table 3.

Table 3: Pupils Responses on Mastery Goals

	Strongly. Agree		Agree		Not Decided		Disagree		Strongly. Disagree	
Statements	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**
I aim to master everything taught in subject in class	224	58.9	138	36.3	11	2.9	7	1.9	0	0
I always make efforts to read my class notes to master content	251	66.1	114	30	6	1.6	7	1.8	2	0.5
My goal in this class is to learn to gain deeper knowledge	303	79.7	70	18.4	1	0.3	5	1.3	1	0.3
Understanding how to do the work in class is important for me	264	70	97	25	8	2.1	8	2.1	3	0.8
My purpose of doing class work is to learn new ideas	222	58.4	124	32.6	6	1.6	19	5	9	2.4
I prefer topics that challenge me to understand the subject well	243	63.9	119	31.3	5	1.3	9	2.4	4	1.1

Source: Field Data, 2021

Results in Table 3 show that 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. 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 second-best ratings from the pupils with each getting an approval rating of 95.2%. The statement, 'understanding how to do the work in class is very important for me was the fourth rated factor of mastery cluster with 95% of the respondents agreeing with the statement. The statement, 'the purpose of doing my classwork is because I like to learn new things' received 93.2% of the pupils' approval. The least with 86.1% rating from the pupils was, 'I always make efforts to read my class notes to help me master the content taught.'

It is clear that most of the pupils accounting for 98.1% learn to gain deeper knowledge. 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 of synthesis or analysis because the knowledge gained here is deeper than that of memorization.

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. At the 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 textbooks. 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. Findings have indicated that those who read the notes have a good mastery of the content learned in different subjects and are likely to post better grades in the examinations.

From the findings, it is evident that most pupils aim to master the 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 the 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.

On this item, the county director of education had a different opinion. He observed 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 centered to learner centered, 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 the CDE's concerns. The teachers should let learners explore their abilities in school. This however cannot be possible without the teacher's guidance.

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 inTable 4.

Table 4. Correlation matrix (mastery factors ~ pupils mean score)

		Mastery	pupils mean
Mastery	Pearson Correlation	1	.055
	Sig. (2-tailed)		.285
	N	380	378
pupils mean	Pearson Correlation	.055	1
	Sig. (2-tailed)	.285	
	N	378	378

Source: Field Data 2021

From the correlation matrix results in Table 4, it was 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 the mastery cluster collectively had no significant influence on academic performance. This does not mean these six mastery factors are not important. More factors could be added to the existing ones.

Correlation Test

The predictor achievement goals variable was transformed, through the addition of all the 12 factors making up the construct. The transformation created an approximately normally distributed single variable (Norman, 2010; Sullivan et al 2013). Pearson product-moment correlation test was then used to test the association between achievement goals and academic performance.

The correlation between pupils' academic performance and achievement goals predictor variable data sets were run and the results are presented in Table 5.

Table 5. Correlation Matrix (Pupils mean score ~ Achievement goals)

		AG1	Pupils mean
Achievement Goals	Pearson Correlation	1	.537**
	Sig. (2-tailed)		.007
	N	379	378
Pupils mean	Pearson Correlation	.537**	1
	Sig. (2-tailed)	.007	
	N	378	378

Source: Field Data 2021

From the results in Table 5, the Pearson Product Moment correlation between pupils means score performance (academic performance) and achievement goals predictor variable data sets produced a positive association with a correlation coefficient of 0.537**, p = 0.007. Compared upon the confidence level of 95% with significance level set at 5% (0.05), it was established that the association was statistically significant (r = .537**, n=378, p = .007). It seems mastery cluster factors improved on their relevance and effect when put together with performance factors.

Hypothesis Testing

A number of tests were carried out to help uphold or reject the null hypothesis that there is no significant difference between achievement goals and academic performance of primary school pupils in Migori County. Simple regression analysis between academic performance (response variable) and achievement goals (predictor variable) was conducted using SPSS version 26. The results of the p-value arising from the regression analysis were used to determine the statistical significance of the hypotheses.

R-Squared also called the coefficient of determination was run to evaluate the scatter of the data points around the fitted regression line (Moore et al., 2013). The results are presented in Table 6.

Table 6. Model Summery (pupils mean score ~ achievement goals)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					F Change	df1	df2	Sig. F Change
1	.720[a]	.519	.516	56.576	7.235	1	376	.007***

Source: Field Data 2021

The results in Table 6 shows that R-Squared equals 0.519, or 51.9%, to means that the achievement goals predictor variable explains about 51.9% of the variation in academic performance. This is slightly above 0.5 so, it clearly shows that achievement goals have a moderate effect size on academic performance. Certainly, the results revealed that there is a small difference between observed data and fitted values. Thus, a better fitting regression model. Therefore academic performance linearly relates to achievement goals.

Analysis of Variance (ANOVA) was also run. The sums of squares SS-Regression and SS-Residuals are used to form two mean squares, one for regression and residuals. The results are as displayed in Table 7.

Table 7: Analysis of Variance (Pupils mean score ~ Achievement Goals)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23157.711	1	23157.711	7.235	.007
	Residual	1203534.913	376	3200.891		
	Total	1226692.624	377			

a. Dependent Variable: Pupils mean

b. Predictors: (Constant), Achievement goals

Source: Field Data (2021)

The ANOVA results in Table 7 shows that mean square regression is greater than the mean square residuals. Meaning the null hypothesis that stated that there is no significant difference between achievement goals and academic performance is rejected at p-value = 0.007 < 0.05 level of significance. This means that the difference between mean square regression and mean square residuals is statistically significant.

The findings indicate that achievement goals have an effect on academic performance. These findings concur with that of Shehzad and Aziz (2019) in Pakistan who showed that mastery approach and performance approach on academic achievement was significant. Additionally, the 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. Further, Ng'ang'a, Mwaura, and Dinga (2018) established that different levels of achievement goal orientation were significantly related to students' academic achievement. The concurrence is a result of achievement goals tools used in the reviewed studies which were similar to the tools the current researcher used to collect data. The finding is also in consonance with the conceptual framework which stated that the learners set achievable goals or targets that would enable them to achieve excellent or good grades (400 to 500 marks) to outshine others in scores with the possibility of them joining national or extra- county secondary schools in Kenya.

V. Conclusion and Recommendations

The study 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; there was no significant difference between achievement goals and academic performance among primary school pupils in Migori County was rejected. The findings also necessitated the recommendation that teachers should put more emphasis on mastery goals while handling learners in class for better academic outcomes. Secondly, 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 the basis for secondary, college, and university education.

References

[1]. 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.

[2]. 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.

[3]. 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).

[4]. Chan, D. W. (2008). Goal orientations and achievement among Chinese gifted students in Hong Kong. High Ability Studies, 19(1), 37-51.

[5]. 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.

[6]. Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, Calif: Sage Publications.

[7]. Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches 3rd ed. Thousand Oaks, CA: Sage.

[8]. Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4thed.). Thousand Oaks, CA: Sage.

[9]. 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

[10]. 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.

[11]. 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

[12]. 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

[13]. 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

[14]. Goodwin, C.J. (2005). Research in Psychology Methods and Design. Wheeling Jesuit University 4th ed. John Wiley and Sons, Inc.

[15]. 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.

[16]. Jazmawi, A. (2008). Underachievement and Low Success Rate of Jordanian Students in Secondary Schools, Home Economics. Arab Open University, Jordan.

[17]. Kerlinger, F. N. (2004). Fundamentals of Behavioural Research 7thed. New York: Holt Rinehart and Wiston Inc.

[18]. Klassen, A. C., J. Creswell, V. L. P. Clark, K. C. Smith, & H. I. Meissner. 2012. "Best Practices in Mixed Methods for Quality of Life Research." Quality of Life Research 21 (3): 377–380.

[19]. 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)

[20]. Kothari, C. R., &Garg, G. (2014). Research methodology methods and techniques. (3rded.). New Dellhi: New Age. International (P) Ltd.
[21]. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30, 607-610. Retrieved June 2020
[22]. Kyoshaba, M. (2009). Factors affecting academic performance of undergraduate students at Uganda Christan University .Available at: http://mak.ac.ug/documents
[23]. Lyons, P. & Howard, J. Doueck H. J. (2010). The Dissertation: From Beginning to End. Front Cover. Oxford University Press.
[24]. Matos, L., Lens, W., &Vansteenkiste, M. (2007). Achievement goals, learning strategies and language achievement among Peruvian high school students. Psychological Belgic, 47, 51-70.
[25]. Migori County Education Office. (2019). County Government of Migori.
[26]. 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).
[27]. 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.
[28]. 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.
[29]. 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
[30]. Norman, G. (2010). Likert scales, levels of measurement and the "laws" of statistics. Advances in Health Sciences Education, 15(5), pp.625-632.
[31]. 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
[32]. Richard, M., & Grinnell, Jr. (2001). Social Work Research and Evaluation: Quantitative and Qualitative Approaches: Illinois State University: Wadsworth.
[33]. 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.
[34]. 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
[35]. Sullivan, G. &Artino Jr., A. R. (2013). Analyzing and Interpreting Data from Likert – Types Scales. Journal of Graduate Medical Education. 5(4), 541- 542.