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PERFORMANCE: CASE OF KENYA MEDICAL TRAINING  
COLLEGE (AN OPERATIONAL STUDY OF KMTC)

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**FACTORS AFFECTING STUDENTS, ASSESSMENTS PERFORMANCE: CASE OF KENYA MEDICAL TRAINING COLLEGE (AN OPERATIONAL STUDY OF KMTC).**

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### Abstract

**Purpose:** The study assessed the influence of both intrinsic and extrinsic factors and students perceptions. While student and teacher-related factors constitute the intrinsic factors, parents and the government on the other hand are examples of the extrinsic factors. This research project focuses on assessing the factors that contribute and influence KMTC students' performance with an aim of establishing ways to improve their performances in examinations and assessments.

**Methodology:** A mixed and descriptive cross-sectional research design was utilized involving a study of both intrinsic and extrinsic factors that affect students' performance.

**Findings:** The study findings established that both intrinsic and extrinsic had an effect on performance. The study findings established that a unit increase in student attitude can lead to an increase of 0.05 in the scores of student performance. This implies that student attitude had a significant positive effect on student performance. The study found out that a unit increase in intrinsic factors of 0.227 can lead to an increase in students' performance. This clearly shows that extrinsic factors had a significant positive effect on student performance. The study results revealed that a unit increase of 0.01 can lead to an increase in students' performance. This shows that extrinsic factors had a significant positive effect on students' assessment and performance. Therefore, the study independent variables had a strong positive relationship to the dependent variable which was student performance.

**Unique contribution to theory, practice and policy:** The study recommends for higher learning institutions to integrate both intrinsic and extrinsic factors in their planning.

**Key Words:** *Intrinsic and Extrinsic Factors, Assessments Performance, Kenya Medical Training College.*

## 1.0 Background of Study

Improving student's performance in examinations/assessments is a multifaceted issue that demands for the application of an array of strategies. Across the globe, educationists recommend that improving students' performance in assessments involves a close scrutiny of both intrinsic and extrinsic factors affecting students' performance. In developed countries such as the United States, education experts have narrowed down to intrinsic factors such as school culture as a way of improving students' performance. One of the strategies that has been widely utilized in the United States is the increase in student testing, a strategy that enable students get used to examinations or assessments hence improving their performance (Jeremy, Brett, Emily & Aaron, 2016).

On the other hand, developing countries such as most of the African countries are still battling with extrinsic factors affecting performance such as low income by parents. In this case, some of the strategies that most of the African countries have developed include; availing teaching and learning resources and introducing free education. Although such strategies can be ineffective in directly influencing students' performance, they contribute to students' overall achievement. In Kenya, interventions are based on providing valid information about current performance, whereby pragmatic execution and ongoing student progress monitoring are essential (Katamei & Omwono, 2015).

In Kenya, students' academic progress is measured through assessments and as such, the Ministry of Education (MOE) has developed learner support programs including; behavior change, life skills programs, capacity building and parental involvement as a strategy of improving performance in assessments (Jeremy, Brett, Emily & Aaron, 2016). The country has taken a school-based approach to improving students' performance since approaches vary according to school hence the need to implement different strategies of improving students' performance in examinations or assessments in different schools as well as levels of education.

Similarly, the Kenya Medical Training College being part of the country's education system has adopted this strategy. In its quest to enhance leadership in the training of competent healthprofessionals for sustainable development, KMTC has from time to time embarked on measures to review its curriculum to ensure it is responsive to the training needs. KMTC needs to begin by coming up with ways to improve the performance of its students in assessments (Narad & Abdullah, 2016). Improved performance would be an indicator that the institution's goals and objectives are being met. The process of improving learners' performance in assessments begins with understanding and establishing the factors that influence students' performance.

In its 2018-2023 strategic plans, KMTC has placed quality training as its key strategic issue. To achieve this goal, the institution has to research and implement strategies to improve its students' performance in assessments. Some of the challenges faced by the health sector in the country are contributed to by lack of sufficient training for students in medical training institutions. As the main medical training institution in Kenya, KMTC ought to scrutinize its training to ensure that it is effective in producing health professionals with competencies to solve present and future

health issues in the country (Odanga, 2018). An assessment of the training programs offered by the institution has to start by evaluating how assessments are done in the institution. This was followed by an assessment of the factors influencing students' performance in these assessments which then formed the basis of recommending ways to improve students' performances.

KMTC has a core mandate in the training of middle level health care workers not only for the country but also for East Africa as well and beyond. The quality of this training is reflected by the standards as shown by the students' performances in assessments (Continuous Assessment Tests (CATs), Promotional Examinations and in Practical Assessments). Over the recent years, there has been a growing concern of examination irregularities and students performing poorly. A country where medical students are performing poorly in examinations and assessments can be equated to poor health outcomes and a lot of errors in medical operations and procedures. Although the performance of students in the Kenya Medical Training College (KMTC) has been fairly good, there is need to improve the performance of students in the institution to greater levels. KMTC assessments are designed with an aim of producing learners and indeed health care workers who are well equipped with various competencies required to solve both present and future healthcare issues and concerns.

The justifications as to why it is prudent to conduct a research study to assess the various ways of improving students' assessments performance at the Kenya Medical Training College (KMTC): First, an improvement in KMTC students' performance can be equated to an enhancement in the provision of health services in the country; Secondly, a study of the factors influencing the performance of KMTC students would not only help the institution improve the performance of its students but also help it meet its goals and objectives; Thirdly, results from the study on the factors influencing KMTC students' performance in assessments can be used not only to improve the performance of these students, but also to come up with ways of making the evaluation and assessments more effective (Gallagher, 2015).

## 2.0 Methods and Materials

This study utilized a descriptive study design. Conducted in 10 selected campuses of Kenya Medical Training College. The study targeted 100 students who had completed more than two semesters of training. Lecturers from various faculties were involved in key informant interviews. Fishers et al formulae was used to estimate minimum number required for the research findings to be representative of the views and opinions of the general KMTC population.

Interviewer administered Questionnaires were used together with key informant interviews to validate the responses. Test-retest method and Pearson's product formulae was utilized to test for validity and reliability. Two weeks after the study is conducted, the same respondents were contacted to validate the information they had provided. Quantitative data was presented in the form of tables and figures. The collected data was analysed using SPSS software. The study was based on the following regression model.

$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$  Where:

Y= Students assessment and performance

a= Constant.

Then:  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$ , will be the coefficient function of the independent variables,

X1= Student Attitude/ Perception (Objective 1)

X2= Intrinsic Factors (Objective 2)

X3= Extrinsic Factors (Objective 3)

Linear regression analysis was used to estimates the relationship between the study variables. The nonlinearity test was vital since the correlation and regression in the general linear model assume the linearity.

### 3.0 Results

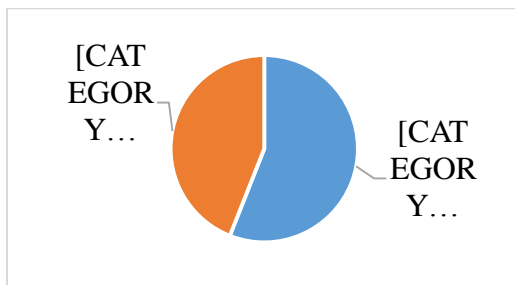
The study findings are based on the student independent variables which are student attitude, intrinsic factors and extrinsic factors. The study sampled 80 respondents whereby 74 questionnaires were fully filled and returned for analysis. This represented 93.1 percent which is highly acceptable

**Table 1: Respondents Age Bracket**

Age Bracket	Frequency	Percentage
Under 18 years	15	20
18 – 27 years	28	38
28 – 37 years	21	28
Above 37 years	10	14
Total	74	100

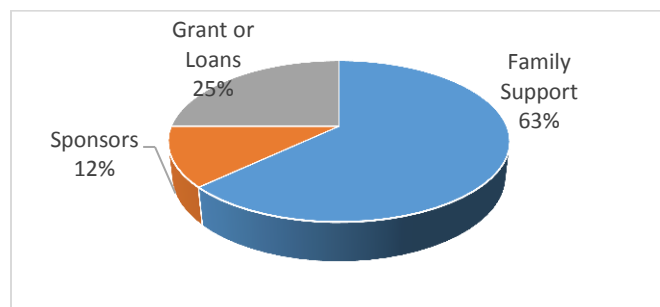
The study results showed that 56 percent of the respondents were female whereas 44 percent of the respondents were male with diverse age distribution, all of whom had completed more than 2 semesters in the college, implying that all participants were in ongoing programmes

**Figure 1: Respondents Gender**

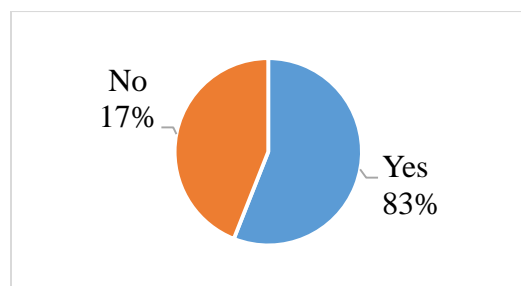


When respondents were asked on the fee payment methods; 63 percent of the respondents indicated family support, 25 percent of the respondents indicated grand or loans and only 12 percent of the respondents indicated sponsors. Majority of the respondents by 85 percent indicated yes on the assertion that they still had fee balances and only 17 percent of the respondents indicated No indicating that fee payment was a challenge to many students

**Figure 2: Respondents Method of Fee Payment**



**Figure 3: Whether Respondents have Fee Balances**



Majority of the students were found to be residing in the college hostels (Students accommodation was distributed as follows, 38 percent of the respondents indicated college hostels, 24 percent of the respondents indicated private hostels, 19 percent of the respondents indicated that they commuted from home and 19 percent of the respondents indicated the leave with relatives).

**Table 2: KMTC Student’s Accommodation.**

Type of Accommodation	Frequency	Percentage
College Hostels	28	38
Private Hostels	18	24
Commute from Home	14	19
Leave with relatives	14	19
Total	74	100

The study also established that 89 percent of the respondents indicated their family earned below ksh. 30, 000; 7 percent of the respondents earned between ksh. 30, 000 to ksh. 70, 000 while only 4 percent of the respondents earned more than ksh. 70, 000 earners who received less than ksh. 30, 000 with majority of the students indicated that they were not married

**Table 3 : Respondents Total Earning per Month in Kenya Shillings**

Type of Accommodation	Frequency	Percentage
Bellow 30,000	66	89
30,000 - 70,000	5	7
Above 70,000	3	4
Total	74	100

**Table 4: Respondents Marital/ Relationship Status**

Marital/ Relationship Status	Frequency	Percentage
Single	20	27
In an open relationship	6	8
Separated	6	8
Complicated relationship	8	11
Dating	24	32
Married	10	14

When the respondents were told to indicate their academic level; 66 percent of the respondents indicated they had none, 14 percent of the respondents indicated bachelor's degree, 12 percent of the respondents indicated diploma, 4 percent of the respondents indicated certificate/technical/vocational course, 3 percent of the respondents indicated diploma and lastly only 1 percent of the respondents indicated education level of masters and above

**Table 5: Respondents Academic Qualification**

Academic Qualification	Frequency	Percentage
Certificate/ Technical/ Vocational Course	2	3
Diploma Course	36	49
Higher Diploma	22	30
Bachelor's Degree	10	14
Master's Degree and More	4	5
Total	74	100

This shows that majority of the respondents were learned and could provide appropriate results in regards to the subject under investigation. Majority indicated they were fresh from high school and they did not have any employment assist on their fee payment.

The study also sought to determine the rating of the respondent's class attendance in the last or in the most immediate academic year; 46 percent of the respondents indicated regular attendance, 38 percent of the respondents indicated most of the times, 18 percent of the respondents indicated few of the times and none indicated never attended class.



**Table 6: Rating Respondents Class Attendance**

Factors	Frequency	Percentage
Regular/ all the time	33	46
Most of the times	28	38
Few of the times	13	18
Never attended class	Nil	Nil
Total	74	100

This implies that majority of the students attended class although there is still need to ensure that there is a hundred percent class attendance for every student enrolling in Kenya Medical Training College

The study sought to determine the rating of the respondents' performance in the previous academic year

**Table 7: Rating Respondent's Performance in the Last Academic Year**

Factors	Frequency	Percentage
Passed	46	62
Passed After Supplementary	13	18
Failed After Supplementary	10	14
Failed and Repeated	5	7
Total	74	100

62 percent of the respondents indicated they had passed, 18 percent of the students indicated they had passed after supplementary, 14 percent of the respondents indicated faulted after supplementary and 7 percent of the respondents indicated they failed and repeated. Therefore, it's clear that student performance followed the normal curve but there is need to sensitize students to work hard in their learning programmes

### 3.2 Assessment of Student Attitude

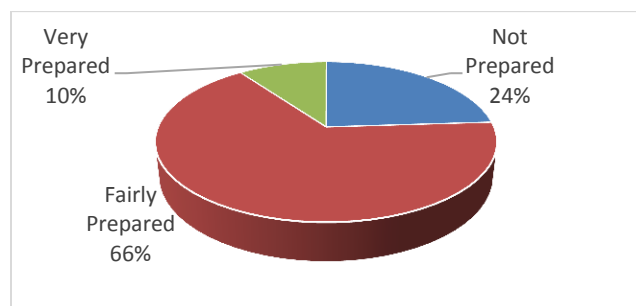
When the respondents were requested to rate their level of satisfaction; 35 percent of the respondents indicated they were fairly satisfied, 27 percent of the respondents indicated they were very satisfied, 23 percent of the respondents indicated satisfied and 15 percent of the respondents indicated not satisfied but expected.

**Table 8: Rate the Level of Satisfaction of Respondents with their Performance**

Levels	Frequency	Percentage
Very Satisfied	20	27
Fairly Satisfied	26	35
Satisfied	17	23
Not Satisfied but expected	11	15
Not satisfied and disappointed	Nil	Nil
Total	74	100

Therefore, the study findings indicated that majority of the students were fairly satisfied with their performance in their previous academic year

The researcher sought to relate this the students level of preparedness; 66 percent of the respondents indicated they were fairly prepared, 24 percent of the respondents indicated not prepared and 10 percent of the respondents indicated they were very prepared which shows some relationship between level of preparedness and students performance.

**Figure 4. Responses on How Prepared the Respondents are on Examinations/ Assessments**

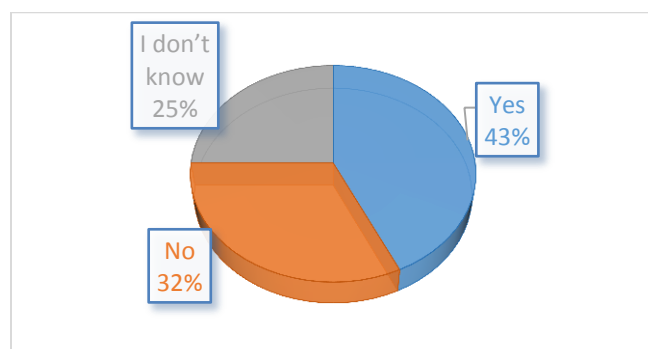
When the respondents were asked whether KMTC students attitudes had an effect on some subjects or topics performance; 74 percent of the respondents indicated sometimes, 14 percent of the respondents indicated always, 8 percent of the respondents indicated never, 4 percent of the respondents indicated they don't know.

**Table 9: Respondents Attitude towards a Subject or Topic Ever Affected Performance in Examination or Assessments**

Levels	Frequency	Percentage
Never	6	8
Sometimes	55	74
Always	10	14
I don't know	3	4
Total	74	100

This clearly shows that student attitude had an effect on their performance thus need for counselling. The study findings are supported by another study done by Langat (2015) who established that students', who had positive attitudes towards a subject or course, had a higher chance of performing well in examinations and assessments. This can be manifested in the manner the lecture or teacher interacts with the students, how he or she answers their questions, how learners respond to these questions and how the lecturer assesses their responses. When students lecturer relation was explored, majority of the students the study findings established that 43 percent of the respondents agreed that attitude towards lecturer had an effect on student performance, 32 percent of the respondents disagreed and 25 percent of the respondents indicated they don't know.

**Figure 4: Whether Respondents Attitude towards Lecturer has Ever Affected Student Performance**



The study findings are in line with the study done by Schenkel (2009) which established that student beliefs about their competence had a direct link to the levels of emotional states which promotes their performance academically.

**Table 10: Student Attitude Factors Affecting Student Performance**

Statements	Mean	St.D
Social interactions has an effect on student performance	3.80	1.031
Students aspirations has an effect on student performance	4.00	.643
There is a relationship between class attendance and student performance	4.06	.682
Student perceptions towards certain learning programmes has impact on student performance	4.02	.850

The study established that there was a relationship between class attendance and student performance where by it had a mean of 4.06 and a standard deviation of 0.682, the statement that student perceptions towards certain learning programmes had an effect on student performance had a mean of 4.02 and a standard deviation of 0.85; student aspirations had a mean of 4.00 and standard deviation 0.643, the statement that student interactions had an effect on student performance had a mean of 3.80 and standard deviation of 1.031 respectively. This shows clearly that student attitude had a strong significant effect on student performance.

This is in agreement with the study of Katrien Struyven (2002) which highlighted that student perceptions have an effect on student performance. The study asserted that learners can perform better if they have positive attitude towards assessment and examination

### 3.4 Intrinsic Factors Affecting Performance

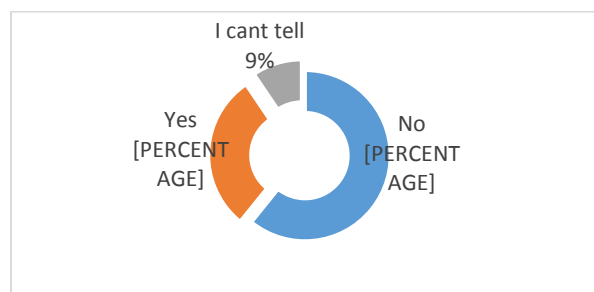
**Table 11: Intrinsic Factors Affecting Performance**

No.	Statements	Mean	St. D
	I usually panic before examinations or assessments	3.78	.7235
	I usually feel so tense and worry a lot about failing	2.69	.7432
	Examination room usually makes me so nervous to appoint that I forget what I had red before	2.88	1.043
.	I am usually scared of the examination invigilators and assessors to appoint that I can even tremble and panic	1.78	.8562
.	The language used to ask questions is usually not easy to understand therefore I don't understand the question	3.84	.9122
	The questions are usually not legible and I have to strain to read them	2.75	.8256
	The time allocated for the assessments/exams are not sufficient	2.44	.7742
	The questions are very many, this makes it difficult to finish the examination/assessment on time	3.66	.8365
	The examination schedule/timetable is usually released on time	2.74	.8698
	Syllabus is usually adequately covered	2.78	1.364

The study findings indicated that on the statement that the respondents panicked before examinations or assessments had a mean of 3.78 and Standard Deviation of .7235, on the statement that students worry and tense a lot about failing had a mean of 2.69 and standard deviation of .7432, on the statement that examination room makes respondents usually nervous to appoint that they had a red before had a mean of 2.88 an standard deviation of 1.043, on the statement that students were usually scared of the examination invigilators and assessors had a mean of 1.78 and .8562, on the statement that language used to ask questions was not easy to understand had a mean of 3.84 and standard deviation of .9122, on the question that the questions are usually not legible and had to strain to read them had a mean of 2.75 and standard deviation of .8556, on the statement that tie allocated for the assessment was not sufficient had a mean of 2.44 and standard deviation of .7742, on the statement that the questions were many and difficult to finish during examinations had a mean of 3.66 and a standard deviation of .8698 and lastly, on the statement that syllabus was usually covered had a mean of 2.78 and a standard deviation of 1.364. This implies that intrinsic factors had a significant effect on student performance

The respondents were asked as to whether the college had enough lecturers their findings are as shown. Majority of the respondents agreed by indicating yes by 61 percent on the assertion that there were no enough lecturers supervising students, 30 percent of the respondents indicated yes while only 9 percent of them indicated they can't tell.

**Figure 5: Assertion that the College has Enough Lecturers who teach and Supervise Students**



This shows that the college didn't have enough lecturers who could provide adequate teaching and assessment to the students. This explains why, when asked about lecturer's availability for consultation, majority of the respondents indicated sometimes by 69 percent while 31 percent of the respondents indicated yes. In spite of all that, the study established that 66 percent of the respondents still agreed on the assertion that teachers are usually are very supportive and understanding, 24 percent of the respondents strongly agreed and 9 percent of the respondents disagreed. This is clear that majority of the teachers were very supportive towards enhancing students learning

**Table 12: The Assertion that Teachers are usually Very Supportive and Understanding**

Levels	Frequency	Percentage
Strongly Agree	18	24
Agree	49	66
Disagree	7	9
Total	74	100

### 3.5 Extrinsic Factors

The study sought to determine the extrinsic factors affecting student performance. The study revealed that 64 percent of the respondents were neutral on the assertion that parent or guardian income affected students' performance, 43 percent of the respondents disagreed and 9 percent of the respondents agreed.

**Table 13: Assertion that Parent/ Guardian income affect Students'**

Level	Frequency	Percentage
Agree	7	9

Neutral	47	64
Disagree	20	43
Total	74	100

This shows that parent or guardian income did not form part of the factors affecting students' performance.

**Table 14: Extrinsic Factors Affecting Student Performance**

Statements	Mean	St.D
Relationship between students of opposite sexes affects other students preparedness for examinations and assessments	3.67	1.061
Students' performance is commonly affected negatively by peer pressure from fellow students	3.73	.785
Parents income or occupation had an effect on student performance	3.80	.847
Rewards from teachers had an impact on the outcome of any student performance	3.93	.740

The study findings revealed that parents income had an effect on student performance as it had a mean of 3.80 and standard deviation of 0.847, rewards from teachers had an impact on the outcome of any student performance had a mean of 3.93 and standard deviation of 0.740, Students' performance is commonly affected negatively by peer pressure from fellow students had a mean of 3.73 and standard deviation of 0.785 and the relationship between students of opposite sexes affect other students preparedness for examination and assessments had a mean of 3.67 and standard deviation 1.061. This implies that extrinsic factors had an effect on student performance

The study is supported by the findings of Quereshi & Pirzada (2015) who argued that motivation determines the success of student performance whereby extrinsic factors forms part of the motivating factors.

### 3.6 Interview Objective and Significant Observations

The purpose of the interview was to add on what had been collected from the quantitative data. The study made significant observations. It was observed the findings obtained from the interviews did not have any difference from the quantitative data. From the interviews, the researcher acknowledged that student attitude, intrinsic factors and extrinsic factors had significant effect on student assessment and performance.

## 4.0 Correlation and Regression Analysis

### 4.1 Correlation Analysis

A correlation describes a number which shows the relationship between two study variables, (Wilcox, D., 2010). Correlation analysis is applied in most studies since it brings useful statistics. In the study, Pearson's correlation analysis was carried out at 95 percent confidence interval and 5 percent at confidence level which tailed between each of the study variables was adopted in

determining the significance and association degree between dependent and independent variables. The table below indicates the correlation matrix obtained.

**Table 15 : Summary of Pearson's Correlations**

Correlations		Student Attitude	Intrinsic Factors	Extrinsic Factors	Student Performance
Student Attitude	Pearson Correlation	1	.012	.080	.030
	Sig. (2-tailed)		.905	.445	.774
	N	74	74	74	74
Intrinsic Factors	Pearson Correlation	.012	1	.313**	.025
	Sig. (2-tailed)	.905		.002	.807
	N	74	74	74	74
	Pearson Correlation	.080	.313**	1	.101
	Sig. (2-tailed)	.445**	.002		.332
	N	74	74	74	74
	Pearson Correlation	.030	.025	.101	1
	Sig. (2-tailed)	.774**	.807**	.332**	
	N	74	74	74	74
*. Correlation is significant at the 0.05 level (2-tailed).					
**. Correlation is significant at the 0.01 level (2-tailed).					

The study findings established that there is a significant positive relationship ( $r=.774$ ) between student attitude and student performance in the Kenya Medical Training College. The study as well highlighted that there is a positive relationship ( $r=.807$ ) between intrinsic factors and student assessment and performance at the Kenya Medical Training College. Lastly, the study established that there was a positive relationship ( $r=.332$ ) and performance of students.

#### 4.2 Regression Analysis

The regression analysis is a statistical method of estimating the relationship among study variables. It constitutes of both analysing and modelling different study variables which focus on the relationship between the dependent and other independent variables as describes by Marshall, C., (2012).

The study applied multivariate regression analysis to ascertain the significance of the relationship between the dependent variable and all the other study independent variables when put together. The regression analysis served the purpose of estimating the proportion of the dependent variable

which can be predicted from the independent variables (student attitude/perception, intrinsic factors and extrinsic factors).

The findings from the regression analysis highlighted that there is a significant positive relationship between dependent variable and the independent variable. The independent variables R were found to have value of .870<sup>a</sup> which indicates that there was a perfect relationship between dependent and independent variables. In the study, when the R square value is at 0.757 this implies that 75.7 percent of the corresponding variation in students assessment/performance which can be expounded on or predicted by (student attitudes, intrinsic factors and extrinsic factors) which shows that the technique was fit for this particular study data. The study findings regression

analysis clearly shows a significant positive relationship between the study dependent variable and independent variable at ( $\beta = 0.757$ ),  $p=0.000 <0.05$ ).

**Table 16: Model Summary**

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.870 <sup>a</sup>	.757	.727	1.27626
a. Predictors: (Constant), student attitude, intrinsic factors, extrinsic factors				

#### 4.3 Analysis of Variance (ANOVA)

Analysis of variance is type of statistical technique applied in testing the difference between two or more means. When testing the significance level, the statistical significance is usually significant in the event the p-value is less or equivalent to 0.05. In the current study, the p-value is at 0.00 which is less than 0.05. This implies that the regression model is statistically significant in predicting the factors affecting student assessment/ perception in Kenya Medical Training College.

**Table 17: ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.215	4	2.072	5.298	.000 <sup>b</sup>
	Residual	35.189	70	.391		
	Total	41.404	74			
a. Dependent Variable: Student Assessment/ Performance						
b. Predictors: (Constant), Student Attitudes, Intrinsic Factors, Extrinsic Factors						



#### 4.4 Coefficients of Determination

Table 18 : Coefficients of Determination

Model	Unstandardized Coefficients		Standardized t	Sig.
	B	Std. Error	Beta	
(Constant)	3.542	.341	10.401	.000
1 Student Attitude	.050	.057	.107	.377
Intrinsic Factors	.227	.059	.425	.000
Extrinsic Factors	.010	.057	.018	.864

a) Predictors: (Constant), Student Attitude, Intrinsic Factors and Extrinsic Factors

b) Dependent Variable: Student Performance

The formula illustrated below was used.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where;

Y = the dependent variable (Student Performance)

X<sub>1</sub> = Student Attitude

X<sub>2</sub> = Intrinsic Factors

X<sub>3</sub> = Extrinsic Factors

The regression equation is therefore;

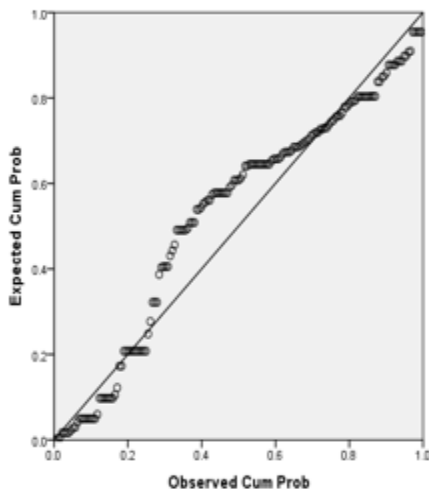
$$Y = 3.542 + 0.050X_1 + 0.227X_2 + 0.010X_3$$

The regression model above noted that taking all factors into consideration (student attitude, intrinsic factors and extrinsic factors) to be constant zero, the student performance will be an index of 3.542. The study results taking into consideration of the independent variables to be zero then a unit increase in student attitude can lead to an increase of 0.05 in the scores of student performance; a unit increase in intrinsic factors of 0.227 can lead to an increase in students' performance and lastly a unit increase of 0.01 can lead to an increase in students' performance. This implies that the three study variables had a strong positive relationship to the dependent variable which was student performance.

## 4.5 Tests for the Assumptions of Regression Analysis

### 4.5.1 Tests for Linearity

The study tested the linearity between the study variables that is the independent variables which were student attitude/ perception, intrinsic factors and extrinsic factors and the dependent variable which was student performance with the aid of scatter diagrams. The scatter diagram illustrating linearity relationship between the variables is as shown below;

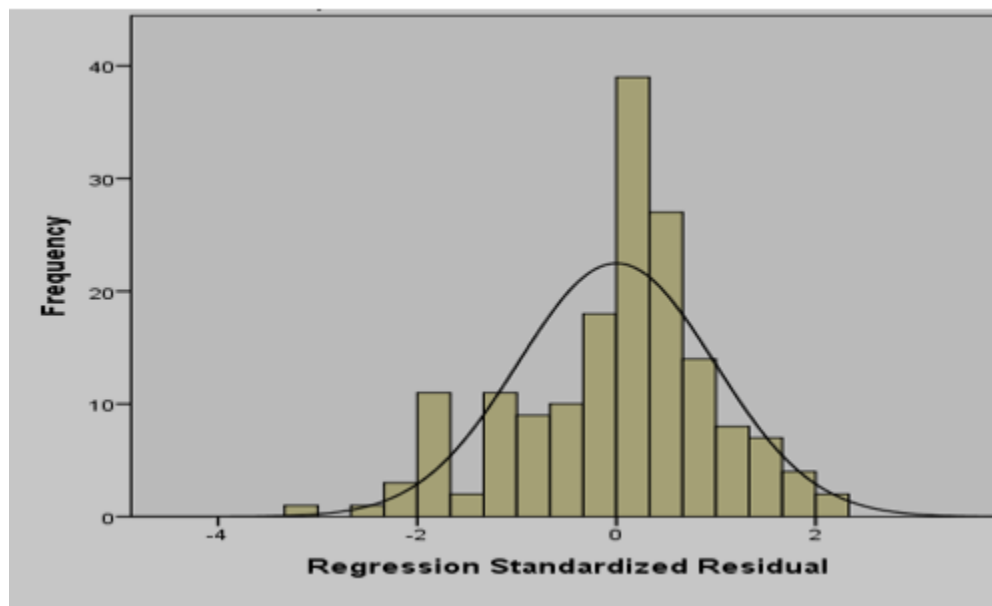


The scatter diagram above shows the linearity relationship between the factors affecting student's assessment and students' performance. The diagram shows that an increasing pattern of factors affecting students' assessment and an increase in students' performance thus a positive linear relationship is inferred

### 4.5.2 Tests for Normality

Histogram and normal probability plot was adopted in testing the dependent variables

Which was student performance. The histogram is as presented below



The histogram plot shows that student performance is distributed with an average of  $8.51E - 16 \approx 0$  and a standard deviation of  $0.988 \approx 1$ , which is a normal distribution. Similarly, the standard probability plot presented in the diagram indicated that the residuals are uniformly distributed alongside the regression line thus conclusions can be made that students' performance was normally distributed.

#### 4.6 Summary of Findings

Quality in academic performance is a mirror of the quality in the training system. It's clear from the study that among other factors, attitude, intrinsic factors, and extrinsic factors are some of the variables to academic outcomes. On the effect of perception on the methods used in assessments, the study findings established that a unit increase in student perception can lead to an increase of 0.05 in the scores of student performances this is similar to the findings of a study by Langat (2015) and Katrien S (2002). All are indicating that students would perform better when there is positive attitude towards the examination and assessment processes and the results would be more positively accepted. It can therefore be concluded that student attitude on the assessment process had a significant effect (both positive and negative) on student performance outcome.

The study also sought to identify the effect of intrinsic factors (lecturer related factors, student-related factors and examination factors.) on student assessment and performance. The study borrowed from Maric & Sakac (2014) which grouped this factors as either those related to the individual, the internal factors and those that results from social engagements, the social factors. The study demonstrated that a unit increase in the intrinsic factors of 0.227 can lead to an increase in students' performance. This clearly demonstrates the significant role both students and their teachers or lecturers play in influencing performance in any teaching and training institution. Based on this results, the researchers were persuaded to agree with Akinsolu (2010)

who emphasizes that teacher's/lecturer's experience and qualification has significant impact on academic performance and disagreed with Odanga (2018) who indicated that lecturer-related factors such as experience, age, gender and qualification had no significant interrelationship with students' academic performances, The study established on the effect of extrinsic factors on students' performance that a unit increase of 0.01 can lead to an increase in students' performance. This shows that extrinsic factors also had significant positive effect on students' assessment and performance. Therefore, the study independent variables had a strong positive relationship to the dependent variable which was student performance.

#### **4.7 Conclusions**

The analysis established that student perception, intrinsic and extrinsic factors formed the predictors of student performance. The study concluded that if student learning characteristics are well harnessed then this can go a long way improving students' performance. Therefore, there is need for higher learning institutions to integrate this factors in their planning.

For Kenya Medical Training College, the study concluded that: it has inadequate lecturers who can provide technical assistance and assessment of student and majority of the students also have challenges on fee payment both of which can have a significant effect on student performance. Teacher student attitude, attitude towards examinations and assessments also affected performance

Therefore, there is need for the higher learning institutions to take into considerations of the intrinsic and extrinsic factors during their planning and budgeting processes for betterment of student performance. All stakeholders in higher learning institutions needs to come together and work towards adopting long-term solutions, strategies and approaches which can minimize the factors affecting student performance.

#### **4.8 Recommendations**

Based on the study findings and conclusions the study recommends as follows;-

The study recommends that, the government should increase the number students accessing loans to hundred percent in the Kenya Medical Training College to enhance continuous learning in the institution. The college needs to come up with appropriate ways of counselling students to enhance their performance. This can be done by joint effort from both students and lecturers. The study recommends that the institutions can create internships whereby students can get paid and increase their self-esteem as they pursue their career

#### **References**

- Akinsolu, A. O. (2007). Teams and the Dynamics of Collaboration: An Antidote for Educational Organisation Efficiency. *The International Journal of Knowledge, Culture, and Change Management: Annual Review*, 7(5), 65-72. doi:10.18848/1447-9524/cgp/v07i05/50372
- Gallagher, C. H. (2015). *Academic Performance: Student Expectations, Environmental Factors and Impacts on Health*. Hauppauge, NY: Nova Science Publishers.

- Komakech, R. A. (2015). School Attendance is a Pre-Requisite for Student Academic Performance in Universal Secondary Education Schools. *Journal of Social Science for Policy Implications*, 3(1). doi:10.15640/jsspi.v3n1a3
- Langat, L. (2015). *Teacher factors affecting student achievement in biological sciences*. Saarbrücken: LAP LAMBERT Academic Publishing.
- Lee, G. P., & Otto, R. K. (2015). *How to Prepare for the Written Examinations in Clinical Neuropsychology and Forensic Psychology*. Oxford Clinical Psychology. doi:10.1093/med:psych/9780195372434.003.0006
- Marić, Mia, & Sakač, Marija. (2014). *Individual and social factors related to students' academic achievement and motivation for learning*. Naklada Slap.
- Marshall, K. (2013). *Rethinking teacher supervision and evaluation: How to work smart, build collaboration, and close the achievement gap*.
- Narad, A., & Abdullah, B. (2016). Academic Performance of Senior Secondary School Students: Influence of Parental Encouragement and School Environment. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 8(2), 12-19. doi:10.21659/rupkatha.v8n2.02
- Odanga, S. (2018). Influence of Socio-cultural Factors on Performance in Examinations in Kenya. *Asian Research Journal of Arts & Social Sciences*, 7(1), 1-14. doi:10.9734/arjass/2018/41051
- Osterman, K. F., & Kottkamp, R. B. (2015). *Reflective Practice for Educators: Professional Development to Improve Student Learning*. New York: Skyhorse Publishing Company, Incorporated