

# **DETERMINANTS OF TEACHER MOTIVATION IN PUBLIC SECONDARY SCHOOLS IN MASABA SOUTH SUB-COUNTY, KENYA**

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## **Abstract**

*The purpose of this study was to determine the of teacher motivation in public secondary schools in Masaba South Sub-County in Kisii County, Kenya. The study targeted 402 teachers from 14 schools in Masaba South Sub-County. The sample size of the study was 121 teachers constituting 30 % of the total population. Schools were stratified into two locations: Masaba and Kiamokama location to reduce the study sample size. Simple random sampling was used to select teachers from the 14 selected public secondary schools. Two schools in the same sub-county were used for the pilot study to test on the reliability of results. Semi-structured Questionnaire was used to collect data from the respondents. Data was analyzed using SPSS for descriptive and regression analysis. The study established that development factors had a significant effect on teacher motivation; where 64.2% change in teacher motivation was as a result of the developmental factors. The study recommended that school managers to sponsor teachers to workshops and seminars in order to motivate them. Schools management should work towards improving the teaching and learning environment. Study findings will assist school*

*managers in formulating competitive teacher motivational strategies to improve student examination performance and to curb the mass loss of teachers from public secondary schools to more lucrative jobs.*

*Keywords: Motivation, Academic Performance, Teachers, Secondary school, Education*

## **INTRODUCTION**

Teachers' motivation is one of the important factors in realizing educational objectives in achieving high academic performance. Low teacher motivation has led to low student performance in academics. Thus the learning environment and teachers' motivation upon knowledge development relatively need attention in our schools. Human resource as a factor of production is affected by adequacy and quality as reflected by the level of training and level of motivation (Juma, 2011). Teachers and student performance being inseparable it was logical to use standardized students assessment results as the basis for judging the motivation of teachers. Teachers are charged with other responsibilities such as guiding and counseling, disciplining students, managing classes and participating in curriculum development panels other than teaching. Managers should recognize that teachers are major contributors to the efficient academic achievement of the education sector (Abbasi and Hollman, 2000). In many education institutions, managers bear little attention to ensuring job satisfaction that in turn influence teacher motivation and this implicates more on student KCSE performance. Teacher motivation is very critical in achieving academic excellence hence an investigation on determinants of teacher motivation in public secondary schools was inevitable to achieve the educational goals in secondary learning institutions.

Majanga, Nasongo and Sylvia (2010) argued that FPE has created increased class sizes, shortage of teachers, heavy teachers' working load and lack of teacher motivation. Bishay (1996) noted that the teaching profession ranks high on the success list of a society. Teachers are mentors, life shapers, destiny shapers and they must be prepared to undertake the task put into their hands diligently. Freezing of the hiring of teachers to public schools by the Kenyan government in 1998 created a teacher shortage in many secondary schools leading to increased workload. Further, it has been noted that teachers are demoralized with heavy workloads, handling many lessons, many pupils and working for long hours. This was the same concern in Masaba South Sub-County, which tends to have teachers with low morale leading to dismal KCSE results annually. It is upon this background that this study aimed at finding out the determinants of teacher motivation in public secondary schools in Masaba South sub-county in Kisii County.

## Statement of the Problem

Although the motivation of employees has been widely researched, few studies have been studied on the attributes of motivation of employees to organizational performance. Student academic performance is very important in most societies today. The entire success of an education institution is based on students' performance in the national examination. Quality teaching staff is the cornerstone of students' academic success. However without teacher motivation educational institutions will continue to boost poor results in KCSE examinations. The poor academic performance in most schools can be attributed to teacher motivation among other factors. Bedassi (1990) argued that rewards help an individual to get highly committed towards attainment of personal goals attributing to the organization's success. Efficient teaching and moral will take place when there is strong motivation in terms of wages and other factors from both employers, also the students' performance sometimes may serve as a motivation for the teachers in order to perform efficient in academics. This motivation may be aroused by either extrinsic or intrinsic stimuli both of which are important in directing and regulating the learner's behavior towards attainment of the desired goals. Teachers must therefore be motivated through various ways which may include the organization of seminars and workshops, upgrading test, performance appraisal, timely payment of salary and wage, providing the required physical facilities like laboratories and verbal encouragements for student etc. Chimombe (2011) conducted research on the effect of the school environment on teacher motivation and found out that poor school environment led to low motivation hence under performance. Mwangi (2002) studied factors related to the morale of agriculture teachers in Machakos district and found out that those factors were: dissatisfaction with school authority, inadequate pay and poor career structure, poor school facilities, inadequate disciplinary policy but failed to point out the leadership and development factors affecting productivity and retention of employees. Little research and public documentation of determinants of teacher motivation in public secondary schools in Masaba South Sub -County justified that this study had a grey area that warrants investigation meant to fill the wide gap of determinants of teacher motivation.

It is, therefore, imperative for the ministry of education and managers of educational institutions to ensure competitive motivational strategies to ignite teachers to focus on school target and work efficiently towards attaining it. It was upon this premise that teacher motivation is an area of concern to educational scholars and the government to curb teachers' annual industrial actions and improve the academic performance of institutions in national examinations. Therefore, this study sought to determine the effect of development factors on

teacher motivation that improves their performance leading to variation in KCSE results of schools in the same category.

### **Research Objectives**

First, this study aimed at determining the effect of development factors on teacher motivation in Public Secondary Schools in Masaba-South Sub-County; secondly, establishing the effect of development factors on teacher motivation in Public Secondary Schools in Masaba-South Sub-County; thirdly, determining the effect of environment factors on teacher motivation in public secondary schools in Masaba South sub-County and fourthly, establishing the effect of leadership factors on teacher motivation in public secondary schools in Masaba South sub-County. Lastly, determining the effect of remuneration factors on teacher motivation in public secondary schools in Masaba South sub-County

### **Research Questions**

The research questions for this study were: What is the effect of development factors on teacher motivation in public secondary schools in Masaba South sub-county? What is the effect of environment factors on teacher motivation in public secondary schools in Masaba South sub-County? What is the effect of leadership factors on teacher motivation in public secondary schools in Masaba South sub-county? What is the effect of remuneration factors on teacher motivation in public secondary schools in Masaba South Sub-County?

## **LITERATURE REVIEW**

### **Teacher Motivation**

The quality of human resource management is a critical influence on the performance of the firm. Concern for strategic integration, commitment, flexibility and quality has called for attention to employee's motivation and retention. Bennell & Akyeampong (2007) find sizeable percentages of primary school teachers are poorly motivated in sub-Saharan Africa and Asia. Finnigan & Gross (2002) warn against the demotivating consequences of continually sanctioning of poorly performing teachers or schools without simultaneously providing support for those teachers or schools to improve performance. Debbie (2008) contends that teachers are the most important factor in determining the quality of education that children receive. Financial motivation has become the most concern in today's organization in regard to Maslow's basic needs. Non-financial aspect only comes into subsidize financial motivation. This is a major concern to the government and TSC in dealing with teacher's salaries increment that leads to annual strikes of teachers affecting education systems in public secondary schools.

Hoy and Miskel (1997) notes that employees motivation consists of the complex forces, drives, needs, tension, states or other mechanisms that start and maintain voluntary activity directed towards the achievement of personal goals. One way of stimulating people to work is by adopting effective motivation which makes workers more satisfied and committed to achieving a desired outcome.

Nyakundi (2012) found out in her study that, job satisfaction, fairness in the teacher promotion system, reward system and better-working conditions influence teacher motivation. Dessler (2001) asserts that organizations' liveliness whether public or private comes from the motivation of its employees, although their abilities play an important role in determining work performance.

### **Maslow's Hierarchical Theory of Motivation**

Maslow's (1943), the theory of human motivation is based on assumptions that need that are not satisfied motivates or influences behavior. In his theory Maslow claims that human beings have desires, wants and needs arranged in a hierarchy beginning with the most basic to the highest and these are; physiological needs, safety or security needs, social and belonging or affiliation needs, self-esteem, ego or status needs and the need for self-actualization. McGregor, (1999) reaffirmed that needs are arranged according to a hierarchy of importance and that an individual's needs at any level on the hierarchy emerges only when lower level needs are reasonably well satisfied. The use of universal needs hierarchy by a manager in motivating employees is based on the concept that reasonably well-satisfied needs do not motivate.

Physiological needs are the most basic in the hierarchy that include food, water, oxygen, sex and sensory satisfaction. Once they are satisfied, they cease to motivate an individual. However, if the satisfaction of a lower order need is threatened than that need will again become proponent and one's effort to satisfy all higher needs is reduced. (Okumbe, 1998). In the employment context, physiological needs are satisfied through adequate salaries or wages. (Nzure, 1999). Besides managers can improve work conditions through providing effective food programs, adequate drinking water and well-ventilated offices and classrooms.

Safety needs emerge when physiological needs are relatively satisfied. They include a desire for security, stability, dependency, protection, freedom from fear and anxiety and the need for structure, order, and law (Cherrington, 1989). These needs are satisfied through adequate wage and salaries, constant feedback and participatory decision-making. The third level is love or social needs. These include affiliation, belongingness, acceptance, and friendliness. The manager of a school should facilitate conducive environment where teachers

relate well with colleagues to satisfy social needs. Next level is esteem needs that include self-respect, desire for achievement and accomplishment, recognition and autonomy. Head teachers can enable teachers to attain this need by recognizing teachers' effort through appraisal, appreciation through rewards and quality supervision.

### **Environment Factors and Teacher Motivation**

Indeed, physical resources enhance the conducive environment that promotes effective teaching and learning. Studies conducted on the effect of the school environment on teacher motivation attest to the fact that school environment that is not conducive to teaching may lead to low motivation hence underperformance (Chimombe, 2011). Provision of adequate teaching and learning facilities at all levels including equipment and human resources enhance the quality and relevance of imparting skills to learners (Lumuli, 2009). Teaching and learning resources include classrooms, laboratories, libraries, playing fields, textbooks among other things. Reduced class size motivates teachers to effective teaching due to more student participation. Yuma (2011) links performance in examinations to the state of teaching and learning resources in schools. He notes that students from poor backgrounds perform poorly in the examinations because the poor are often in areas where schools are seriously deprived of vital facilities an attitude of helplessness may be inculcated early into students making them have a negative attitude toward the school. Michaeloaw (2002) found out that workload challenges are negatively correlated teacher job satisfaction and positively correlated to absenteeism. Africa not only does a heavy workload negatively impact teachers effort but also makes teachers resistant to applying new teaching. (Bennel & Akyeampong 2007)

Physical materials in terms of adequacy and quality have been noted to have a great impact on teacher motivation. (Husen, et.al.1978) A school that has adequate instructional materials is likely to post better school mean. Low quality and inadequate physical resources in a school creates low morale of teachers. A school with inadequate classrooms will be forced to accommodate more students than recommended increasing teacher-student ration (Nafucho, 1999; Psycharapolous & woodhall, 1985). The lack of basic facilities like laboratories has compromised the teaching of science subjects. Topics that are meant to be taught practically are taught theoretically as part of the adaptive mechanism by teachers due to inadequate resources for effective teaching. This ends up affecting students' performance reducing their competitiveness for opportunities whose placement is pegged on performance in some subjects (Mayama 2012; Lumuli; 2009). This study, therefore, proposed to find out whether environment factors affect teacher motivation that has led to variation in performance existing among the schools.

## Leadership Factors and Teacher Motivation

In Kenya, schools like all organizations are advancing in complexity with an increasing number of factors that impact on school's management and performance. Consequently, they raise challenges for leadership styles that call for principals as leaders in these schools to create an attractive environment in order to motivate and retain effective teachers. The Kenyan situation is incredibly complex as many schools are caught in the middle of the web of authoritarian hierarchies and traditional leadership approach as well as bureaucratic hierarchies mixed with the modern approach of leadership. Hatfield, et al. (2002). As organizations and their environments continue to transform quickly into the future new style of leadership less bureaucratic and more democratic is required to ensure institution's survival and performance. Mester, et al. (2003) acknowledges that most managers and organizations realize that they face a future of rapid and complex changes. It is believed that organizations that are over-managed and those under-led inhibit organizational growth and development (Swane, et.al., 2000). Maritz, (1995); Bass (1997) there is a claim that public secondary schools and school systems are not led in ways that enable them to respond to the current demands that face educational institutions.

Several administrative problems of formal organizations are caused by a fundamental conflict between needs and motives of mature individual and requirements of organizations. Hoy and Miskel (1996) assert that there is interplay between individuals' attempt to personalize their roles so that they actualize their personal needs and that of organization in an attempt to mould and fit them to the prescribed roles to achieve the organizational goals. According to Terry (1987), leaders of schools, who are head teachers, have been charged with the responsibility of ensuring that people strive willingly towards school vision, mission, and objectives. Schools that invest in quality leadership always perform exceptionally well while those with poor leadership styles perform poorly. Closer investigation reveals that performance does not just happen, but it is as a result of effective teaching and general quality leadership. Millet (1998) further researched on the extent to which quality of leadership related to teacher motivation and established that, there exists a positive correlation between quality leadership and teacher motivation that brings variation of performance in schools.

Head teacher's Leader styles vary from one school to another, and it is worth to mention that no two leaders can administer and lead an institution in the same way. According to Holford (2003) five leadership styles were identified as Autocratic, which uses rewards and punishment to influence behavior. Besides, the Democratic leader seeks advice from subordinate and tries to reach consensus with their teams (Rotemberg & Saloner, 1993). The third leadership style Holford (2003) identifies is transactional leadership whereby a leader believes that punishment

and reward motivates people and assumes that when people agree to a particular assignment, they must agree to leave up to those agreements then their leaders must take full control and power over the subordinate who must obey without question.

Currle & Lockeett (2007) noted that transformational leaders meet the needs of followers and sensitive to individual differences. Transformational leadership is analyzed into four dimensions namely: idealized influence (behavior and attributes), inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Steidlmeier 1998). Lastly, laissez-faire leadership style is identified as where there are practically no rules in the organization granting complete freedom to the groups or individual decisions. Leaders never give direction to their followers (Nzuve, 1999). Besides in laissez-faire, leaders never intervene with the administrative processes (Karip, 1998).

Alessandro, Castro, Ray & Vereline (2004) note that a basis of good leadership is the honorable character and selfless service to organizations. Most teachers view these as the main factor that affect the achievement of organizations and their wellbeing. Respected leaders never tend to concentrate on what they are in terms of beliefs and character but with what they know in terms of job tasks and human nature and implement, provide direction and motivate their followers.

### **Remuneration Factors and Teacher Motivation**

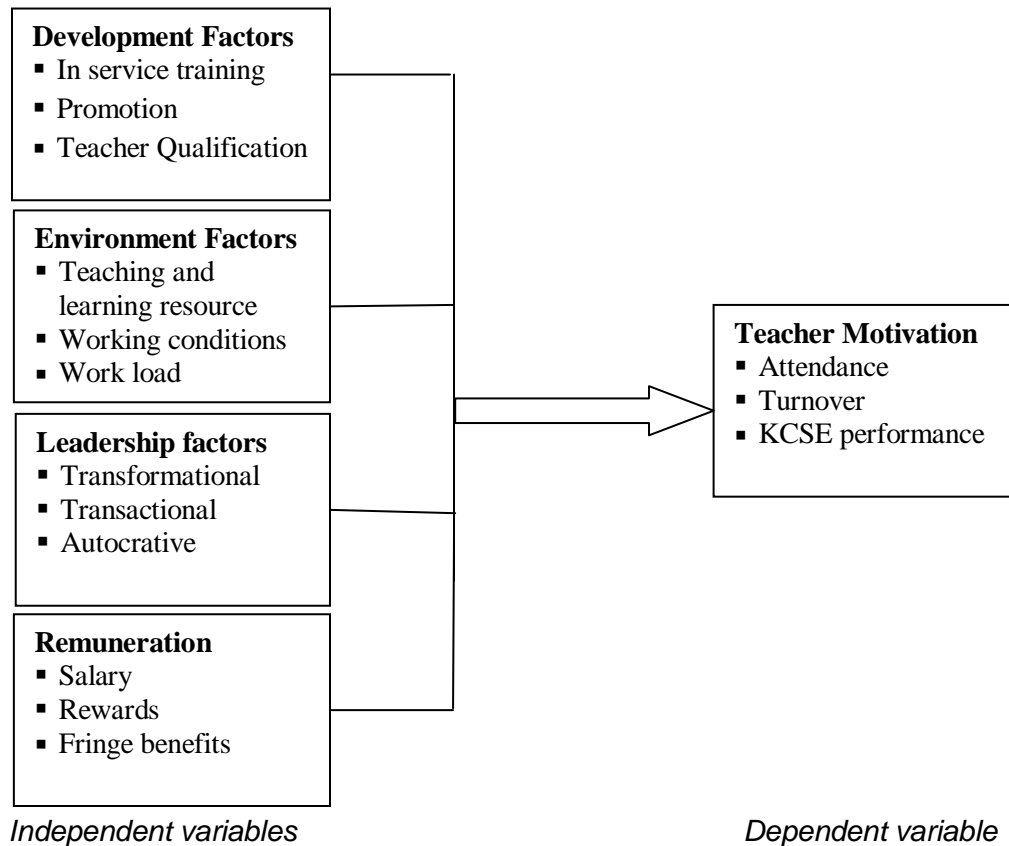
Okumbe (1998) suggested that the motivation of workers is enhanced when workers perceive equitable pay compared to their input. When employees feel that they are inequitably remunerated dissatisfaction sets, and this reduces their performance. Debbie (2007) research findings appear to confirm views by Herzberg (1966) that pay is a hygiene factor rather than a motivator and once people are satisfied with their pay additional increases will have little effect where other factors are pushing an individual towards quitting. Torrington, et al. (2005) assert that hygiene factor are of some threshold. Rewards or output (promotion, salary, status) equate to the input (skills, efforts, experience) fairly compared with the rewards given to others. Teachers' unions assert that salary levels are low often, declining in real terms and relatively compared with other professions. Where teachers' salaries have been eroded down by the government, teachers are always pushed into a second job or private tutoring. (Garnor, 1994) Secondary income activities create divided attention and loyalty of teaching and impact negatively on the quality of schooling.

However, Delannoy & Sedlock (2000) noted that across the board salary increases in Brazil were ineffective in increasing performance. Teachers are more motivated when they are paid on time when retrieving their pay is easy and sometimes through performance bonus pay



schemes. In India irregularly paid salaries are a major source of low motivation.(Ramachandran & Pal 2005).In terms of bonus pay, Muralidharan & Sundararaman (2009) find that individual and group performance pay schemes significantly increased test scores in India through encouraging greater effort among teachers.

Figure 1: Conceptual Framework



## RESEARCH METHODOLOGY

This study adopted descriptive survey design as it is concerned with describing, recording, analyzing and reporting circumstances that are available. (Kothari, 2003) .This design enabled the researcher to assess the situation within the study area at the time of the study. The researcher used the design to find out the determinants of teacher motivation in public secondary schools in Masaba South sub-County.

The study targeted 402 teachers from 14 public secondary schools randomly selected from the total 40 public secondary schools in Masaba South Sub-County. The schools were stratified into two divisions in the sub-county that were; Masaba and Kiamokama to ensure optimum allocation to ensure fair distribution of different schools in the sample and reduce the schools into the manageable sample. A sample of 14 public secondary schools in the sub-

county was randomly selected from 40 public secondary schools in Masaba South Sub-county. Random sampling technique was used to sample teachers from the 14 selected public secondary schools in Masaba South Sub-County because schools had similar characteristics. According to Mugenda & Mugenda, (2003) 10% to 30 % of the target population may be selected as a sample size. The researcher, therefore, considered 30% to be representative enough for the study. The study targeted a total of 121 teachers.

Data was collected by the use of a research questionnaire. To assess the content validity of the questionnaires the researcher sought expert assistance from the supervisor. The supervisor assessed the instrument and gave feedback for implementation as the researcher identified loop holes and made necessary adjustments. To test the reliability of the instruments, the researcher conducted a pilot study in two schools not selected in the actual study in the same Sub-County since they share characteristics. According to Mugenda & Mugenda (2003) reliability is a measure of the degree of a research instrument to yield consistent results or data after repeated trials. The research instrument administered in the pilot study yielded a coefficient of 0.895 then it had a high degree of reliability.

Primary data from the field was edited to eliminate errors made by respondents. Coding was done to translate question responses into specific categories. Coding was expected to organize and reduce research data into manageable summaries. The responses of participants to the questions were keyed into the SPSS. Descriptive statistics mainly; percentages and frequencies were used to analyze data. Regression analysis, was used to measure the effect of independent variables on teacher motivation.

## EMPIRICAL RESULTS AND DISCUSSIONS

### Effect of Development Factors on Teacher Motivation

To establish the effect of development factors on teacher motivation as measured by training, a regression analysis model of the form  $y = a + bx$  was used, where  $a$  is the  $y$ -intercept and  $b$  is the development factors coefficient. The results are as shown in the table 1

Table 1: Development Factors Coefficients

Model	Unstandardized Coefficients		Standardized coefficients		
	<b>B</b>	<b>std. error</b>	<b>Beta</b>	<b>T</b>	<b>Sig.</b>
1 Constant	11.49	23.5		18.071	0.006
Education	19.33	94.7	.642	71.41	.027

Therefore, the model was  $Y = 11.49 + 19.33X$ . This means that an increase in development factors by one shilling causes an increase in teacher motivation by 19.33 performance units.

The standardized beta value of .642 indicates that an increase in development factors by 1% would cause an increase in teacher motivation by 64.2%. This is confirmed by Barber & Mourshed (2007) who asserted that the quality of an education system is determined by the quality of teachers who have undergone knowledge intensive training institutions and teacher development centers.

To test the goodness of fit of the regression model development factors F value was obtained and the results were as below.

Table 2: Development Factors ANOVA

Model 1	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.433	1	.433	31.65	.027
Residual	.423	99	.061		
Total	.855	100			

The F value of 31.65 indicates a significantly high value showing that the model is a good model, and it can hold. The p-value of .027 is less than 0.05 significance level and, therefore, the model is good.

Table 3: Development Factors Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	.642	.412	.28	.24765

The R square value as shown in Table 3 indicates that a change in development factors caused a 41.2 % variation in teacher motivation in secondary schools while other factors could explain 58.8% of the variation in motivation of teachers.

This study established that development factors affect teacher motivation significantly and transfer the effect to the performance of teachers. These findings confirms the work of Juma (2011) who asserted that human resource as a factor of production is affected by the adequacy and quality as reflected by the level of training and motivation in possession of the staff. Further, Wilson, (2002) confirms the findings by asserting that staff development is meant for the school to meet wider responsibilities it is expected to fulfill. Mbatia (2004) concurs with the findings by noting the importance of the knowledge, experience and ongoing training of teachers on academic excellence. The findings are also backed by the previous research of Dibble (1999) who asserted that development enables gaining of new skills and taking

advantage of many methods of learning that benefit employees and organizations alike hence better performance.

### Effect of Environmental Factors on Teacher Motivation

Learning resources in the schools sampled was used as a measure of environmental factors in those schools. Regression analysis was used to establish the effect of environmental factors on teacher motivation in public secondary schools in Masaba South Sub-County. The model took a simple regression form of the nature  $Y = a+bX$ . The table below shows the results.

Table 4: Environmental Factors Coefficients

Model 1	Unstandardized Coefficients		Standardized coefficients		
	<b>B</b>	<b>std. error</b>	<b>Beta</b>	<b>T</b>	<b>Sig.</b>
Constant	19.8	239		7.76	0.0412
Resources	42.3	543	.764	28.24	.0126

Therefore, the model was  $Y = 19.8+42.3X$ . This implies that an increase in environmental factors by 1 shilling causes an increase in teacher motivation by 42.3 performance units. The standardized beta value of .764 indicates that an increase in environmental factors by 1% would cause an increase in teacher motivation by 76.4%.

To test the goodness of fit of the regression model above ANOVA table 5 below was used.

Table 5: Environmental Factors ANOVA

Model 1	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.191	1	.1191	67.69	.0126
Residual	.065	99	.032		
Total	.255	100			

The F value of 67.69 indicates a significantly high value implying that the model is a good model. The p-value of .0126 is less than 0.05 significance level, and, therefore, the model is good.

Table 6: Environmental Factors Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	.764	.584	.419	.18028

The R square value as shown in Table 6 indicates that a change in environmental factors can explain 58.4% of the variation in teacher motivation in Masaba South Sub-County secondary schools while other factors can explain 41.6% of the variation in teacher motivation.

The study established that environmental factors have a significant effect on teacher motivation making them perform better or poor in the delivery of service. The finding concurs with the conclusion of Chimombe (2011) who asserted that physical resources enhance the conducive environment that promotes effective teaching and learning. Yuma (2011) linked performance in examinations with the state of teaching and learning resources in schools noting that students from poor backgrounds perform poorly in examinations because the schools they attend are often deprived of vital facilities. The current study confirms this argument by Yuma (2011).The assertion by Lumuli (2009) that provision of adequate teaching and learning resources at all levels including human resources enhance quality and relevance of imparting skills to learners confirms the findings of the study. Husen, et al. (1978) confirms the findings by asserting that physical materials in terms of adequacy and quality have a great impact on teacher motivation. R.O.K (2009) identifies textbook ratio and school facilities as some yardsticks to be used to measure the quality of secondary school education. This study supports this argument by R.O.K (2009).In conjunction with that when teachers experience pressure on the existing resources, they get demotivated and compromise their methodology as an adaptive mechanism affecting performance. Nafucho, 1999).This study attributes the importance of quality and quantity of learning facilities on teachers' motivation which directly impacts on their performance and service delivery. Inadequate teaching resources lead to ineffective teaching affecting student performance that is an implication of low teacher motivation as indicated by Mayama (2012).This is in line with the current study that found out that environmental factors affect teacher motivation.

### Effect of Leadership Factors on Teacher Motivation

Table 7 indicates the results of a regression analysis of the effect of leadership styles on teacher motivation

Table 7: Leadership Factors Coefficients

Model 1	Unstandardized Coefficients		Standardized coefficients		
	<b>B</b>	<b>std. error</b>	<b>Beta</b>	<b>T</b>	<b>Sig.</b>
Constant	15.7	10.7		.138	.002
Leadership	48.7	23.0	.443	7.148	.013

The regression model from the table above was  $Y=15.7+48.7X$ . This means that an increase in leadership skills by 1 shilling causes an increase in teacher motivation by 48.7 performance units. The beta coefficient shows that an increase in leadership skills by 1% will cause an increased teacher motivation by 44.3%.

To test goodness of fit of the regression model on leadership skill F value was derived, and the results are as shown in the table below.

Table 8: Leadership Skills ANOVA

Model 1	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.246	1	.246	52.092	.029
Residual	.012	99	.005		
Total	.257	100			

F value of 52.092 from Table 8 indicates a highly significant value implying that the regression model used is a good model and can hold. A P-value of .029 is less than 0.05 significance level, thus emphasizing that the model is a good model.

Table 9: Leadership Skills Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	.443	.196	.185	.06937

Table 9 shows R square value of .196 indicating that leadership skills can explain 19.6% of the variation in teacher motivation.

This study indicates that leadership skills have a significant effect on teacher motivation. This finding concurs with the work of Hatfield, et al (2012), who asserted that as organizations and their environments continue to transform quickly into the future new style of leadership less bureaucratic and more democratic is required to ensure institutions' survival and performance. Bass (1997) confirms the finding by acknowledging that in a competitive world of business environment organizations must employ leadership styles that enable them survive in a dynamic environment. This finding is in line with Millet (1998) who found out that there exists a positive correlation between quality leadership and teacher motivation that brings the variation of performance in public secondary schools in Masaba South Sub-County. Terry (1987) confirms that schools that invest in quality leadership always perform exceptionally well while those with poor leadership styles perform poorly. This study asserts that a basis of good leadership is a selfless character that allows teachers autonomy in the innovation of new ideas leading to high

level of teacher motivation. This concurs with Alessandro, Castro, Ray & Vereline (2004). Therefore, leaders who attend leadership seminars and workshops provide proper direction, inspiration, and motivation to attain the school's vision and mission hence better performance.

### Effect of Remuneration Factors on Teacher Motivation

To determine the effect of remuneration factors on teacher motivation a regression model of the form  $Y = a + bX$  was used. The table below shows the results;

Table 10: Remuneration Factors Coefficients

Model 1	Unstandardized Coefficients		Standardized coefficients		
	<b>B</b>	<b>std. error</b>	<b>Beta</b>	<b>T</b>	<b>Sig.</b>
Constant	18.5	235		7.86	0.042
Resources	31.1	542	.864	25.36	0.016

Therefore, the model was  $Y = 18.5 + 31.1X$ . This means that an increase in remuneration factors by 1 shilling causes an increase in teacher motivation by 31.1 performance units. The standardized beta value of .864 indicates that an increase in remuneration factors by 1% would cause an increase in teacher motivation by 86.4%.

To test the goodness of fit of the regression model above ANOVA table 10 below was used.

Table 11: Remuneration Factors ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.191	1	.1191	58.69	.016
Residual	.065	99	.033		
Total	.255	100			

The F value of 58.69 indicates a significantly high value implying that the model is a good model. The p-value of .016 is less than 0.05 significance level, and, therefore, the model is good.

Table 12: Remuneration Factors Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	.864	.746	.619	.1802

The r square value as shown in Table 12 indicates that a change in remuneration factors can explain 74.6% of the variation in teacher motivation in Kenyan secondary schools while other factors can explain 25.4% of the variation in teacher motivation.

The study affirms the findings of Cherongis (2010), which asserted that teachers who excel in their teaching subjects are rewarded during open education day held annually in every district. Ellis (1984) argued that extrinsic rewards are more likely to provide employee positive motivation hence better performance. These findings concur with Gordon (1986) who asserted that, the larger the reward, the more satisfied and motivated an employee becomes.

### **Effect of Development, Environment, Leadership and Remuneration Factors on Teacher Motivation**

A multi-linear regression model of the form  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$  was used to determine the effect of the independent variables on teacher motivation. In this model  $\beta_0$  was a constant, while  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  and  $\beta_4$  are regression coefficients and  $X_1$ ,  $X_2$ ,  $X_3$  and  $X_4$  are development, environment, leadership and remuneration factors respectively. The results of the model are shown in table 13 below.

Table 13: Multi-linear Regression Coefficients

Model 1	Unstandardized Coefficients		Standardized coefficients		
	<b>B</b>	<b>std. error</b>	<b>Beta</b>	<b>T</b>	<b>Sig.</b>
Constant	2.82	.110		2.467	.019
Development	8.92	.110	.145	.891	.032
Environment	15.30	1.009	.325	2.312	.041
Leadership	12.33	.198	.263	3.110	.036
Remuneration	38.50	8.127	.429	3.340	.005

The multi-linear regression model was therefore  $Y = 2.82 + 8.92X_1 + 15.30X_2 + 12.33X_3 + 38.5X_4$ . The standard beta coefficients in the table above indicate that development factors can explain 14.5% of the variation in teacher motivation holding environmental, leadership and remuneration factors constant. Environmental factors can explain 32.5% of the variation in teacher motivation when development, leadership, and remuneration factors are held constant. Leadership factors can explain 26.3% of the variation in teacher motivation if development, environment, and remuneration factors are held constant. Also, remuneration factors can explain 42.9% of the variation in teacher motivation

To test the goodness of fit of the multi-linear regression model the F value in Table 14 below was used.



Table 14: Multi-linear Regression ANOVA

Model 1	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.276	4	.092	39.673	.000
Residual	.376	95	.012		
Total	.655	99			

Since the F value of 39.673 is the ANOVA table is significantly high, then the model is valid, and it can hold. Also, the P value of 0.000 is less than 0.05 significance level for all the variables, which means that development, environment, leadership and remuneration factors have a significant effect on the teacher motivation

To establish the proportion of the effect of all variables on teacher motivation r square value was derived. The results are as shown in the table below.

Table 15: Multi-linear Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	.819	.601	.366	.10889

The R square value of .601 shown in Table 15 above indicates that 60.1% of the variation in teacher motivation can be explained by changes in development, environment, leadership and remuneration factors. This is confirmed by Nyakundi (2012) who found out that fairness in teacher promotion, job satisfaction, reward system and better working conditions have a positive effect on teacher motivation. Dessler,(2001) asserts that organizations' liveliness whether public or private comes from the motivation of its employees not forgetting their abilities determining work performance. The current study found out that teacher motivation is imperative for any organization's performance. This concurs with Harrington, (2003) who asserted that over-achieving, talented employees are the driving force of all firms so it is imperative for the organizations to strive to motivate and hold onto the best employees.

## RECOMMENDATIONS

Schools need to embrace the development of teachers in order to motivate them to appreciate their jobs and work more efficiently and effectively. Regular training sessions involving different experts should be encouraged in all schools for instance seminars, conferences, workshops and out of job training in institutions of higher learning. This will equip them with necessary skills required in curriculum implementation hence better KCSE performance to minimize disparities in the performance of schools in the same category.

Schools management should work towards improving the teaching and learning environment. Teachers when in a conducive environment like offices, sizeable classes, laboratories and well-equipped library in a quality state desire to work extra ordinary for better KCSE results. This will go a long way in motivating the teachers and enable the learner to acquire knowledge effectively.

Dynamic, proactive and Democratic leadership skills should be embraced in schools to keep up with the pace of the fast changing environment. This will motivate not only teachers towards hard work but also facilitate teamwork in schools.

Teachers should be paid a package that is equivalent to their education levels and the years of service. Regular updates should be carried out to promote teachers for the new skills acquired and the performance record. This is directed to the teachers' service commission in improving teachers' salaries and allowances.

## **CONCLUSION**

Development factors: They add a significant value to an individual teacher through training and promotion. This increases the morale of teachers to deliver in class thereby leading to improved performance of students in their examinations.

Learning environment is imperative for the better performance of students. This better environment equips the teachers with the necessary facilities to enable them impart knowledge to learners effectively. This also makes the teacher feel motivated to exploit their capacity of knowledge transfer.

Democratic and objective oriented leadership translates to improved teacher morale hence better performance in class. The global challenges and changes demand a dynamic, focused and all inclusive leadership. This is also real among the service industry such as teaching.

Teachers who are well remunerated are highly motivated and are likely to perform better in their subjects. This means that they have the vigor to impart knowledge in the best ways possible.

## **IMPLICATIONS FOR FURTHER RESEARCH**

Other than adding to the existing body of knowledge, the findings will help the employer of teachers and school managers in formulating competitive teacher motivational strategies to improve student KCSE performance and to curb the mass loss of teachers to more lucrative jobs. It is therefore recommended that another research should be carried out on other factors affecting teacher motivation that account for 39.9 %. Developmental, environmental, leadership

and remuneration factors accounted for 60.1% of teacher motivation the current study. Another study of determinants of teacher motivation should be conducted in private schools to find out whether they are the same across the board. Moreover, any future researchers should use the recommendations of this research to aid them in the direction on which to base their future research.

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