

Work Environment as a Predictor of Teacher Motivation in Kenya.

J. Onyiego Orina¹, J. Kanjogu Kiumi², P. Kaboro Githae³

1. PhD student, Department of Curriculum and Educational Management (C&EM), Laikipia University, Kenya.

2&3. Department of C&EM, Laikipia University, Kenya (Corresponding Authors).

Abstract

The purpose of this study was to find the extent to which factors relating to work environment could be linked to teacher motivation in public secondary schools in Kwale County, Kenya. The study was guided by Herzberg's Two Factor Theory. Using *ex-post facto* research design, data was collected from 255 teachers using a self-administered questionnaire who were randomly selected from a total population of 752 teachers in the county. The questionnaire was assessed for validity in consultation with experts and the supervisors of this study. Reliability was estimated using data collected from a pilot study through test-retest and the internal consistency techniques which yielded a correlation coefficient of $R = .78$ and a Cronbach alpha coefficient of $R = .85$ respectfully. Nominal scale data was analysed descriptively through mean and stand deviations while hypothesis was tested at an alpha level of .05 through regression statistics. The key findings revealed that work environment ($\beta = .338$, $P < .05$) had statistically significant positive impact on teacher motivation.

Key Words: Teacher Motivation, Work environment, Public Secondary Schools, Kwale County, Kenya.

1. Introduction

Motivation may mean different things to different people depending on the field of application. Velez (2007) conceptualised motivation as an inspiration of a person to do his/her best. In other words, motivation is the behaviour needed in order to achieve anything in life and without it a person would give up at the first sign of adversity. Snowman, Mcown and Biehler (2008) on the other hand, defined motivation as the forces that lead to the arousal, selection, direction, and continuation of behaviour. In their view, teacher motivation is a concept that assists in understanding why teachers behave the way they do. Motivation to teach, according to the three scholars is a complex construct which is easier to define than to understand. Motivation is not observed directly but rather inferred from the teacher's behavioural indices such as verbalisations, task choices, and goal directed activities.

Irrefutably, several organisations put much emphasis on identifying the approaches that can be adopted in human capital management in order to increase the levels of performance among their employees (Leigh, 2012). The majority (organisations) believe that performance of employees can be maximized by enriching their motivation and constructing a positive organisational culture (Kawara, 2014). For example, adequate motivational incentives for employees are among the best ways to manage as well as to reach organisational objectives even in a scenario where both human and material resources are not adequate (Forson, 2012). However, certain de-motivating issues may

arise in the work place to the detriment of employee performance and by implication organisational output and competitiveness. Such issue could range from low employee compensation, poor work environment and lack of employee recognition among others (Okumbe, 1998).

There are two main facets of motivation factors which affects employees, namely; intrinsic and extrinsic factors. Intrinsic factors are those which come from within a person whereas extrinsic motivation are those which are determined basically by the level and type of external rewards that are available (Bennell & Akyeampong, 2007). However, Claeys (2011) identified a third factor and called it altruistic. Claeys defined altruistic factor as a love for and desire to work with children and/or young persons, and an inclination to serve society. Although extrinsic factors like higher remuneration and good working conditions tend to attract the most attention, attempts to improve the substance of teachers' work, such as improvement of teaching materials or in-service training, can also be significant incentives according to Bennell and Akyeampong (2007).

When motivation results from within an individual valuing an activity, he/she experiences greater excitement, interest, and confidence, which in turn leads to greater performance, persistence, and creativity in relation to the activity (Deci & Ryan, 2012). Generally, the major challenge for school administrators is to develop highly motivated teachers who are; actively engaged in teaching and learning, open to new ideas and approaches, and also committed to students' achievements. Productivity in any organization is a function of how well the employees perform their various tasks. An individual's performance in the work place is a function of his/her willingness to execute the tasks he/she has been assigned by the employer (Armstrong, 2006). Chapman (2003) argued that the worker's output level is directly related to the level of motivation to fulfil designated organizational role expectations. Therefore, it can be inferred that motivation among workers is fundamental for effective work performance.

Teacher motivation plays an important role in the promotion of teaching and learning excellence. Generally, motivated teachers are more likely to motivate students to learn in the classroom to ensure the implementation of educational reforms and feeling of satisfaction and fulfilment. Brady (2016) pointed out that, while teacher motivation is fundamental to the teaching and learning process, most teachers are not highly motivated. This observation is detrimental to the realisation and achievements of educational goals in learning institutions and should be addressed. The success of any organisation is dependent on the extent to which employers' meets workers expectations in terms of pay, productive supervision, job security and involvement in organisational decision making process (Brown, 2010). On the other hand, the quality of organisational output is similarly contingent upon the degree to which workers meet organisational demands by way of playing their role expectations to the desired standards (Khan, Farooq & Ullah, 2010). This observation has the implication that employers have an obligation to motivate workers by creating conditions that will direct workers' behaviour towards fulfilling their organisational roles.

The provision of quality formal education in developing countries is at a critical point in time. This is primarily because there has been a deliberate effort to galvanize international efforts towards internationally agreed targets to expand and improve education as part of Education for All (EFA) movement (World Bank, 2015). However, teacher de-motivation as has been severally pointed out is impacting negatively on the developing countries' endeavours to achieve these targets (Bennell & Akyeampong, 2007). In many of these developing countries, the teaching force is de-moralized and frustrated owing to low salaries, neglect of their educational and training needs and bureaucracy in the educational systems (Baron, 2002). As a result, the teaching profession is characterized by high attrition rate, lack of confidence among teachers and low levels of professional commitment. It has further been noted that due to dissatisfaction with their profession, some teachers tend to engage in

non-teaching privately based activities such as running small scale businesses and engaging in farming with a view to supplementing their income and thus improve their socio-economic status (Barmby, 2006).

The aforementioned teacher de-motivation scenario has the implication that teachers in developing countries are less likely to generate the expected learning output in schools. This will indisputably impact negatively on education quality in these countries. It is an established fact that low education quality represents a waste of public resources invested in an education system (Deci, 2000). Teacher motivation has been linked to higher pay, job autonomy, a chance to contribute to important school decisions, positive interpersonal relations and recognition by supervisors (Chapman, 2003). Other teacher motivation correlates include supportive school leadership, clear promotion policies and collegial support (Evans, 2018). If these needs are accorded low status in the teaching profession, teacher performance is highly likely to be compromised to the detriment of the targeted learning outcomes at the institutional level and consequently at the entire educational system of a country.

In view of the critical role that teacher motivation plays in an effort to raise quality of learning outcomes, researchers have attempted to establish the antecedents of teacher motivation. The overriding theme in teacher motivation studies has consistently been to identify the potential demotivators and strategies to address them. For instance, a study carried out by Turner (2007) on staff motivation, found out that motivation of staff through provision of better housing at subsidized rates and provision of meals such as breakfast, tea breaks and lunch through the sponsorship of the school Board of Managements (BoMs), had a positive impact on their motivation and indeed the critical factor that gave teachers the impetus to teach extra lessons and give personal attention to the students.

After exploring issues related to teacher retention in special education in Georgia, Fore, Martin and Bender (2002) concluded that lack of recognition, inadequate salary, limited opportunities for promotion, negative working conditions, lack of administrative support, inadequate resources, limited decision-making power, extensive time spent in meetings and limited opportunities for individualization, all contributed to teachers' decisions to leave the teaching profession. Diamantes (2004) and Mathew (2005) have also observed that ineffective supervision characterised by selective justice and bribery to secure preferred postings are also crucial issues affecting teacher motivation and satisfaction in most developing countries, especially in Africa and South Asia. In a study on teacher job satisfaction and motivation in Francophone Sub-Saharan Africa, Michaelowa (2002) noted that contrary to popular views, salaries are not the most important factor in teacher motivation as is/are the availability of textbooks and other logistical support for teaching and learning. According to Michaelowa, although large class sizes have brought about low job satisfaction and motivation, teachers prefer to handle large classes in a single stream to the shift system. In Tanzania, Bennell and Mukyanuzi (2005) reported that because teacher participation in policy development continues to be limited, teaching is widely perceived as a last choice of employment.

Teacher motivation has also attracted the interest of researchers in Kenya. The motivation behind these studies stems from industrial disharmony that has characterised the teaching profession in the country in the recent past. This scenario has been occasioned by teachers' agitation for better salaries and allowances. For instance, the Kenya National Union of Teachers (KNUT) conducted a study in Kenya with a view to finding the trends on the needs of teachers in the country. The study revealed that teachers in the country had unmet professional and personal needs which cut across the working environment (KNUT, 2015). Some of the areas that teachers who participated in the

study indicated had not been met by the employer revolved around provision of instructional materials, salary, opportunities for further education and provision of basic needs (for example, water, car loans, insurance cover and medical cover). Other needs that had not been met as indicated by the teacher participants were recognition in the society and provision of security against attack from wild animals, hostile communities and aggressive parents.

The foregoing findings suggest that teacher management policies in Kenya have gaps insofar as meeting the needs of teachers is concerned. Since teachers are the active agents of curriculum implementation, it cannot be gainsaid that it is a serious omission on the part of the TSC and school managers to ignore the welfare of teachers. This is because the cumulative effect of de-motivated teaching work force is learners' dismal performance in the academic and non-academic realms of learning which in turn translates to loss of public resources invested in their (children) education (Chapman, 2003). This observation justifies the need to carry out a detailed study with a view to finding out the extent to which work environment related factors could either be motivating or demotivating teachers in Kenya.

2. Purpose of the Study

The study sought to find out whether work environment can predict teacher motivation in public secondary schools in Kwale County, Kenya.

3. Research Hypothesis

In order to achieve the stipulated purpose of the study, one null hypothesis was developed and stated as follows:

H_{01} : Work environment has no statistically significant influence on teacher motivation in public secondary schools in Kwale County, Kenya.

4. Literature Review

According to Akinyele (2010), work environment is the totality of conditions under which a person or a group of persons work or perform their duties. In the schools' setting, work environment consists of two major components, that is, the physical environment and the behavioural component of work environment. Physical environment in a school setting encompasses the tools and other categories of resources such as finances and facilities at the disposal of employees. The behavioural component of work environment on the other hand denotes aspects relating to collegiality, leader-member relationship, students attitudes and behaviour towards teachers, and those relating to parental partnership with teachers. An unfavourable work environment can result in negative organisational behaviour among employees. An unfavourable work environment in a school setting for example would be characterised by heavy workload, lack of collegiality among staff members, weak institutional support, poor teacher-supervisory practices by their seniors, learner indiscipline, disrespect by parents, inadequate teaching-learning resources, insecurity and poor physical environment. In such a school, teachers are likely to disrespect their seniors and colleagues, resist change including the tendency to take actions that undermine team motivation and consequently attainment of the school goals (Yincheng, 2016).

Since the work environment is a critical determinant of the level and quality of employee performance outcomes, researchers within and without the education system have consistently sought for empirical answers on the link between work environment and employee motivation. The overriding objective of these studies has been to identify factors within the work environment that have the potential to demotivate employees. The reasoning behind these studies is that the findings will provide insights on how to address the identified de-motivating factors and hence raise workers

output. For instance, Chen (2010) carried out a study among middle school teachers (n=294) in Jinzhau city, China. A five point likert scale questionnaire was used to collect the data which was in turn analysed through independent t-test and one-way ANOVA statistics. The results revealed that teachers were dissatisfied (and by implication demotivated) by factors relating to, workload, leadership and administration of their schools, students behaviour pattern and inadequate parental support. The study recommended that in order to retain and motivate teachers in their current schools, policy makers and school leaders in Jinzhau city should pay attention to these factors since they are highly likely to increase teachers' motivation to either seek for employment in other schools or other occupational sectors.

Sirin (2009) conducted a study among physical education research assistants in 40 universities in Turkey using an interview schedule and email delivered questionnaire. The study revealed that in general the research assistants had a favourable perception and indeed felt motivated in their roles as research assistants. However, the study showed that the respondents were demotivated in a number of dimensions relating to their work, specifically, quality of supervision by their supervisors. The study made several recommendations, key among them being the need for university managers to support career plans of research assistants by motivating and guiding them in their career aspirations.

Liu and Meyer's (2008) examined teachers' satisfaction and motivation with various aspects of their job facets through multilevel analysis of national surveys conducted in the United States. The survey found out that teachers were dissatisfied and hence demotivated by working conditions in their schools which concluded among others, micromanagement, job insecurity, and low quality communication with their seniors. These results rendered support to the findings by Ari and Sibal (2009) and Hean and Garret (2001) in Turkey and Chile respectively.

Haq and Islam (2005) carried out a situational analysis study on job satisfaction and motivation among teachers in Bangladesh. The study relied on secondary data based on teachers' feelings about and reactions to professional contexts available in newspapers, educational documents and individual experiences. The study sampled qualitative views through interviews using 126 respondents who played different roles in the profession. The findings from the study revealed that teacher motivation was dependent upon the following variables: school location, type of school, physical facilities of the school, opportunities for further teacher-training, workload, promotion and career path, student behaviour, relationships with community, and with School Management Committees (SMC's) including school quality factors such as teaching and learning resources. The study further revealed that in situations where the factors were unfavourable, teachers level of motivation or simply willingness to put extra effort in their teaching tasks tended to be low and vice versa.

Denmar and Marmoah (2017) conducted a study in Indonesia whose aim was to find out whether there was any significant relationship between job environment, motivation and teachers' performance. The study used survey method design with correlation approach. The sample for the study was 60 respondents from the sample framework of 120 subjects selected by proportional random sampling technique. Data was collected using a questionnaire and analysed using descriptive statistics. The results of the findings revealed that a comfortable and dynamic work environment had an appreciable impact on teacher motivation. Other work related motivational factors that were identified by the study included availability of teaching and learning resources, adequacy of physical facilities and quality of team work and collegiality. The study observed that

level of teacher motivation and morale increased toward schools where work environment motivational factors were favourable to the teachers.

Nyam and William-West's (2014) study sought to examine the psychological and societal factors that were influencing teacher motivation in Nigeria. The study used a questionnaire and an interview schedule to collect data. The findings from the study demonstrated that level of motivation among the study participants was generally low due to lack of adequate instructional support by the school managers by way of teaching-learning resources, low quality relationship with school managers and inadequate parental support. The study concluded that these working conditions were largely contributing to the teachers' propensity to seek for alternative occupations.

The descriptive-correlational study by Castillo and Cano (2004) purposed to describe the amount of variance in faculty members' (n=139) overall level of job satisfaction at the college of food, agricultural and environmental studies at the Ohio state university, USA. The focussed variance was in relation Hersberg, Mausner and Snyderman's (1959) job motivator and hygiene factors. Data was analysed through regression analysis. The most motivating factors were those relating to content of the job or simply the work itself (specifically responsibilities, autonomy and recognition) whereas the least motivating factors were working conditions, namely, relationships with seniors, supervisors, work related policies and salary. The study recommended that departmental administrators should improve the working conditions (context of the job) in which the faculty members were working so as to create happy and motivated faculty members in the workplace. An earlier study by Louis, Marks and Kruse (1996) in USA had similarly observed that if teachers work in an environment where they are empowered to make decisions, they are highly likely to be enthusiastic about their work and workplace. This will in turn contribute to the creation of an engaged professional community. The study averred that the human and social resources needed to create an engaged teaching force in a school include, supportive leadership, mutual respect steeped in strong professional knowledge and a climate that invites risk taking and innovation.

Similarly, Ingersoll's (2001) study in USA showed that when teachers are denied an opportunity to participate in decision making by the school managers, including inadequate administrative support and subjection to autocratic school climate and unfavourable educational policies they are highly likely to be demotivated and demoralized. Diamantes (2004) and Mathew (2005) also observed that ineffective supervision characterised by selective justice and witch hunting were also crucial issues affecting teacher motivation and satisfaction in most developing countries, especially in Africa and South Asia. In a study on teacher job satisfaction in Francophone Sub-Saharan Africa, Michaelowa (2002) noted that contrary to popular views, salaries are not the most important factor in teacher satisfaction as the availability of textbooks and other logistical support for teaching and learning.

In another related study, George and Mensah (2011) investigated the perceived causes of teacher dissatisfaction in the Sekondi-Takoradi District of postcolonial Ghana using Participatory Rural Appraisal (PRA) method which included focus group discussion, semi-structured interviews, questionnaire and observation schedules. The study involved 50 teachers. The findings suggested that large class size and the lack of sufficient teaching and learning materials were barriers to motivation and professional practice among the teachers. Some studies (for instance Tawia-Armah, 2010; Mensah, 2011) have also shown that working in rural schools is considerably more difficult and thus more de-motivating than in urban schools due mainly to poor living and working conditions in remote areas. Contrary to these findings, other studies, for instance Agezo (2010) and Asadullah (2006) in Ghana and Bangladesh respectively established that teachers who work in

schools in their native areas tend to have higher levels of job satisfaction and motivation than their colleagues who work in schools located outside their native localities. This study reasoned that locally based teachers are more likely to have supportive extended family and social networks. Moreover, such teachers may receive a higher rate of community support, including the motivation to promote education and other developmental activities in their local areas.

In Tanzania, Mark (2015) carried out a study on factors influencing teachers' motivation and job performance. Using a questionnaire and an interview schedule, data was collected from 39 participants comprising 32 teachers, four school heads, one District Education Officer, one Teachers Service Department (TSD) officer, and one *Chama cha Walimu* Tanzania (CWT). The findings revealed that teachers were satisfied with school facilities, availability of a peaceful school environment, and teaching learning resources. However, the participating teachers indicated that they were demotivated by a number of factors in their schools including, failure by the school administration to consider their opinions, strict school leadership, heavy workload, lack of recognition by the employer, delays in promotion, and the tendency by school heads to make decisions that only suited them thereby ignoring the needs of teachers. The study recommended for the government and school management to enhance the quality of teachers working environment so as to boost their (teachers) motivation and morale.

The study by Makoti (2008) in Murang'a district, Kenya also revealed that unfavourable working conditions including poor conditions of service were some of the de-motivating factors among pre-school teachers. This finding is consistent with a latter study by Majanga, Nasongo and Sylvia (2010) in Nakuru Municipality, Kenya. The study for instance demonstrated that the Free Primary Education (FPE) in Kenya had lead to increased class sizes, shortage of teachers, heavy teachers' working load and consequently teacher demotivation. The study recommended the need to improve teachers' working conditions through recruitment of more teachers to alleviate the problem of large work load among teachers.

Another study by Matoke, Okibo and Nyamongo (2015) set out to establish the determinants of teacher motivation in public secondary schools in Masaba south sub-county, Kenya. The study adopted a descriptive survey design. A questionnaire and an in-depth interview schedule were used to collect data. The study findings showed that work environment had a significant influence on teacher motivation. The study further revealed that inadequate teaching and learning facilities including laboratories, decent classrooms, educational trips and reference materials were a source of teacher demotivation in the study area. Similarly, Juma's (2011) study in Bungoma north district, Kenya linked teacher motivation to the state of teaching and learning resources in schools and noted that teacher motivation was negatively affected by deprivation of vital resources and facilities in schools.

5. Theoretical Framework

This study was guided by the Two Factor Theory which was developed by Herzberg in the second half of the 20th century. The theory argues that there are two sets of needs which people strive to fulfil. These are the lower order needs and the higher order needs. He referred to the lower order needs as the hygiene factors while the higher order needs are what is referred to as the growth factors or motivators in the theory.

Hygiene factors, as pointed out by the theory are concerned with the work environment. If these needs are met, the employee will be satisfied with the job but he/she will not be motivated. For

instance an employee will only report to his/her job if the organization offers reasonable pay and safe working environment, but these factors will not make the employee work harder at his/her job when she/he is there. However, if the needs are not properly addressed, employees will be dissatisfied thereby making it rather difficult to motivate them. Motivators on the other hand are the job content factors or the intrinsic/psychological factors. The factors are therefore related to the job characteristics. If opportunities to fulfil these needs are available, employees will be satisfied with their jobs and hence motivated (Merwe, 2008).

In the context of working environment, the hygiene factors include salary/wages, job security, working conditions, collegiality, and supervisory practices. Examples of motivators (growth needs) include achievement, recognition, autonomy, promotion, and responsibility. The theory argues that the two sets of factors are separate and distinct since they are concerned with two different sets of needs. They also work independently from one another. Specifically, hygiene factors are concerned with the maintenance of a good working environment while the motivator factors are concerned with the need for growth.

Based on the foregoing explanations of the two factor theory, it can be argued that teacher motivation is dependent on two groups of factors. These are the hygiene factors which can demotivate teachers if not present but cannot motivate them alone. For instance, salary and job security cannot motivate teachers but have the potential to demotivate them if they are inadequately met. The other category of factors is the motivators which are capable of arousing and sustaining the motivation to work. These observations have the implication that for teacher motivation to be aroused and sustained there is a need to first create a satisfying work environment and then motivate the teachers. Aptly put, teacher managers should take care of hygiene factors by ensuring that teachers are given reasonable pay and also assured of their job security, including creation and promotion of collegiality in the work place.

After providing the teachers with the basic hygiene factors, the teachers need to be motivated to achieve higher levels of performance. This can be accomplished through improving the nature and the content of the job. For instance, giving teachers more responsibilities in the school (job enlargement), giving them challenging tasks (job enrichment), and delegating authority or simply decision making power in their teaching areas (empowerment). Adopting these strategies will undoubtedly raise teachers' satisfaction with their profession and also contribute immensely to teacher motivation (Mehmood *et al.*, 2012).

6. Conceptual Framework

The study reasoned that work environment has the potential to influence teacher motivation. The study hypothesized that the influence of work environment on teacher motivation may be confounded by three extraneous variables, namely, the principal's management style, teacher's teaching experience and the type of school in which one is working in (in terms of whether the school is a national, an extra-county or county school). Extraneous variables have the potential to generate competing hypotheses that might explain the result of a study thereby compromising its internal validity (Marczyk, Dematteo & Festinger, 2005). This observation has the implication that extraneous variable in a research undertaking needs to be controlled so as to minimize their effect. In this regard, the study controlled the aforementioned extraneous variables through randomization. This helped to minimize the error effect that could have been generated by the three extraneous variables.

The conceptualized relationship between the independent, extraneous and dependent variables is presented in figure 1.

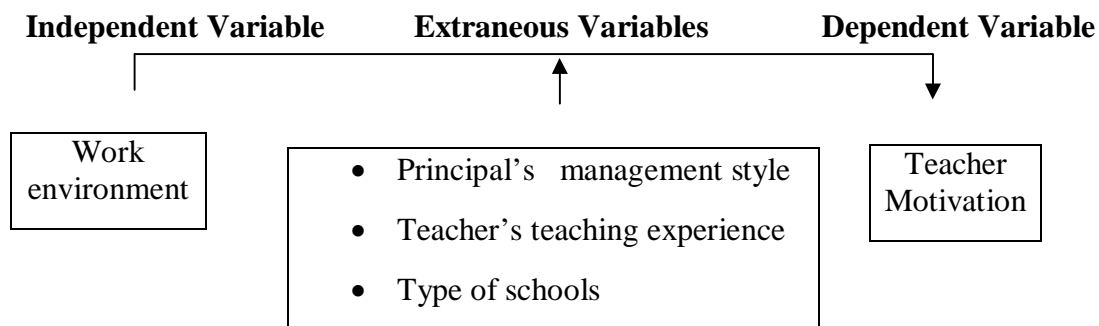


Figure 1: Hypothesized relationship among variables subsumed in the study.

7. Methodology

This study adopted *ex-post facto* research design. This is a research design which is applied in a situation where the independent and dependent variables have already interacted (Kerlinger, 1986). In this regard, the researcher cannot manipulate the independent variable(s) with a view to establishing its/their impact on the dependent variable. The design was deemed ideal in view of the fact that the independent variable in the study (that is, work environment) had already impacted on teacher motivation, implying that the outcome of their effect could only be explored retrospectively.

8. Instrumentation

This study employed a questionnaire to collect data from the respondents. The questionnaire was chosen because it is efficient and practical including its capacity to gather data from a large sample in addition to being easy to administer and score responses (Fraenkel & Wallen, 2000). The questionnaire had three parts labelled A, B, and C. Part A gathered respondents' bio-data in relation to gender, age, years of teaching experience, academic qualification, and longevity of teaching in their current schools. Part B contained eight (8) likert scale items which measured teachers' level of motivation in regard to work environment.

9. Validity and Reliability of the instrument

Validity is the degree to which an instrument measures the construct(s) it purports to measure (Cohen, Manion & Morrison, 2007). Validity was accomplished by requesting the two supervisors of this study to evaluate the instrument in terms of the targeted content validity domains. Changes to the instrument suggested by the two supervisors including those amendments to the instrument that were deemed ideal on the basis of responses to the instrument by the pilot group were effected with a view to enhancing the validity of the instrument prior to mounting the main study.

Reliability contains two measurement properties which were the focus of reliability estimate in this study. These are internal consistency and the external reliability which denotes the ability of an instrument to generate consistent data when administered to a group of subjects on two different occasions under similar conditions (Bryman & Cramer, 2011). Internal consistence reliability domain was estimated through Cronbach alpha in which a reliability coefficient of $r = .81$ was generated. This implied that the items were sufficiently correlated. External reliability on the other hand was estimated by administering the instrument in the neighbouring Kilifi County. The instrument was administered to the same group of teachers after two weeks. Scores from the two instrument administration sessions were correlated using Pearson correlation coefficient. A

coefficient of $r = .86$ was generated which implied that the instrument's level of external reliability was high (Fraenkel & Wallen, 2000).

10. Results and discussion

Data analysis was conducted at two levels. In the first level, the influence of work environment on teacher motivation was determined by computing mean scores from the respondents' responses to the eight statements on work environment in the instrument. The result of this analysis is summarized in table 1.

Table 1

Respondents' Motivation Mean Scores on Work Environment

Statement	Mean Score	Standard deviation
Level of work load	2.00	.634
School security	2.02	.642
Teaching resources/equipment e.g., text books, teachers' guides, writing materials etc	2.15	.639
Relationship with colleagues	2.16	.638
Parental support to teachers/school	2.04	.652
Level of student discipline	2.03	.640
Teachers' welfare programmes e.g., tea break, lunch etc	2.01	.662
Relationship with the school management/principal	2.02	.638
Grand Mean	2.05	.641

Source: Field data, 2020

From table 1, it is clear that the overall mean accruing from teachers' responses to the items on work environment was 2.05. Inferring from table 3.3, it can be concluded that the eight evaluated aspects of work environment had a moderate effect on teacher motivation. It is also clear from the table that the aspect of work environment which had the highest motivational effect was the relationship with colleagues (mean=2.16) followed by adequacy of teaching resources (mean=2.15), and teachers' welfare programmes (2.04). The factors that had the lowest impact were school security (mean=2.02) and level of workload (mean=2.00).

The mean scores were further subjected to regression analysis. This analysis was done to confirm the truth of the assumption held by the null hypothesis which was formulated as follows:

H_{01} : Work environment has no statistically significant influence on teacher motivation in public secondary schools in Kwale County, Kenya.

To ascertain the truth of this supposition, the hypothesis was tested using simple regression statistic at .05 alpha level. The result of this analysis is presented in table 2.

Table 2
Summary of Simple Regression between Work Environment and Teacher Motivation

Variable		R ²	Adj. R ²	Constant	df	F	P- value
Dependent	Work environment	.114	.111	2.200	1,239	30.626	.000*
Independent	Teacher motivation		$\beta=.338$	Regression coefficient		t= 5.534	.000*
				.365			

(* means significant at .05 alpha level)

From table 4.18, it can be established that the F- value (F=30.626; df=1,239; p=.000) was statistically significant. This means that there was statistically significant linear relationship between compensation and teacher motivation. In addition, the table shows that the beta value ($\beta=.338$) was positive and statistically significant (t= 5.534; p=.000). The computed R² -values (R² = .114; R²_{adjusted}= .111) proposes that work environment accounted for 11% of variation in teacher motivation. In addition, the generated regression model was fitted as illustrated in equation 5.

$$TM = 2.200 + 0.365X_5 \dots \dots \dots (5)$$

An investigation of equation (5) indicates that for every unit change in the work environment teachers' level of motivation will increase by 37% other factors held constant. Following the foregoing findings the null hypothesis Ho₅ was rejected. In this regard, it can be argued that work environment had statistically significant influence on teacher motivation in public secondary schools in Kwale County.

This finding is in agreement with Husen's (2013) study which asserted that physical materials in a school in terms of adequacy and quality have a great impact on teacher motivation. Likewise Mayama's (2012) study observed that quality and quantity of instructional facilities were critical determinants of teacher motivation and consequently performance. Moreover, teacher demotivation has also been linked to high workload (Michaelowa, 2012) and a school environment where teachers are subjected to many working hours (Sylvia, 2010). Specifically, the two studies observed that teachers are more likely to be demotivated if the workload is heavy (e.g., high student-teacher ratio) or in a situation where they are compelled to work for many hours and vice versa.

11. Conclusions and Recommendation

Findings accruing from the study have demonstrated that work environment factors which were focussed by the study had the capacity to predict teacher motivation. The findings have additionally revealed that the motivation impact of the eight job factors was below teachers' expectations. This observation is predicted on the fact that while the expected maximum mean score was 5.0, the actual respondents' mean score stood at 2.05. This implies that teachers' need for work environment was inadequately met.

From the foregoing observation, it can be concluded that there is a need for the TSC and school managers, specifically BoMs to provide teachers with enabling work environment where they can maximization their potential for the benefit of the learners.

References

- Agezo, K. C. (2010). Why teachers leave teaching: The case of pre-tertiary institutions in Ghana. *International Journal of Educational Reform*, 19(1), 51-52.
- Akinyele, S. T. (2010). The influence of work environment on workers' productivity in Lagos, Nigeria. *African Journal on Business Management*, 4(3), 299-307.
- Ari, M., & Sipal, F. R. (2009). Factors affecting job satisfaction of Turkish special education professionals: Predictors of turnover. *European Journal of Social Work*, 12(4), 447-463.
- Armstrong, M. (2009). *A Human Resource Management Practice Handbook*. London: Hall Inc.
- Asadullah, M. N. (2006). Pay differences between teachers and other occupations: Some empirical evidence from Bangladesh. *Journal of Asian Economics*, 17(6), 1044-1065.
- Barmby, P. (2006). Teacher recruitment and retention. *Educational Research*, 48(3), 248-265.
- Baron, R. A. (2002). *Behaviour in Organizations: Understanding and Managing the Human Side of Work*. Englewood Cliffs, NJ: Prentice.
- Bennell, P. S., & Akyeampong, A. (2007). *Teacher Motivation in Sub-Saharan and African and South-Asia*. London, UK.
- Bennell, P., & Mukyanuzi, F. (2005). *Is There a Teacher Motivation Crisis in Tanzania? Senior Partner, Knowledge and Skills for Development*. Brighton, UK: Managing Partner, HR-Consult, Dar es Salaam, Tanzania.
- Brady, L. (2016). Motivation factors affecting nursing faculty: Albuquerque University of New Mexico. *Journal of Nursing Education*, 2, 65-69.
- Brown, S. P. (2010). Consequences of the performance appraisal experience: *Journal of Personnel Review*, 39 (3), 375-396.
- Bryman, A., & Cramer, D. (2011). *Quantitative Data Analysis with IBM SPSS Statistics 17, 18 and 19: A guide for Social Scientists*. Hove: Psychology Press.
- Castillo, J., & Cano, A. (2004). Factors explaining job satisfaction faculty. *Journal of Agricultural Education* 45(3), 65-74.
- Chapman, D.W. (2003). Career motivation and satisfaction of teachers. *Educational Quarterly*, 7(3), 40-50.
- Chen, J. (2010). Chinese middle school teacher job satisfaction and its relationships with teacher motivation. *Asia Pacific Education Review*, 11(3), 263-272.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education* (6th ed). New York: Routledge Cole.
- Deci, E.L. (2000). Need satisfaction, motivation and well-being in the work organizations of a former Eastern Bloc Country: A Cross Cultural Study of Self-determination. *Personality and Social Psychology*, 27(1), 930- 942.
- Deci, E.L., & Ryan, R.M. (2012). *Intrinsic Motivation and Self-determination in Human Behaviour*. New York: Plenum.
- Diamantes, T. (2004). What principals think motivates teachers. *Journal of Instructional Psychology*, 31(1), 43-50.
- Evans, L. (2018). *Teacher Morale, Job Satisfaction and Motivation*. London: Paul Chapman Publishing Ltd.
- Forsen, J.E.M. (2012). *Impact of motivation on productivity of employee at GTBank, Ghana*. Unpublished PhD Thesis, university of science and technology, Ghana.

- Fraenkel, J. R., & Wallen, N. E. (2000). *How to Design and Evaluate Research in Education*. New York: McGraw-Hill Higher Education.
- Haq, M. N., & Islam, M. S. (2005). *Teacher motivation in Bangladesh: A situation analysis*. Published Thesis, Dhaka: University of Dhaka, Bangladesh.
- Hean, S. & Garrett, R. (2001). Sources of job satisfaction secondary school teachers in Chile. *Compare*, 31(3.1), 363-379.
- Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The Motivation to Work* (2nd ed.). John Wiley.
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 3 (8), 499-534.
- Kawara, P. (2014). Effects of reward systems on employee productivity in Catholic University of Eastern Africa. *International Journal of Recent Research in Commerce Economics and Management*, 1(2), 1-4.
- Kenya National Union of Teachers. (2015). Trends on the needs of teachers in public schools report in Kenya.
- Kerlinger, F.N. (1986). *Foundations of Behaviour Research*. New York: Holt Rinehalt and Winston Inc.
- Khan, K. U., Farooq, S. U., & Khan, Z. (2010). A comparative analysis of the factors determining motivational level of employees working in commercial banks in Kohat, Khyber Pukhtunkhwa. *International Journal of Business and Management*, 5(12), 180-184.
- Leigh, A. (2012). Teacher pay and teacher aptitude. *Economics of Education Review*, 31, 41-53.
- Liu, X.S., & Meyer, J.P. (2008). Teachers' perceptions of their jobs: A multilevel analysis of the teacher follow-up survey for 1994-95. *Teachers College Record*, 107(5), 985-989.
- Louis, K. S., Marks, H.M., & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American Educational Research Journal*, 33 (4), 757-798.
- Majanga E.K, Nasongo J.W. and Sylvia V.K. (2010). *The Effect of Class Size on Classroom Interaction During Mathematics Discourse in the Wake of Free Primary Education: A study of public primary schools in Nakuru Municipality*. Unpublished Masters' Thesis, Kenyatta University.
- Makoti, M. N. (2005). *Terms and condition of service and their relationship to motivation of pre-school teachers in Kigumo Muranga County*. Unpublished Med Thesis, Nairobi: Kenyatta University.
- Marizyk, G., Dematteo, D., & Festinger, D. (2005). *Essentials of Research Design and Methodology*. New Jersey: Johnwiley & sons.
- Mark, A. (2015). *Factors influencing teachers' motivation and job performance in Kabaha District, Tanzania*. Unpublished MED Thesis, Open University of Tanzania.
- Mathew, L. J. (2005). *The impact of higher salaries and performance-related pay on retention rate of graduate teachers of public schools in Singapore*. Unpublished Master's Thesis, Monash University, Australia.

- Matoke, K.Y., Nyamingo., D.N., & Okibo, W.B. (2015). Determinants of teacher motivation in public secondary schools in Masaba South Sub-County, Kenya. *International Journal of Economics, Commerce and Management of United Kingdom*, 3(6), 276-289.
- Mehmood. N., Irum, S., & Ahmed, S. (2012). A study of factors affecting job satisfaction (evidence from Pakistan). *Interdisciplinary Journal of Contemporary Research in Business*, 4(6), 172-186.
- Mensah, K. W. (2011). *Motivation and job commitment among teachers in four selected senior high schools in the Ashanti region of Ghana*. Unpublished Masters' Thesis, Kwame Nkrumah University of Science and Technology. Ghana.
- Merwe, V. (2008). *A critical analysis of factors that influence employee work performance*. Unpublished MBA Project.
- Michaelowa, K. (2002) Teacher Job Satisfaction, Student Achievement and the Cost of Primary Education in Francophone Sub-Saharan Africa. *HWWA Discussion Paper 188, Hamburg: Hamburg Institute of International Economics*.
- Michaelowa, K. (2012). Teacher job satisfaction, student achievement, and the cost of primary education in Francophone Sub-sahara Africa. *HWWA Discussion Paper, Hamburg Institute of International Economics*.
- Nyam, J & William-West, T. O. (2014). Teachers' motivation: A Study of the psychological and social factors. *International Journal of Education and Research*, 2(2), 1-8.
- Okumbe, J.A. (1998). *Education Management. Theory and Practice*. Nairobi: University of Nairobi.
- Sirin, E. F. (2009). Analysis of relationship between job satisfaction and attitude among research assistants in schools of physical education and sports. *Journal of Theory and Practice in Education*, 5(1), 85-104.
- Snowman, J., Mcown, R., & Biehler, R. (2008). *Psychology Applied to Teaching* (13th ed.). USA: Houghton Mifflin.
- Tawia-Armah, G. (2010). *Teacher motivation in selected senior high schools in the Kwabre district of the Ashanti region*. Unpublished Masters' Thesis, University of Cape Coast, Cape Coast, Ghana.
- Turner, H.C. (2007). *Predictors of teachers' job satisfaction in urban middle schools*. Unpublished Doctoral dissertation, University of North Carolina at Chapel Hill, Chapel Hill.
- Velez, S. (2007). *What is motivation? Ezine articles*. Retrieved: December 5, 2018, from <http://ezinearticles.com/?What-Is-Motivation&id=945902>.
- World Bank. (2015). *Making Services Work for the Poor. World Development Report*. Washington D.C: World Bank.
- Yinchng, Y. (2016). *The effects of working conditions on teacher effectiveness: Value added scores and student perception of teaching*. Unpublished Doctor of Philosophy (PhD) Thesis, Virginia Polytechnic Institute.