

INFLUENCE OF WORK-RELATED STRESS ON GOVERNANCE OF TEACHERS' IN PUBLIC SECONDARY SCHOOLS IN JUJA SUB-COUNTY, KENYA

¹Waititu Francis Munyua, ²Dr. Kepha Andrew Ombui

¹Msc. Student: Department of Entrepreneurship, Technology, Leadership and Management; Jomo Kenyatta University of Science and Technology: Nairobi, Kenya.

²Adjunct Lecturer: Department of Entrepreneurship, Technology, Leadership and Management; Jomo Kenyatta University of Science and Technology: Nairobi, Kenya.

Abstract: The main aim of the study was to establish the influence of work-related stress on governance of teachers' in public secondary schools in Juja Sub-county in Kenya. The study was guided by two specific objectives which included to examine the effect of policies-related stress on governance of public secondary schools teachers in Juja Sub-county and to establish the effect of economic-related stress on governance of public secondary schools in Juja Sub-county. In Kenya, teachers are confronted with occupational, pedagogical and technological changes which have largely influenced alterations in their working conditions. Changes of this nature have been reported to be partly responsible for work stress and this subsequently affects how teachers perform. The study used three theories related to work-related stress: path-goal, person-environment fit and effort-related imbalance theories. The study sought to bridge the existing knowledge gap on the effects of work-related stress on teachers' performance in Juja Sub-county, Kiambu County, Kenya. Purposive and stratified sampling techniques were used whereby subjects were selected from existing subgroups in the population. Out of a total population of 190 TSC teachers from eight secondary schools, a sample size of 66 respondents was selected from eight secondary schools. Questionnaires were used to collect primary data while the secondary data was collected through review of published documents and text books. The presentation of data was through tables. The findings from the study indicate that management-related stress, family-related stress, policies-related stress and economic-related stress affect teachers' performance in Juja Sub-county. The findings further indicate that up to 81% of the teachers' job performance in public secondary schools in Juja Sub-county could be attributed to the combined effects of the variables studied. The study also suggested for further studies to be conducted on the emerging job related stress factors such as the effects of the new performance appraisal on teachers' performance in public schools in Kenya as well as a side by side comparison of the same variables in other Sub-counties and Counties in Kenya.

Keywords: Work-related stress, performance, turnover.

I. INTRODUCTION

The goal of education in developing countries like Kenya is to equip students with new skills, tacit knowledge, cultures, attitudes, behaviors and innovative ways of solving day to day problems in life (UNESCO, 2010). Education is aimed at supplying the economy with human capital that can convert efficiently other resources into output of high value for quality life (Gitonga, 2012). Investment in education is widely recognized as important in any country's development strategy because education is the surest most powerful way to promote economic and social progress by producing

educated, responsible and productive citizens (UNESCO, 2007). Schools have performance and organizational maintenance goals to achieve in education such as high academic and discipline standards, good performance in co-curricular activities, good public image and the provision of quality education through quality teaching and learning for quality students' grades (UNESCO, 2010). Achievement of education and national goals largely depend on teachers' excellent performance (MOEST, 2014).

Teachers are the most valued human asset of any country. They impart knowledge and skills to the students, who after completion of their studies, join the different sectors of a country and start contributing towards the development of the country's economy (UNESCO, 2007). They are the most significant factor of the education process since the success of any educational organization largely depends on the quality and efficacy of the teaching force (Obwogi, 2011). Therefore, the most valuable asset to invest in, in an educational organization is its teachers (Ng'ethe, 2013). Indeed the human capital consists of the knowledge, skills and abilities of the employees which determine the organization's success (Armstrong, 2010). While Robbins (2008) warns that excess stress affects one's health and productivity, Lowe (2010) notes that healthy employees cope better with stress and perform more effectively hence the need to create healthy workplaces. However, stress experts, Lazarus and Folkman (2004) warns that excessive and repeated irritants at work can be stressful even to healthy people lowering their productivity.

Ivancevich et al., (2010) defines work stress as the adaptive reaction to over demanding situation or work environment. Cummings and Worley (2008) define work stress as an adaptive response to excessively demanding situation, event or interaction of people and their jobs that cause physical, psychological and/or behavioral deviations from their normal functioning. Of further interest is the conceptualization offered by Lazarus and Folkman (2004) who defined occupational stress as being the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, needs or expectations of the worker. A more specific definition was provided by Kyriacou (2001) who claims that "work-related stress in the teaching profession refers to the experience by teachers of unpleasant, negative emotions, such as anger, anxiety, tension, frustration or depression, resulting from some aspect of their work as a teacher which is beyond their control and resources".

According to WHO (2002) health report, work related stress is a 'global epidemic' hitting a fever pitch in every nation. They found that apart from the health problems of those under severe stress, it also accounts for about 25 % of all absenteeism leading to low productivity at work. Furthermore, 80-90 % of all industrial accidents are related to emotional stress. In the current competitive global economic environment, industrial economy is gradually being replaced by knowledge-based economy hence the increase in demand for highly skilled and educated labour force to gain competitive advantage over the competitors (Robbins, 2008).

Lowe (2010) warns that the current global environment is defined by unprecedented uncertainty, a premium placed on knowledge, and the threat of future talent scarcity. There is need therefore to ensure effective human resource management for healthy organizations, to enhance retention of highly skilled and talented employees. He further explains that vibrant workplaces will inspire employees to achieve sustainable individual and organizational success. This is affirmed by Lowe (2010) who claims that the key to organization's success today is its ability to make strong healthy links between employee's wellbeing, organizational performance and social responsibility in humanly sustainable ways. This supports claims by Borg and Falzon (2010) that effective work stress management will not only help to attract, develop, motivate and retain talented teachers and reduce turnover, but also synergize their contribution within the resource base of their schools for excellent performance.

Hanif (2014) declared work stress as a universal element which employees around the globe are experiencing as a matter of routine. A completely stress-free work climate hardly exist, neither would it be the ideal. Stress has become a reality of our everyday life. Robbins et al., (2008) asserted that the negative effects of job stress impact negatively on employees leading to high cost of stress due to high turnover rates, increased absenteeism, low productivity and costly stress-related diseases. This consequently drains the resources and cause inefficiency in organizations hence the increasing widespread concern amongst policy makers, employers, employees and researchers over the high levels of stress in the world today. Examples of this concern will set the context for this current research on work-related stress, its causes and effects on teachers' performance in the teaching profession.

Previous studies asserted that the effects of work-related stress and intra individual conflict can create physical problems (heart disease, ulcers, migraine headaches and hormonal imbalances), psychological problems (low self-esteem, negative

attitude, poor decisions, resentment of supervision, poor communication and job dissatisfaction) and/or behavioral problems (absenteeism, frequent mistakes, accidents and turnover). Individuals and organizations have to develop strategies to cope with these stress-induced problems (Lazarus & Folkman, 2004; Luthan, 2011; Seaward, 2004). Although stress is present among employees globally, it can be reduced by improving quality of benefits in companies and providing employees with the best working environment (Seibt et al., 2008).

Despite the aforementioned negative stressors, Luthan (2011) posit an interesting delineation of 'eustress' which is positive and controlled, characterized by low muscle tension, an alert presence of the mind, peaceful body feelings, increased creative intelligence, physical vitality and a deep sense of wellbeing. Cummings (2008, p481) "Eustress' occurs in moderate levels and contributes to effective motivation, innovation and learning. An employee facing higher responsibility through promotion will be challenged to remain focused, innovative and eager to contribute to retain their position and better rewards. However, if excessively high or chronic, stress can be dysfunctional leading to burnout." Eustress seems to have lost fit in the high demanding teaching profession.

Luthans (2011) asserted personal control over the work environment and the job (task) as important in determining employee's level of stress, job satisfaction and performance. Satisfaction of one's needs is key to his/her performance (Maslow, 1971). Where the expected satisfiers cause dissatisfaction they turn into stressors and affect the level of one's stress and their performance (Luthan, 2011). In public schools, work stress can negatively affect teachers' physiological and psychological well-being which can adversely affect schools' effectiveness. Students' learning is also negatively influenced by teachers' job dissatisfaction and stress (Milbourne, 2006).

Particular interest is growing in the causes, effect and management of work-related stress in the teaching profession due to the increased importance and demand for quality education for national and global development causing more pressure on teachers to attain the set education goals (MacGrath, 2007). In 2000 the World Conference on Education for All (EFA) confirmed their commitment to achieving Education for All by year 2015 with the goal of improving the quality of education to make it relevant to the needs of the individual, the community and the nations (UNESCO, 2007). In the developing countries like Kenya quality education goal have not yet been realized fully (UNESCO, 2010), hence the need to address the challenges within their education systems such as job stress in order to achieve quality education to all for sustainable development. Locally, the increasing levels of unmanageable work stress amongst teachers in public schools in Kenya is compounded by the rapid expansion amid declining funds which has seen the schools experience challenges of poor physical facilities, overcrowding and staff disillusioned by several factors including inadequate and non-competitive salaries, poor working conditions, heavy workload, work-family conflict and institutional governance among others (Ngeno, 2007).

According to TSC (2008), Kenya, teacher's work stress is compounded by the Free Primary Education (FPE) whose implementation saw public schools enrolment rise to unprecedented levels thus placing a serious strain on all education related resources. The teacher-pupil ratio has in many cases exceeded the 1:40 prescribed by UNESCO (2000) by far. Inevitably, this translates into occupational stress among the classroom teachers having increased work load. Most teachers work under stress, in overcrowded classrooms and dilapidated buildings without the necessary learning resources. This explains the frequent teachers' strike in demand for their workers' rights and the exodus of teaching staff to the private sector or abroad in search for better jobs and working conditions (Kitenga, 2009).

The negative symptoms of stress can impact negatively on one's emotional, physical and psychological health, job performance and overall quality of life and they are unmistakably many. They include tension headaches, neck/back/shoulder pain, tight jaw, sleeping problems, fatigue, loss of concentration, learning problems can increase, irregular or rapid heart rate, migraine headaches, high blood pressure, sexual dysfunction (in either sex), digestive problems/colitis, upset stomach, ulcers, hormone imbalances, reduction of immune system function, over reaction by immune system (allergies or autoimmune diseases worse), increased allergies, increased aging rate, anxiety, depression, substance abuse, poor habit control, over-eating, low energy, prone to accidents or mistakes, impaired communication and poor performance among others (Brody et al., 2000; Clarke & Cooper, 2003; Lazarus & Folkman, 2004). Effective management of job stress helps to create healthy workplaces and enhance employees' good performance hence organizational success (Lowe, 2010).

Statement of the Problem

Preliminary studies on the cost of stress at schools in most developing countries indicated a steady rise as evidenced by the increasing trends of high teacher turnover, increased sick off days per teacher, decline in job performance, poor students' results and absenteeism (UNESCO, 2010). In Kenya, teachers are confronted with occupational, pedagogical and technological changes which have largely influenced alterations in their working conditions. Changes of this nature have been reported to be partly responsible for work stress and this subsequently affects how teachers perform (Ngeno, 2007). This explains why despite the Kenyan government commitment to enable majority of its citizen's access to education for individual and national development, through free primary and subsidized secondary education programs, most public schools continue to record high teacher turnover and students' dismal performance in important examinations putting their future at stake. Consequently, education goals of quality education for all have not yet been realized in Kenya (KNEC, 2014).

Juja Sub County is one of the many sub counties where education goals have not been met fully due to myriads of problems in public schools, major ones being the rising trends in high teacher turnover, high teacher-student ratio and teacher deficit, increased absenteeism and sick leaves (TSC, 2015). All these problems are potential indicators of existing work-related stress factors in public secondary schools that possibly affect teachers' performance and consequently lead to students' poor performance in the KCSE in Juja Sub County over the last four years. As such, this study was designed to find out the underlying issues leading to poor performance in the Sub County with special focus on all public secondary schools. The Kenya Secondary Schools Heads Association (2015) report attributes poor performance in public secondary schools to teacher's job dissatisfaction and high teacher turnover in search for better paying jobs. The TSC (2015) report shows that teacher turnover in Juja Sub County continues to rise per year and it is even higher compared to other neighboring sub counties as shown in Table 1.1 below.

According to the Kenya National Union of Teachers (2015) report, teachers' strikes in Kenya over poor pay has been witnessed in the years 1997, 1998, 2002, 2008, 2013, 2014 and 2015. There was raised concern that public schools continue to face acute shortage of qualified teachers due to poor remuneration and high teacher turnover.

Public schools according to UWEZO report (2012) are likely to have overcrowded classrooms particularly in urban or peri-urban locations with high population density and limited land for expansion. The TSC (2015) report also showed that, the implementation of free education caused an enrolment rise in Juja Sub County with a high teacher-student ratio of 1:55 in public schools which is far beyond the prescribed 1:40 by UNESCO (2000). This led to overcrowded classes, work overload, shortage of teaching resources and teacher deficit in public secondary schools in the sub county. Previous studies have shown that overcrowded classrooms, work overload, poor management and shortage of resources are potential work stress factors that cause job dissatisfaction, poor performance and high turnover (Borg, 2010; Kyriacou & Chien, 2004).

To the researcher knowledge, the limited local empirical evidence on the effects of emerging work-related stress factors on teacher's performance hinder effective stress management in Kenyan schools. Should the lack of effective direct control of teachers' work related stress gap persist, then the high cost of work related stress and its negative effects on teacher's performance would continue, and consequently retard the achievement of individual, educational and development goals in Juja Sub-County. The study aimed at filling the gap locally by finding out the effects of work related stress on teachers' performance in Juja Sub County, Kiambu County, Kenya.

General Objective

The general objective of the study was to establish the influence of work-related stress on governance of teacher's in public secondary schools in Juja Sub County, Kiambu County, Kenya.

Specific Objectives

The study was guided by the following specific objectives:

- i. To examine the effect of policies-related stress on governance of public secondary schools teachers in Juja Sub-county.
- ii. To establish the effect of economic-related stress on governance of public secondary schools in Juja Sub-county

Research Questions

The study sought to answer the following research questions:

- i. What are the effects of policies-related stress on governance of public secondary school teachers in Juja Sub-county?
- ii. How does economic-related stress affect governance of public secondary school teachers in Juja Sub-county?

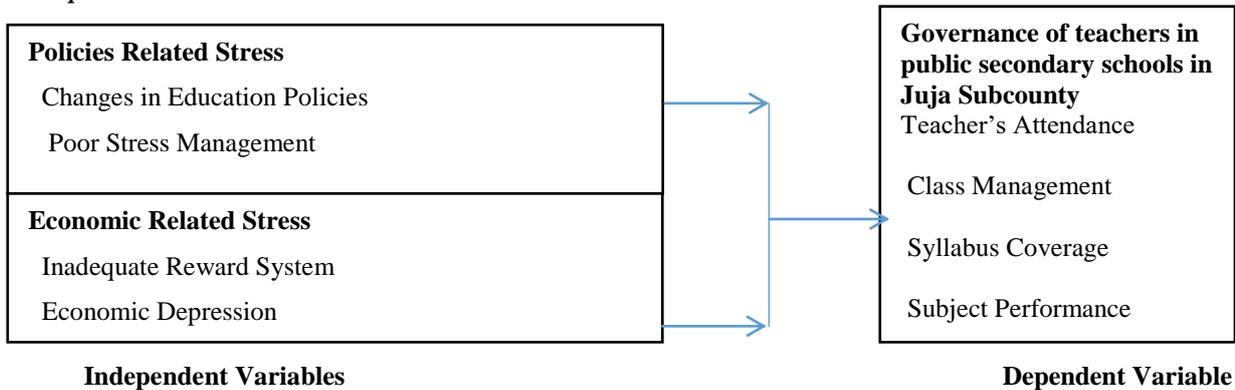
Conceptual Framework

Figure 1: Conceptual framework

II. RESEARCH METHODOLOGY

The study adopted descriptive and inferential research designs. Mugenda and Mugenda (2008) argue that descriptive designs provide important clues regarding the issues that the investigator should focus on. This design made it possible to collect a large amount of data for detailed analysis since the study covered respondents from eight public secondary schools within Juja Sub-county. Kothari (2008) observes that a descriptive research design is used to get information on the current status of people and their attitude, opinions, habits or any of the variety of educational or social issues.

The study, therefore, aimed at getting information on the current status of work-related stressors in public secondary schools in Juja Sub-county and their effects on teachers' performance by analyzing teachers' opinions on the same issue. Mugenda and Mugenda (2008) also indicate that inferential research design basically helps in assessing relationships among variables. If a statistically significant relationship exist between two variables, then it is possible to predict one variable using the information available on another variable. Through correlation and regression analysis, the study was able to determine the relationships between the independent variables and how they affect/influence the dependent variable.

The target population consisted of the 190 TSC teachers from the 8 public secondary schools selected in Juja Sub-county as in Table 1.

Table 1: Target Population

Schools	K.C.S.E Performance (M.S.S)		No. of Teachers Targeted
	2014	2013	
	Top schools		
Murera Sec Sch	7.78	8.04	43
Blessed Mugutha	7.01	7.15	38
Gachororo Sec	6.89	6.64	33
Theta Sec Sch.	6.43	6.64	24
	Bottom schools		
Athi Sec Sch.	2.81	3	12
Juja Secondary	2.65	3.1	15
Kitamaiyu Sec	2.63	2.83	13
Achievers Snr. Sch	2.07	2.67	12
Total	4.78	5.01	190
Source: DEO & KNEC Report, 2015			

The study adopted purposive and stratified sampling techniques where subjects were selected in such a way that the existing subgroups in the population were more or less reproduced in the sample. Sampling frame was the list of all TSC teachers in the eight targeted public secondary schools in Juja Sub County. The sample size for the study was determined using Slovin's sample size determination formula (Altares et al., 2003).

Slovin's sample size formula:

$$n = \frac{N}{1+Ne^2}$$

Where; n = Desired sample size, N = population i.e. 190 TSC teachers and e = Error tolerance.

The study confidence level was 90% which gave a margin error of 10% i.e. (e = 0.1). Therefore;

$$n = \frac{190}{(1+190*0.1^2)} n = \frac{190}{2.9} n = 65.52 \text{ (Sample size was 66 teachers)}$$

The sample size of 66 teachers representing 35% of the target population was considered adequate to allow for reliable levels of accuracy hence adopted for the study analysis. Mugenda (2011) recommends a sample size of at least 30% as a good representation of the target population since it allows for reliable levels of accuracy for testing significance of differences between estimates. To determine the sample size of each school (stratum) in the target population, proportionate stratified sampling was used. The sample size was selected to represent the various strata as shown in Table 2.

Table 2: Sample Size

School	Target Population (N)	Sample Size (35%) N
Murera Sec Sch	43	15
Blessed Mugutha	38	13
Gachororo Sec	33	12
Theta Sec Sch.	24	8
Athi Sec Sch.	12	4
Juja Secondary Sch	15	5
Kitamaiyu Sec	13	5
Achievers Snr. Sc	12	4
Total	190	66

The research utilized both primary and secondary data. The researcher collected primary data using open and closed structured questionnaires to record respondents' responses using drop and pick method. Kothari (2008) observes that collecting data through questionnaires saves time by collecting huge amount of data when the population of interest is large.

A pilot study was conducted to test the validity and reliability of the data collection instrument used. This was conducted in two target schools where eight teachers were selected to form 12% of the sample size. The response by the teachers in pilot test enabled the questionnaire modification for the main study. All the study indicators were found to have a Cronbach Alpha coefficient greater than 0.70 thus they were considered valid and retained for further analysis.

Collected data was then coded, edited to detect errors and omission to enhance accuracy and precision after which it was analyzed using descriptive and inferential statistics with the aid of Statistical Package for Social Science (SPSS) computer software version 20 (Nachmias & Nachmias, 2008). Correlation and multiple regression analysis was also applied. Mugenda (2011) explains that correlation analysis is used to establish statistical significance and the nature of the existing relationship between the dependent and the independent variables while multiple regression analysis is used to determine statistical significance and the influence/effect that the independent variables have on the dependent variable as shown in the regression model below;

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where, y = Teachers Performance

β_0 = a constant

$\beta_1, \beta_2, \beta_3$ and β_4 = regression coefficients

X_1 = Management related stress

X_2 = Family related stress

X_3 = Policies related stress

X_4 = Economic related stress

ε = Error term

The ε is an error term normally distributed about a mean of 0 and for purposes of computation, the ε is assumed to be 0. The equation was solved by the use of SPSS statistical model. A t-test was conducted to ascertain if two sets of data were significantly different from each other. Analysis of Variance (ANOVA) test was also conducted to analyze the amount of variation within each of the sample relative to the amount of variation between samples. This was considered important since it makes use of the test in terms of sum of squares effect over sums of squares residual (Mugenda, 2011).

The researcher used tables to present the research results and findings.

III. RESEARCH FINDINGS AND DISCUSSION

The study sought to establish the effects of work-related stress on teachers' performance in public secondary schools in Kenya in terms of the effects of management-related stress, family-related stress, policies-related stress and economic-related stress on teacher's performance in public secondary schools in Juja Sub County. Descriptive and inferential statistics such as Pearson correlation and Multiple Regression computations have been used to interpret and present the findings of the study.

Pilot Testing Results

The questionnaire was pre-tested to ascertain its validity and relevance. The pilot study consisted of at least 10% or eight respondents from the target population. This generated an alpha coefficient of 0.78, thus considered valid and retained for the study. According to Kothari (2008) an alpha coefficient of 0.70 or higher indicates that the gathered data are reliable as they have a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population.

Table 3: Reliability Coefficients

Variable	Number of items	Cronbach's Alpha
Policies Related Stress	7	0.783
Economic Related Stress	5	0.794
Teachers performance	4	0.772

Response Rate

Out of the 66 questionnaires distributed to the respondents, a total of 57 were completed and returned which represents a response rate of 86%. This response rate was satisfactory to draw conclusions from the study and was, therefore, representative. According to Mugenda and Mugenda (2008), a response rate of 50% is adequate for analysis and reporting, a rate of 60% is generally good while a response rate of above 70% is excellent.

The high response rate of 86% facilitated gathering of sufficient data that could be generalized to determine the effects of work related stress on teacher's performance in public secondary schools in Kenya. Table 4 shows response rate of the questionnaires from the respondents.

Table 4: Response Rate

Number of Questionnaires Issued	Number of Questionnaires Filled and Returned	Response Rate (%)
66	57	86%

Respondents Demographic Characteristics

This section covers the analysis of the demographic characteristics of the respondents in the target population such as gender, age bracket, level of education and teaching experience. This is aimed at ensuring that there was no biasness in

the selection of respondents who participated in the study. Harris (2006) suggested four variables that have significant relationship with teachers' job satisfaction and stress namely; age, gender, educational level and years of work experience.

Gender of the Respondents

Both gender participated in the study. Out of 57 respondents who participated in the study, 30 were male representing 53% while 27 were female representing 47%. Kothari (2008) asserts that a ratio of at least 1:2 in either gender representation in the study is representative enough. With the small difference in the male and female respondents, it shows that there is no discrimination on gender parity in the schools covered in Juja Sub County.

The findings agreed with those of Lundberg (2005) who concluded that there was a narrowing of the gender gap in terms of the physiological reactivity and appraisal of stressors and males and females were almost equally responsive to stressors. The results of this information are presented in Table 5.

Table 5: Gender of Respondents

Gender	Frequency	Percentage Frequency
Male	30	53%
Female	27	47%
Total	57	100%

Age of Respondents

The teachers' age was also a factor considered in this study. Age could be an important determinant of the level of job satisfaction and stress for the teachers when other factors remain constant. Data collected from teachers was recorded as shown in the Table 6 below.

Table 6: Age of respondents

Age bracket	Frequency	Percentage
Less than 25 years	10	16.7
26 - 35 years	18	31.6
36 - 45 years	17	29.2
46 - 55 years	10	18.4
56 and above years	2	4.1
Total	57	100%

The findings show that majority of the teachers were aged between 26-35 years 31.6% followed by ages 36-45 years with 29.2%. Teachers with age 46-55 were represented by 18.4 % while those with less than 25 years were represented by 16.7%. Those aged 56 years and above had the lowest representation of 4.1%. This shows most of the teachers are in the middle age while the young ones are few. Those who are about to reach the retirement age are also few.

The fact that there were only few teachers in the below 25 years category may be explained by the fact that fresh graduates are not posted to schools immediately after graduating as it takes some years before being posted. However the results agree with studies done by Borg (2010) that young novice teachers thought that teaching had become less attractive as a career and would consider joining other better jobs to avoid stress. It also affirms Bowers and Mciver (2001) observation that schools lose their highly experienced teachers through early retirement from the teaching profession due to stress related illnesses.

Academic Qualification of Respondents

The study sought to find out whether the respondents' academic qualifications influenced the levels of teachers' job satisfaction and stress. The findings are presented in Table 7 below.

Table 7: Academic Qualifications

Academic Qualification	Frequency	Percentage
Certificate level	3	5.8
Diploma	9	15
Degree	39	69.2
Masters	6	10
Total	57	100%

From the table 7 above, majority 69.2 % of teachers had a degree, followed by 15% who had a diploma, 10 % had a master's degree while 5.8% had a certificate. Lukuyani (2004) on factors contributing to job satisfaction among secondary school teachers in Turkana district revealed a significant correlation between job satisfaction, teaching experience and professional qualifications. He noted that teachers with higher education left teaching for better paying jobs.

According to Kitenga (2009), attainments of bachelor's degree and beyond tend to lead to a mismatch between teachers' expectations and professional realities. Teachers tend to improve their knowledge through higher educational attainment hoping that their efforts would be recognized by their employers through promotion and appointment to higher posts of responsibilities with better rewards. Unfortunately, they are not recognized after their academic attainment leading to dissatisfaction in the job. This dissatisfaction makes the teachers frustrated hence they move out of the teaching profession whenever chances occur leading to high teacher turnover in secondary schools.

Policy Related Stress Factors

The study sought to find out the effects of policy related stress factors on teachers' performance. The results of these findings are presented in Table 8.

Table 8: Respondents opinions on Policy Related Stress factors

Statements	SA (%)	A (%)	N (%)	D (%)	SD (%)	χ^2	p-value
Adjusting to policy Changes is stressful	16.8	53.4	6.2	14.9	8.7	118.410	0.0001
Handling overcrowded Classes reduce class control and increase indiscipline	44.1	42.9	3.1	6.8	3.1	148.710	0.0001
Preparing lessons an evaluating students	16.8	56.5	2.5	15.5	8.7	144.807	0.0001
Handling students indiscipline cases	23.6	60.9	1.2	7.5	6.8	190.460	0.0001
Inadequate training and promotion opportunities	47.6	36.6	2.5	9.3	4.3	135.500	0.0001
Coping with globalization effects like computerized teaching, projects and analysis	11.8	44.1	12.4	20.5	11.5	63.068	0.0001
Inadequate stress management in schools deteriorate stress levels	19.9	44.1	3.7	21.1	7.5	96.422	0.0001

Key: SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree. %=Percentage frequency that gave the opinion

According to the findings in table 4.8 more than a half, (53.4%) of the respondents agreed that adjusting to policy changes has effects on job performance of public secondary school teachers. It is clear that for changes and reforms in education to be effective, policy makers need to involve teachers in planning and implementation of such changes at the grassroots' level. The results agreed with findings by Dizon (2011) that changes in education policies have contributed to teachers' work-related stress and poor performance especially where the policy makers do not involve teachers in the policy making process yet they are the implementers of such changes.

The study sought to find out the effects of handling overcrowded classes on teacher's class control and student's discipline whereby 44.2% agreed that handling overcrowded classes due to free and subsidized education policies cause work related stress and affects job performance among public secondary school teachers leading to reduced class control and increased indiscipline. The study results confirm findings by Gitonga (2012) that overcrowded classes make class control, student's concentration and customized individual student guidance difficult leading to indiscipline and poor subject performance which is very stressful for the teacher. The findings are well supported by UWEZO (2012) report that public schools are likely to have overcrowded classrooms particularly in urban or peri-urban locations due to overpopulation and shortage of school land for expansion. This is evident in the peri-urban Juja Sub County.

From the study results majority (56.5%) of the respondents agreed that preparing lessons, teaching aids and evaluating students work, have great effects on teachers' job performance. This corroborates views by Sorenson (2000; p.12) "Stress is a condition of twenty-first-century education that continues to increase as more accountability standards and new policy initiatives are introduced." According to the study findings majority (60.9%) agreed that handling students' indiscipline cases have the most significant effect on teachers' performance among policy related stress factors with Chi-square results ($\chi^2=190.460$, $p= 0.0001$). The results are a clear indication that in public secondary schools students' indiscipline cause work related stress and poor performance. The findings support studies by Geving (2007) that suggests student behavior is an increasing factor of the stress, especially among secondary level teachers due to inadequate discipline policy and Dizon (2011) and Gitonga (2012) that restrictive government legislation on child rights protection has led to restrictive students' disciplinary policies in schools thus repeated students' misbehavior making classroom management and subject matter delivery difficult hence time wastage and anxiety in teachers whose jobs are at risk for disciplining their students.

Additionally, 47.6% strongly agreed that inadequate training and promotion opportunities cause low morale, uncertainty and teacher turnover. Poor training further makes coping with emerging globalization effects such as technology integration in teaching stressful. Also 44.1% agreed that inadequate stress management in schools deteriorate teachers' stress levels leading to frustration, stress-related diseases and eventually turnover supporting such findings by Borg (2010).

Economic Related Stress Factors

The study further sought to find out the effects of economic related stress factors on teachers' performance in public secondary schools. The findings are presented in Table 9.

Table 9: Respondents opinions on Economic Related Stress Factors

Statements	SA (%)	A (%)	N (%)	D (%)	SD (%)	χ^2	p-value
Inadequate salary Create economic stress	66.5	29.2	1.2	3.1	0.0	179.1	0.0001
Economic downturn raises teachers' anxiety	30.4	34.5	6.5	17.4	11.4	28.9	0.0001
Delays and cutbacks on Government subsidies	13.7	49.1	9.3	16.1	11.8	87.043	0.0001
Inadequate teaching Aids and resources	19.3	52.8	3.7	21.1	3.1	131	0.0001
Self-sponsored computer training to match the global technological demands increase economic stress	29.8	34.4	9.9	17.4	8.7	42.882	0.0001

Key: SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree. %=Percentage frequency that gave the opinion

The results in table 9 indicated that majority of public secondary school teachers (66.5%) strongly agreed and 29.2% further agreed that inadequate salary have the highest effects on teachers' performance as supported by the Chi-square results ($\chi^2=179.05$ $p=0.001$). This clearly indicate the need to harmonize teachers' salary with those of comparable jobs with same job qualifications to make teaching profession competitive, retain talented teachers and reduce teacher turnover. Adequate salary will motivate teachers to work hard and perform better for it as their primary source of income for better living standards.

These findings corroborate studies by Kyriacou and Chien (2014) who noted that teachers' salaries tend to be lower than those of comparable jobs and hardly match the high cost of leaving leading to anxiety, job dissatisfaction and high turnover in search for better paying jobs. However, the findings contradict claims by Armstrong (2010) and Edworthy (2000) that effective rewards aim to reward employees fairly, equitably and consistently in accordance with their value; skills, talents, knowledge and time to the organization and further helps an organization to be more competitive, retain key

talented employees and reduce turnover leading to high performance.

The findings also revealed that 34.5% of respondents agreed that economic downturn raises teachers' anxiety thus affects their performance. These study results match claims by Powell and Snellman (2004) that depression in the economy creates negative stress for employees because they will be much more anxious about making ends meet with the high cost of living than performing their jobs. Satisfaction of one's needs is key to his/her performance (Maslow, 1971).

Additionally 49.1% respondents were of the opinion that delays and cutbacks on government subsidies have effects on teachers' job performance since they cause inadequate teaching aids and resources as agreed by 52.8% of the respondents. These match findings by Chetty(2004) that economic depression in a country result to cut-backs and delays on government subsidies causing a scarcity of physical resources such as textbooks, teaching aids and equipments such as computers and projectors, enough teachers and the lack of furniture in public schools. This is hindering timely syllabus coverage and the progress of learners and has concomitantly exacerbated the performance of teachers. Betonio(2015) further affirms that teachers are sometimes forced to use their own funds to buy their own teaching aids such as set books, revision books, computers and calculators which cause anger and stress to teachers working in the supposedly government funded public schools. According to the study findings, 34.4% of the teachers agreed that self-sponsored computer training to match the global technological demands increase their economic stress and has effects on their job performance. This agreed with McGrath (2007) observations that most schools had no budget allocation for technological integration and refresher training to update their systems and teachers' knowledge to cope with current trends of education and globalization effects.

Measures of Teachers Performance

Teacher's performance entails the effectiveness and efficiency of the teacher based on attendance, class management, syllabus coverage and subject performance among others. Teacher's performance in public secondary schools in Kenya is very critical because it determines individual and national development since all the professions take their roots and nourishment from the teaching profession. Teachers' performance helps in supplying the economy with educated and productive citizens who can convert efficiently other resources into output of high value for quality life and also determines the overall public image of their school.

The study, therefore, sought to measure the extent to which teachers' performance contributes to the achievement of organizational objectives in public secondary schools in Kenya. The results are presented in table 10 below.

Table 10: Measures of Teachers Performance

Statements	VG (%)	G (%)	A (%)	P (%)	VP (%)	χ^2	p-value
Teacher's attendance	21.7	32.9	31.7	11.2	2.5	55.615	0.0001
Class management	37.3	44.7	16.1	1.2	0.6	132.949	0.0001
Syllabus coverage	24.2	52.8	18.0	5.0	0.0	78.776	0.0001
Subject performance	11.2	48.4	31.7	11.2	2.5	124.062	0.0001

Key: VG= Very Good; G = Good; A=Average; P=Poor; and VP =Very Poor

% = Percentages frequency that gave the opinion

The results in table 10 indicated that 52.8% ($\chi^2=78.8$, $p>0.001$) of the respondents have good performance on syllabus coverage, in subject performance 48.4% of the respondents indicated that they are good and 44.7% indicated that they are good in class management. The findings also indicated that 32.9% were good in teacher's attendance. The 11.2% poor performance in teacher's attendance agreed with studies by Borg and Falzon (2010) who observed that stressful work conditions lead to teachers' job dissatisfaction, fatigue, withdrawal from school activities and increased absenteeism.

Inferential Analysis

This section presents the results of the correlation and regression analysis done in the study to evaluate the nature of the relationship between the dependent and independent variables. Pearson Product Moment Correlation was used. An ANOVA test was also done to establish whether there were indeed significant differences between sample means.

Correlation Analysis

In this section the Pearson Correlation analysis was done to examine how the various variables are related and the strength and directions of their relationships. According to Mugenda and Mugenda (2008), correlation technique is used to analyze the degree of relationship between two variables. Variables for further statistical analysis such as regression analysis are selected based on the value of their correlation coefficient.

The computation of a correlation coefficient yields a statistic that ranges from -1 to +1. This statistic is called a correlation coefficient (r) which indicates the relationship between the two variables and the bigger the correlation the stronger the coefficient between the two variables being compared (Carver et al., 2009). In testing statistical significance between variables, the level of significance (α) is often set at 0.05 or 0.01 and the probability (p -value) should be less than the (α) value to conclude that a significant relationship exist between the variables (Mugenda, 2011). The direction of the relationship is also important in that if it is positive (+) it means that there is a positive relationship between the two variables and this means that when one variable increases, the other variable increases or when one variable decreases the other variable also decreases. A negative relationship (-) means that as one variable decreases, the other variable increase and vice versa and hence an inverse relationship. The score 1 indicates perfect correlation, which is found only when a variable is correlated with itself while 0 indicates no correlation at all hence no need for further analysis on such variables with no relationship.

The researcher carried out correlation analysis between the variables of the study using Pearson correlation coefficient to test whether there existed interdependency between the independent variables and also whether the independent variables were related to the dependent variable (teacher's performance) and the correlation results presented in Table 11.

Table 11: Summary of Correlations

	Management Related Stress	Family Related Stress	Policy Related Stress	Economic Related Stress	Teacher Performance
Management Pearson's Related Stress correlation(r)	1				
Family Pearson's Related Stress correlation Sig. (2-tailed) (p)	.362** .000	1			
Policy Pearson's Related Stress correlation Sig. (2-tailed)	.493** .000	.200** .000	1		
Economic Pearson's Related Stress correlation Sig. (2-tailed)	.605** .000	.597** .000	.484** .000	1	
Teacher Pearson's Performance correlation Sig. (2-tailed)	-.615** .000	-.478** .000	-.667** .000	-.634** .000	1

Key: r = correlation p = correlation significance

The correlation coefficient results in Table 11 below indicate that according to the study, there was a highly significant linear correlation between the independent variables and the dependent variable. This implies that the relationship between the work related stress factors and teachers' performance is very close. The relationship therefore exists since it is above the 30% recommended (Mugenda & Mugenda, 2003). Each of the four work related stress variables coefficients were negatively significant, the p -value of all the four tests are less than 0.001 indicating that teachers' job performance was affected by work related stress factors negatively.

Teacher's performance correlated with management related stress factors ($r = -0.615$, $p = 0.000$, $\alpha = 0.05$). Family related stress factors significantly correlated with teachers' performance ($r = -0.478$, $p = 0.000$, $\alpha = 0.05$). Policies related stress factors correlated significantly with teachers' performance ($r = -0.667$, $p = 0.000$, $\alpha = 0.05$) and Economic related work stress factors also significantly correlated with the dependent variable ($r = -0.634$, $p = 0.000$, $\alpha = 0.05$). This is supported by

Chaplain (2005) who concluded that work stress and employee's job performance were found to be significantly negatively correlated, with high reports of work related stress being related to low levels of job performance. The negative relationship between work related stress and teachers performance means that an increase in work related stress will lead to a decrease in teachers' performance and vice versa and hence the two have an inverse relationship. The correlation coefficients further showed that the four independent variables were all significantly interdependent and related in the public secondary schools in Juja Sub County.

Analysis Of Variance (ANOVA)

An ANOVA test was done using stepwise multiple regression procedure to examine the relationship between the independent variables and dependent variable. The results of ANOVA are presented in Table 12.

Table 12: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	12.40	4	3.10	3.125	.028 ^b
Residual	51.576	52	0.99		
Total	63.976	56			

- Dependent variable: Teachers' Performance
- Predictors(Constants): Management-Related Stress, Family-Related Stress, Policies-Related Stress and Economic-Related Stress

The Analysis of Variance results (ANOVA) at F-statistic =3.125, Degree of freedom =52, P< 0.05 (i.e. p= 0.028) indicated that there was a highly significant relationship between work related stress factors and teachers' performance in public secondary schools in Juja Sub County, Kiambu County, Kenya. The study therefore establishes that, when the four independent variables (management-related stress, family-related stress, policies-related stress and economic-related stress) are combined together and tested against the dependent variable (teachers' performance), the independent variables significantly affect teachers' job performance in Juja Sub-County under the study at 0.05 significance level, the p-value is 0.028 as shown in Table 12.

This means that work related stress is influential in predicting teachers' performance in public secondary schools in Juja Sub County, Kiambu County, Kenya. These findings support previous studies that indicated that teachers are usually under stress at work and hence not able to achieve the expected high levels of performance leading to ineffective education and delays in national and global development (Kyriacou & Chien, 2004). Many researchers agree that job dissatisfaction caused by the multiple factors (stressors) leads to teachers' stress, ill health, poor performance and eventually high teacher turnover.

Research conducted in the United States of America (USA), United Kingdom (UK), New Zealand and Australia has identified several key causes of work related stress commonly associated with teachers. These include inadequate salary, work overload, time constraints, lack of promotion opportunities, lack of regular performance feedback, changing job roles, inadequate recognition, inadequate management and participation in management decision making, inadequate resources and funding, inadequate policies and student indiscipline (Borg, 2010; Bowers et al., 2000; Kyriacou, 2001).

The study further implies that the regression model has less than 0.028 probability of giving wrong prediction. With regards to the extent to which each of the four independent variables contributed to the prediction, regression analysis gave the value of the T-ratio associated with respective variables as shown in table 13 below.

Regression Coefficients

With regards to the extent to which each of the four independent variables contributed to the prediction of the dependent variable, the regression coefficients and the t-ratio value associated with respective variables was shown in table 13. This analysis was used to explain how the independent variables influence/effect on the dependent variable and the more significant stress factors.

Table 13: Regression Coefficients

Model	Unstandardized Coefficients Beta (β)	Standard Error	Standardized Coefficients Beta	t	Sig.
(Constant)	1.902	0.238		7.984	0.000
Policy RelatedStress	0.99	0.062	0.166	1.983	0.018
Economic RelatedStress	0.87	0.066	0.154	1.776	0.026

a. Dependent variable: Teacher's Performance

Policy Related Stress was significant at 0.05 significance level, $t = 1.983$, and $p = 0.018$.

The regression coefficients, the t-values and their probability levels in table 13, indicate that all the independent variables are significant predictors of the dependent variable. Policy related stress factors had the most significant influence on teachers' performance in public secondary schools in Kenya at 5% level of significance, $t = 1.983$, $p = 0.018$ compared to the other work related stress factors in the study. This means that policy changes and reforms in education have had a negative impact on the efficiency and effectiveness of teachers leading to poor performance because in most cases, changes in education tend to ignore the role and needs of the teachers. Teachers need to be involved in education changes affecting their job so as to own such changes and effect them without stress.

The findings support studies by Dizon (2011) that changes in education policies have contributed to teachers' work-related stress and poor performance especially where the policy makers do not involve teachers in the policy making process yet they are the implementers. Day (2002) observes that education reforms have the following effects on the teachers: they challenge teachers' existing practices, resulting in stressful periods of temporary destabilization; they result in an increased work load for teachers; and they do not always pay attention to teachers' identities, challenges or expectations – arguably central to motivation efficacy, commitment, job satisfaction and effectiveness.

Multiple regression analysis was used to determine statistical significance and the influence/effect that the independent variables have on the dependent variable as shown in the regression model below;

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where,

y = Teacher's Performance (i.e. dependent variable)

β_0 = a constant

$\beta_1, \beta_2, \beta_3$ and β_4 = regression coefficients

X_1 = Management related stress

X_2 = Family related stress

X_3 = Policies related stress

X_4 = Economic related stress

ε = Error term

The ε is an error term normally distributed about a mean of 0 and for purposes of computation, the ε is assumed to be 0. The equation was solved by the use of SPSS statistical model. The constant and regression coefficients $\beta_0, \beta_1, \beta_2, \beta_3$ & β_4 were (1.902, 0.178, 0.117, 0.99 and 0.87) respectively as shown in table 13. Coefficients for regression of all variables indicated that the final model should be retained as follows:

$$y = 1.902 + 0.178X_1 + 0.117X_2 + 0.99X_3 + 0.87X_4$$

The model shows that all the work related stress factors have effect on teachers' job performance under the study. The model illustrates that when all the variables are held constant, the value of teachers' performance would be 1.902.

However, holding other factors constant, a unit increase in Management-Related Stress would lead to 0.178 decreases in teachers performance, a unit increase in Family-Related Stress would lead to 0.117 decreases in teachers' performance. Further, a unit increase in Policies-Related Stress would lead to 0.99 decreases in teachers' performance while a unit increase in Economic-Related Stress would lead to 0.87 decrease in teachers' performance. The results agreed with studies done in British, South Africa and Scotland where increase of work related stress led to decrease in teachers' performance (Borg & Falzon, 2010; McGrath, 2007; Wilson, 2002).

The findings of the study on the significance of work related stress factors on teachers' performance match previous studies which specified work related stress factors that affect teacher's performance as: poor management, work-family conflicts, ineffective rewards, inadequate policies, shortage of resources, inadequate training and recognition, indiscipline, role overload and ambiguity, global changes, societal expectations, lack of staff welfare programs and weak organizational structures among others (Borg, 2010; Kyriacou & Chien, 2004).

Model Summary

Multiple regression analysis was used to determine whether the four independent variables (management-related stress, family-related stress, policies-related stress and economic-related stress) together predict the independent variable (teacher's performance). The study aimed at establishing the overall effect of work related stress on teacher's performance in public secondary schools in Kenya. The work related stress factors under review were management-related stress, family-related stress, policies-related stress and economic-related stress factors. Multiple linear regression analysis results for all variables were as shown in Table 14.

Table 14: Regression Model Summary for all variables

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.759 ^a	.583	.533	.417

a. Dependent variable: Teachers Performance

b. Predictors (Constants): Management-Related Stress, Family-Related Stress, Policies-Related Stress and Economic-Related Stress

Multiple regression analysis yielded an Adjusted R Square (0.533,) as shown in table 14. The Adjusted R² is called the coefficient of determination adjusted for degrees of freedom and tells us how different factors affect or predict teachers' performance in public secondary schools in Kenya varying with management-related stress, family-related stress, policies-related stress and economic-related stress. The regression model equation $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \alpha$, explained 53.3% as measured by the goodness of fit as shown in Table 14 above.

The results indicate that management-related stress, family-related stress, policies-related stress and economic-related stress combined explained 53.3% of the variation on teachers' performance in public secondary schools in Juja Sub County as shown by the Adjusted R². This therefore implies that other factors not covered in this study contribute to 46.7%. Since the p-value is less than 0.05, the model is therefore statistically significant in predicting how work related stress effect on teachers' performance in public secondary schools in Kenya.

This is supported by Hoel et al. (2004) and Poelmans et al., (2008) who indicated that there is a strong relationship between work-related stress and teachers' performance. The study results agreed with previous studies confirming that teachers usually experience negative work related stress which lead to job dissatisfaction, ill health, poor performance and high teachers' turnover (Borg, 2010; Hanif, 2014; Hemphil, 2013; Jarvis, 2012; Kyriacou & Chien, 2004).

IV. CONCLUSION AND RECOMMENDATIONS

Introduction

The general objective of the study was to determine the effects of work-related stress on teachers' performance in public secondary schools in Kenya. The study specifically determines the effect of management-related stress, family-related stress, policies-related stress and economic-related stress on teachers' job performance in Juja Sub-County of Kiambu County, Kenya.

The reviewed literature showed that effective teachers' performance contributes to individual and national development since all the professions take their roots and nourishment from the teaching profession. Effective teachers' performance helps in supplying the economy with educated and productive citizens who can convert efficiently other resources into output of high value for quality life. Previous studies confirm that teachers usually experience negative work related stress which lead to job dissatisfaction, ill health and poor performance.

This study further revealed that management-related stress, family-related stress, policies-related stress and economic-related stress affect teachers' performance. The findings indicated that up to 81% of the teachers' job performance in public secondary schools in Kikuyu Sub-County could be attributed to the combined effects of all these variables in the multiple regression models. The effects of each of the variables are presented in the following sub sections.

Policy Related Stress

The findings of the study revealed that the changes and restrictions in education policies are work stress factors which have had a negative effect on the efficiency and effectiveness of teachers leading to poor performance in public secondary schools in Juja Sub-county as supported by the correlation and multiple regressions analysis results. Majority of the respondents argued that most of the changes and restrictions in education policies frustrate their efforts to perform and tend to ignore their views and challenges at the grassroots.

The findings of this study agreed that the biggest challenge to teachers' class control was dealing with the increased students' indiscipline cases resulting from restrictive government legislation on child rights protection. It was considered the most stressful of the policy related stress factors. The results of this study corroborates studies conducted by Geving (2007) who found out that student misbehavior is an increasing factor of work stress, especially among secondary level teachers due to inadequate discipline policy.

From the study findings, inadequate teacher training and promotion opportunities affect performance negatively. These findings agreed with those of Gakure et al., (2013) that despite the reported importance of in-service training to the working efficiency of the teaching staff, such trainings were almost absent and in cases where trainings were done, they were scarce and short, thus not playing the role of equipping teachers with relevant skills for better delivery of their services. The trainings given were reported to be inadequate since they were also not in line with the ever-changing curriculum of the public schools in Kenya.

Drafke and Kossen, (2002) postulate that many people experience satisfaction when they believe that their future promotion prospects are good. This may translate into opportunities for advancement and growth in their current workplace, or enhance the chance of finding alternative employment. They maintain that if people feel they have limited opportunities for career advancement, their job satisfaction and performance may decrease.

Further, the study also revealed that overcrowded classes due to the government free primary education and subsidized secondary education policies, preparing lessons and evaluating students' work and coping with the emerging globalization effects on education such as computerized teaching, projects, records and analysis were stress factors that had effects on teachers' performance in public secondary schools in Juja Sub-county.

The above notwithstanding, the study also established that inadequate stress management deteriorate stress levels in most public secondary schools. These findings agreed with findings by Borg (2010) and Kyriacou (2001) that management of work related stress have unfortunately been left to teachers to develop their own 'hardiness' and coping mechanisms such as discussing the stressful situations with family and friends, drinking alcohol, smoking, withdrawal, meditation, listening to music and seeking promotion elsewhere.

The same views are anchored by Bowers and Mciver (2000) and Hughes (2001) who observes that the most direct action teachers are left to take to mitigate their work stress is to remove themselves from the situation which they think is causing their stress, either temporarily through absence from work or permanently by leaving the profession thus the increasing teacher turnover.

Economic Related Stress

According to the findings, majority of the respondents agreed that economic related stress influenced negatively on teachers' performance in public secondary schools in Juja Sub-county as reflected by the correlation and multiple regression analysis results. Most respondents viewed inadequate salary as the main economic related stress factor with the

highest effect on teachers' job performance. The findings support studies by Kyriacou and Chien (2014) who noted that teachers' salaries tend to be lower than those of comparable jobs and hardly match the high cost of leaving leading to anxiety, job dissatisfaction and turnover in the profession.

Further, Ng'ethe (2013) observed that most key educators leave teaching due to remuneration to join sectors with more competitive rewards. For a long time in Kenya, teachers' salaries have remained very low compared to those of their counterparts in the civil service with the same qualifications. This scenario has compelled Kenyan teachers to go on strike on several occasions asking for pay increments. Usually, teachers who are not motivated can have serious negative influence on the learning process of their students. This implies that the future of the child is put at stake. The findings further support studies in British by Borg (2010) who noted that thirty percent of novice teachers exit the profession prior to their fifth year due to work-related stress. In his study, a significant percentage thought that teaching had become less attractive as a career and would consider better jobs.

The findings also indicated that economic downturn raises teachers' anxiety as supported by Gigam and Hoel (2013) and Powell and Snellman (2004) claims that depression in the economy creates negative stress for employees, because they will be much more anxious about making ends meet with the high cost of living than performing their jobs. Most respondents also agreed that delays and cutbacks on government subsidies continue to affect teachers' performance negatively due to scarcity of physical resources such as textbooks, teaching aids and equipments such as computers and projectors, enough teachers and the lack of furniture which is thus hindering timely syllabus coverage and the progress of learners. The results of this study corroborates studies conducted by Chetty (2004) which indicated that teachers are sometimes forced to use their own yet scarce funds to buy their teaching aids such as set books, revision books, computers and calculators which cause anger and stress to teachers working in the supposedly government funded public secondary schools.

The findings also revealed that teachers in public secondary schools in Juja Sub-county seek new sources of funds for self-sponsored technological training to cope with the global high demand for highly educated and technologically skilled labour. This agreed with McGrath (2007) observations that most schools had no budget allocation for technological integration systems, computer gadgets and refresher training for the implementation of the global education in the new secondary curriculum.

Conclusion

This study aimed at establishing the effects of work-related stress factors on teachers' performance in public secondary schools in Kenya. The findings of the study revealed that these factors significantly influenced teachers' job performance in Kenya. The study revealed that management related stress factors such as coercive leadership frustrates teacher's innovativeness, heavy work load, unrealistic syllabus coverage deadlines, inadequate recognition for good performance, low involvement in decision making and taking responsibility for students' performance have effects on teachers' performance in public secondary schools in Kenya.

The study further revealed that family related stress factors among them, difficulty balancing work and personal life, children and sick family members are stressful and lack of staff welfare for personal issues have effects on teachers' performance in public secondary schools in Kenya. This is true in the sense that teachers face difficulties in balancing work and personal life due to heavy workload and the conflicting roles at work and at home.

From the experience gathered during the study, it was revealed that policy related stress factors that affect teachers' performance in public secondary schools in Kenya are; adjusting to policy changes, handling overcrowded classes due to free education, preparing lessons and evaluating students' work, handling students indiscipline cases, inadequate training and promotion opportunities, coping with globalization effects like computerized teaching, records and analysis and inadequate stress management in school that deteriorate stress levels.

Economic related stress was another important factor that affects teachers' performance in public secondary schools in Kenya. According to the study, factors such as inadequate salary, economic downturn, delays and cutbacks on government subsidies, inadequate teaching aids and resources and self-sponsored computer training to match the global technological demands to a large extent affect teachers' performance in public secondary schools in Kenya.

Recommendations

On the basis of the stated findings and conclusions, the following recommendations were made to help improve teachers' performance and ensure successful implementation of sustainable and adequate stress management measures in public secondary schools in Kenya.

Policy Related Stress

The study recommends consistency in teacher training and development activities whereby teachers will be engaged in frequent staff development programmes to constantly update their knowledge in order to be adaptive to global changes and new trends in their job. Most teachers are intrinsically motivated when they update their skills and grow professionally. Staff development programs will enhance job satisfaction, self-esteem and confidence leading to reduced stress and the eventual self-actualization of the teacher.

The Ministry of Education, Science and Technology (MOEST) should allocate more funding to the sub-county education departments and schools to enable sub-county education managers and principals organize more refresher training programmes in their schools such as scholarships, workshops and seminars for teachers. There is need for government budget allocation for technological integration systems, computer gadgets and refresher training for effective implementation of the global education in the new secondary school curriculum.

TSC to conduct training needs analysis to ascertain the relevance of training to the needs of the teacher trainees. Stress management courses should be incorporated in teacher training for awareness and effective stress control. The government should institute more collaborative Occupational Health and Safety programmes in public schools to create sufficient stress awareness and effectively manage work related stress for improved occupational health and performance for teachers.

Many people experience job satisfaction when they believe that their future promotion prospects are good. Restructuring of the teaching profession is therefore recommended to invent and expand promotion opportunities since the current leadership ladder has few, precious and highly competitive rungs of being the deputy or the principal in a school. More performance based promotion opportunities with added rewards will motivate teachers to work extra hard leading to excellent performance.

At school level, the stress management should be discussed with all actors, teachers and their representatives, education employers, parents and student representatives to draw up a school risk assessment process that includes psychosocial hazards to identify the school's major stress factors and to jointly develop measures to prevent and abolish these factors. Departments must take the initiative to be creative and innovative in teaching so that students will be encouraged and motivated to participate in the learning process hence remain focused throughout. This will help contain students' discipline thus easier class control, effective content delivery and student's good pass rates.

At the national level, the teacher unions and the employer must become more pro-active in their national social dialogue structures when dealing with and setting up strategies on Health and Safety in schools, in particular as regards preventing and tackling work related stress and including psychosocial hazards in risk assessments and collective bargaining agreements in the education sector. Teacher unions need to address teachers' work-related stress as one of their priority issues in their union agenda of activities particularly because healthy and safe working conditions are fundamental social rights for all employees including teachers.

Economic Related Stress

There is need for the government to align teachers' reward system with those of other comparable jobs. Competitive rewards will help to retain talented and experienced teachers for better performance. When formulating reward policies, teachers must be involved so that they can be motivated to work for them for a reasonable period of time thus reduced turnover. The reward system should also take care of the emerging teacher's needs and economic downturn effects.

The study recommends that the employer conduct seminars and symposiums for financial advice on 'smart money management' whereby economics experts will help the teachers manage their economic stress and gain control over their financial situation even at hard times of economic downturn. The government must meet its part of the bargain by supplying the education subsidies just in time to ensure a good level of resources and facilities in public schools to

support teachers' performance. Donor funding and expatriates may be utilized for public school projects such as computer installation to match the emerging global education demands.

Areas for Further Research

There is need for further research on the emerging job related stress factors such as the effects of the new performance appraisal on teachers' performance in public secondary schools in Kenya since the study findings indicate that it has contradictory standards and expectations beyond teachers' abilities, resources and job description causing role conflicts, work overload and negative work stress. Future study similar to this should be carried out in public secondary schools in other sub counties across the country and findings be compared to help education planners and managers find concrete solutions to teachers' work stress and poor job performance in Kenya. Since the study has concentrated on public secondary schools under the government, there is also need to undertake similar studies in private schools operating in Kenya.

REFERENCES

- [1] Armstrong, M.A. (2010). Handbook of Human Resource Management Practice. London: Kogan Page Limited.
- [2] Aquino, G. V. (2008). Educational Administration: Theory and Practice. Quezon City: Rex Bookstore.
- [3] Bashir, A. (2007). Employees' Stress and its impact on their Performance. Paper presented at International Conference on Business and Technology, Iqra University, Islamabad, July 2007.
- [4] Betonio, J.R. (2015), "Stress Factors and the Teaching Performance of the College Faculty", International Journal of Social Science and Humanity, Vol. 5 No. 7, pp. 651-655.
- [5] Borg, M. G., & J. M. (2010). "Determinants of occupational stress in teachers", British Journal of Educational Psychology, vol.2, pp.119-130.
- [6] Borg, M. J. (2010). "Occupational stress in British educational settings", Educational Psychology, vol.10, pp.103-126.
- [7] Bowers, T. & Mciver, M. (2001). Ill Health, Retirement and Absenteeism Amongst Teachers. Research Brief No 235: Department for Education and Employment, London.
- [8] Chance, E.W. (2012). Visionary leadership in schools: Successful strategies for developing & implementing an educational vision. Springfield, IL: Charles C. Thomas.
- [9] Chetty, U.P. (2004). The Effect of Stress on Educator Efficacy. D.Ed. Thesis, Durban: University of Zululand.
- [10] Clarke, S. & Cooper, C.L. (2003). Managing the risk of workplace stress: Health and Safety Hazards. London: Routledge.
- [11] Cronbach, L. J. (1975). Research for tomorrow's schools: Disciplined inquiry for education. New York: Macmillan.
- [12] Cummings, T.G., & Worley, C.G. (2008). Organization Development & Change (9th Ed.). USA: Cengage Learning.
- [13] Dickman, F. & Emener, W.G. (2012). "Employee Assistance Programmes: Basic concepts, attributes, and an evaluation", Personal Administrator, vol.27.No.8, pp.55-62.
- [14] Dizon, M. (2011). "Relationship of stress and the teaching performance of the faculty members of Mindanao State University: basis for continuing professional development program," Ph.D. dissertation, Dept. Educ., Liceo de Cagayan University, Cagayan de Oro City, Philippines.
- [15] Edworthy, A. (2000). Managing stress. Buckingham: Open University Press.
- [16] Fimian, M.J. (2004). "The development of an instrument to measure occupational stress in teachers: The Teacher Stress Inventory", Journal of Occupational Psychology, vol.57, pp.277- 293.
- [17] Gigam, J and Hoel, T. (2013). Violence and Stress at Work in Financial Services. Retrieved from: http://www.ilo.org/public/english/dialogue/sector/papers/service/w_p210.pdf.
- [18] Gitonga, D. (2012). Influence of Teachers' Motivation on Students' Performance in Public Schools, Kenya. Ph.D. Thesis, University of Nairobi.

- [19] Hanif, R. (2014). Teacher stress, job performance and self-efficiency of women school teachers. M.Phil Thesis, in National Institute of Psychology, Center of Excellence, Quaid-i-Azam University, Islamabad.
- [20] Hughes, R.E. (2001). "Deciding to Leave but Staying: Teacher burnout, precursors and turnover", *International Journal of Human Resource Management*, vol.12 .No. 2, pp.288–298.
- [21] ILO (International Labour Organisation) (2010). Skills, Knowledge and Employability. From <[http://www.ilo.org/global/Themes/Skills_Knowledge and Employability/lang-en/index.htm](http://www.ilo.org/global/Themes/Skills_Knowledge_and_Employability/lang-en/index.htm)> Ivancevich, J.M., & Matteson, M.T. (2010). *Stress and Work: A managerial perspective*. Glenview, IL: Scott, Foresman.
- [22] Jali, S. L (2010) "Some factors influencing job satisfaction & job performance of reading teachers in the division of Iligan City, a proposal training program," Ph.D. dissertation, Dept. Educ., Liceode Cagayan University, Cagayan de Oro City, Philippines.
- [23] Jamal, M. (2004). "Job stress and Job performance: An empirical assessment". *Organizational Behavior and Human Performance*, vol.33. pp.1-21.
- [24] Jarvis, M (2012). *Stress News*. [Online]. Available: <http://www.isna.org.uk/Stressisna/teachersstress.html>
- [25] Kinman, G & Jones, F.(2008). Effort-reward imbalance and work-life conflict: Case of UK university educators. *Journal of Managerial Psychology*, 23: 236-251.
- [26] Kitenga, B. N. (2009). Factors Contributing to Occupational Stress and Coping Mechanisms among Primary School Teachers in Ngong Division of Kajiado North District. *Journal of Research Abstracts – JRA*, Volume 3.
- [27] Kocak, R (2006). The validity and reliability of the teachers' performance evaluation scale. *Educational Sciences: Theory and Practice*, 6(3): 799- 808.
- [28] Kothari, C. R. (2008). *Research methodology. Methods and Techniques*. New Delhi: New Age International Publishers.
- [29] Kyriacou, C., & Chien, P. (2004). Teacher stress in Taiwanese primary school. *Journal of Education Enquiry*, 5(2): 86-104.
- [30] Kyriacou, C. (2001). Teacher Stress: Directions for future research. *Educational Review*, 53, 1, 27–35.
- [31] Lazarus, R., & Folkman, S. (2004). *Stress, appraisal and coping*. New York: Springer Publications.
- [32] Lewis, S. and Cooper, C. (2005), *Work-Life Integration: Case Studies of Organizational Change*, Wiley, Chichester.
- [33] Lowe, G.S. (2010). *Creating Healthy Organizations: How Vibrant Workplaces Inspire Employees to Achieve Sustainable Success*. University of Toronto Press.
- [34] Luthans, F. (2011). *Organizational Behaviour :An Evidence Based Approach*, McGraw-Hill.
- [35] Maslow, A. (1971). *Motivation and Personality*. New York: Harper and Row.
- [36] McGrath, S. (2007) Transnational, Globalisation and education and training: evidence from the South African automotive sector. *Journal of Vocational Education and Training*, 59 (4), pp.575-589.
- [37] Meneze, M.M., (2005). *The Impact of Stress on productivity at Education Training & Development Practices: Sector Education and Training Authority*.
- [38] Mugenda, O. M. & Mugenda, A. G. (2008). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: ACTS Press.
- [39] Mugenda, A.G.(2011). *Social Science Research: Theory and Principles*. Kenya: ARTS.
- [40] Mullins, L. J. (2007). *Management and Organization Behaviour*. England: Prentice Halls.
- [41] Nachmias, D. & Nachmias, F.C. (2008). *Social Statistics for a diverse society with SPSS student version 20*, Milwaukee: Sage Publications.
- [42] Ng'eno, G. (2007). Causes of Burnout among Primary School Teachers within Kericho Municipality, Kenya. *Journal of Technology and Education*, Vol. 12 (2), pp.9-11.

- [43] Ng'ethe, J.M. (2013). Determinants of Academic Staff Retention in Public Universities in Kenya, Ph.D. Thesis. Jomo Kenyatta University of Agriculture and Technology.
- [44] Obwogi, J. (2011). Factors that Affect Quality of Teaching Staff in Universities in Kenya, PhD Thesis. Jomo Kenyatta University of Agriculture and Technology.
- [45] Poelmans, S. A. Y., Kalliath, T. & Brough, P. (2008). Achieving work life balance: Current theoretical and practical issues. *Journal of Management and Organization*, 14(3), 132-148.
- [46] Robbins, S.P. et al. (2008). *Organizational Behaviour*, (5th Ed.). Prentice Hall. pp 623-631.
- [47] Schultz, S and Steyn, T (2007). Stressors in the professional lives in South African Secondary School Teachers. *South African Journal of Education*, 27: 691 - 701.
- [48] Seaward, B. L. (2004). *Managing stress principles and strategies for health and wellbeing*. Boston: Jones and Bartlett Publishing.
- [49] Seibt, et al., (2008). Predictors of work ability in occupations with psychological stress. *Journal of Public Health*, 17: 9-18.
- [50] Sharpe, D.L., Hermsen, J.M & Billings, J. (2012). Factors associated with having flextime: A focus on married workers. *J. Family Econ. Issue*, 23(1): 51-72.
- [51] Siegrist, J. (2012). *Effort-Reward Imbalance at Work: Theory, Measurement and Evidence*, Medical Sociology Department, University of Dusseldorf, Germany.
- [52] Thrush, A. (2012). Leadership in Higher Education. *International Journal of Humanities and Social Sciences*, 2 (13), 1-12.
- [53] UNESCO. (2010). *National Education Support Strategy (UNES) for the Republic of Kenya*, 2010-2011.
- [54] UNESCO. (2007). *Teachers and educational quality: Monitoring global needs for 2015*. Montreal: UNESCO Institute for Statistics.
- [55] Unterbrink, T. et al. (2007). "Burnout and Effort-reward imbalance of German teachers". *Journal of Occupational Environment and Health*, vol.80, pp.433-441.
- [56] UWEZO Report (2012). *Where are our children learning in Kenya? Policy Brief KE.09 2012E*.
- [57] Watson, M. W. (2009). Leadership's influence on job satisfaction. *Radiologic Technology*, 80(4): 297-308.
- [58] Wilson, V. (2002). *Feeling the Strain: An overview of literature of teachers' stress: The Scottish Council for Research in Education*; Edinburgh.
- [59] Winefield, Boyd, J., Saebel & Pignata . (2008). *Job Stress in University Staff: An Australian Research Study*, Australian Academic Press.
- [60] World Health Organization (WHO), (2002). *Work Stress* 525 23 St.N.W, Washington, D.C.20037, pp.861-890.

AUTHOR'S PROFILE:

Francis Waititu Munyua is an elected Member of Parliament in Kenya. He is pursuing an Executive Master of Science degree in Governance and Leadership at Jomo Kenyatta University of Agriculture & Technology (JKUAT): Nairobi, Kenya. He is an accomplished agriculturist and very passionate in serving his community. Email: geraldkagumo@gmail.com

Dr. Kepha Andrew Ombui is an adjunct lecturer in the School of Human Resource and Development at Jomo Kenyatta University of Agriculture and Technology (JKUAT): Nairobi. Kenya. He also works as a Human Resource Officer with a leading Agricultural Research Institution. He is an expert in Human Resource Management having attained a PhD in Human Resource Management. Email: andrew.ombui@kalro.org