



RESEARCH ARTICLE

INFLUENCE OF TEACHER STRESS ON STUDENTS' ACADEMIC PERFORMANCE IN PUBLIC  
SECONDARY SCHOOLS IN KENYA: A CASE STUDY OF KAKAMEGA  
NORTH SUB-COUNTY

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ABSTRACT

Studies worldwide have revealed that teachers like other professionals do experience stress in their workplaces. Moderate stress has been found to enhance performance of workers whereas low and high stress characterized by boredom, fatigue, exhaustion and burnout leads to poor performance. Preliminary survey in five public secondary schools revealed that teachers in Kakamega North sub-county were experiencing stress. Students' performance on the other hand was below average from 2009 to 2013. The mean score in Kenya Certificate of Secondary School Examinations had remained below 4.29 compared to neighbouring sub-counties that had recorded higher means of 4.8 and above for the same period thus Kakamega North Sub County had a mean of 4.29, Kakamega South 5.38, Kakamega East 5.16 and Matete 4.84 for the same period. The objective of the study therefore was to establish the influence of teacher stress on student academic performance in public secondary schools in Kakamega North sub-county, Kenya. A conceptual framework based on Bray, Camlin, Fairbank, Dunteman and Wheelless (2001) concepts that stress is influenced by work factors which in turn influences performance of workers was adopted. On average, secondary teachers in public schools in Kakamega North sub-county were moderately stressed with a mean rate of 3.44. and its influence was weak, negative and not significant as signified by Pearson's "r" coefficient -.129 and accounted for .6% of the students academic performance as signified by Adjusted R square coefficient .006. Low and high stress levels among teachers had negative influence on students' academic performance as signified by Pearson's r of -.220 and -.017 respectively though not significant. Moderate stress levels among teachers had a weak positive influence on students' academic performance as signified by Pearson's r of .278 though not significant. The study concluded that teachers in Kakamega North sub-county were moderately stressed and stress among the teachers had little influence on students' academic performance. The study recommended that stress audits need to be conducted in schools with a view to improving stress levels among teachers to the benefit of students academic performance. The findings of this study are significant to educationists in identifying strategies to deal with stress levels among secondary school teachers in enhancement of students' academic performance in the Sub County.

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INTRODUCTION

Globalization has led to an increase in the growth of educational institutions all over the world and the education scene in Kenya is not an exception especially with the current scenario of trying to achieve Vision 2030. According to Aikaman and Unterhalter (2005), globally, educating a nation remains the most vital strategy for the development of the society throughout the developing world. In essence, teachers are the key stakeholders in the teaching profession. This means that any factor that affects the teaching profession affects teachers.

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One such factor is teacher stress. In the world of work stress is a commonplace and now major concern of managers and administrators of institutions. Teachers like other workers in different professions do experience stress. According to Kyriacou (2001), teaching is one of the top five most stressful careers. Stress affects the output. Performance is the function of administration. School Administration often blames performance on stress. A stressed teacher experiences fatigue, irritated easily, makes irrational decisions and this affects the teacher's as evidenced in students' performance. In teaching school factors and employment factors are management factors that influence teacher stress. The influence varies from one teacher to another, from one region to another, from one school to another and therefore consequences also vary. The success or failure of any educational system depends on the teacher.

The teachers' welfare is therefore very important for the success and achievement of educational goals. The role and responsibility of a teacher is multitasked in the present school system, the teacher has additional managerial responsibilities which include planning and executing instructional lessons, assessing students based on specific objectives derived from the set curriculum and communicating to parents, accountability for students' performance, supervisory role, classroom management and discipline and extracurricular activity. Teaching profession occupies important and prestigious place in the society, teachers are considered as the creators of knowledge, scientists, philosophers, advocates, politicians and administrators. A teacher is the principle means for implementing all educational programmes (Kaur, 2011). Cole (2004), when an organization's employees suffer from stress, results are likely to take one or more of the following forms: high level of sickness and absenteeism, reduced productivity and failure to meet targets, increased accidents and error rates, increased number of internal conflicts between individual and undesirable high rate of staff turnover.

Leka, Griffiths and Cox (2003) in United Kingdom, found out that if the key staff large numbers of workers are affected by work stress may challenge the healthiness and performance of their organization. Unhealthy organizations do not get the best from their workers and this may affect not only their performance in increasingly competitive market but eventually even their survival. According to Kwaku (2012), in his study on occupational stress and its effects on job performance: a case of Koforidua Polytechnic, there was a negative relationship between job stress and job performance. Those workers who had high level of job stress had low job performance. The study adopted a cross-sectional survey method as its research design. This study had a study population of 577 respondents. A sample size of 150 respondents was selected. This sample size was appropriate as the findings represented the entire population. The study used open and closed ended questionnaire. However the study could have incorporated other methods such as focus group discussions and interviews to get a variety of information. This study focused on occupational stress among polytechnic staff. This study found out that there was a negative relationship between job stress and performance. However, we have levels of stress and the study did not indicate which levels leads to low productivity among teachers, the study did not address influence of stress among teachers on students' academic performance in secondary schools.

Ubangari and Bako (2014) in their study on relationship of stress among university lecturers in Nigeria that the following are effects of stress: reduced work productivity, depression, lecturers lie or give excuses to cover up poor work, frequent headaches, neck ache, back pain and muscles spasms, social withdrawal or isolation, constant tiredness, weakness, fatigue, low sexual performance, increased frustration, anger and hostility, number of minor accident increase, difficulty in taking decision, increase smoking, alcohol or drug use, trouble learning new information, insomnia, nightmares, disturbing dreams. Koross (2010) in her study on the influence of teacher stress on academic performance of secondary school students: a case of Eldoret Municipality found out that there was a relationship between level of teacher stress and students performance. Teachers teaching in high performing schools had the lowest level of teacher stress. Teachers teaching in low

performing schools had the highest level of teacher stress. The transactional model of stress was used in the study. The ex-post facto design was used. The study involved 100 teachers drawn from six secondary schools. Stratified sampling was employed to categorize schools into high, average and poor performing schools. Multi-stage sampling was then used to select 6 schools from 20 secondary schools in the Municipality. Purposive sampling was used where teachers who had taught in the school for more than three years were identified to fill the questionnaires. The data collected was analyzed by use of percentages, rank score, chi-square and Analysis of Variance (ANOVA).

The level of significance was set at 0.05. This study focused on school mean in the Kenya Certificate of Secondary Education examinations. However, a school mean comprises effort of many teachers in the school. The study could have used individual teacher mean score in the subjects taught against stress level to get the influence of the teachers stress level on students' academic performance. The study used ex-post factor, research design, the study could have incorporated correlational research design to be able to get the influence of occupational stress on students' academic performance. Koech (2014) in his study on effects of occupational stress on job performance among public primary school teachers in Kuresoi sub-county, Nakuru County found out that employer related occupational stress factors had effects on job performance among public primary school teachers in Kuresoi sub-county. The target population of the study consisted of teachers from the four divisions in Kuresoi sub-County of Nakuru County with a sum total of 1237 teachers spread out in 181 public primary schools. The study adopted a descriptive survey research design. Stratified random sampling was used to select 64 public primary schools and 191 teachers to participate in the study. Data were collected using a questionnaire and data analysis was done using both descriptive statistics and inferential statistics with the aid of Statistical Package for Social Sciences. In assessing the relationship between stress among teachers and performance focused on syllabus coverage, coordination of co-curriculum, preparation and evaluation of pupils work and others, however, the study could have used individual mean grades of a teacher in national examination to find the relationship between job stress and performance.

Kendi (2005) in her study on impact of occupational stress on head teachers' tasks in secondary schools of Kisumu county, Kenya, concluded that the head teachers stress' is linked to a wide range of illnesses which affects the physical, behavioural and emotional states of the head teachers, other teachers and the school in general, stress affected the performance of head teachers and the head teachers stress in turn affected the performance of teachers and the general performance of the school. The study sampled head teachers, Heads of Department and the Provincial Director of Education. Study population was 245. The study sample was 73 respondents: stratified random sampling was used to identify study sample. Questionnaires and key informant interview schedule were used as data collection tools. Data analysis was done thematically using Statistical Package for Social Sciences based on the objectives of the study. The study adopted the descriptive survey design. In analysis, means and percentages were used. Cole (2004) found out that when an organization's employees suffer from stress, the results are likely to take one or more of the following forms: high level of sickness and

absenteeism and reduced productivity. Kendi (2005) in her study on impact of occupational stress on head teachers' tasks in secondary schools of Kisumu county, Kenya, concluded that the head teachers stress' is linked to a wide range of illnesses which affects the physical, behavioural and emotional states of the head teachers, other teachers and the school in general stress affected the performance. Koross (2010) in her study on the influence of teacher stress on academic performance of secondary school students: a case of Eldoret Municipality found out that there was a relationship between level of teacher stress and students performance. Teachers teaching in high performing schools had the lowest level of teacher stress. Teachers teaching in low performing schools had the highest level of teacher stress. All these studies have shown that stress has a negative relationship on productivity. However, the actual contribution of stress among teachers on students' academic performance was not addressed.

sub-county, there had been so many teacher management related stress cases from the teachers. According to the County director, most of the teachers complained that there was a lot of pressure at their place work, highhandedness by the principal, lack of promotion, poor student entry behavior, stunted professional development and poor results. With available data showing that the students' performance was poor and so many teacher management related stress cases, it was important that a study on teacher management related factors influencing teacher stress and its effects on student academic performance in public secondary schools in Kakamega North sub-county. From Table 2, it is observed that teacher management related stress cases were so many and it was important for a study to be carried out to establish teacher management related factors influencing teacher stress and its effect on student academic performance in public secondary schools in Kakamega North sub-county.

**Table 1. Kenya Certificate of Secondary Education Performance in Sub-counties of Kakamega County**

Sub-County	2009	2010	2011	2012	2013	Average
Mumias	5.23	5.297	6.206	6.063	6.202	5.7996
Matungu	5.373	5.816	6.196	5.928	5.798	5.8222
Kakamega South	4.508	4.806	5.700	6.254	5.629	5.3794
Likuyani	5.783	5.076	5.494	5.262	5.505	5.424
Butere	4.975	5.383	5.827	5.480	5.497	5.4324
Kakamega East	4.88	4.706	5.384	5.462	5.359	5.1582
Kakamega Central	4.635	4.771	5.499	5.206	5.337	5.0896
Lugari	5.464	5.806	5.350	5.417	5.39	5.4854
Navakholo	New	New	New	5.169	5.264	5.2165
Matete	4.804	4.805	4.104	5.350	5.159	4.8444
Khwisero	4.916	4.668	5.020	4.982	4.37	4.7912
Kakamega North	4.110	4.405	4.411	4.196	4.304	4.2852
Average mean	4.971	5.049	5.381	5.397	5.318	5.2232

**Table 2. Stress related Cases in Kakamega North Sub-County (2009 - 2013)**

Indicators	Years					Total	Teacher Management Related stress Cases
	2009	2010	2011	2012	2013		
Transfer requests	14	100	120	238	295	767	701
Absenteeism	60	65	60	75	100	360	319
Sick leave	40	73	100	99	187	499	401
Drug abuse	23	74	100	110	160	467	411

Source: County Director Kakamega North Sub-county, 2014

According to Teachers Service Commission Director as cited by Inyanji and Chepkoech (2014), out of the all the students who sat for Kenya Certificate of Secondary Education examinations in the year 2013, 73.02% scored D+ and below. According to Oparanya as cited by Inyanji and Chepkoech (2014), Kakamega North's poor educational performance had been criticized for long. According to him, it was upon educationists to put proper mechanisms in place in order to better the 2014 results. It is for this reason that the researcher sought to establish teacher management related factors influencing teacher stress and its effects on student academic performance in public secondary schools in Kakamega North sub-county. Nationally, out of 280 sub-counties in Kenya, Kakamega North was position 231 in the year 2012 in Kenya Certificate of Secondary Education examinations while in the year 2013, it was position 212. From Table 1, it is observed that Kakamega North has consistently been performing poorly. For the last five years (2009-2013), it can be observed that Kakamega North sub-county had been the last position except in the year 2011 where it was position 10 out of 11. From the table, it can also be observed that Mumias, Matungu, Kakamega South, Likuyani, Butere, Kakamega East, Kakamega Central and Lugari sub-counties are performing better. According to the County Director, in Kakamega North

## Research Objective

The research objective was: To establish the influence of teacher stress on students' academic performance in public secondary schools.

## Synthesis of Literature on influence of stress among teachers on students academic performance

The objectives of teaching process cannot be materialized without fully satisfied and committed teachers. In Malaysia it has been found that the teachers' stress is a reaction of teachers to the unwanted environment factors furthermore the performance of teachers is both tasks and non task related. The teachers' stress negatively affects the performance of teacher by lowering the productivity of individual teacher and of educational institution. The teachers' resources act as moderator by minimizing negative effects of stress (Anwar, Ishak, Sadaf and Shafiq, 2012). In their study on occupational stress, performance and emotional intelligence: a critical review found out that work stress was globally recognized workplace hazard whereas it had negative relationship with the employees' work performance and emotional intelligence. Therefore it was recommended that the organizations should

seriously consider the problem of work stress by fully comprehending all the stress contributing factors through learning and awareness. In that regard the employees should be given regular training for developing strong emotional competencies which will ultimately help them to boost up their performance and combat stress in proactive way. In that way the organizations could be saved from the overwhelming effects of work stress. Once such effects are fully handled the organizations could focus on building good performance levels of their employees. It will lead to the development of a better society as a whole (Kazi, Shah and Khan, 2013). In Pretoria, Menezwa (2005) found out that the majority of employees reported to have had poor performance feedback and that was an indication that productivity had been hampered by stress, majority of employees sometimes stayed away from work and some reported late for duty, an indication that productivity was hampered by their absenteeism. The study used descriptive research design. This design is appropriate but the researcher could have incorporated it with correlational research to be able to correlate employees stress and productivity. The target population was 51 employees. The sample size was 51. The sample size was a representative of the study population. The study used questionnaires to collect data. The study could have included other methods such as interviews to get a variety of data.

According to Professional dialogue (2012) on stress in the workplace: causes, effects and how to cope indicated employees under stress experience a narrowing of their attention spans, and their attention is easily diverted. They have trouble concentrating. They become disorganized. Consequently they make more mistakes. More mistakes leads to decreased productivity, which in turn leads to stress. Further study by Ozturk (2011) on cases from Istanbul and Stockholm indicated that teaching was a stressful profession. Effects of job stress needed to be monitored, because they impact not only the teachers, but indirectly affect students and schools. Improvements in the working conditions, understanding the needs, and feelings of teachers could possibly lead to improved student achievement, productivity at schools, and quality in education. In Pakistan in a study on effectiveness of teaching stress on academic performance of college teachers in Pakistan by Tahir (2011), teaching stress was found to be one of the factors that influence the academic performance of college teachers, however, this influence is observed deepen in teachers of private colleges of Pakistan. This study did not indicate the research design, study population and the sample size that was used, it is therefore difficult to verify its authenticity. This study focused on the relationship between teaching stress and academic performance of college teachers. In a study on relationship between occupational stress and job satisfaction of faculty: the case of universities of Punjab, Raza (2012), found out that most of the teachers do not perceive occupational stress as a big problem in university environment. The study had a sample size of 500 university teachers; stratified random sampling was used to select data. Bivariate analysis of correlation ( $r$ ) was used to analyze the relationship between occupational stress and job satisfaction. The research methodology was appropriate. However, this study was limited to university teachers. Anwar *et al*, (2012) in their study on teachers' stress, performance and resources: The moderating Effects of Resources on Stress and Performance in Pakistan, found out that teachers under stress cannot perform well. Their job satisfaction and motivation levels are decreased and they

show unwanted behaviors like absenteeism, mistakes during work and violence at work. Furthermore they have more health related physical and psychological complaints. Their students' satisfaction level is also decreased in such way that they cannot impart quality instructions to the students. Resultantly complaints come from parent and employers' side, which have hired students as their employees thus the overall image of the educational institution gets damaged. In a study on job stress, performance and emotional intelligence in Academia, Yusoff, Khan, and Azam (2013) confirmed that job stress had negative relationship with the faculty members' job performance and emotional intelligence. The study concluded that university teaching was stressful profession and academic staff members working in Universities of Pakistan were facing the problem of job stress as a result of which their work related performance was negatively affected. The study adopted a cross sectional survey design, Simple random sampling technique was used to select the sample size.

According to Bibi, Yasmin, Fozia and Mola (2004) as cited by Raza (2012) in his study on relationship between occupational stress and job satisfaction of faculty: the case of universities of Punjab, indicated that most of the head teachers at elementary level were stressed and it was negatively affecting their job satisfaction. Steyn and Kamper (2006) in their study on understanding occupational stress among educators: an overview in South Africa found out that the outcome of unproductive levels of educator stress can be harmful to educators and may have destructive effects on teaching and learning, their personal lives and most importantly, the learners. As such, educator stress was a matter of concern and needs to be addressed. On impact of stress on the performance of executives: an empirical study in Faridabad, India; Kapoor and Khanka (2013), established that executives with high stress levels perform less. It was also observed that executives perform more with increase in the stress levels provided the stress level doesn't cross the optimum level. One hundred participants from Automobile company room were administered with the questionnaire. The participants were of the age from 34 to 50 (mean age = 41 years) selected through random sampling. Manzoor Awan, Mariam (nd) on investigating the impact of work stress on job performance: A Study on textile sector of Faisalabad, job stress does not impact employees' job performance. The study used random sampling technique to select 150 employees of different companies from the textile sector. Relevant data was collected using structured questionnaire and descriptive and correlation analysis was conducted to check the relationship between stress and performance.

Yusoff, Khan and Azam (2013) carried out a study on job stress, performance and emotional intelligence in academia. The study sampled out 65 faculty members from two universities in Pakistan including one public and other private sector university. Data was collected using questionnaire, and was analyzed through descriptive and inferential statistical techniques. It was found that a negative relationship exist between job stress and performance, whereas a strong positive was found between emotional intelligence and job performance. The finding revealed that the faculty members in the higher education institution of Pakistan should focus not only on identifying the job stress factors but should also try to manage their emotional competence by working in a conducive atmosphere. In this way they can deal with problems of job stress and boost up their performance. The outcome of this

study implies that negative relationship exists between job stress and lecturer's performance in Nigeria and that university lecturers in Nigeria should identify the job stress factors and try to manage their emotional competencies by working in a conducive atmosphere, this would deal with problem of stress and boost their performance. Further study by Ubangari, Bako (2014) Relationship of Stress among university lecturers in Nigeria evidence that there is relationship between stress and performance among Nigerian university lecturers, the university lecturers were working in an un-conducive environment, poor condition of service and motivation. All these stressors culminate to slow down productivity among university teachers in Nigeria. Pop not given methodology not given. Depoju (2001) as cited by Sulaiman and Akinsanya (2014) identifies the under listed as the effects of occupational stress in educational system: physical disposition stress which persists in individual bodies tends to have a substantial negative influence on physical health or disposition of the teacher. Psychological disposition job stress had impact on mental alertness of individuals. In this respect, it increases peoples' anxiety, frustration, passivity and aggression as well as depression and suicide. Decision making to a large extent, job stress impedes effective decision making in schools because when those saddled with the responsibility of making decisions are stressed up, there is likelihood of procrastination and avoidance of making decisions, because of lack of concentration. Behavioural disposition changes in behaviour such as loss of appetite, increased alcohol consumption, smoking, sleeplessness and aggression.

This leads to increased turn-over and absenteeism, leading to poor or reduction in performance and productivity. In a study on factors contributing to the causes of work related stress and its impact on performance of teachers in Nkayi district, Zimbabwe, Ncube and Tshabalala (2013) found out that most of the respondents indicated that: they felt less able to do their job as a result; stress caused them to be less patient with children, colleagues and the administration; stress was also having detrimental impact on their health and lifestyle as they spent many hours visiting doctors and other health experts thereby depriving pupils of the teachers' services. According to Kwaku (2012) in his study on occupational stress and its effects on job performance: A case of Koforidua Polytechnic found out that there was a negative relationship between job stress and job performance. Workers who had high level of job stress had low job performance. All the factors contributing to job stress affected all the categories of staff of Koforidua Polytechnic. This study used systematic sampling technique to select the sample size. This study focused generally on influence of stress on staff members of Koforidua polytechnic. Kithokoo (2008), in his study on school factors affecting performance in Kenya Certificate of Primary Education in public primary schools in Yatta division lower Yatta District, Kitui county found out that a number of school factors were found to affect performance. The factors included; number of teachers, understaffing, availability of teaching and learning materials and enrolment level. This study focused on factors influencing performance in primary school; however, it did not address factors influencing performance in secondary schools. The study did not address the influence of stress among teaches on students' academic performance in secondary schools, a knowledge gap that the current study sought to fill. According to Karihe, Namusonge and Iravo (2015) in their study on effects of working facilities stress factors on the performance of employees in public universities in Kenya

workers under stress cannot perform well. Their job satisfaction and motivation levels were decreased and they showed unwanted behaviours like absenteeism, mistakes during work, drugs use and abuse and violence at work. Furthermore they had more health related physical and psychological complaints. The university employees' satisfaction level was also decreased in such way that the university could offer quality education to the students. The resultant effect include complaints from parents and other stakeholders on the status of service delivery at the institutions, frequent strikes, dissatisfied employees and poor performance of the universities in general, and eventually overall image of the educational institution gets damaged The research design used for the study was a cross-sectional evaluation survey. Cluster sampling technique was employed for the survey. The data collection tools used for the study were a questionnaire and interview schedules to obtain data from primary sources and a document review and analysis for secondary sources.

Kendi (2012) focused on impact of occupational stress on head teachers' found out that head teachers stress affects other teachers and the school performance. Stratified random sampling technique was used to identify the study sample. This study focused on the effect of head teachers' stress on teachers and students performance. However, it did not address the influence of stress among teachers on students' performance in Kakamega North sub-county. Further study in Kenya by Musyoka, Ogutu and Awino (2012) in their study on employee stress and performance of companies listed in the Nairobi Securities Exchange found that stress had positive influence on corporate performance. The relationship between stress and physiological, psychological and behavioral manifestation was also positive. These finding can provide the direction for human resource managers on how well to handle employee stress and formulate the best decisions to enhance corporate performance. According to Kendi (2012) in her study on impact of occupational stress on head teachers' tasks in secondary schools of Kisumu County, Kenya found out that the position of headship, stake holders and families were the sources of stress to the head teachers; the level of stress differs with head teachers biological, psychological and social systems; head teachers stress affects other teachers and the school performance; and the stress mitigation strategies employed by the head teachers and Ministry of Education are not effective. In a study on factors contributing to stress among public secondary school teachers in Vihiga district, Kenya Ayoti and Poipoi (2011) found out that stress was caused by; heavy workload, lack of clarity of duties and responsibilities, poor management, substandard equipments and insufficient salaries. The effects of stress were: poor relations with the students and administration, lack of unity, absenteeism, loss of motivation and teacher transfer. The final consequence of stress mentioned was teacher transfer as teachers would see transfers as the only way to escape the stressful conditions they find themselves in. The study adopted a theoretical framework from the one propounded by Jerrold. The research design for the study was descriptive survey. The sample size for the study was 16 teachers. The researcher used interview schedules and questionnaires as the data collection instruments. The method of sampling that the researcher employed was stratified random sampling. The study population was not been indicated and so we can verify the appropriateness of the sample size. This study focused on the factors causing stress among public secondary school teachers. However it did not address the influence of teachers' stress on academic student performance,

a knowledge gap that the study sought to fill. Studies reviewed by Tahir (2011) in Pakistan, Yusoff, Khan and Azam (2013) and Kwaku (2012) in Ghana, Ncube and Tshabalala in Zimbabwe and Kendi (2012) in Kenya have shown that teachers' stress affects students performance. However, the studies did not address influence of stress among teachers on student performance.

### Conceptual Framework

The conceptual framework (Figure 1) is based on Bray, Calmlin, Fairbank, Dunteman and Wheelless (2001) concept that there is a link between stress and job functioning of employees. The relationship is that there is classic inverted U-shaped relationship between stress and performance that is employees who experience moderate degree of job stress perform their job most efficiently, while those who experience either low or high work related stress show reduced work efficiency. Bray, Camlin, Fairbank, Dunteman and Wheelless (2001) also assert that there are job related factors that influence stress among workers.

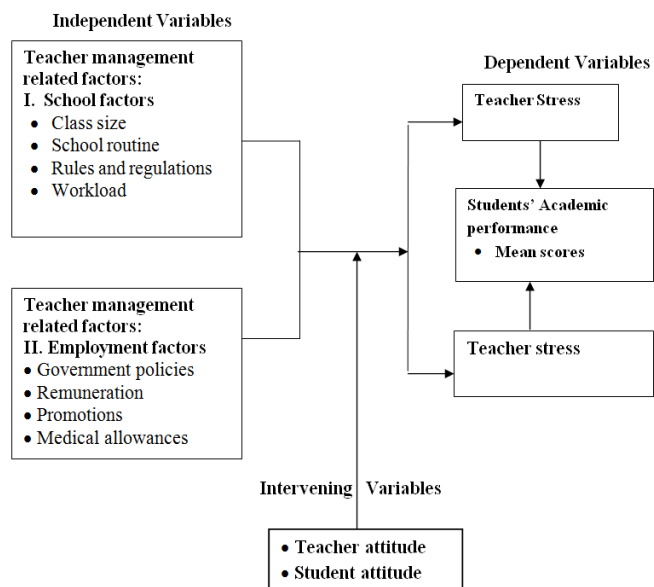


Figure 1. A Conceptual Framework Showing the Influence of Teachers' Stress on Students Academic Performance

The conceptual framework postulates that teacher management factors such as class size, workload, school routine, rules and regulations, government policies, remuneration, promotions and medical allowances influences teacher stress. Once a teacher is stressed, he/she can be affected positively or negatively and this can affect job performance as signified by student academic performance. If the teacher is affected negatively it leads to poor students' academic performance and if affected positively, leads to good students' academic performance. If a teacher is well paid, has manageable workload, consulted and involved in making decisions on policies, teaches well behaved students, receives support from the administration and given promotions will experience no or less stress. The teacher will concentrate on his/her work and this will lead to good students' results. However, when a teachers is having a big load that he/she is not able to handle, a large class, no promotion, not involved in decision making and more children, the teacher is likely to experience teacher management related stress which will affect his/her performance eventually leading to poor students' results. A stressed teacher can only improve performance when he/she

has a positive attitude. Positive attitude will make the teachers work hard to better performance. When a teacher has a negative attitude, will not work hard and so this will lower students' performance.

### MATERIAL AND METHODS

The study will adopt descriptive survey and correlational research designs. The study population consisted of 45 principals, 133 teachers and one Teachers Service Commission County Director. The study used saturated sampling technique to select 40 principals and one Teachers Service Commission County director. Purposive sampling technique was used to select 99 teachers of the form four 2014 students. Quantitative data was collected using questionnaires and document analysis guide while qualitative data was collected using interview schedules. Data was collected by use of questionnaires, interview schedules, and document analysis guide. Face and content validity of the instruments was determined by experts in the area of Educational Administration whose input was incorporated in the final instruments before going to the field. Reliability of instruments was established through a test re-test method in 5 (10%) of the schools that were not involved in the main study whereby Pearson's r coefficient of 0.7 and above at a set p-value of 0.05 was considered reliable. In this case the Pearson's r coefficient for teachers' questionnaire was 0.89, hence the instrument was declared reliable. Quantitative data from closed-ended items of the questionnaire was analyzed using frequency counts, percentages and means in order to establish the stress levels. Qualitative data from the open-ended items in the questionnaire and interviews were transcribed and analyzed in emergent themes and sub-themes.

### RESULTS

Demographic Characteristics of the Teachers: The demographic data of teachers were as shown in Table 3.

Table 3. Demographic Characteristics of the Teachers (n=99)

Demographic Characteristics	Frequency (F)	Percentage (%)
Gender		
Male	60	60.6
Female	39	39.4
Total	99	100
Marital Status		
Married	62	62.6
Single	26	26.3
widow	3	3.0
widower	5	5.1
Divorced	3	3.0
Total	99	100
Age in Years		
20-29	23	23.23
30-39	23	23.23
40-49	32	32.32
50 and Above	21	21.22
Total	99	100
Highest Level of Education		
Diploma	12	12.12
Bachelor of Education	54	54.54
Bachelor of Science and Post Graduate Diploma in Education	21	21.22
Masters	12	12.12
Total	99	100
Teaching Experience		
< 5 years	12	12.12
6-10 years	29	29.29
11-15 years	35	35.35
16 and above	23	23.23
Total	99	100

Sixty (60.6%) of teachers were male and 39 (39.4%) were female. This means that majority of the teachers in the sub county were male. Sixty two (62.6%) of the teachers were married, 26 (26.3%) were single, 5(5.1) were widowers, 3(3.0) were widows and 3 (3.0%) were divorcees. This means that majority of the teachers were married. The study also sought to investigate the ages of the teachers. The study categorized the ages of the respondents into four age brackets; Age bracket 20-29 had 23 (23.23%) respondents, 30-39 had 23(23.23%) respondents, and 40-49 had 32 (0.32%) respondents and 50 and above had 21 (21.22%) respondents. It can be concluded that a majority of the respondents were in the age bracket 40-49. This is the age when most parents have a responsibility of raising their children. The study also sought to investigate the level of education of the teachers.

experience, 29(29.39%) teachers were in the bracket of 6-10 years of experience, 35 (35.35%) were in the bracket of 11-15 years of experience and lastly 23 (23.24%) were in bracket of 16 and above years. This means majority of the teachers have taught for 6-10 years. The information on experience was important as the more experienced teachers were, the higher their ability to understand the students better. The demographic information enabled as to get balanced information as we had teachers in all the categories, that is single, married, widows, widowers and divorcees.

### Research Hypothesis

The research hypothesis responded to was: There is no statistically significant relationship between teacher stress and students' academic performance.

**Table 4. Students Academic Performance 2014 as indicated by Teachers (n=99)**

Respondent (S/N)	Performance	Respondent (S/N)	Performance	Respondent (S/N)	Performance
1	8.00	43	5.20	85	5.10
2	7.70	44	5.20	86	3.30
3	4.10	45	6.26	87	6.49
4	7.45	46	6.25	88	7.99
5	4.25	47	4.80	89	7.38
6	3.43	48	5.41	90	7.32
7	6.59	49	6.21	91	4.31
8	4.30	50	4.16	92	5.15
9	6.75	51	8.15	93	5.11
10	3.95	52	4.01	94	4.78
11	5.35	53	4.61	95	5.24
12	5.06	54	3.68	96	3.93
13	6.81	55	4.25	97	4.30
14	6.10	56	4.47	98	4.15
15	5.20	57	6.05	99	7.50
16	6.91	58	4.06		
17	3.30	59	6.10		
18	5.45	60	6.60		
19	8.51	61	5.28		
20	3.25	62	4.26		
21	5.00	63	4.50		
22	5.25	64	7.60		
23	6.20	65	4.36		
24	7.15	66	4.50		
25	4.67	67	5.20		
26	4.95	68	3.92		
27	7.46	69	6.74		
28	3.21	70	4.79		
29	4.35	71	6.99		
30	5.25	72	6.2		
31	4.43	73	2.56		
32	4.15	74	3.91		
33	4.91	75	5.37		
34	7.06	76	6.71		
35	7.15	77	3.75		
36	5.75	78	4.16		
37	3.80	79	3.91		
38	6.31	80	3.84		
39	5.95	81	7.40		
40	6.85	82	7.02		
41	6.36	83	4.70		
42	4.99	84	6.39		

Source: Field Data, 2015

The information was important as it helped in gauging the responses of the respondents. Majority of the teachers had Bachelor degree in education, that is 54 (54.54%), Bachelor of Science and Post Graduate Diploma in Education were 21(21.22%), twelve (12.12%) had Masters degrees while 12 (12.12%) had diploma degrees. The study sought to determine the teaching experience of the teachers. The teaching experience was categorized into four categories that is, <5 years, 6-10 years, 11-15 years, 16 and above years. The results showed that 12 (12.12%) teachers had less than 5 years of

To actualize this hypothesis, the level of teacher stress, based on data that was obtained from the questionnaire, that is, the instrument used to collect data on teacher stress (adapted from Holmes and Rae, 1967) and data on students academic performance (Table 4) were correlated using Pearson's "r". The students' academic performance are mean scores students earned under the instruction of the respective teachers in respective subjects from the time the students entered form one in 2011 and sat Kenya National examinations Council in 2014. These mean scores were used in computing the

relationship between teacher stress and students academic performance using Pearson product moment correlation coefficient. The results were as shown in Tables 5.

**Table 5. Relationship between Teacher Stress and Students Academic Performance**

		Students academic Performance
Teacher stress	Pearson Correlation	-.129
	Sig. (2-tailed)	.209
	N	99

From Table 5, it can be observed that teachers' stress had a weak negative influence on students' academic performance. The influence was not significant as the calculated P-value was 0.209 which was greater than the set critical value of 0.05. The null hypothesis was accepted. Nevertheless, since the Pearson's "r" was -.129, it means that teachers' stress negatively influenced students' academic performance. To determine the actual influence of teachers stress levels on students' academic performance, regression analysis was done and the results were as shown in Table 6.

**Table 6. Regression Analysis of the Influence of Teachers Stress on Students' Academic Performance**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.129 <sup>a</sup>	.017	.006	1.372298

Predictors: (Constant), Teacher Stress

From Table 6 it can be observed that stress level among teachers accounted for 0.6% of students' academic performance. 99.44% could be explained by other factors. Students' in Kakamega North sub-county have consistently performed poorly in Kenya Certificate of Secondary Education Examinations. To determine whether teachers' stress level was a significant predictor of students' academic performance or not, ANOVA was computed and the results were as shown in Table 7.

**Table 7. Analysis of Variance on the Influence of Teachers Stress on Students' Academic Performance**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	3.008	1	3.008	1.597	.209 <sup>b</sup>
Residual	178.904	97	1.883		
Total	181.912	98			

a. Dependent Variable: Performance

b. Predictors: (Constant), Teacher Stress

From Table 7, it can be observed that stress level among secondary school teachers was not significant predictor of students' academic performance in Kakamega North Sub-county ( $F(1,97)=1.597 > 0.5$ ). The low stress level (1.45-2.44) of teachers was correlated with students' academic performance and the results were as shown in Table 8.

**Table 8. Relationship between Low Levels of Stress among Secondary School Teachers and Students' Academic Performance**

		Students Academic Performance
Low stress level among teachers	Pearson correlation sig (2 tailed)	-0.220
	N	0.780
		6

From Table 8, it can be observed that there was a weak negative relationship between low stress level among teachers' and students' academic performance. The relationship was not significant as the calculated P-value was 0.780 which was greater than the critical value 0.05. The moderate stress level (2.45-3.44) of teachers was correlated with students' academic performance and the results were as shown in Table 9.

**Table 9. Relationship between Moderate Stress Levels among Teachers on Students' Academic Performance**

		Students Academic Performance
Moderate stress level among teachers	Pearson correlation sig (2 tailed)	0.278
	N	0.096
		37

From Table 9, it can be observed that moderate stress level had a weak positive influence on students' academic performance. The influence was however not significant as the calculated p-value was 0.096, greater than the set critical value of 0.05. The study further sought to estimate the actual influence of moderate stress level on students' academic performance. The results were as shown in Table 10.

**Table 10. Regression Analysis of the Influence of Moderate Stress Level on Students Academic Performance**

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.278	.077	.051	1.29367

Predictors : ( constant), Moderate Stress Level

From Table 10, it can be observed that moderate stress level among teachers accounted for 5.1% of students' academic performance, 94.9% could be explained by other factors not included in the study. These factors could be are: students' initiative, students' health status, students' family background and stability of the teachers as was indicated by respondents in open ended items in the questionnaire. ANOVA on the influence of moderate stress level among teachers on students' academic performance was computed to confirm whether moderate stress level among teachers was a significant predictor of students' academic performance. The results were as shown in Table 11.

**Table 11. Analysis of Variance on the Influence of Moderate stress Level among Teachers on Students Academic Performance**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	4.890	1	4.890	2.922	.096 <sup>b</sup>
Residual	58.576	35	1.674		
Total	63.465	36			

a. Dependent Variable: Performance

b. Predictors: (Constant), Moderate Stress Level

From Table 11, it can be observed moderate stress level among teachers in Kakamega North sub-county is not a significant predictor as the calculated P-value was .096 greater than the set critical value of 0.05.

The high stress level (3.44-4.45) of teachers was correlated with students' academic performance and the results were as shown in Table 12.



**Table 12. Influence of High Stress Level on Students Academic Performance**

		Student academic Performance
High stress level among teachers	Pearson Correlation	-.017
	Sig. (2-tailed)	.904
	N	56

From Table 12, it can be observed that high stress had a very weak negative influence on students' academic performance. The influence was not significant as the calculated P-value was 0.904, greater than the set critical value of 0.05. This means that increase in teacher stress reduced students academic performance as signified by Pearson's correlation coefficient -.017.

**Table 13. Regression Analysis Showing Influence of High stress level on Students Academic Performance**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.017 <sup>a</sup>	.000	.018	1.36252

a. Predictors: (Constant), High Stress Level

From Table 13, it can be observed that high stress level among teachers accounted for 1.8% of students' academic performance 98.2% could be explained by other factors. These factors are availability of teaching resources, stability of teachers and students, students' entry behaviour and students' family background as was indicated by qualitative data from open ended items in the questionnaire and interview findings. In fact, there are higher levels of stress in schools especially when it comes to testing and marking of examinations and dealing with un-cooperative parents, however, due to may be better conditions in certain areas, for instance, control over work, motivation and support at work, the teachers are able to perform well and stress is unable to retard the performance of the teachers. ANOVA on the influence of high stress among teachers on students' academic performance was computed to confirm whether high stress level among teachers was a significant predictor of students' academic performance. The results were as shown in Table 14.

**Table 14. Analysis of Variance on the Influence of High Stress Level on Students Academic Performance of the Students**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.027	1	.027	.015	.904 <sup>b</sup>
	Residual	100.249	54	1.856		
	Total	100.277	55			

a. Dependent Variable: Performance

b. Predictors: (Constant), High Stress Level

From Table 14, it can be observed high stress level among teachers in Kakamega North sub-county is not a significant predictor as the calculated P-value was 0.904 greater than the set critical value of 0.05. Therefore there was no need to compute simple linear regression analysis. These findings concur with those of Bray et al (2001) who found that high stress had very low or no influence on performance.

## DISCUSSION

Teacher stress indeed is a factor that influences students' academic performance. Studies have supported these assertions with contradiction that is, some have found out that teacher

stress improves students academic performance while others have indicated that teacher stress reduces students academic performance. The results obtained from this study indicate that teacher stress negatively influenced students' academic performance. Nevertheless, since the Pearson's "r" was -.129 it means that teachers' stress had a weak, negative influence on students' academic performance though the relationship was not significant. These findings concur with those of Khan and Azam (2013) who found that there was negative relationship between job stress and performance. From the findings, the poor performance of the students' is not as a result of stress among teachers, stress among teachers is moderate. According to Bray *et al.* (2001) concepts, it was expected that students' performance should have been high as moderate stress motivates the teacher to work hard to better students' performance. However, the performance of the students is poor. This means that the moderate stress in Table 4.3 in this case was negative rather than positive Students' performance could be as a result of other factors like lack of teaching materials, students' entry behaviour, students discipline and students' absenteeism as was indicated by qualitative data from open ended items in the questionnaire and interview findings.

From these findings, it can be observed that stress level among secondary school teachers had a weak negative influence on students' academic performance and the influence was not significant. This means stress level among teachers cannot be relied on to determine students' academic performance. This also means that there could be other factors affecting students' performance that were not part of this study. People react differently when undergoing intense pressure. When a teacher develops stress related sicknesses, his/her productivity goes down. This teacher may develop a bad relationship with other teachers due his/her anger, irritability, making mistakes while doing school work and this may also affects the productivity of other teachers in school hence affecting students' academic performance. These findings are in line with the findings of Kazi *et al* (2013) that work stress is globally recognized workplace hazard as it has a negative relationship with employees' work performance and emotional intelligence. The findings are also in line with the findings by Khan and Azam (2013) that confirmed that job stress had a negative relationship with faculty members' job performance. The study concluded that university teaching was a stressful profession and academic staff members working in Universities of Pakistan were facing the problem of job stress as a result their work related performance was affected. However, the findings of this study disagrees with the findings Manzoor, Awan and Mariam (nd) which assert that there was no significant relationship between job stress and employee performance. The study further indicate that stress levels among employees in textile sector of Faisalabad was high in certain areas like work overload and long work hours, affect on family life, pressure at work, job insecurity, and physical agents, however, that kind of stress did not affect the performance of the employees. The study concluded that the there was no relationship between job stress and employee performance.

Stress is normal to human existence. A totally stress free state is death. During the interviews with the Principals, it was revealed that stress affects performance only if the individual affected does not manage the stress. The science of stress management is therefore very important as it can help in keeping stress to a stimulatory level that was healthy and manageable. The study went further to establish the influence

of different levels of stress among teachers in public secondary schools in Kakamega North sub-county on students' performance, as a matter of interrogating the findings further to resolve the issue of contradictions on the relationship between stress and performance. Since the N-value was small regression analysis was not computed. Brace, Kemp and Snelgar (2006) state that for regression analysis to be computed the N-value should be 10 times the number of independent variables (predictor variables). Since the influence was not significant, it means low stress level cannot be relied on to determine the students' academic performance. Teachers experiencing low stress levels are never bothered by teaching activities they are not motivated, not anxious about students' academic performance. They are not disturbed by the need to improve students' academic performance. In normal circumstances, a teacher who is concerned with students' academic performance will always be in search for teaching/learning resources, preparation of lessons, frequent testing of students and this culminate into risk in stress level.

If majority of the teachers are experiencing low stress, things like teamwork and effective communications suffer greatly and this means, teachers cannot share ideas that may better performance. Interview findings revealed that teachers who exhibit low stress level are non-performers, because they joined teaching profession by default. In this respect, one Principal stated: "Teachers experiencing low stress level are a burden in our schools. They don't care about anything and their students results are the worst. These are the teachers we surrender to other schools." This is true because the Principal had long experience as a teacher and a principal for 20 years. These findings concur with those of Subbulaxmi (2002) that stress can have various effects on the individual as well as on the organization. High levels of stress or even low levels sustained over a long period of time, can lead to reduced employee performance and thus require action by management. Low stress may result in a teacher response as boredom or unchallenging. Even when that task is very important, a teacher who is experiencing low stress level, lack of enough pressure on the teacher, attention and concentration to do the task may make the teacher perform poorly. These findings are also in line with the findings of Bray, Camlin, Fairbank, Dunteman and Wheelless (2001) that there is a link between stress and job functioning of employees. The relation is that there is a classic inverted U-shaped relationship between stress and performance that is employees who experience moderate degree of job stress perform their job most efficiently, while those who experience either low or high work related stress show reduced work efficiency. The test of inverted U-shaped hypothesis of stress and performance in relationship in the industrial context has been undertaken by Srivastva and Krishna (1991). These results disagree with the findings by Greenberg (2006) that teachers experiencing job satisfaction and lower stress levels create a climate that is conducive to the development and maintenance of a safe, supportive learning environment where children feel cared for and respected. This in turn results in high performance expectations, commitment to the academic success of all students and openness to parental and community involvement.

Since moderate stress level was not significant, it means that moderate stress level cannot be relied on to determine the students' academic performance. Teachers experiencing positive moderate stress levels are motivated to do their work; they are concerned with students' demands, they are anxious to

better performance. These are teachers who are always searching for skills to better their performance and this culminates to rise in stress level. The findings from interviews revealed that teachers who are in teaching profession by choice tend to have moderate stress level. In this respect the Principal (P, 15) said: Some teachers are intrinsically motivated and they work to better performance. These teachers are always ready to face challenges and look for solutions to them. Most principals don't wish to surrender such teachers. They are an asset to the school. Teachers who are in teaching profession by default are stressed. Such teachers are irritated easily, and may not perform well.

In real life situation, moderate stress is necessary as it motivates a teacher to work. We may feel challenged, but the sources of the stress are opportunities that are meaningful to us. Eustress helps provide us with energy and motivation to meet our responsibilities and achieve our goals. When the stress level of an individual increases, performance increases to a certain level to the point of eustress or healthy tension. As the level of stress continues to increase to levels that the individual cannot manage, the level of performance begins to decrease. The findings from the study are inconsistent with the findings of Peretomode (nd) in his study on work and stress among academic administrators of higher education institution in Delta estate that the administrators experienced on average a low to moderate stress level and this did not negatively affect their performance. In real life situation, a short deadline but adequate that is given to a teacher motivates and encourages the teacher to work hard to complete the given assignment. This is because a teacher may experience moderate stress that will make him or her get actively involved in the assigned work and do it perfectly but when the deadline is very short and not adequate, it may stimulate high levels of stress that may lead to physical discomfort in a teacher and this may make the teacher ineffective in his or her work. During the interviews with the Principals, it was observed that just enough stress was important to stimulate performance in a school. For this instance, one Principal stated: "Just enough stress can keep you on toes; too much stress can have debilitating effects on our health agitating many problems such as heart disease, high blood pressure, depression, stroke and sleep disorders." Another one stated: "Stress is harmful. Teachers under stress drink or smoke to suppress their stress level. This makes most of them to fail to report to school on daily basis. This lowers performance as most lessons go untaught."

Since the influence was not significant, it means high stress level cannot be relied on to determine the students' academic performance. Teachers experiencing high stress levels are extremely bothered by teaching activities they are anxious about students' academic performance. They are disturbed by the need to improve students' academic performance. In normal circumstance, teachers who are extremely bothered about certain issues do not perform well as their tendency to perform well also reduces. With increasing levels of stress, the teachers thinking capacity is interfered with and this demoralizes the teacher and his tendency to perform well also reduces. Interview findings revealed that teachers who exhibit high stress level do not perform well, because they are affected by stress related illnesses such as headaches and insomnia that hinder their performance. In this respect, Principal (P, 17) stated: Job stress is considered rising and has become challenge for the teachers and because high level stress lowers productivity, this is because it leads to increased absenteeism

and collection of other teachers' problems like alcoholism, drug abuse, hypertension and host of cardiovascular problems. A teacher who is highly stressed may be angered by very small things and so this may make the teachers to disagree with his or her colleagues and so quality time could be wasted on bitter exchange between colleagues. High stress affects the ability of a teacher to remember things they already know. When the teacher is mentally exhausted from all the worries, anxieties and tension that may have been brought up by the working environment, the teacher is easily distracted and prone to make costly and harmful or even fatal mistakes at school. Teachers who may be experiencing high stress have lower engagement, less productive and have high absenteeism rate and that means the work accumulates during their absence and thus generate even more stress in a teacher about how to cover up the missed lessons. The findings are in line with the findings of Koross (2010) in her study on the influence of teacher stress on academic performance of secondary school students: a case of Eldoret Municipality that there was a relationship between level of teacher stress and students' performance. Teachers teaching in high performing schools had the lowest level of teacher stress. Teachers teaching in low performing schools had the highest level of teacher stress.

These findings concur with those of Dar, Akmal, Naseem and Khan (2011) in their study on impact of stress on employees' job performance in business sector in Pakistan, who found out that job stress had a negative relation with job performance that when stress occurs, it affects the performance of employees negatively. However, this study did not state the research design that was used and there it's difficult to authenticate the results. The findings are also in line with the findings of Yusuf, Olufunke and Valentine (2015) in their study on causes and impact of stress on teachers' productivity as expressed by primary school teachers in Nigeria that the major impacts of stress on teachers' productivity are: lack of commitment to work; transferring of aggression to students; and distraction at work. The result showed that majority of primary school teachers were stressed on the job and this had negative impacts on their productivity. When stress is perceived as uncontrollable or unmanageable, the teacher begins to experience gradual decrease in performance and this leads to a decline in productivity. A teacher who may be taking care of his/her sick father at the hospital, paying school fees for the sister and taking care of her extended family members may find it hard to deal with overwhelming stress and so if the situations are not handled well may lead to reduced performance, poor relationship with colleagues, ill health and the teacher may end up drinking alcohol or even smoking. The findings of this study also concur Ubangari and bako (2014) in their study on relationship of stress among university lecturers in Nigeria that the following are effects of stress: reduced work productivity, depression, Lecturers lie or give excuses to cover up poor work, frequent headaches, neck ache, back pain and muscles spasms, social withdrawal or isolation, constant tiredness, weakness, fatigue, low sexual performance, increased frustration, anger and hostility, number of minor accident increase, difficulty in taking decision, increase smoking, alcohol or drug use, trouble learning new information, insomnia, nightmares, disturbing dreams.

A teacher who is worried so much about performance may not perform well. This teacher may lower the performance because, too much worry may culminate into stress related sickness and so the teacher may not be productive in school.

This Findings disagree with the findings of Manzoor, Awn and Mariam (nd) in their study on investigating the impact of work stress on job performance in textile sector in Faisalabad who revealed that the stress levels among employees in textile sector of Faisalabad is high in certain areas like work overload and long work hours, affect on family life, pressure at work, job insecurity, and physical agents, however, this kind of stress is not affecting the performance of the employees. The study concluded that there is no relationship between job stress and employee performance. In fact, Stress is normal to human existence. A totally stress free state is death. The science of stress management therefore is to keep stress to a stimulatory level that is healthy and manageable.

The results also disagrees with the findings of Education International/European Trade Union Committee for Education Stress Report (1999) that teachers experiencing high levels of work-related stress can develop a sort of "stress syndrome" that combines their stress with negative emotions like anger, fear and helplessness. This syndrome can make it difficult for them to relax in their spare time, have a negative impact on their health and well-being, greatly interrupt their interpersonal transactions, and negatively interfere with their non-professional and family life. It is important that teachers understand that, in education, there is a profound need for restoration, relaxation and rejuvenation, and they should be allowed these things without feeling guilty. Prevalence of stress or a stress-related illness is often associated with shame, guilt and a loss of pride and dignity. Aside from feeling a lack of support for their job, most teachers feel that their employers also fail to look after their health and safety. Some of the more commonly reported stress-related illnesses are high blood pressure, migraine headaches, recurrent virus infections, irritable bowel syndrome, stomach ulcers, asthma, and depression. However, one of the greatest risks of stress is the decrease in the quality of education and the reduction in teacher effectiveness. The combination of all of these elements means that the overall quality of education provided by the institutions also suffers.

## **Conclusion**

Stress among public secondary school teachers in Kakamega North Sub County did not have significant influence on students academic performance in Kenya Certificate of Secondary examinations. This means that factors such as teacher experience, qualification, age, gender and attitude may have played a role in influencing students' academic performance. The other factors being students academic discipline, entry behaviour and physical discipline, besides school infrastructure and teaching and learning resources.

## **Recommendations**

In light of the finding that teachers transfer policy increases stress among teachers, the government should allow teachers to transfer to other schools where they can feel comfortable as that will make the teacher to become motivated to teach and this will culminate into better students' performance. With regard to the finding that evaluation policy on students academic assessment processes increases stress among teachers, the study recommended that the formative examinations deadlines be extended to give teachers ample time to mark and revise the examinations done in schools. In light of the findings that teachers promotion policy increases

stress among teachers, the study recommended that teachers promotion policy to be amended to allow fair contest mobility. School managements should endeavour to motivate staff in a manner that creates moderate stress levels that have been found to enhance performance as opposed to high and low stress levels that are associated with low performance. This would translate to higher students academic performance.

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