TEACHER MANAGEMENT RELATED FACTORS INFLUENCING TEACHER STRESS AND ITS EFFECT ON STUDENT ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN KAKAMEGA NORTH SUB-COUNTY, KENYA

BY

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DECLARATION

DECLARATION BY THE CANDIDATE

This thesis is my original work and has not been presented for the award of any degree to any other University.

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DEDICATION

This thesis is dedicated to my children Lovella, Lavanne and Lashawn. My greatest personal accomplishment has been for you.

ABSTRACT

Studies worldwide have revealed that teachers do experience stress which affect their performance. 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 schools revealed that teachers in Kakamega North sub-county were experiencing stress due to some teacher management related factors. 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 purpose of this study therefore was 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, Kenya. The objectives of the study were to; establish stress levels among secondary school teachers, determine influence of school factors on teacher stress; determine influence of employment factors on teacher stress and establish the relationship between teacher stress and students' academic performance in public secondary schools in Kakamega North sub-county. A conceptual framework based on Bray, Camlin, Fairbank, Dunteman and Wheeless (2001) concepts that stress is influenced by work factors which in turn influences performance of workers was adopted. The study adopted descriptive survey and correlational research designs. The study population consisted of 45 principals, 900 teachers and one Teachers Service Commission (TSC) County Director. The study used saturated sampling technique to select 40 principals and one TSC County director. Purposive sampling technique was used to select 100 teachers of the form four 2014 students. Quantitative data was collected using questionnaires and document analysis guide while qualitative data was collected by use of interview schedules. Face and content validity of the instruments was determined by experts in Educational Administration whose input was incorporated in the instruments. Reliability of instruments was established through a test re-test method in 5(11.1%) of the schools that were not involved in the study. The teachers' questionnaire had a reliability coefficient of .8. Quantitative data from closed-ended items of the questionnaire was analyzed using frequency counts, percentages, means and regression analysis. Qualitative data from the open-ended items in the questionnaire and interviews was transcribed and analyzed in emergent themes and sub-themes. The study established that stress level among 6(6.06%) teachers was low, 37(37.37%) moderate while 56(56.57%) high. On average, secondary teachers in public schools in Kakamega North sub-county were moderately stressed with a mean rate of 3.44. School factors accounted for 4.6% of the variance. Employment factors accounted for 10.9% of the variance. 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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LIST OF ABBREVIATIONS AND ACRONYMS

ABBREVIATIONS

D.E.O District Education Office

K.C.P.E Kenya Certificate of Primary Education

K.C.S.E Kenya Certificate of Secondary Education

P. G. D. T Post Graduate Diploma Teachers

U. P. E Universal Primary Education

ACRONYMS

KNEC Kenya National Examinations Council

SRRS Social Readjustment Rating Scale

TSC Teachers Service Commission

USA United States of America

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

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. 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).

In a study on public primary school teachers' perceptions of their working conditions and job stress cases from Istanbul and Stockholm indicated that teaching is a stressful profession (Ozturk, 2011). According to Sprenger (2011) in a study on stress and coping behaviors among primary school teachers in North Carolina, 100% of teachers interviewed for this study reported that the teaching profession is stressful, with 72% describing the profession as extremely or very stressful. Decenzo and Robbins (2006) indicated that stress is a dynamic condition in which an individual is confronted with an opportunity, constraint, or demand, related to what he or she desires and for which the outcome is perceived to be both uncertain and important. Teacher management related stress can manifest itself in either positive or negative way. It is positive when a situation offers an opportunity for one to gain something, but when constraints of demands are placed on us then it is negative.

Kyriacou (2000) indicates that teacher stress is characterized by unpleasant negative emotions, frustrations, anxiety, depression and nervousness as a result of teaching as a profession. According to Bratton and Gold (1999), stress is now part of the regular vocabulary of managers and employees. While some teacher management related stress is normal to life, if it is repeated or prolonged, it causes psychological discomfort.

According to Beckley (2011) in his study on the well being of New Zealand teachers, the relationship between health, stress, job demands and teacher efficacy, over 39% of teachers considered teaching to be either very stressful or extremely stressful. This means that most teachers experience stress. The study used a cross-sectional design. The study used a 10 item perceived stress scale to determine the stress levels. Correlation was done to determine the relationship between health, stress, job demands and teacher efficacy. However, this stress scale was not exhaustive as it did not cover all the areas within the teaching environment. The study sample size was 131 teachers randomly selected across New Zealand schools. The study population was not been indicated and so we cannot generalize that the sample size was a representation of the study population. The study did not also indicate instruments of data collection and so it was therefore not easy to assess the suitability of the instruments used.

Boyland (2011) in a study on job stress and coping strategies of elementary principals: a statewide study in USA found out that a large majority of Indiana's elementary principal participants were experiencing moderate to high levels of job stress. In addition, most of the experienced principals indicated more stress now than in previous years. A total of 193

principals from 79 counties in Indiana responded to the survey. However, the study did not indicate the study population, instruments of data collection and the research methodology that was used and so it was difficult to verify the accuracy of the results. This study focused on stress levels among elementary principals, however, teacher management related stress in secondary schools was not addressed a knowledge gap that the current study sought to fill. This study did not state the exact number/percentage of the teachers who scored moderate and high stress levels, a knowledge gap that the current study sought to fill.

Siddiqui (2012), in a study on occupational stress in teachers: a comparative study of public and private schools in Hyderabad city in India found out that it was a fact that female teachers working in public schools as compared to working in private schools lack resources like advanced technologies. Somehow, this could be considered a contributing factor in their stress level. The Urdu version of the Occupational Stress Scale (OSS) developed by Sohail and Khanum (2000) was used to explore the difference between the level of occupational stress experienced by public and private schools. Siddiqui (2012) had a sample size of 90 teachers from public schools and 90 teachers from private schools. However, the study did not indicate the total population of the study to be able to assess the appropriateness of the sample size. The study did not also indicate the research design. It was therefore difficult to authenticate the results of the study.

Alemu, Teshome, Kebede and Regassa (2014) in their study on experience of stress among student-teachers enrolled in postgraduate diploma in teaching (PGDT): the case of Haramaya university cluster centers, Ethiopia, concluded that many practicing student-teachers report

high levels of stress. Alemu, Teshome, Kabede and Ragassa (2014) addresses stress levels among practicing student-teachers. However, the study did not address teacher management related stress, a knowledge gap that the study sought to fill.

Anbu (2015) in his study on professional stress of higher secondary school teachers, the female higher secondary school teachers had more stress than the male higher secondary school teachers. The reason was that female teachers apart from guiding the terminal stage school students, they had to look after their family members and they couldn't be able to allocate equal weight age to working as well as family environment, hence that resulted in enhanced stress level. Married higher secondary school teachers had more stress than the unmarried higher secondary school teachers because married teacher shoulder more responsibilities than the unmarried in terms of school works as well as in the family and society, hence they were in the position to satisfy all the dimensions and that resulted in higher level of stress. Higher secondary school teachers working in government schools had more stress than those working in private higher secondary schools because the government teachers had to fulfill the work and the task given to them time by time from the administration as well as from the government departments, hence they were more responsible to the government officials than the private school higher secondary teachers, hence higher level of stress was evident in the government. Survey method was used to for this study. The sample consisted of 200 post graduate teachers working in government and private higher secondary schools in and around Nagercoil region. The occupational Stress Inventory (OSI) was developed by Joseph and Dharmangadan. The five point scale consisted of 37 test items, which includes positive and negative statements.

In Ethopia, Gebrekirstos (2015) in his study on occupational stress among secondary school teachers and their coping strategies: The case of Central Zone of Tigray region found out that all the secondary school teachers experienced high level of occupational stress. This study employed a cross-sectional survey. The study population was 1139 secondary school teachers and out of them 321 participants was taken for this study. To collect data for the study, occupational stress inventory, coping-questionnaire and stressor-questionnaire were used. This study could have incorporated other methods like document analysis, observation and interviews to get a variety of data. Descriptive and inferential statistics were applied to analyze the data. Cluster random sampling and then lottery method of simple random sampling techniques were used to collect data.

In Kenya, Ngari, Ndungu, Mwonya, Ngumi, Mumiukha, Chepchieng and Kariuki (2013) in their study on levels of stress among secondary school administrators and its implication in education management in Kenya established that the school administrators experienced stress in their work. Among the three administrative levels, a bigger proportion of principals recorded high levels of stress compared to deputy principals and heads of departments. Ngari *et al* (2013) focused on stress levels among administrators which included principals, deputy principals and heads of departments. The study used ex-post facto research design. The study used Professional Life Stress Scale (PLSS) modified from Fontana (1989). Stress levels among school administrators were measured on a 3 point Likert Scale. The population of the study comprised all administrators in the 28 public secondary schools consisting of 28 principals, 28 deputy principals and 224 heads of departments. A sample of 18 secondary schools was selected and included in this study. The sample size was a representative of the

population of the study. However, the study could have also adopted a correlational research design to be able to correlate the results. In assessing the stress levels, the study had seven items, these items were not exhaustive. This study adopted a questionnaire from professional life stress scale, which had a reliability of 0.636, the current study adopted the questionnaire from Homes and Rahe (1967) that has a high reliability of 0.81. The study did not indicate instruments used to collect data. It was not clear whether the instruments used were appropriate. This study focused on administrators in schools, however teacher stress was not known a knowledge gap that the current study sought to fill.

Beckley (2011) in his study on the well being of New Zealand teachers found out that 39% of teachers considered teaching to be either very stressful or extremely stressful. However teacher management related stress was not indicated a knowledge gap that the current study sought to fill. The study also did not indicate the category of the teachers whether primary or secondary. Boyland (2011) on job stress and coping strategies among elementary principals, in America, found out a large majority of Indiana's elementary Principals were experiencing moderate to high levels of job stress, however, the actual percentage of the teachers experiencing high and moderate levels of stress was not indicated, the study also focused on Indiana's Principals, however, stress levels among teachers was not addressed a knowledge gap that the current study sought to fill. Ngari *et al* (2013) on stress among administrators and its implication on management found out that administrators experience stress and among them principals recorded high levels of stress compared to deputy principals and heads of departments, however, stress levels of the other teachers were not addressed a knowledge gap that the current study sought to fill. This study did not indicate the

instruments of the study used. Studies reviewed by Boyland (2011), Beckley (2011) and Ngari et al (2013) have shown that teachers experience moderate to high levels of stress, however, teacher management related stress was not a addressed, knowledge gap that the current study sought to fill.

In America, Dessler (2008) indicates that external factors can lead to job stress. These include work schedule, pace of work, job security, route to and from work, and the number and the nature of customers or clients. According to him, job stress has serious consequences for both employer and employee. The human consequences include anxiety, depressions, anger and various physical consequences such as headaches and accidents. For the organization it includes, reductions in the quantity of performance, and increased absenteeism and turnover. According to Sprenger (2011) in a study on stress and coping behaviors among primary school teachers in North Carolina, unrealistic expectations set forth by school officials and parents were the most frequent source of stress followed by excessive paperwork, and school administration. A mixed method design was used to assess stress and coping behaviors among current primary school teachers. This study used appropriate research design as one method could not provide answers to all the research questions. However, the study questionnaire was not exhaustive; it did not cover all the areas that surround a teacher, the questionnaire had 16 items measuring stress factors among teachers, the study also focused on primary teachers. It did not address influence of school factors on stress among teachers in secondary schools, the study did not indicate the actual contribution of stress factors on stress among secondary school teachers, a knowledge gap that the current study sought to fill. The current study adopted a modified questionnaire that was exhaustive.

Skaalvik and Skaalvik (2015) in their study on job satisfaction stress and coping strategies in the teaching profession found out that both the workload and the accumulation of numerous sources of stress had a number of maladaptive consequences. Important consequences for a number of the teachers were physical and emotional exhaustion, the sacrifice of social lives, increasing instances of sick leave, the reduction of teachers' employment with economic consequences for the individual teachers, and early retirement, with disability pension for some teachers.

According to Tuck, Eleanor, Manthei, Adair, Adair and Moore (1999) in their study on sources of occupational stress in New Zealand, primary teachers reported moderate levels of stress and job satisfaction. The study found out that disruptive students, inadequate remuneration, task overload, lack of respect for teachers, inadequate resources and administrative support were sources of mild to moderate stress. The study used 30 item likert type scale. However, the study did not address the percentage contributed by these factors on teachers' stress levels, the study also did not also address teacher management related factors influencing stress among teachers in secondary school a knowledge gap that the current study sought to fill.

Younghusband (2005) in a study on high school teachers' perceptions of their working environment in Newfoundland found out that the major stressors have remained much the same: heavy workloads, time pressures, inadequate administrative support, students misbehaviour, inadequate resources, restructuring and the reality of constant change, inclusive classes, and a host of other concerns. According to him, there are a multitude of

international studies which indicate that teacher stress is increasing and that stress is a threat to the quality of personal and family life as well as physical and psychological well- being which indicate that teacher stress is increasing. This study observed that multitude of international studies indicate that teachers' stress is increasing. However the study did not indicate when the multitude international studies were done and where they were carried out. This study did not also indicate the research design that was used in the study and therefore it is difficult to authenticate the results. The study did not compute the correlation on the factors to determine whether the factors were significant predictors of stress among teachers, the knowledge gap that the current study sought to fill.

Areekkuzhiyil (2014) in his study on factors influencing the organizational stress among teachers working in higher education sector in Kerala: An empirical analysis identified nine factors which determine the organizational stress of teachers working in the higher education sector in the state. These factors: were interpersonal relationship in the organization, professional and competence development, recognition in the organization, work environment, autonomy in work, work family interaction, role conflict, job security and remuneration, and non-academic works. The study sample size was 200 respondents However, the research design that was used was not indicated, the study population was also not indicated and so the findings cannot be authenticated. This nine factors were identified as responsible for organizational stress of teachers working in the higher education sector in the state, however, their actual contribution to stress among teachers in secondary schools was not known, a knowledge gap that the current study sought to fill.

Olayiwola (2008) focused on dimensions of job stress among public secondary school principals in Oyo State. The study used descriptive survey research design. The study also used cluster sampling to select the sample size. The instrument used was a 40-item questionnaire tagged: Dimensions of Job Stress for Principal Questionnaire (DJSPQ). The questionnaire was adapted from Payne and Furnham (1987) and Nhundu (1999) instruments. The study sample was 100 principals from all 937 public secondary schools. However, this sample size was too small to represent the study population. This therefore means the findings may not appropriately represent the study population. The research design was appropriate. Olayiwola (2008) focused on sources of stress among school principals, however, the study did not address teacher management related factors influencing stress among other teachers, a knowledge gap which the current study sought to fill. The study did not also not indicated the actual contribution of these teacher management related factors on stress among teachers, a knowledge gap that the current study sought to fill.

In Kenya, on causes of burnout among secondary school teachers: a case of Bungoma North district, Kenya, Sichambo, Maragia and Simiyu (2012) revealed that apart from the normal classroom teaching, teachers had a number of remedial lessons to attend to, larger classes to handle, a lot of paper work and some had to stay in their work stations other than their normal school timings in order to complete various tasks. All these factors were contributing to burnout among teachers which were badly impacting their performance. This study adopted a survey research design. Further study on socio-demographic factors and causes of job stress of sports personnel in Kenyan universities, Rintaugu (2013) found out that causes of stress among sports personnel were: decreased job mobility, large number of university

students who did not take part in sports, lack of relationship between successful sports performance and promotion, and inadequate personnel. The least causes of stress were poor relationship with fellow sports administrators, working under pressure, pressure of university administrators to produce results, supervision of sport programs were low and lack of career development while administering sports. The design of the study was descriptive survey research design. This design was appropriate to the study. The study used questionnaires to collect the data. The study could have used other methods such as focus group discussions and interviews to collect data. This study focused on causes of stress among sports personnel in Kenyan universities. However, it did not address teacher management related factors influencing stress among secondary teachers, a knowledge gap that the current study sought to fill.

Ngari *et al* (2013) in their study on levels of stress among secondary school administrators and its implication in education management in Kenya established that more than 50% of the school administrators reported that the amount of work they have undertaken exceeds the time available. This means that they feel overstretched in matters of time and energy to work. Factors that were investigated by the study included the size of the schools, where the student populations ranged from 372 to 799, satisfaction with remuneration, inadequate allowances, job overload, transfers from one school to another, lack of counseling services for school administrators, and family responsibilities. The results indicated that such issues were causing stress among the administrators. This study investigated stress factors among the administrators, however, stress factors among teachers were not addressed, and the study also did not address actual contribution of these factors on teachers stress level, a knowledge

gap that the current study sought to fill. Ngari *et al* used descriptive statistics to analyze data, the current study used regression analysis to analyze data.

According to Ang'alika, Aloka and Raburu (2016) in their study on school physical environmental factors responsible for stressful experience among teachers in Kenyan special primary schools, there was a weak but statistically relationship between environmental factors and stress among teachers. The study also revealed that school physical factors contributing to teachers' stress included lack of enough latrines and also travelling far distances to school. This study had a target population of 138 teachers from special primary schools and 4 head teachers, a sample size of 138 teachers from special primary schools and 4 head teachers chosen through saturated sampling, the study was guided by the concurrent triangulation design within the mixed methods approach, both descriptive and inferential methods of analysis were used to analyze data. This study used a likert scale while the current study used rating scale adopted from Homes and Rahe (1967). This study focused on special primary schools, it did not handle school related factors influencing stress among teachers in general secondary schools and the study did not also indicate the actual contribution of these factors on stress among teachers, a knowledge gap that the current study sought to fill.

Sprenger (2011) in a study on stress and coping behaviours among primary school teachers in North Carolina found out that unrealistic expectations set forth by school officials and parents were the most frequent source of stress followed by excessive paperwork, and school administration. In Kenya, on causes of burnout among secondary school teachers: a case of

Bungoma North district, Kenya, Sichambo, Maragia and Simiyu (2012) revealed that apart from the normal classroom teaching, teachers had a number of remedial lessons to attend to, larger classes to handle, a lot of paper work and some had to stay in their work stations other than their normal school timings in order to complete various tasks. In Nigeria, Olayiwola (2008) in his study on dimensions of job stress among public secondary school principals in Oyo State concluded that public secondary school principals were experiencing job stress in the same dimensions. The reasons were that sources of this job stress were related to administrative routines, inability to delegate, conflicting demands from Ministry and workload. All these studies have shown that the following factors have contributed to stress among teachers: a lot of paper work, larger classes, role overload and unrealistic deadlines. However, these studies did not investigate the influence of school factors on stress among teachers in Kakamega North sub-county the knowledge gap the study sought to fill. These studies did not also indicate the actual contribution of these factors on stress among teachers a knowledge gap that the current study sought to fill.

Alan, Chan, Chen, and Chong (2010) in their study on work stress of teachers from primary and secondary schools in Hong Kong found out that heavy workload, time pressure, education reforms, external school review, pursuing further education, and managing students' behaviour and learning were the most frequently reported sources of work stress.

In a study on an empirical study of stressors that impinge on teachers in secondary schools in Swaziland, Okeke and Dlamini (2013), found out that the major stressors included the lack of power and influence, threat of job losses, performance related incentives, poor pay, lack of

accommodation, badly planned changes, temporary contracts, and shortage of teachers. This study employed the descriptive correlation research design to determine the relationship between stressors and teachers stress among secondary schools. This research design was very appropriate in finding the relationship between teachers stress and the teachers working environment.

In Nigeria, Sulaiman and Akinsanya (2014), in a study on stress and instructors' efficiency in Ogun State Universities: Implications for Nigerian educational policy revealed that teachers in private universities were less prone to stress than teachers in public universities. Although the findings reflect that the private teachers were saddled with more workloads and lesser job security, they however had better working environment; better remuneration and provision of educational resources as compensation for the imbalance. The teachers in public universities had job security and lesser workloads compared with their counterparts, but these were not appreciated given the kind of remuneration, bad/unconducive working environment and lack of educational resources in the public universities. This situation, however, makes the public universities less desirable to work in when compared with the private set up. This study did not indicate the research design that was used in the study and so it's difficult to authenticate the results. Teachers in private and public universities should not be compared as they are in different environment and under different management. However, this study was limited to influence of employment factors on teachers in public and private universities. It did not address influence of employment factors on stress among teachers in secondary schools a knowledge gap this study sought to fill. This study showed that employment factors such as

remuneration was a stressor in public universities however its actual contribution on stress among teachers was not known a knowledge gap that the current study sought to fill.

Wangai (2012) in her study on factors affecting job satisfaction among secondary school teachers of Mwatate district, Kenya found out that salary level was ranked as the most important factor towards job satisfaction and poor pay as the most dissatisfying job factor. This study used descriptive survey research design. The target population was 21 secondary schools and 217 secondary school teachers. Twenty three teachers responded out a total population of 217 forming a sample size of 10.5%. This sample size was too small to represent the entire population. The study used questionnaires to collect data. The study could have incorporated other methods such as interviews and focus group discussions to get a variety of responses.

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. This study had a target population of 496 teachers, stratified random sampling was used to select a sample size of 16 teachers and the study adopted descriptive survey research design. Questionnaires and interview schedules were used to collect data, descriptive statistics was used to analyze data. This study also was general, aspects of managements are so many and so the study could have gone specific on management aspects to be able to determine which aspect had the highest influence on stress. The study indicates that the equipments were substandard; however, the study does not

specify the types of equipments. This study was not exhaustive, it didn't address the actual contribution of these factors on stress among teachers, a knowledge gap that the current study sought to fill. Ayoti and Poipoi (2011) used handled five factors, these were: insufficient salaries, substandard equipments, poor working environment, poor management, lack of clarity of duties and responsibilities and heavy workload. The current study handled 27 factors, regression analysis was used to analyze data, the contribution of individual factor was analysed, and the current study is specific and in-depth.

In a study on an empirical study of stressors that impinge on teachers in secondary schools in Swaziland, Okeke and Dlamini (2013), found out that the major stressors included the lack of power and influence, threat of job losses, performance related incentives, poor pay, lack of accommodation, badly planned changes, temporary contracts, and shortage of teachers. Alan, Chan, Chen, and Chong (2010) in their study on work stress of teachers from primary and secondary schools in Hong Kong found out that heavy workload, time pressure, education reforms, external school review, pursuing further education, and managing students' behaviour and learning were the most frequently reported sources of work stress. All these studies focused on employment factors, however, the actual contribution of these factors on stress among teachers have not been shown, these studies did not also address influence of employment factors on stress among teachers, a knowledge gap that the current study sought to fill.

Stress has an impact on productivity. According to Subbulaxmi (2002), stress can have various effects on the individual as well as on the organization. Clearly not only the individual suffers but the organization may also be affected by absenteeism, work related accidents, turnover and impaired decision making. People get sick from stress at work and the cost associated with stress is hence significant to the employer. Stress is associated with constraints and demands. Constraints prevent the person from doing things what he or she desires. Management may not be concerned when employee experience low to moderate level of stress. Such levels may lead to higher employee performance. But 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.

Seng and Yazdanifard (2013) found out that employee or employers with organizational stress tend to characterized by the feelings of helplessness in solving any task that was given. Likewise, stress also has a significant, negative relationship with job satisfaction and organizational commitment such as counterproductive work behaviours, withdrawal behaviours, turnover intentions and depression. All of these aspects will eventually reduce the overall organizational effectiveness and productivity directly or indirectly. However, stress has a positive effect on employees of any organization but only up to a certain extent that an employee can cope with it. For example, some of the positive stress may serve as a motivation among the employer and employee to boost up their job performance. This positive stress may also increase the level of employee's self- confident, self-efficacy and self-worth to enhance believes on their own ability to get the job done well. However, if this stress exceeds the bearable limits, some negative effects might fall upon employees or employer.

Ozturk (2011) on public primary school teachers' perceptions of their working conditions and job stress cases from Istanbul and Stockholm indicated effects of job stress need to be monitored, because they impact not only on the teachers, but indirectly affect students and schools. This study was comparative; it compared perceived working conditions, job stress, and effects of job stress of public primary school teachers working in Istanbul, Turkey, and in Stockholm, Sweden. The study used case study research design. Data collection was done using semi-structured interviews. Istanbul and Stockholm are two different areas under different Geographical conditions and so comparison should not be done. The study used Case study research design which provides an opportunity to study a topic in depth and to gain understanding from the perspective of sampled people. The study however did not indicate the study population and so we can assess the appropriateness of the sample size to the study.

According to Antoniou, Polychroni, and Vlachakis, (2006) in their study on gender and age differences in occupational stress and professional burnout between primary and high-school teachers in Greece, found out that occupational stress leads to unwanted feelings and behaviors such as job dissatisfaction, lower motivation, low employee morale, less organizational commitment, lowered overall quality of work life, absenteeism, turnover, intention to leave the job, lower productivity, decreased quantity and quality of work, inability to make sound decisions, occupational burnout, alienation, and increased smoking and drug intake.

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, a knowledge gap that the current study sought to fill. The study did not

also indicate the actual contribution of teacher management related stress on teachers' productivity a knowledge gap that the current study sought to fill.

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 ANOVA. The level of significance was set at 0.05. This study focused on school

mean in the KCSE 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 a knowledge gap that the current study sought to fill. 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 (SPSS). 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 a knowledge gap that the current study sought to fill. This study focused on effect of occupational stress on teachers in public primary schools, however, the study did not address influence of teachers'

stress on teachers in public secondary schools, a knowledge gap that the current study sought to fill.

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 (HOD) and the Provincial Director of Education (PDE). 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 (SPSS) 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. These studies did not also addressed influence stress among teachers on students' academic performance in public secondary schools, in Kakamega North, a knowledge gap that the current study sought to fill.

According to TSC Director as cited by Inyanji and Chepkoech (2014), out of the all the students who sat for K.C.S.E 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 KCSE examinations while in the year 2013, it was position 212.

Table 1.1

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

From Table 1.1, 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 south, Kakamega East, Kakamega Central and Lugari sub-counties are performing better. According to the county director, in Kakamega North 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.

Table 1.2

Stress related Cases in Kakamega North Sub-County

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

From Table 1.2, 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.

1.2 Statement of the Problem

Studies worldwide have indicated that teacher management related factors influence stress which affects teachers' performance which is inferred from students' academic performance. Thus in spite of the government's commitment to provision of subsidized secondary

education, students in Kakamega North sub-county had consistently been performing poorly in K.C.S.E. Nationally, though Kakamega County performs well, for instance in 2013 it took position 15 out of 47 counties in K.C.S.E examination. In the year 2013, seventy three point zero two of the students who sat for KCSE had D+ and below. For the last five years, the sub- county had been in the last position in the county except in the year 2011 when it was position 10 out of 11. In the year 2013, only 6(13.3%) of the schools scored above a mean grade of C while 39(86.7%) of the schools got below a mean grade of C. The poor performance was a concern to all the stakeholders in education and to some extent teacher management related stress was being expressed having a link with it. In fact in the last five years, stress related cases had been high in the sub county. It was not known how much of this performance was accounted for by teacher management related stress, teachers stress levels and teacher management related factors influencing stress among the teachers. It was against this backdrop that the researcher sought 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 Kenya.

1.3 Purpose of the Study

The purpose of this study was 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, Kenya.

1.4 Objectives of the Study

The objectives of this study relating to Kakamega North Sub-county were to:

i) Establish stress levels among teachers in public secondary schools.

ii) Determine influence of school factors on teacher stress in public secondary schools.

iii) Determine the influence of employment factors on teacher stress in public secondary schools.

iv) Establish the relationship between teacher stress and students' academic performance in public secondary schools.

1.5 Research Questions

The research questions of this study relating to Kakamega North Sub-county were:

i. What are the levels of stress among public secondary schools teachers?

ii. What is the influence of school factors on teacher stress in public secondary schools?

iii. What is the influence of employment factors on teacher stress in public secondary schools?

iv. What is the relationship between teacher stress and students' academic performance in public secondary schools?

1.6 Null Hypotheses

Ho_1 There is no statistically significant relationship between school factors and teacher stress in public secondary schools in Kakamega North sub-county.

Ho_2 There is no statistically significant relationship between employment factors and teacher stress in public secondary schools in Kakamega North sub-county.

Ho_3 There is no statistically significant relationship between teacher stress and students academic performance in public secondary schools in Kakamega North sub-county.

1.7 Conceptual Framework

The conceptual framework (Figure 1) is based on Bray, Calmlin, Fairbank, Dunteman and Wheeless (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 et al (2001) also assert that there are job related factors that influence stress among workers.

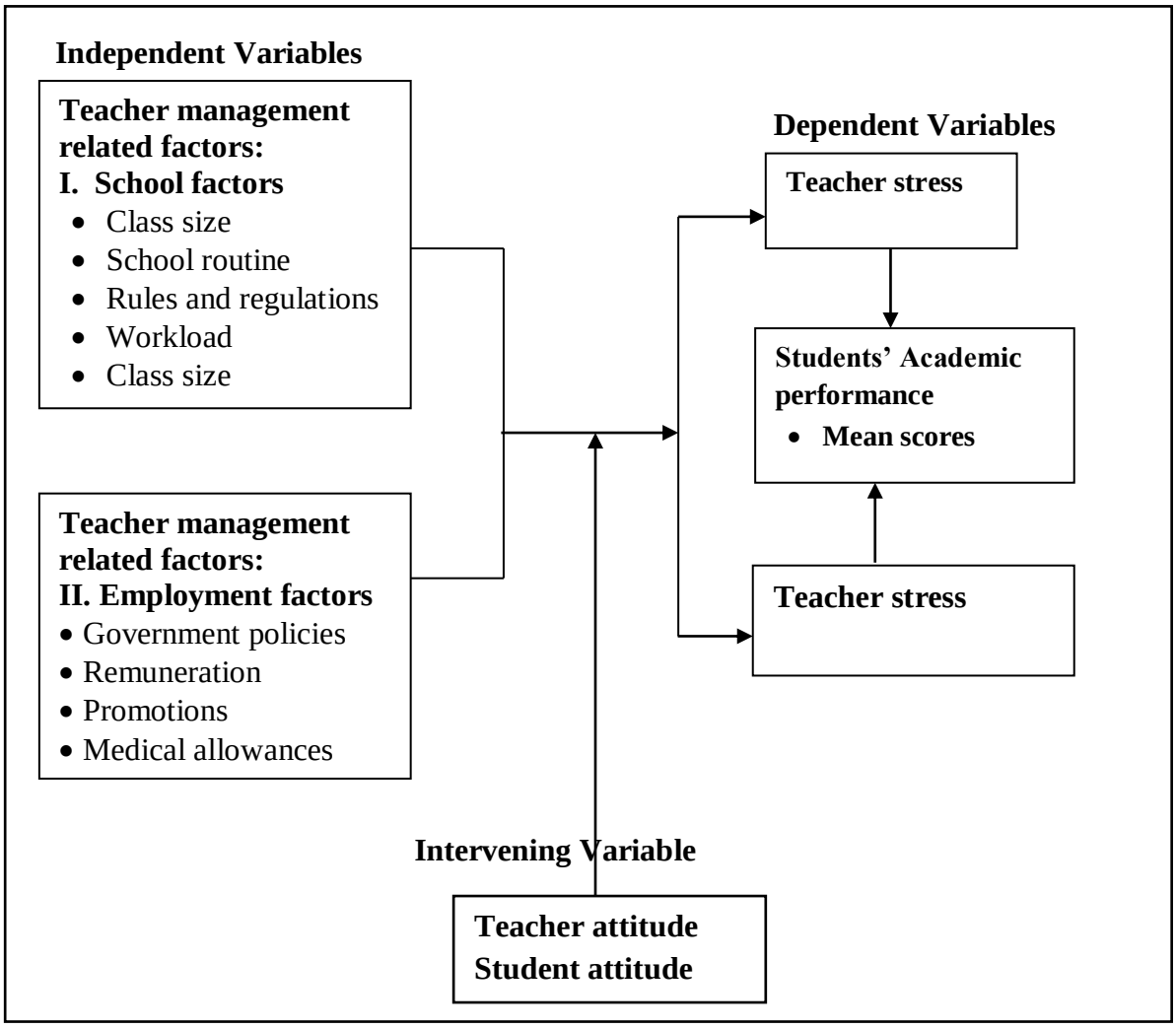

Figure 1.1: A Conceptual Framework Showing the Influence of Teachers' Stress on Students Academic Performance

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.

1.8 Significance of the Study

The study may inform stakeholders in education in identifying strategies to deal with stress levels among secondary school teachers in order to improve students' academic performance in the sub county. The findings of the study may also be useful to parents and administrators as they will be able to adopt appropriate coping mechanisms and control stressors so that they would find and operate at a level that is most comfortable to them and this will enable them to be more productive, effective and efficient and this will lead to improvement in K.C.S.E results. The findings may also provide a framework for comparative study on executive stress in other organizations. It will also guide to policy makers on the need to integrate stress in training institutions to equip the teachers with stress coping mechanisms to control negative effects of stress.

1.9 Assumptions of the Study

This study was based on the following assumptions:

i. Teachers in schools are experiencing stress as is natural and cannot be avoided.

ii. Teachers should be experiencing stress due to high workload.

iii. Employment factors and school factors can stress a teacher.

iv. Teachers may be experiencing different stress levels as a result of demands at work place.

1.10 Scope of the Study

The study was confined to public secondary schools in Kakamega North sub-county. The study focused on the years 2011 -2014. This is because the study is focused on the performance of teachers who had been with the students for four years. The study focused on teacher management related factors influencing teacher stress and its effects on student academic performance in public secondary schools in Kakamega North sub-county, Kenya.

1.11 Limitation of the Study

One (1%) respondent did not respond to open ended section of the questionnaire. Another limitation was one (1%) respondent did not return the questionnaire. This means some information was not captured in the analysis. This did not however affect the results much because according to Mugenda and Mugenda (2003), 99% return was sufficient for analysis.

1.12 Operational Definition of Terms

Burn-out Refers to extreme physical, mental and emotional exhaustion caused by prolonged and chronic stress.

Job performance Degree to which an individual employee executes a particular role or responsibility, in accordance with certain specified standards.

Job stress The harmful physical and emotional response that occur when the requirements of the job do not match the capabilities, resources or needs of the employee.

Management It's the process of planning, decision making, organization, communicating, coordination, influencing and evaluation that aims at achieving the set objectives of the organization.

Occupational stress Is the strain imposed on an employee's physical, social and Emotional states as a result of unfavourable workplace environment and practices.

Public schools: Schools that are formally supported by Government especially in terms of employment of teachers.

School climate shared perceptions of organizational policies, practices and procedures, both formal and informal.

Stress Is the disequilibrium between the mind and the body of a teacher characterized by tension, anxiety, depression, irritation, worries and fatigue

Students academic performance	The extent to which a student has achieved the education goal measured by K.C.S.E. examination mean scores.
Teacher management related stress	Stress experienced by teachers while carrying out duties and responsibilities under the supervision of education administrators.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section undertakes a review of the related literature to the study. Past studies both global and in Kenya, journals, thesis and books were analyzed, critiqued and finally the gap in the literature generated under the following headings:

2.2 Stress Levels among Teachers

In America, Fisher (2011) in his study on factors influencing stress, burnout, and retention of secondary schools found out that teachers burnout levels between new and experienced teachers were significantly different, with novice teachers having higher burnout, but their difference in stress levels was not statistically significant.

Siddiqui (2012) in a study on occupational stress in teachers: a comparative study of public and private schools in Hyderabad city found out that it was a fact that teachers working in public schools as compared to working in private schools lack resources like advanced technologies. For instance if internet and variety of teaching methods were not available for them, somehow, this could be considered contributing factor in their stress level. Siddiqui (2012) in Hyderabad city did a comparative study between teachers working in private and public schools using the Ardu version of the occupational stress developed by Sohail and Khanun (2000). Teachers working in private schools should not be compared to those in public schools because the two schools are under different management and they can access new methods of technology like internet while those in most public schools struggle with

minimum resources. This study was general. It's not clear on whether the study addressed all the teachers from pre-school to the university level. This is a knowledge gap that the study sought to fill. The current study was limited to establishing stress levels among secondary teachers in public schools in Kakamega North sub-county. It used descriptive and correlational research design. The current study used rating scales to analyze the data.

Ritz, Burris, Brashears and Fraze (2013) in their study on the effects of a time management professional development seminar on stress and job satisfaction of beginning Agri-science teachers in West Texas, found out that the beginning teachers had slight to moderate stress. Additionally, the teachers had slightly above neutral levels of job satisfaction. The study employed a quasi-experimental, static-group comparison design. .However, the study did not indicate the study population and the sample size used. It is therefore difficult to authenticate the results of the study. Instruments of data collection were also not indicated and so difficult to assess the suitability of the instruments used in the study. Ritz, Burris, Brashears and Fraze (2013) focused on stress levels among beginning Agri-science. However, this study did not address stress level among teachers in the other subjects, a knowledge gap that the current study sought to fill.

Hasan (2014) in his study on occupational stress of primary school teachers found out that in general, the primary school teachers were found to be highly stressed. Moreover, the private primary school teachers were also found to be highly stressed in comparison to their government primary school teacher counterparts. A sample of 100 teachers was selected, 50 each from government and private schools. Teachers' Occupational Stress Scale constructed and standardized by Jamal and Raheem was administered. The study was empirical study and

is exploratory in nature. This study did not indicate the study population so we cannot verify whether the sample size was a representative of the study population. This study focused on stress levels among primary teachers, however the secondary teachers were not addressed a knowledge gap that the current study sought to fill.

According to Tsigilis, Zournatzi and Koustelios (2011) in their study on burnout among physical education teachers in primary and secondary schools in Greece showed that physical education teachers working in the primary schools reported significantly and meaningfully higher levels on the core burnout dimension, namely emotional exhaustion in comparison to their colleagues in the secondary schools. Moreover, the strength of association among the three burnout components was more prominent in primary physical educators than in secondary schools. The results showed that the education level in which physical education teachers were working represents an important job characteristic that influences burnout levels and should be taken into consideration when this syndrome is examined, at least within the Greek educational system. The study used version of Maslach Burnout Inventory to analyze stress levels. The study sample size was 207 teachers in primary schools and 230 in secondary schools. This study was limited to physical education teachers in primary and secondary schools. This study did not indicate the total population of the study and so it is difficult to assess the appropriateness of the sample size. However, this study did not address stress levels of teachers of other subjects a knowledge gap that the study sought to fill.

In a study on prevalence and factors associated with stress among secondary school teachers in Kota Bharu, Kelantan, Malaysia, Hadi1, Naing, Daud, Nordin, and Sulong (2009) found out that the prevalence of stress was reported as 34.0%. Seventeen point four percent of

teachers experienced mild stress. Age, duration of work and psychological job demands were significantly associated with stress level. This study indicates that job-related factors did not contribute much to stress among secondary school teachers. They carried out a cross-sectional study. The instrument used to carry out the study was adopted and modified from the Depression, Anxiety and Stress Scale (DASS 21) and Job Content Questionnaire (JCQ). This study addressed only 18 items in the teaching environment (both job related and non-job related factors), the study therefore did not exhaustively address all the areas surrounding the teacher. Further study by Azmi (2012) on teaching English and stress: teacher trainees versus experienced teachers found out that the experienced teachers had suffered from a stressful life being English teachers due to several reasons and at the same time the teacher trainees had a tendency of having the same problem. The study used questionnaire which consisted of 48 items based on a four-likert scale. This study did not indicate the total population of the study and the research methodology that was used. It's therefore difficult to verify whether the sample size was a representation of the study population or not. The study focused on stress among English teachers, however, teachers teaching other subjects were not addressed, a knowledge gap that the current study sought to fill.

Tashi (2014) in his study on occupational stress among Bhutanese teachers in South Korea found out that male teachers faced more stress than their counterparts. The study also found out that stress was most prevalent among teachers with an experience of over 10 years followed by teachers with 6-10 years of experience in teaching. The study used descriptive research design. The sample consisted of 150 school teachers, selected from 42 schools. This study did not indicated the total number of teachers in the 42 schools. Though the sample size was given, we cannot verify if it was a representative sample of the study population.

In a research on teachers' collective efficacy, job satisfaction, and job stress in cross- cultural context by Klassena, Usher and Bongc (2010), found out that teachers had greater workload stress, greater classroom stress from student behaviors, and lower classroom management self-efficacy. Teachers with greater workload stress had greater classroom management self-efficacy, whereas teachers with greater classroom stress had lower self-efficacy and lower job satisfaction. Those teaching young children (in elementary grades and kindergarten) had higher levels of self-efficacy for classroom management and student engagement. Lastly, teachers with greater classroom management self-efficacy or greater instructional strategies self-efficacy had greater job satisfaction.

In a study on occupational stress of teachers: a comparative study between Turkey and Macedonia, it was revealed that Turkish teachers had mild stress levels and Macedonian teachers had moderate stress levels. There was a meaningful difference in the stress level points of Turkish and Macedonian teachers (Eres & Atanasoska, 2011). Turkey and Macedonia are two areas under different climatic conditions and working environments. The two should not be compared. Comparison should be made to schools under the same management, environmental conditions and working conditions.

Reddy and Anuradha (2013)in a study on occupational stress of higher secondary teachers working in Vellore District in India found that, around 88 percent of higher secondary teachers were experiencing moderate and high levels of occupational stress. Survey method was used in this study. For the research tool, the researchers adopted and re-modified the rating scale developed by Reddy (2006) and modified by Poornima (2010) for assessing the occupational stress of special education teachers. Alemu, Teshome, Kebede and Regassa

(2014) in their study on experience of stress among student-teachers enrolled in postgraduate diploma in teaching (PGDT): the case of Haramaya university cluster centers, Ethiopia, concluded that many practicing student-teachers report high levels of stress.

Hasty (2007) in his study on teacher attrition: the relationship between teachers' stress and their intentions to leave their current positions in Nebraska public schools, found out that higher stress levels were associated with stronger intentions of teachers to leave their current positions. Further study by Tasleema, Muddasir and Javied (2013) on a study on social and family role stress among primary school teachers of district Budgam, India showed that female primary school teachers were found to have more stress as compared to male primary school teachers of district Budgam. Private male primary school teachers were found to have more stress as compared to Government male primary school teachers of Budgam District. The main reason was that private females feel insecurity in terms of safety, job, pressure from home and society. The Social and Family Role Stress Scale (SFRS) by S. Sultan Akhter and Priti Vadra were administered.

Further study in India on occupational stress and health among teacher educators, Vipinder and Sarita (2013) revealed that teacher educators experienced moderate level of occupational stress. Significant differences indicated occupational stress among teacher educators in relation to gender and marital status. The correlation analysis revealed that occupational stress does have significant and positive impact upon the health of teacher educators.

Sumathy and Sudha (2013) in their study on teachers stress and type of school in India concluded that teachers from private un-aided school had high level of stress, than public and

private schools, so private un-aided school management had to concentrate on their teachers wellbeing, and provided job security and had to implement strategies to avoid the conflict between the teachers and also be considered by the way of qualification and eligibility and willingness of concern teacher. By the way of taking care of teachers' wellbeing the management can reduce the teachers stress and can promote the student wellbeing directly.

Antoniou, Ploumpi, and Ntalla (2013) in their study on occupational stress and professional burnout in teachers of primary and secondary education: The role of coping strategies in Attica, found out that that teachers of Primary Education experience higher levels of stress compared to the teachers of Secondary Education. Female teachers experience more stress and lower personal accomplishment than men. Primary teachers should not be compared to secondary teachers. Secondary teachers specialize in two subjects while primary teachers specialize in five subjects. Examinations in primary schools have multiple choices while in secondary, students are not given multiple choices, and these teachers are bound to face different levels of stress.

According to Putter (2003), in his study on stress factors among teachers in schools of industry, teachers from schools of industries experience high levels of stress. The study showed that teachers experience high levels of stress with regard to time management, work-related stressors, professional distress, discipline and motivation and professional investment as well as high levels of stress manifestations with regard to emotional, fatigue, cardiovascular, gastronomic and behavioral manifestations. The results of this study indicated that there were no differences between the stress levels and stress manifestation for

teachers in schools of industry and mainstream schools and that demographic variables do not play a significant role in the stress levels of teachers.

According to Mondal, Shrestha and Bhaila (2011) in their study on job stress and job satisfaction, in Kaski, Nepal, school teachers were partly satisfied and experiencing mild to moderate stress from their job overall. These can be the resultant of unfavourable job condition and job types for the school teachers. Study comprised of randomly selected 69 school teachers from Pokhara, Nepal. Socio economic data of the subjects were collected by questionnaire. Modified TJSQ and Modified TARSO were applied to identify the Job satisfaction and Job stress of the subjects. Data from acceptable returned questionnaires were analyzed by SPSS 17.

Alemu, Teshome, Kebede and Regassa (2014) in their study on experience of stress among student-teachers enrolled in postgraduate diploma in teaching (PGDT): the case of Haramaya university cluster centers, Ethiopia, concluded that many practicing student-teachers report high levels of stress. The experience of stress did not significantly differ based on sex, age, fields of study, and geographic locations of student-teachers. Student misbehavior, inability to contact with significant others like families and relatives, and uncomfortable working environment were identified to be the greatest stressors in that order.

In South Africa, Peltzer, Shisana, Zuma, Wyk and Zungu-Dirwayi (2008) in their study on job stress, job satisfaction and stress related illnesses among South African educators found considerably high stress levels among educators. Job stress and lack of job satisfaction were associated with most stress-related illnesses (hypertension, heart disease, stomach ulcer,

asthma, mental distress, and tobacco and alcohol misuse). Further study by Olivier and Venter (2008) in their study on the extent and causes of stress in teachers in the George region, South Africa indicated that the stress levels of teachers in the George area are average.

In Kenya, (2013) Ngari *et al* in their study on levels of stress among secondary school administrators and its implication in education management in Kenya established that among the three administrative levels, a bigger proportion of principals recorded high levels of stress compared to deputy principals and heads of departments. This study used ex-post facto research design. Ngari, *et al* (2013) in Kenya focused on stress levels among school administrators which included principals, deputy principals and heads of departments. The study used ex-post facto research design. However, the study did not address stress levels among other teachers. Ngari *et al* did not indicate the actual stress levels of the administrators, they only indicated that a bigger proportion of principals recorded high levels of stress compared to the deputies. The current study used correlational and descriptive research designs. The current study sought to establish stress levels among teachers in secondary schools in Kakamega North sub-county.

Studies reviewed by Siddiqui (2012) in Hyberdad city, Ritz, Burris, Brashears and Fraze (2013) and Ngari, *et al* (2013) in Kenya have shown that teachers experience moderate to high levels of stress. However, these studies did not address stress levels among secondary teachers in Kakamega North sub-county, a knowledge gap that the current study seeks to fill.

2.3 Influence of School Factors on Stress among Teachers

In America, Shernoff, Mehta, Atkins, Torf and Spencer (2011) in a study on a qualitative study of the sources and impact of stress among urban teachers, one-half of the cases identified lack of resources, excessive workload, school-level disorganization, managing behavior problems, and accountability policies as significant sources of stress. This study focused on urban teachers, however, the study did not address causes of stress among teachers in rural areas, a knowledge gap that the current study sought to fill.

Curtaz (1997) in her study on perceived causes of stress and burnout as reported by elementary teachers at an urban school, teachers spent many days and nights working toward keeping the school off the closure list. This included several meetings after school and sometimes late into the night, contacting and working with parents as well as getting the word out to the community. The teachers were under an immense amount of stress that was out of their immediate control. Furthermore, teachers interviewed indicated they felt more stress with their jobs when there were problems with the administration. The study used a case study research design.

According to Kaur (2011) as cited by Siddiqui (2012), teachers stress is the outcome of school management's disability to fulfill teacher's needs and demands. Further study by Syed, Alain and Muhammad (2012) in their study on impact of organizational role stressors on faculty stress and burnout in Pakistan found out that role ambiguity is one of the organizational role stressors having the biggest impact on two dimensions of stress and one dimension of burnout among the faculty. The other significant organizational role stressors

include role stagnation, inter-role distance, self role distance, resource inadequacy, role conflict and role overload.

According to Santiago *et al* (2008) in his study on occupational stress in secondary school teachers: examining the role of students' disruptive behavior and or attitudes and the perceived difficulty in conflict management in Espania found out that the stress associated to students' disruptive behaviour and to the difficulties faced by teachers in managing conflict has a greater incidence on female teachers on second cycle teachers and on intermediate stages in the profession. Santiago *et al* (2008) used Inventory of Occupational Stressors of Secondary School Teachers (Inventario de Estresores Laborales para Profesores de Secundaria -IELPS-; Otero López et al., 2006) to analyze data. The current study used rating scales to analyse data. The study focused on the influence of students' disruptive behaviour on teachers stress. However, the study did not address other stressors in the school environment a knowledge gap that the current study sought to fill.

In a study on occupational stress on job satisfaction among teachers with particular reference to corporate, higher secondary school of Nepal: empirical study, Kayastha and Kayastha (2012) found out that occupational stress is associated with job satisfaction. Occupational stress was negatively associated with six job satisfaction facets. It was seen that a high level of occupational stress will reduce job satisfaction. Reducing occupational stress such as workload; conflict; unreasonable group and political pressures may lead to high satisfaction with regards to work, pay, co-workers, and supervision promotion and job in general. Questionnaires were used to collect data. This study did not indicate the research methodology that was used in the collection data. It's thus difficult to verify its authenticity.

According to Torres, Rebecca and Lambert (2009) in their study on job-related stress among secondary Agricultural education teachers: a comparison study in Missouri concluded that Agriculture teachers in Missouri and North Carolina were not in an overall state of stress compared with norm data. However, time related job tasks were found to be a source of stress among both teacher samples, and excessive paperwork was identified as the highest stressor. Low stress items among teachers fell into three broad job related categories best described as supervision, advancement, and inactivity. This study focused on job related stress among Agriculture teachers only. Data was collected by using the job stress survey developed by Spielberger and Vagg (1999). The study used descriptive-survey research. This is a comparative study and so the researcher could have used correlational research design to correlate the two areas. This study focused on job-related stress among Agricultural education teachers. However, the study did not address job-related factors affecting teachers teaching other subjects, a knowledge gap that the current study sought to fill.

According to Tsai, Fung and Chow (2006) in Hong Kong in their study on sources and manifestations of stress in female kindergarten teachers, time management and work related stressors were more common sources of stress whereas feelings of fatigue and emotional related symptoms were more common manifestations of stress. Assessment of data was done using teacher stress inventory. Tsai, Fung and Chow (2006) did not indicate the study population to. It's difficult to establish whether the sample size was appropriate. The research methodology was also not indicated and so it was difficult to authenticate the results. The study was limited to female kindergarten teachers.

Ozturk (2011), in a study on public primary school teachers' perceptions of their working conditions and job stress: cases from Istanbul and Stockholm found out that for teachers working in Istanbul, the main reasons of job stress were paperwork, computer work, administrative duties; meetings with colleagues and parents, too many conferences; too much work, take work to home; less time; relations with students and their psychological and social well-being, and parents' demands from teachers; the least stressful elements were lunch time, parents' demands on their children, and parents' personal problems.

Zedan and Bitar (2012) on stress and coping strategies among elementary school teachers in Israel found out that the ten greatest causes of stress for Israel teachers were: overloaded classes, problems in pupil behavior, disdain of pupils for class assignments, pupils without motivation, lack of teaching resources (teaching hours, teaching assistants), violence in school, inconvenient working conditions (schedule, workload, etc.), lack of public understanding of the burden placed upon the teacher, overloaded study program, integration of pupils with special needs. A sample size of 425 teachers was selected, what is unknown is whether 425 teachers was a representation of the total population. This study used structured questionnaires to collect data. Questionnaires alone cannot give you enough data, the study could have added other methods which include interviews and document analysis.

In a research on a qualitative study of workplace stress and coping in secondary teachers in Ireland Kerr, Breen, Delaney, Kelly, Miller (2011) showed great concern for their students, with some being prepared to ignore school guidelines in order to deal with their pupils' needs. Several particularly stressful factors were identified, including the maintenance of

boundaries (especially when dealing with students with personal problems), dealing with disruptive student behaviour, and the heavy workload.

Senthil, Mohan, Velmurugan (2013) in their study on causes of work stress of teachers in Engineering education in India, found out that significant association among gender, type of institution, location of the college, current working status and average number of working hours with causes stress. Questionnaires were used to collect data. This study focused on teachers in engineering education in colleges and universities. However, the study did not address factors causing stress among teachers teaching other subjects in secondary schools a knowledge gap that the current study sought to fill.

In Nigeria, Olayiwola (2008) in his study on dimensions of job stress among public secondary school principals in Oyo State concluded that public secondary school principals were experiencing job stress in the same dimensions. The reasons were that sources of this job stress were related to administrative routines, inability to delegate, conflicting demands from Ministry and workload. The study used descriptive survey design. Cluster sampling was used to select the sample size of 100 principals was selected. However, the study did not indicate the study population. We cannot verify the appropriateness of the sample size. The study used questionnaires collect data, the study could have also used other methods like interviews to get a variety of data. Olayiwola (2008) focused on job stress among principals. However, job stress among teachers was not addressed, a knowledge gap that the current study sought to fill.

In a study on prevalence of job stress among primary school teachers in South-west, Nigeria, Olaitan, Oyerinde, Obiyemi and Kayode (2010) revealed that the teachers' major sources of stress were colleagues, curriculum, marking, parents, pupils, school authority, society, supervision / teaching, teaching environment and wages.

Jaiyeoba and Jibril (2008) on sources of occupational stress among secondary school administrators in Kano State, Nigeria showed that, administrative routine, work load, and conflicting demands and roles between work and family were the highest sources of stress. Further study by Adeniyi, Fakolade, and Tella, (2010), in their study on perceived causes of job stress among special educators in selected special and integrated schools in Nigeria found out that stress or burnout is caused by several factors as follows: lack of progress achieved on the part of the students and teachers, workload of the teachers, lack of help or assistance, in respect of numbers of special educators available and increase or over population of students especially in mainstream schools. When teachers see little or no progress in student learning, psychological trauma develops and eventually leads to stress. According to Hasting and Brown (2002) as cited by Adeniyi, Fakolade, and Tella (2010) found out that special teachers face high level of anxiety as a result of their pupils' progress. physical environment and resources, workload and time pressure, changes in educational policies, students, parents, rewards, relations with colleagues and principals, role conflict, and school structure and management among other are sources of stress in schools.

According to Maphalala (2014) in his study on the manifestation of occupational stress in the teaching profession: the unheeded voices of teachers in South Africa, teaching stressors which the teachers found stressful, in order of most to least stressful, were curriculum

changes, work load pressures, job insecurity, poor relationship with colleagues, reward and recognition, learners discipline problems, poor rapport with management and role ambiguity.

In a research 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 the major causes of stress among the respondents were poor pay, work overload, bad school management role overload and large class sizes.

A study on the extent and causes of stress in teachers in the George region by Olivier and Venter (2003) indicated that the stress levels of teachers in the George area were average, but teachers nevertheless expressed concern about teaching factors that cause them stress. In this regard they mentioned inadequate salaries, lack of discipline in the school, unmotivated learners, coping with large classes, time demands, and lack of involvement in decision-making and emotional reactions such as depression.

According to Naidoo, Botha and Bisschoff (2013) in their study on causes of stress in public schools and its impact on work performance of educators, strenuous working conditions had a direct impact on educator stress resulting in poor performance. The findings of the seven factors which were organizational support, overload, remuneration, control, job insecurity, relationship and opportunities and growth opportunities also highlight the reasons why educators were considering quitting the profession.

In Kenya, in a study on investigating high school principals' stress in relation to their job experience in schools in Southern Nyanza region of Kenya revealed that the sources of stress:

role based, task based, conflict mediating and boundary spanning had a correlation and dependable relationship with high school principals' job experience in schools (Yambo, Kindiki & Tuitoek, 2012). Yambo, Kindiki and Tuitoek (2012) focused on investigating high school principals' stress in relation to their job experience in schools in southern Nyanza region of Kenya. They used descriptive survey. The study was guided by Role Performance and Demand theory by Hebb (1972). Stratified random sampling technique was used to select the sample. The current study used descriptive and correlational research designs. Simple random sampling and purposive sampling technique was used to select the sample size. Rating scales were used to analyze the data. Yambo, Kindiki and Tuitoek (2012) did not investigate on school factors causing stress among other secondary teachers, the study did not also indicate the actual contribution of this factors on stress among teachers a knowledge gap that the current study sought to fill.

In Kenya, Ngari *et al* (2013) in their study on levels of stress among secondary school administrators and its implication in education management in Kenya established that the school administrators experienced stress in their work. 54.5percent of the respondents recorded high levels of stress resulting from their school workload and other responsibilities. Among the three administrative levels, a bigger proportion of principals recorded high levels of stress compared to deputy principals and heads of departments. This study addressed sources of stress among administrators, however, it did not addresses sources of stress among other teachers, the study also was not exhaustive as it only indicated that administrators experienced stress from workload and other responsibility, this is a knowledge gap that the current study sought to fill.

Musyoka, Ogutu and Awino (2012), in a study on employees stress and performance of companies listed in the Nairobi Securities Exchange, factors within the organization such as work overload, difficult co-workers, too many responsibilities, demanding and unreasonable deadlines, conflicting demands and unclear expectations did not affect performance negatively. Lack of control over workload, demanding and difficult customers and office politics may have triggered positive stress, which in turn enhanced performance. Further study in Kenya on causes of burnout among secondary school teachers: a case of Bungoma North district, Kenya, by Sichambo, Maragia, Simiyu (2012) revealed that apart from the normal classroom teaching, teachers had a number of remedial lessons to attend to, larger classes to handle, a lot of paper work and some had to stay in their work stations other than their normal school timings in order to complete various tasks. All these factors were contributing in burnout among teachers which were badly impacting their performance.

Studies reviewed by Santiago *et al* (2008) in Espania,Olayiwola (2008) and Duyilemi in Nigeria and Sichambo, Maragia, Simiyu (2012) and Yambo, Kindiki and Tuitoek (2012) in Kenya showed that school routines, workload, paperwork and students disruptive behaviour contributes to teachers' stress. However, the studies did not address influence of school factors on stress among teachers in secondary schools in Kakamega sub-county, the knowledge gap the current study sought to fill.

2.4 Influence of Employment Factors on Stress among Teachers

In Malaysia, in a study on occupational stress and turnover intentions among school teachers in Negeri Sembilan by Salahudin, Abdullah and Hitam (nd) revealed that the teachers with

higher salary in the schools would experience more stress compared to lower income teachers. In the schools context, teachers with higher salaries were occupied with more responsibilities and duties which could increase their stress level. Teachers who were getting salary more than RM 4000 demonstrate the lowest level of stress because they felt more secured in their career. They further revealed that those teachers who had higher qualifications experienced higher stress due to the fact that: they are looking or considering other opportunities in deciding their career path.

In a study on an empirical study of stressors that impinge on teachers in secondary schools in Swaziland, Okeke and Dlamini (2013), the major stress teachers and this component included the lack of power and influence, threat of job losses, performance related incentives, poor pay, lack of accommodation, badly planned changes, temporary contracts, and shortage of teachers. Poor pay, lack of accommodation, temporary contracts among other factors have been mentioned factors causing stress.

In Pakistan, teachers under stress cannot perform well. Their job satisfaction and motivation levels were decreased and they show unwanted behaviors like absenteeism, mistakes during work and violence at work. Furthermore they had more health related physical and psychological complaints. Their students' satisfaction level is also deceased in such way that they could not impart quality instructions to the students. Resultantly complaints come from parent and employers' side, which had hired students as their employees thus the overall image of the educational institution gets damaged (Khan *et al*, 2012).

Further study by Bibi *et al* (2012), on the nature and impact of teacher stress in the private schools of Gilgit-Baltistan, Pakistan, teachers' salary increases and promotions were tied with their annual performance rating determined through their appraisal system and that is why teachers take the appraisal system very seriously. Their discussions with the teachers reflected the fact that teachers were highly dissatisfied with the issues of transparency and fairness with which the appraisal is conducted. Most of the teachers complained that there was no justice done by the supervisors in the appraisals. They also shared that the supervisors decide on teacher rating only based on one or two classroom observations during the entire year. Teachers consider this kind of decisions very unfair. In addition, the school heads had a role in teacher appraisal. However, they told us that in most cases heads themselves lack the capacity and were less skilled and knowledgeable than the teachers they assessed.

Further study on effect of salary and stress on job satisfaction of teachers in Sialkot district, Usman, Akbar and Ramzan (2013) found out that financial rewards (salary) significantly affect job satisfaction. It means that if employees were not given proper salary in time, they would be highly dissatisfied with their jobs and may ultimately start thinking leaving the profession at all. This is due to the fact that cost of living is highly increasing in Pakistan.

Govindarajan (2012) study on the level of stress and coping strategies among primary teachers in Tamilnadu, found out that the main source of the stress as pointed out and identified is the changing education policies of the government. The most effective coping mechanism according to them is to have a healthy home life. Teachers reported that the most effective action that schools or the Government can take to reduce teacher stress is to increase teachers' salary and fortunately, the government had announced that the

implementation of 6th pay commission for teachers. This will support the result of this study. (Govindarajan, 2012). This study focused on levels of stress among primary teachers and found out that the main source of stress is education policies. However, it did not address the influence of the education policies and other employment factors on stress among secondary teachers.

In Taiwan Kyriacou and Chien (2004) in their study on teacher stress in Taiwanese primary schools, the main source of stress identified were the changing education policies of the government. The most effective coping action reported was having a healthy home life. Teachers reported that the most effective action that schools or the government could take to reduce teacher stress was to decrease teachers' workload. This study used questionnaires to collect the data. However, the research design was not indicated. It's therefore difficult to authenticate the results. In assessing sources of stress, the study used a questionnaire that had 20 items, the questionnaire was not exhaustive. The study focused on stress among primary teachers. However, stress among secondary teachers was not addressed, the study also did not indicate the actual contribution of these factors on stress among teachers, a knowledge gap that the current study sought to fill.

In a study carried out on Bihar and Jharkhand universities, Kumar and Deo (2011), stress and work life of college teachers, junior college teachers experienced significantly higher level of stress on role overload, role stagnation and interpersonal relation and on overall stress in comparison to senior teachers. The senior teachers were more satisfied with their job and life in comparison to junior colleagues. The reason is red tapism and unnecessary delay in promotion avenue as well as shifting workload to junior colleague.

Alam and Farid (2011), in their study on factors affecting teachers' motivation in Rawalpindi city, concluded that teachers were not satisfied with their socio economic status, choice of profession, student's behavior and examination stress. A number of teachers felt that they were not paid according to their abilities. It was recommended that teachers should get teacher training, should be given due respect and should be paid according to their qualifications and abilities.

In India, in a study on demographic differences and occupational stress of secondary school teachers, Aftab and Khatoon (nd) concluded that nearly half of the teachers are in less stressed group and male teachers face more occupational stress than their counterparts. Further, it was revealed from the result that trained graduate teachers have significantly higher occupational stress than post-graduate and untrained teachers. The study also finds that occupational stress is most prevalent among teachers with an experience of 6-10 years and least among 0-5 years of experience in teaching. Further, no significant difference was seen between the monthly salary and occupational stress of secondary school teachers. Also, no significant difference was found among the teachers teaching languages, arts, social sciences and sciences. In addition to this, the study also supports no significant difference in the marital status and occupational stress of secondary school teachers.

According to Akwesi (2013) in his study on absenteeism among rural teachers: the contribution of poor remuneration, qualification of teachers and furthering studies on distance learning poor remuneration, job dissatisfaction teachers taking salaries from different towns, transportation problem, teachers furthering education on distance learning and the qualification of the teachers to be the main causes of absenteeism in Ghana.

Maphalala (2014) in his study on the manifestation of occupational stress in the teaching profession: the unheeded voices of teachers in KwaZulu Natal province, South Africa revealed that teaching stressors which the teachers found stressful, in order of most to least stressful, were curriculum changes, work load pressures and job insecurity. This study adopted a descriptive research design. Questionnaires were used to collect data. This study focused on occupational stress among primary teachers. However, it did not address stress among secondary teachers, a knowledge gap that the current study sought to fill.

Ekundayo and Kolawole (2013), in their study on stress among secondary school teachers in Ekiti State, Nigeria, revealed that poor working conditions, poor relations with super ordinates and late payment of teachers' salaries were major sources of stress among teachers in the state. The study also revealed that organizing one's time effectively was the main strategy of coping with stress among the teachers. The study further revealed a significant relationship between sources of stress and the teaching effectiveness of the teachers. Duyilemi (nd) in his study on source and social correlates of occupational stress among Nigerian primary school teacher found out that the teachers perceived delay in promotion' as their second greatest stress factor. This should be expected since some of the sample teachers (especially those from Rivers and Imo) complained of being on the same salary level for about 6 years.

In Uganda, in a study on teachers, remuneration and performance of schools under Universal Primary Education (UPE) system in Uganda: a case study of Wakiso District, Barbara (2011) found out that the relationship between teachers' remuneration and performance of

schools under UPE system revealed a strong and positive relationship between teachers' remuneration and performance of schools under UPE system.

In Kenya, Wangai (2012) in her study on factors affecting job satisfaction among secondary school teachers of Mwatate district, Kenya found out that salary level was ranked as the most important factor towards job satisfaction and poor pay as the most dissatisfying job factor. Further study on institutional factors that influence teacher turnover in public secondary schools in Baringo district, Kenya, Koech, Tikoko and Chemwei (2014) concluded that remuneration, career advancement and working conditions were the domains mostly responsible for the teacher turnover in Baringo district secondary schools. On the whole, the study found that institutional factors influence teacher turnover in Baringo District.

In a study on causes of burnout among primary school teachers within Kericho municipality, Kenya, Ng'eno (2007) found that low salaries, lack of involvement in decision making, heavy work load and few opportunities for promotion were main contributory factors to teacher burnout within the municipality. The study used survey research design. Stratified and simple random sampling techniques were used to select the sample. This study did not address the influence of salaries and promotion on stress among secondary teachers, a knowledge gap that the current study sought to fill.

Studies reviewed by Kyriacou and Chien (2004) in Taiwan, Usman, Akbar, Ramzan (2013) in Sialkot district and Govindarajan, (2012) found out that government policies, salary and promotion are sources of stress in teaching. However, these studies did not address influence

of government policies, salary and promotion on stress among secondary teachers in Kakamega North sub-county, a knowledge gap that the current study sought to fill.

2.5 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 Khan *et al*, 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 *et al*, 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. This study focused on stress among employees at the education training and development practices, however, the study did not address influence of stress among teachers on student performance in secondary schools, a knowledge gap that the study sought to fill.

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, however, the study did not address the influence stress among teachers on students' academic performance, a knowledge gap that the study sought to fill.

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, it did not address secondary teachers, a knowledge gap that the current study sought to fill.

Khan *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 deceased 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 *et al.* (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), 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. 100 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 K.C.P.E 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. This study focused on the relationship between job stress and performance in public universities, however, it did not address the relationship between job stress and performance in secondary schools a knowledge gap that the current study sought to fill.

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, a knowledge gap that the current study sought to fill.

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, a knowledge gap that the current study sought to fill.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the procedure and methods the researcher adopted in carrying out the study. It is divided into the following sections: the research design, study area, study population, the sample and the sampling techniques, instruments of data collection, data collection procedure and data analysis techniques.

3.2 Research Design

The study used descriptive survey and correlational research designs. Descriptive survey research design is a scientific method which involves observing and describing the behaviour of a subject without influencing it in any way. The subject is being observed in a completely natural and unchanged natural environment (Shuttleworth, 2008). Bogdad and Tayloy (1984, as cited in Oriwa 2010), define survey as a strategy used to collect information from a large population by use of structured interviews, questionnaires among other methods. According to Fraenkel and Wallen (2009), descriptive survey is the most widely used technique in education and behavioural sciences for data collection. It is a means of gathering information that describes the nature and extent of a specified set of data ranging from physical count and frequencies to attitudes and opinions by asking same questions to a large number of individuals. Descriptive survey research design is appropriate for this study because it is an efficient way of collecting information from a large number of respondents targeted. According to Bogdad and Tayloy (1984, as cited by Oriwa, 2010), the design is also flexible as it allows the researcher to get a wide range of information including attitudes, beliefs,

values and knowledge. Correlation is a statistical technique that is used to measure and describe a relationship that exists between two or more variables. The design is most appropriate because it will enable the researcher to map out the relationship between two or more educational variables (Orodho, 2003).

3.3 Area of Study

The study was conducted in Kakamega North sub-county, Kakamega County. The sub-county is situated in Western Kenya. The name of the sub-county (Kakamega North) changed in the year 2011 from Kakamega North district to Kakamega North sub-county when counties were introduced in Kenya. Its Geographical coordinates are 0^0 and 0^0 30'N, $34^0$30' and $35^0$30'E. The area has 99,716 males and 105,450 females giving a total 205,166 people. The area has a density of 480 sq km. The area covers approximately 427.4^2 km. The economic activities practiced are sugar cane farming, *bodaboda* business and small scale business for example vegetable selling. The sub-county is inhabited by Luhya ethnic group of the large Bantu people of East Africa. The area has 45 secondary schools. The area has a poverty level of 57 % (Appendix VI).

3.4 Study Population

The study population consisted of 45 principals, 900 teachers, and one County director. The sub-county has 45 schools. The principals were chosen because they are in charge of the teachers and they are better placed to give information on teachers' performance, absenteeism and general conduct of the teachers. Teachers were chosen because they are the ones affected either positively or negatively by stress. The County director was chosen because he is in charge of the sub-county and is in charge of teachers discipline in the

district. Those teachers involved were those teaching in longitudinal teaching. These are teachers who had move with the students from form one to form four.

3.5 Sample Size and Sampling Techniques

The study sample size consisted of 40, principals, 100 teachers, and one TSC county director. This sample size was considered adequate. The study used saturated sampling technique to select 40 principals, one TSC county director. Purposive sampling technique was used to select 100 teachers of 2014 students involved in longitudinal teaching. Any teacher who had not moved with the students from form one to form four was not included in the study. These are teachers who taught these students for four years from form one to form four. Table 3.1 shows the study sample size.

Table 3.1: Sample Size

Population category	Target population	Sample Size	Percentage %
Teachers	900	100	11.11%
Principals	45	40	100
County Director	1	1	100
Total	**946**	**141**	

3.6 Instruments for Data Collection

The study used questionnaires, interview schedule and document analysis guide to collect data. The documents that were reviewed included files from the examination office. The instrument for measuring stress level was adapted from Holmes and Rahe (1967) by replacing the life events with those that are experienced at school and at home that affects

their professional work. The life events used were 44 where as those that were used by Holmes and Rahe (1967) were as 43 in number. The adaptation involved tailoring them to Kenyan situation based on day to day experiences of teachers in their operations. The instructions to the respondents were precise and concise to enable them objectively rate their stress levels the fact that they were assured of confidentiality enhanced their degree of objectivity. The instrument was piloted and reliability was 0.8. Thomas Holmes and Richard Rahe developed the scale by listing common stressful events and assigned values of 50 to the "life changing units" to the stress caused by marriage, they then had a large number of men rating the stress caused by other events in comparison to marriage. The results were compiled to create the scale. Studies show a modest correlation between the number of life changing units experienced in a previous year with persons health in the present years specifically correlation have been shown between Social Readjustment Rating Scale (SRRS) scores and heart attacks broken bones, diabetes, multiple sclerosis, tuberculosis, complication of pregnancy and birth, declines in academics, employee absenteeism and other faculties. Although the scale was originally developed and validated using male subjects, it provides useful results with both male and female subjects and it has been validated with Japanese, Latin America, European and Malaysian population.

The instrument for measuring teacher management related factors influencing stress was adopted from Marther, Elizabeth and Mathew (1988). The adaptation involved tailoring them to Kenyan situation based on day to day experiences of teachers in their operations. These instruments was tested and the reliability coefficient was 0.8.

3.6.1 Teachers Questionnaire

This questionnaire was structured to provide information teacher management related factors influencing teacher stress and its effect on student academic performance.

3.6.2 Principals' and TSC County Director Interview Guide

An interview was held with the TSC County director and the principal to solicit information on stress related illness reported by teachers in the district. TSC county director was also instrumental in providing information on the issues that could be ailing the education sector in the region.

3.7 Validity of the Instruments

Validity refers to the appropriateness, meaningfulness, correctness and usefulness of inferences a researcher makes (Fraenkel & Wallen, 2009). To ascertain the validity of the research instruments, the researcher presented the respective questionnaire to experts from the department of Education, Maseno University for examination and verification. Their views and comments were incorporated in the instruments before using them for data collection.

3.8 Reliability of the Instruments

Reliability refers to the consistency of the scores obtained that is, how consistent they are for each individual from one administration of an instrument to another and from one set of items to another (Fraenkel & Wallen, 2009). Reliability of the instruments was established through a test re-test method in 5(10%) of the schools that were not be involved in the main study where by Pearson r of 0.7 and above at a set p- value of 0.05 was considered reliable.

The instrument was adapted from Homes and Rahe (1967) by making the changes to suit the Kenyan situation. The original reliability of the instrument was 0.81. Although the scale was originally developed and validated using male subjects, it provides useful results with both male and female subjects and it has been validated with Japanese, Latin America, European and Malaysian population. In this case, the teachers' questionnaire had a reliability index of 0.8. The original instrument had 44 items. Piloting was then done in 5 schools that were not involved in the main study and the reliability index was 0.8.

3.9 Data Collection Procedures

Introductory letter was sought from the School of Graduate Studies Maseno University. Upon receiving the authorization letter, the researcher proceeded to the field after making appointment with principals of the schools sampled for the study. The researcher visited the schools and distributed questionnaires. The researcher took time to explain the main intention for the study and clarified any other issues with the respondents. The researcher collected the questionnaires after the respondents had completed filling them on the same day. In cases where some respondents had not completed filling the questionnaires, a self addressed envelope was left to them for posting back the questionnaires to the researcher. The TSC County director and the Principals were interviewed to solicit information on stress related illness reported by teachers in the sub-county and the influence of stress among teachers and its influence on students' performance in the sub-county. All principals were interviewed because the sample size of 40 fell in the recommended sample size for interviews to be conducted (Morse, (1994).

3.10 Data Analysis Techniques

Quantitative data obtained was analyzed using descriptive statistics inform of frequency counts, percentages and means. Conclusions were made in reference to the ratings. Qualitative data obtained was transcribed and analyzed in emergent themes and sub- themes. Rating scale was used to analyze the influence of stress among teachers' on student performance in Kakamega North sub-county.

On the analysis of stress levels, a score of 1.00-1.44 was interpreted as very low stress, 1.45-2.44 as low stress level, 2.45-3.44 as moderate stress, 3.34-4.44 as high stress level and 4.45-5.0 was interpreted as very high stress level. On factors influencing stress among teachers in public secondary schools, a score of 1.00-1.44 was interpreted as having very low influence, 1.45-244, as low influence, 2.45-3.44 as having moderate influence, 3.44-4.44 as having high influence and 4.45-5.0 as having very high influence. Regression analysis was used to establish the influence of stress among teachers on students' academic performance in public secondary schools in Kakamega North sub-county. Pearson's Correlation coefficients (r) were therefore interpreted to the influence of teachers' stress on students' academic performance. Pearson's r was used to determine the direction and strength of the relationship. Elifson, Runyon and Haber (1990); Leedy and Ormrod (2005) interpretation guidelines were used as shown in Table 3.2.

Table 3.2: Interpretation of Pearson's Correlation Coefficients (r)

Negative (-)	Positive (+)	Strength of the relationship
0.01 – 0.30	0.01 – 0.30	Weak/low/small
0.40 – 0.60	0.40 – 0.60	Moderate/ medium
0.70 – 0.99	0.70 – 0.99	Strong/high
1.00	1.00	Perfect relationship
0.00	0.00	No relationship

Source: Adapted from Elifson, Runyon and Haber (1990); Leedy and Ormrod (2005)

3.11 Data Analysis Matrices

This analytical tools was used in the study to analyze quantitative and qualitative data as shown in Tables 3.2 and 3.4.

Table 3.3

Quantitative Data Analysis Matrix

Objectives	Independent Variable	Dependent Variable	Statistical tools
Establish stress levels among secondary school teachers in public secondary schools in Kakamega North sub-county	Stressors (indicators)	Stress	Descriptive statistics in form of frequency counts, percentages and means
Determine school factors that influence stress among secondary school teachers in public secondary schools in Kakamega North sub-county	School factors	Stress	Descriptive statistics in form of frequency counts, percentages and means. Pearson's r correlation, coefficient of determination, stepwise regression
Determine employment factors that influence stress among secondary school teachers in public secondary schools in Kakamega North sub-county	Employment factors	Stress	Descriptive statistics in form of frequency counts, percentages and means. Pearson's r correlation, coefficient of determination, stepwise regression
Determine the influence of stress among secondary school teachers on students' academic performance in public secondary schools in Kakamega North sub-county.	Stress levels	Students' academic performance	Descriptive statistics in form of frequency counts, percentages and means. Pearson's r correlation, coefficient of determination, stepwise regression

Table 3.4

Qualitative Data Analysis Matrix

Objectives	**Independent Variable**	**Dependent Variable**	**Transcript**	**Theme and Sub theme codes**
Establish stress levels among public secondary school teachers in Kakamega North sub-county.	**Stressors**	**Stress**	Some teachers experience low stress (principal-3)	**S L**
Determine school factors that influence stress among public secondary school teachers in Kakamega North sub-county.	School factors	Stress	Teachers teach in schools of their choice. (TSC County of School Director of Education)	**SF** L
Determine employment factors that influence stress among secondary school teachers in public secondary schools in Kakamega North sub-county	Employment factors	Stress	Redeployment of teachers is emotional and traumatic (Principal – 1)	**EF GP**
Determine the influence of stress among public secondary school teachers on students' academic performance in public secondary schools Kakamega North sub-county.	Stress	Students' academic performance	Stressed teachers may not perform well (Principal – 1)	**SP TP**

KEY:

SL	Stress Level	**EF**	Employment Factors	**SP**	Students' Performance
SF	School Factors	**GP**	Government Policy	**TP**	Teacher Performance
L	Location				

3.12 Ethical Considerations

In conducting the study, the researcher ensured utmost confidentiality of the respondents. No inducements were given to any individual in order to solicit information. The researcher sought informed consent from the participants before they take part in the study. The researcher also respected individual autonomy as the respondents in the study were given freedom to decide on whether to participate in the study or not. Those who agreed to participate in the study were assured of their freedom to withdraw from the study without giving prior explanations to the researcher.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents results and discussions of the findings of this study. The purpose of this study was 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, Kenya. The findings were presented according to the study objectives. The objectives of the study relating to Kakamega North Sub-county were to:

i) Establish stress levels among teachers in public secondary schools.

ii) Determine influence of school factors on teacher stress in public secondary schools.

iii) Determine the influence of employment factors on teacher stress in public secondary schools.

iv) Establish the relationship between teacher stress and students' academic performance in public secondary schools.

4.2 Return Rate of the Questionnaires

The return rate of the questionnaire was 99%. That is, one hundred questionnaires were issued and 99 of them were duly filled and returned (Table 4.1)

Table 4.1: Response rate of Questionnaires

Category	Issued	Returned	Percentage
Teachers	100	99	99%
Total	100	99	99%

Source: Field data

4.3 Demographic Characteristics of Respondents

This section discusses the demographic characteristics of the respondents used in the study. Information about age, gender, marital status, level of education and work experience of the participants in this study was explored. The information was very important as it enabled the researcher to understand the influence of teachers stress on student academic performance in secondary schools based on their experience in teaching and in life experiences.

4.3.1 Demographic Characteristics of the Teachers

The study sought to investigate the demographic characteristics of the teachers. The respondents who participated in the survey were asked to state their gender, marital status, age, highest level of education and their experience in teaching; and the response was as presented in Table 4.2.

Table 4.2

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	33.32
50 and Above	21	21.12
Total	99	100
Highest Level of Education		
Diploma	12	12.12
Bachelor of Education	54	54.54
BSC-PGDE	21	21.12
Masters	12	12.12
Total	**99**	**100**
Teaching Experience		
> 5 years	12	12.12
6-10 years	29	29.3
11-15 years	35	35.4
16 and above	23	23.23
Total	**99**	**100**

Source: Field data

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 teachers. The study categorized the ages of the respondents into four age brackets; Age bracket 20-29 had 23 (23.23%) respondent, 30-39 had 23(23.23%) respondents, and 40-49 had 32 (33.2%) respondents and 50 and above had 21 (21.12%) respondent. 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 and their participation in educational activities is at its maximum. The study also sought to investigate the level of education of the teachers. The information was important as it helped in gauging the answers of the respondents.

Majority of the teachers had Bachelors degree that is 54 (54.54%), BSC-PGDE were 21 (21.12%), 12 (12.12%) had masters degrees while 12 (12.12%) had diploma certificate. 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 experience, 29(29.3%) teachers were in the bracket of 6-10 years of experience, 35 (35.4%) were in the bracket of 11-15 years of experience and lastly 23 (23.23%) were in bracket of 16 and above years. This means majority of the teachers had taught for 6-10 years. The information on experience was important as the more experienced teachers were, the higher their experience in matters of job stress. 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. The diversity in demographic characteristic enriched their responses on stress among teachers and its effect on students' academic performance.

4.4 Stress Levels among Public Secondary School Teachers in Kakamega North Sub County

The research question responded to was: What are the levels of stress among public secondary school teachers in Kakamega North Sub-county? The responses were as shown in Table 4.3.

Table 4.3: Summary of the Teachers' Stress Levels in Public Secondary Schools in Kakamega North Sub County

Ratings	Level of Stress	Frequency	Percentages
1.00-1.44	Very low	0	0
1.45-2.44	Low stress	6	6.06
2.45-3.44	Moderate stress	37	37.37
3.45-4.44	High stress	56	56.57
4.45-5.00	Very high stress	0	0

From Table 4.3, it can be observed that teachers experience different levels of stress. It can also be observed that majority of the teachers are experiencing high level of stress. From Table 4.4, six (6.06%) of the teachers are experiencing low stress level. In Kakamega North sub-county, only 6% of the teachers are operating at a low stress level. Thirty seven (37.37%) of the teachers are experiencing moderate stress level. it's clear that 37(37.37%) of the teachers are operating at an moderate stress level and so they are creative in their work,

motivated to work hard to better performance in the sub-county. Fifty six (56.57%) of the teachers are experiencing high stress level.

Demographic data revealed that teachers in Kakamega North Sub-county manifested myriad characteristics in terms of gender, marital status age, academic qualifications and teaching experience. All these characteristics were adapted from standardized instrument of Holmes and Rahe's (1967) social readjustment rating scale using 50 "life changing units" or rather life events. These items were robust enough to reveal the stress levels of teachers in the public secondary schools. For instance data on gender, female teachers are likely to have more stress than their male counterparts because apart from their academic responsibilities they are more involved in domestic chores (Anbu, 2015).

This study established that the teaching profession has many stressors. These stressors included worries over expected Kenya Certificate of Secondary Education examinations results, workload, internal assessments, students' indiscipline, lesson preparation, large family sizes among others. These stressors impact differently on stress levels of teachers' workload had high rate meaning that it had high influence on levels of stress among teachers in public secondary schools. Some of the other factors were rated as follows long hours of work 4.2, school policy on dress code 4.3, commuter allowances 3.25, school policy on remedial teaching 4.61, basic salary 3.82, curriculum organization 3.22, marking students work 3.84, shortage of teaching, facilities 4.22, setting examinations 3.45, school ethos 3.12, interpersonal relations 2.80, team teaching 3.2, health status 2.54, married life 3.90, single parenthood 4.24, domestic chores, 4.50. The ratings of 2.45 to 3.44 meant that the life events

(or life changing units) were experienced three times in every 3 months in the last four years which translated to moderate stress level. The ratings of 3.45 to 4.44 meant that the life changing units were experienced four times in every one month in the last form years which translated to high levels of stress. The ratings of 4.45 to 5.0 meant that life changing units were experienced five times in every week in the last four years, which translated to very high stress levels. Nevertheless these life events were expressed as not impacting on teachers singly but jointly with others. It is for this reason that 6% of the teachers established as experiencing low stress levels, 37.37% as experiencing moderate stress and 56.57% as experiencing high stress levels. None of the teachers recorded very low stress and very high stress levels. These findings concur with those of Anbu's (2015) study conducted on professional stress of higher secondary school teachers working in government and private schools in Nagecoil Region, India. Two higher secondary school teachers were used as the sample.

The findings of this study revealed that the demographic factors like gender, type of school and marital status of teachers had significant impact on their stress levels, whereas the professional qualification, location of school, medium of instruction and teaching experience did not differ significantly in their level of professional stress component. Furthermore Anbu (2015) found that higher level of stress was evident in higher government secondary schools than those working in private schools. The findings of this study were also in agreement on stress and employees by Altangerel, Ruime, Elahi and Dash (2015) in their study titled "investigating the effect of Job Stress on performance of Employees; Ulaanbaatar capital of Mongolia; 120 employees of four telecommunication companies of Mongolia, that is,

mobicom, united, Skylel and G-mobile were used as sample size. The study by Oyungerel et al (2015) established that employees were stressed by work overload, no relaxation time during working hours and family sizes. A study by Sultana, Bano, Bano and Shafa (2012) on the nature and impact of teachers stress in the private schools of Gilgit – Baltistan, Pakistan involving 555 private schools revealed that teachers in private schools were more stressed than teachers in government schools. This was irrefutably evidenced in teacher's turnover which was higher in private schools than government schools. The teachers in private schools were working under very demanding circumstances which often eroded their motivation and contributed to their anxiety and tension.

These findings of this study are contrary to those of Anbu (2015) study in Nagercoil Region in India. This means teachers whether in government or private schools experience stress. What may vary is the stress levels. The reasons cited for the stress experienced were workload; time spent in class, preparation, counseling students, working with large number of students, lack of resources, specifically instructional resources, libraries, computer laboratories, laboratories, resource rooms, salaries, family issues and financial resources. These findings concur with the findings of this study, meaning that Holmes and Rahe (1967) social, readjustment Rating scale was effective in establishing stress levels. Gebrekirstos (2015) in a study titled occupational stress among secondary school teachers and their coping strategies: The case of central zone of Tigray Region, Ethiopia using a sample size of 321 secondary school teachers revealed that secondary school teachers experienced high level of occupational stress. The dominant stressors were interpersonal related sources, administrative sources and students' parents related sources' specifically the study indicated that gender

workplace and family had no effect in experiencing occupational stress among teachers. On the contrary, age and work experience had significant mean difference.

The study focused on levels of stress among teachers because of its implication in students' academic performance. In this respect one principal stated: "some teachers experience low stress" Low stress level is a level at which an individual maintains his performance and does not induce and activate or do not suffer from any stress and possibly that the individual sees no reason to change the level of performance. In Kakamega North sub-county teachers were operating at a low stress level. This means they were contented with their performance and so not challenged to better their performance. The teachers operating at this level may not be bothered with students' demands, school mean scores in National examinations, setting of examinations, academic days in the school and other responsibilities in the school. A school that has so many teachers operating at this level may not realize improvement in students' performance.

The findings of this study are inconsistent with the findings of Sumathy and Sudha (2013) who found out that no one was experiencing low stress levels. Compared to teachers in India, a small percentage of teachers in Kakamega North sub-county are experiencing low stress level**.** Moderate stress level is a level at which an individual gets encouraged and stimulated to increase their level of performance especially when confronted with a difficult situation. This is a situation that is responsible for the creation of innovative activity when the individual is trying to solve a difficult problem. The individual is challenged and is stimulated to better his/her performance. From the findings in literature review, optimum amount of stress is important for creating an urge in the individual to perform better, that

optimum level of stress is Eustress. Beyond that level of stress, the performance/efficiency reduces, it is therefore clear that teachers in Kakamega North Sub county may have been operating at moderate stress level and so they would have been creative in their work, motivated to work hard to better performance in the sub-county. Teachers operating at this level are concerned with everything that goes on in the school. They are concerned with the students, setting of examinations in the school, remedial teaching, and attending to parents and other responsibilities in the school. Unfortunately the teachers operating at this level were few in Kakamega North sub-county and so their impact on performance in the County may have been minimal. A school that has so many teachers operating at this level may realize better performance much faster. The findings are inconsistent with the findings of Sumathy and Sudha (2013) who found out that 225(57.69%) of the teachers were experiencing moderate stress levels compared to teachers in Kakamega North sub-county where a small percentage of teachers in India were experiencing moderate stress level.

The findings of this study are also not in line with the findings of Raza (2012) in his study on relationship between occupational stress and job satisfaction of faculty: the case of universities of Punjab, that a moderate level of stress is perceived by university teachers. These findings do not support the findings of Hadi, Naing, Daud, Nordin, and Sulong (2009) in their studies on prevalence and factors associated with stress among secondary school teachers in Kota Bharu, Kelantan, Malaysia, that on average stress level among secondary school teachers in Kota Bharu was mild.

High stress level is a level at which negative effects start to emerge and the results were that performance begins to decline. The severity of stress consumes the attention and the energy

of the individual in trying to focus on his efforts to reduce the causes of stress, leaving little energy for his/her work. Majority of the teachers in public secondary schools in Kakamega North Sub-county are highly stressed. High stress breaks down a person. From the findings, it can be concluded that these teachers are affected by the effects of stress. Teachers operating at this level are highly disturbed with so many issues. For example when there is a problem, these teachers are highly disturbed to get the solution to the problem and so when the solution is not arrived at, they are much stressed. They are disturbed when students misbehave, when students do not perform well in the examinations and they are disturbed when they cannot handle all their lessons comfortably and other responsibilities in the school. Majority of the teachers could be having lower engagements, less productive and the schools could be experiencing higher levels of absenteeism. Unfortunately, majority of the teachers were operating at this level and so their impact on students' performance may have been low.

The findings of this study are in line with Ansarul's (2014) in his study on occupational stress of primary school teachers which found out that primary school teachers were highly stressed. Moreover, the private primary school teachers were also highly stressed in comparison to their government primary school teacher counterparts. The findings of this study support the findings of Manzoor Awan, Mariam (nd) in their study on investigating the impact of work stress on job performance: a study on textile Sector of Faisalabad found out that stress levels among employees in textile sector of Faisalabad were 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 was not affecting the performance of the employees. The findings are consistent with the findings of Sumathy and

Sudha (2013) in their study on teachers stress and type of school that 165(42.31%) were experiencing high stress levels.

The findings of this study are supported by Mapfumo, Mukwidzwa and Chireshe (2014) in their study on sources and levels of stress among mainstream and special needs education teachers in Mutare urban in Zimbabwe that stress levels for the teachers were in general elevated, but those of women both in the mainstream and in special needs education were more elevated than those of their main counterparts. However, this study did not indicated the exact percentage of the stress level among teachers, the current study did not focus on comparison of stress between male and female teachers.

On average the study established that teachers in public secondary schools in Kakamega North sub-county were experiencing moderate stress levels. This means that theoretically teachers in Kakamega North sub-county may be operating at moderate stress level which is a level at which teacher acts in a constructive manner, stimulated and encouraged to better their performance. It is expected that the students' performance in the County should be good as most teachers are stimulated to better their performance. These findings concur with those of Okeke and Dlamini (2013) in their study on an empirical study of stressors that impinge on teachers in secondary schools in Swaziland that teachers were moderately stressed by their work. The findings are further supported by The findings of this study are further supported by Chona and Roxas (2009) in their study on stress among public elementary school teachers in Baguio city Philippines that teachers stress experienced by the public elementary teachers was at normal, teachers were not easily affected by the difficulties they

encounter in relation to their job. However, they focused on teachers in elementary school, secondary teachers were not addressed a knowledge gap that the current study filled.

The findings are also in line with the findings of Olivier and Venter (2003) in their study on the extent and causes of stress in teachers in the George region which revealed that stress levels of teachers in the George area are average, but teachers nevertheless expressed concern about teaching factors that cause them stress. However, the results are inconsistent with the results of Gebrekirstos (2015) in his study on occupational stress among secondary school teachers and their coping strategies: The Case of Central zone of Tigray region Ethiopia that indicated that all the central zone secondary school teachers experienced high level of occupational stress in their work place. The findings are also inconsistent with the findings of Richards (2012) in his study on teacher stress and coping strategies: A National Snapshot indicated that teachers nationwide are highly stressed, with California teachers at the top of the list.

The findings of the current study are further supported by Chona and Roxas that teachers in their study on stress among public elementary school teachers in Baguio city were experiencing normal stress level, teachers were not easily affected by the difficulties that they encounter in relation to their job. This study focused on stress among elementary teachers, however, teachers in secondary schools were not addressed, a knowledge gap that the current study filled.

4.5 Influence of School Factors on Stress among Public Secondary School Teachers.

The research hypothesis was: There is no statistically significant relationship between school factors and teacher stress in public secondary schools.

To respond to this research hypothesis, Pearson's r correlation was used to compute the relationship between school factors and teacher stress. The results were as shown in Table 4.4.

Table 4.4: Relationship between School Factors and Teachers Stress

		Teacher stress
School factors	Pearson Correlation	.238
	Sig. (2-tailed)	.022
	N	99

From Table 4.4, it can be observed that there was a weak positive relationship between school factors and teacher stress. The relationship was significant as the calculated p-value was 0.022 which was less than the critical value of 0.05. The null hypothesis was therefore rejected. Individual school factors were correlated with teacher stress to establish linear relationships. The results were as shown in Table 4.5.

Table 4.5: Relationship between School Factors and Teacher Stress

	School Factors /Life Events		Teacher Stress coefficient (Index)
X_1	Location	Pearson Correlation	-.265
		Sig. (2-tailed)	.011
		N	99
X_2	Class size below 45 students	Pearson Correlation	-.112
		Sig. (2-tailed)	.288
		N	99
X_3	Class size of 45 students	Pearson Correlation	.029
		Sig. (2-tailed)	.787
		N	99
X_4	Class size above 45studnets	Pearson Correlation	.157
		Sig. (2-tailed)	.134
		N	99
X_5	Entry behaviour of below 250marks	Pearson Correlation	.162
		Sig. (2-tailed)	.123
		N	99
X_6	Entry behaviour of above 300mks	Pearson Correlation	.078
		Sig. (2-tailed)	.460
		N	99
X_7	Students transfer policy	Pearson Correlation	.229
		Sig. (2-tailed)	.028
		N	99
X_8	Delegation policy	Pearson Correlation	.031
		Sig. (2-tailed)	.767
		N	99
X_9	Communication channel in school	Pearson Correlation	.251
		Sig. (2-tailed)	.016
		N	99
X_{10}	Evaluation policy on students	Pearson Correlation	.157
		Sig. (2-tailed)	.138
		N	99
X_{11}	Gender parity of students	Pearson Correlation	.129
		Sig. (2-tailed)	.225
		N	99
X_{12}	Gender parity of teachers	Pearson Correlation	.189
		Sig. (2-tailed)	.071
		N	99
X_{13}	Parental support	Pearson Correlation	.116
		Sig. (2-tailed)	.271
		N	99
X_{14}	Teacher- student ratio	Pearson Correlation	.249
		Sig. (2-tailed)	.017
		N	99
X_{15}	Decision making in the school	Pearson Correlation	.176
		Sig. (2-tailed)	.093
		N	99

X_{16}	Office space	Pearson Correlation	.078
		Sig. (2-tailed)	.464
		N	99
X_{17}	Sanitation	Pearson Correlation	.014
		Sig. (2-tailed)	.893
		N	99
$X1_8$	Co-curriculum activity policy	Pearson Correlation	.168
		Sig. (2-tailed)	.112
		N	99
X_{19}	Bench marking policy	Pearson Correlation	.220
		Sig. (2-tailed)	.035
		N	99
X_{20}	Board of management involvement in	Pearson Correlation	.019
	school management activities	Sig. (2-tailed)	.860
		N	99
X_{21}	School ethos, customs and traditions	Pearson Correlation	.190
		Sig. (2-tailed)	.069
		N	99
X_{22}	Schools routine	Pearson Correlation	.206
		Sig. (2-tailed)	.049
		N	99
X_{23}	Teacher-student relationship	Pearson Correlation	.229
		Sig. (2-tailed)	.028
		N	99
X_{24}	Students' dressing code	Pearson Correlation	.081
		Sig. (2-tailed)	.445
		N	99
X_{25}	Monitoring students attendance	Pearson Correlation	.067
		Sig. (2-tailed)	.524
		N	99

* Correlation is significant at the 0.05 level (2-tallied)

From Table 4.5, it can be noted that the relationships between school factors and teacher stress were generally weak and positive ranging from .014 sanitation, (X_{17}) to .251 communication channel in school (X_9); and weak negative relationships -.112 class size below 45 students (X_2) and .-265 location (X_1). It can also be noted that, six school factors had a weak, positive and significant relationship with teacher stress. These school factors were: students transfer policy to the schools (r=.229, N=99, P= <.05), communication

channels like memos, notices, and announcements on assembly and staff briefs (r=.251, N=99, P=<.05), teacher -teacher relationship (r=.249, N=99, P=<.05). Benchmarking policy on academics (r=.220, N=99, P<.05). School routine (r= .206, N=99, P=<.05), teacher student relationship (r=.229, N = 99, P=<.05). This means that these factors increased stress among teachers. One school related factor had a weak negative significant influence on teachers' stress. This is location of school (r=-.265, N=99, P=<.05) which means that it reduced stress among teachers.

Seventeen school factors had weak positive influence on teachers' stress level. The influence was not significant. These were: class size of 45 students class size of above 45 students, entry behaviour of below 250 marks, entry behaviour of above 300 delegation policy, evaluation policy in the school, gender parity of students, gender parity of teachers, parental support, decision making in the school, office space, sanitation, co-curriculum activity policy, board of management involvement in school management activities, school ethos, customs and traditions, students dressing code, and monitoring students attendance. This mean that these factors did not influence teacher stress.

Proper channel of communication is very important for faster passage of information from one person to the other. The study established that the channel of communication had a weak positive significant relationship with teacher stress. The study established that communication channel in schools was poor, teachers were stressed as the information was in most cases not relayed on time. In a situation where the channel of communication is not clear, it leads to delay in passing information from one person to the other. In schools, Principals sometimes break the channel of communication and so information is passed to

the students before it gets to the teachers and this influences stress on a teacher. During the interviews with the Principals, it was revealed that in most schools, there had been delay in the delivery of information. This leads to disagreements among the staff members. For instance, Principal (P, 4) stated:

> I use short text messages and notices to communicate to teachers, sometimes teachers receive the messages and pretend not to have received. Sometimes the messages are not delivered and so they don't attend crucial meetings and other important issues in the school. This leads to disagreement which causes us stress.

This interview finding really means that communication channels in schools increases teacher stress, particularly distress. Nevertheless, this factor was a significant predictor of teacher stress. Schools have their own examination policies.

School routine had a weak, positive significant influence on teachers' stress. The study findings from the open ended question showed that reporting time and departing time influenced stress negatively among teachers. A teacher completes the work of the day but has to stay in school until evening. This distresses the teacher. It was also revealed that teachers like doing things differently. Dealing with issues and school activities in the same manner stresses teachers. The findings disagree with the findings of Adebola and Jibril (2008) in their study on sources of occupational stress among secondary school administrators in Kano State, Nigeria that administrative routine was the highest source of stress. Adebola and Jibril (2008) used descriptive statistics to analyze the data, the current study used inferential statistics to analyse the data, which means the findings of this study can be used to make inferences.

People are very sensitive when they feel something unusual is going on between a teacher and a student especially when it is between a male teacher and a female student and so in many schools, administrators tend to warn male teachers to maintain a healthy relationship between them and students. During the interview with the TSC County director, it was observed that a teacher may wish to assist a student who may misinterpret the teachers' intention and hence making the teacher frustrated and distressed. For instance, the TSC county director said:

> There are many cases brought to our office relating to teacher student-relationship. On investigation, it is realized that students and other teachers misinterpreted the teachers' action. By the time the teacher is freed from the allegations, he/she is stressed. This demoralizes a teacher and many opt to leave the profession.

Another Principal (P, 7) said:

> Teachers complain that sometimes there's a pupil who's clearly upset about something and they know they could help by having a private chat, but they cannot be free to assist, they are afraid that someone can say something negative about them. They feel stressed when they cannot assist the student.

Indeed these interview findings indicated that teacher-student relationship was distressful.

Teachers have always known from their own experience that small classes provide better learning environments. In small classes (classes of below 45 students) they are more able to concentrate on teaching. They spend less time in behaviour monitoring and control of disruptions because they are more able to deal with problems promptly as they arise and before they became serious, this result in a reduction in the amount of stress in the classroom environment. It was revealed from open ended question that the lesser the number of students the lesser the paperwork: in small classes there are fewer behavioural problems.

With the reduction in the number of disturbing incidents and a reduction in the number of disengaged students there is a change in the classroom atmosphere and this reduces teachers stress. In this respect, one Principal (P, 10) stated "Overcrowded classes make it harder for students to learn, most students are affected as the teachers spends most of his/her maintaining order in class and this distresses the teacher."

Students with an entry behaviour of above 300 marks are preferred by the teachers, most of them given enough support perform well in class, much energy is not spend on them and the syllabus is covered faster as little time is spend on concepts. Teaching profession is very demanding and so dealing with brighter students reduces teacher distress. These students need guidance on some issues and so they can handle some issues on their own. During the interviews with the Principals, it was noted that students with these marks do not require much effort from the teacher to perform well in class. Syllabus coverage is faster as the teachers do not spend much time on a certain aspect. In this respect, Principal (P, 9) stated: "Teaching students who scored above 300 marks is enjoyable. I am able to do much in one lesson. These students read a head of the teacher and they make my work easy. They make notes on their own; I just need to guide them."

The results also showed that decision making in the school had a weak positive relationship that was not significant. A restrictive bureaucratic environment with low levels of participation from the teachers may influence staff's experience of stress, staff's experience of stress, while participation by the teachers may give the feeling of some control of the stressors in the environment. During the interviews with the Principals, it was revealed

teachers were not involved in decision making in the school. This distresses them as they are forced to get involved in the issues they were not consulted. As much as the teachers feel it is the principal's job to make leadership decisions, they feel, not being included in the decision making process can be very distressful. In this respect, Principal (P, 13) stated: "I don't involve teachers in making all the decisions in the school. This is because they tend to waste a lot of time and only back up what will favour them. I dictate and this leads to confrontation with the teachers and this distresses them." Another Principal (P, 21) said:

> Teachers feel that they are not given the opportunity to air their opinions or concerns and that their suggestions are rejected by principals, other colleagues and learners. They feel left out if nobody listens to them and this disturbs them. They want to participate and contribute to the decision-making process of the school.

These findings are in agreement with the findings by Howard and Johnson (2004) that teachers feel distressed when the administration structure is very hierarchal and concentrated in the hands of few. The study also revealed that teachers also experience distress when the principal has an autocratic leadership style. The findings are also in line with Sindhu (2013) in his study on factors influencing distress and coping strategies among the college teachers of Kerala state who found out that the factors that caused stress always were mainly due to the interference of the employment organizational responsibilities with their family organizational role, lack of their involvement in decision making that reduced their responsibilities and the participatory model in their organizational set up which enhanced their responsibilities to the point of exhaustion. The sample was collected from the state of Kerala.

Parents' attitude towards teachers is a most disturbing factor. Teachers feel that they do not receive the necessary support and appreciation from parents, and the community poses a serious hindrance to learning and this distresses the teachers. During the interviews with the Principals, it was observed that some parents are not ready to motivate teachers to teach extra lessons yet they will keep complaining when students perform poorly. Some parents are not able to pay fees on time and so students overstay at home when requested to get fees. In this respect, Principal (P, 24) stated:

> Teachers are distressed when students are not able to sit for examination because of lack of school fees. I need money to run the school and so I am forced to ask students to get fees from their parents. Teachers feel stressed especially when their top students are affected. Some parents are not supportive at all on the issue of motivation and so teachers are stressed when I request them to teach extra hours without pay.

Another Principal (P, 8) stated:

> Teachers generally want to have a positive attitude towards the parents. The development of a negative attitude towards a parent causes a moral conflict within the teacher and this leads to a teacher feeling guilty because she/he feels that he/she is to blame for the negative attitude towards a parent. This, negatively influences self image of a teacher and eventually distresses the teacher involved.

The findings of this study support the findings of Ekundayo and Kolawole (2013) in their study on stress among secondary school teachers in Ekiti State, Nigeria that lack of support from the parents is a stressor. The findings are also in agreement with the findings of Ozturk (2011) in his study on public primary teachers' perception of their working condition and job stress in Istanbul and Stockholm that relations with students and their psychological and social well-being, and parents' demands from teachers; the least stressful elements were lunch time, parents' demands on their children, and parents' personal problems.

Support from supervisors and colleagues helps to reduce stress at work place. Without much support from the supervisors and peers, the workers feel alone and disserted and their pace of work and performance retards. It was revealed from open ended questions that teachers sometimes teachers differ over petty issues in the staffroom and this stresses them. The study findings are supported by Okeke and Dlamini (2013) in their study on an empirical study of stressors that impinge on teachers in secondary schools in Swaziland, found out that it was a factor that had the least stress.

The study findings are also inconsistent with the findings of Maphalala (2014) in his study on the manifestation of occupational stress in the teaching profession: the unheeded voices of teachers that teaching stressors which the teachers found stressful, in order of most to least stressful, were curriculum changes, work load pressures, job insecurity and poor relationship with colleague.

The findings are further supported by Haastrup, Ekundayo and Kolawole (2013) in their study on stress among secondary school teachers in Ekiti State, Nigeria that poor working conditions, poor relations with super-ordinates and late payment of teachers' salaries were major sources of stress among teachers. These were followed by poor relations with colleagues, inadequate physical facilities in schools, indiscipline on the part of the students as well as lack of support from the parents. However, Karaj and Rapti (2013) in their study on teacher job stress in Albania: examining the role of students' classroom disruptive behavior and other factors in the school context found out that relations with colleagues were not found to be a significant predictor of teacher stress.

The findings are also in consisted with the findings of Chona and Roxas (2009) in their study on stress among public elementary school teachers in Baguio city Philippines that teachers in their study on stress among public elementary school teachers in Baguio city that increase level of competition among colleagues, colleagues undermining competence or personality and not airing of personal opinion was the least stressor.

On Sanitation, office space and delegation policy teachers are more concerned with cleanliness in their working environment as they know very well that it may lead to transmission of diseases. Findings from open ended question showed that teachers were stressed by the fact that they were not free to speak their mind in school. They felt like prisoners. When they want to attend to their personal issues, they could not delegate their responsibility to another teacher, they were forced to seek permission from authority yet maybe the teacher wanted to be out for just an hour.

The results are in line with the findings by Education International (EI) European Trade Union Committee for Education (ETUCE, 1999) that lack of financial resources for sufficient materials, class rooms and equipment; environmental noise; poor ventilation; and problems with hygiene and safety were just some of the bad working conditions. This caused a great deal of stress because these feelings clash with the teacher's personal ambitions and goals for fulfilling their job and providing a quality education, and the educator is left at a loss.

A class size of more than 45 students, had a weak positive statistically relationship with teachers stress, when a class has more than 45 students, it means that the teachers involved had more responsibilities to handle including paper work, supervision and guidance. More students in a class also mean more disrupting students in a class and managing them requires more energy which distresses the teacher. During the interviews, it was noted that most teachers preferred to deal with classes of below 45 students. Principal (P, 34) stated:

> Having more than 45 students in a class means that when it comes to marking of the assignments, more energy and time will be required as compared to having small classes. When it comes to students' discipline, the teacher involved has to be very keen for the students to be very attentive. This is very distressful. Teachers with a higher teaching load are frustrated. Teaching overcrowded classes is irritating.

Another Principal (P, 9) stated:

> Most teachers are very uncomfortable with classes of above 45 students. They Complain so much especially when it comes to marking of the examinations. Most of them don't beat the deadline and so we are forced to keep changing the deadline. On preparation, monitoring, marking of the examinations, grading and discipline rather than relating to individual students or using innovative instructional approaches, are problems frequently identified with large classes.

The TSC county director said: "Most teachers want to be transferred to younger schools. They give change of environment as the main reason but when asked about the environment, too much work is cited as the main reason". These results are in line with the findings by Zedan and Bitar (2012) in their study on stress and coping strategies among science elementary school teachers observed that overloaded classes were the greatest source of stress.

These findings are also in line with the findings of Pervez and Hanif (2003) in their study on level and sources of work stress among women school teachers that level of stress is high

among teachers who have to teach more number of students in a class. These findings are inconsistent with the findings by Hanif, Tariq, and Nadeem (2011) in their study on personal and job related predictors of teacher stress and job performance among school teachers in Government and private schools in Islamabad (Pakistan) that number of students was a significant predictor of teacher stress. The findings are further supported further by Chona and Roxas (2009) that teachers in their study on stress among public elementary school teachers in Baguio city that large class size was a major stressor among teachers.

Students with 300 and above marks require a teacher to give them more attention, a teacher who will rush through the syllabus will not be moving together with the students. This really stresses a teacher. In reality all classes have students of mixed ability, so some pupils are ready to fly ahead with one topic while others are struggling. Most teachers hate leaving anyone behind. They really want to help them, but there isn't always the time and so this really stresses them. During the interviews with the Principals and the TSC County director, it was revealed that students with 300 and below marks tend to require more effort from the teacher. This causes stress to the teacher especially when the teacher has to go through a certain aspect for the students to understand and this stresses the teacher. For instance Principal (P, 15) said:

> Students with 300 and above marks are easy to handle in class. You don't need to struggle that much. This are high achievers, with those with low marks, below 300, you cannot complete the syllabus on time as you have to waste a lot of time on a single aspect. This makes the teacher to fail to meet the targets set by the administration.

The study also established that students transfer policy had a weak positive relationship with teachers stress, the relationship was significant. When a student is admitted in a school, teachers are not involved in the admission and later it is realized that a student is forced to do

a subject that she/ he does not have background knowledge from another school. During the interviews with the Principals and TSC County director, it was observed that teachers feel demoralized especially when their good students transfer to other schools. Sometimes when students get to form four, they are grouped according to their abilities and this demotivates the teacher. For instance Principal (P, 3) stated:

> Interviews are sometimes not done when admitting a student in our school and this is a policy in our school and so later we discover a student was admitted and the student is not performing well and so teachers get distressed dealing with such students. Sometimes we don't pay much attention to the subjects that were done in other schools but later we discover a student cannot fit in our system.

Students dressing code is also a stressor in schools. Students' misbehavior in dressing code provokes stress reactions because it disrupts teaching; it irritates a teacher so much so interferes with his/ her teaching. During the interviews with the Principals, it was noted that teachers are stressed by the students' character. It was observed that the character of the students could be detected from the students' behaviour. The study findings from open ended question, showed that classroom discipline and managing disruptive students demand time and energy from teachers and are linked to a sense of stress. When a teacher witnessed a student physically assaulting or intimidating another student, a student verbally abusing another student and a student verbally abusing a teacher, he is distressed as the teacher sometimes feels helpless. Students' misbehavior, such as cultism, examination malpractice, and mode of dressing general indiscipline stresses the teacher. For instance Principal (P, 13) stated: "Students who are indiscipline tend to wear wrong uniform and so a teacher is forced to confiscate the uniform. This exercise of confiscating wrong uniforms distresses the teacher as sometimes students engage in hide and seek game with the teacher."

The study findings are in line with Allan, Chan, Elaine (2009) in their study on work stress of teachers from primary and secondary schools in Hong Kong that managing student behaviour is the most frequently reported source of stress. The findings are also in line with the findings by Oliver and Venter (2003) who found out that inadequate salary, lack of discipline in the school, unmotivated learners, coping with large classes, time demands, lack of involvement in decision-making and emotional reactions such as depression causes negative stress.

On the whole, school factors had a weak positive statistically relationship with teachers' stress. This means that teachers in Kakamega North Sub County were stressed, but school factors contributed little to the teachers' stress. The school based stressors were many and whereas some seemed significant, some were apparently not. Hence the need to compute stepwise regression analysis to determine the real school factors that were responsible for teachers' stress. Stepwise regression analysis were computed and the results were as shown in Table 4.6.

Table 4.6: Stepwise Regression Analysis of Influence of School Factors on Teacher Stress

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	2.345	.359		6.539	.000
X_1	Location	-.022	.053	-.065	-.415	.012
X_2	Evaluation policy on students	.129	.064	.418	2.031	.047
X_3	Gender parity of students	-.192	.079	-.634	-2.416	.019
X_4	Bench marking policy	.117	.058	.408	2.021	.048
X_5	BOM management of school	-.190	.076	-.614	-2.497	.015
X_6	School ethos customs traditions	.199	.078	.518	2.556	.013

a. Dependent Variable: Stress level

Regression Equation $Y= \beta_0+\beta_1X_1+ \beta X_2 +\beta X_3 + \beta X_4 + \beta X_5 +\beta X_6$

Where:

$Y =$ is the dependent variable

$\beta_0 =$ is the constant or intercept

β_1X_1---- = is the slope or change in Y, given one unit change in X_1------

X_1 ---- = is the independent variable

In stepwise regression analysis, independent variables were added into the equation model one by one and at each stage, any variable which was already included in the model but whose extra sum of squares (R^2) contribution had declined to a non-significant level was eliminated. Selection stopped when all non-significant variables were eliminated and all variables that were significant were retained.

From Table 4.9 it can be noted that six school factors influenced teacher stress. These were; location, evaluation policy on students, gender parity of students, benchmarking policy, BOM management of schools and; school ethos, customs and traditions. The other nineteen factors were eliminated. This means that only a few factors really influenced teachers' stress.

School ethos, customs and traditions were the strongest predictors of teacher stress. This means that one percent increase in school ethos, customs and traditions increased teacher stress by .199 percent as signified by a coefficient of .199. During the interviews with the Principals, it was revealed that teachers were stressed when they were forced to do their duties basing on the tradition that was set long time ago. This demoralized teachers and stressed them as they could not come up with new ideas. Indeed the tradition of the school increases stress among teachers. Teachers would wish to do their administrative duties in different ways and not to follow the tradition of the school. When they are not allowed this stresses them so much. For instance, in some situation, school administration may not be willing to embrace new technology because of the tradition of the school.

These findings are consistence with the findings of Sichambo *et al* (2012), Naido *et al* (2013) and Ncube and Tshabalala (2013) who in their studies found that school ethos, traditional and customs pertaining to poor pay, work overload, large class sizes, strenuous working conditions in Bungoma North Sub County, Kenya and Nkayi District, Zimbabwe.

Gender parity of students negatively influenced teacher stress. That is, for every one percent increase in gender parity, teacher stress reduced by .192 percent as signified by the coefficient of -.192. Gender parity of the students had a weak negative significant relationship with teachers stress. Schools can have boys only, girls only or boys and girls. Some teachers are comfortable teaching girls only, boys only or boy and girls in mixed schools. In mixed schools, when the ratio of boys to girls is not 1:1, teachers are forced to provide guidance and protection to group that has fewer students. The study findings from open ended question showed that teachers in mixed schools were stressed by the fact that

sometimes the ratio between boys and girls is 1:10 and in a situation where girls are few, they are forced to protect the girls and this stresses them.

The qualitative data obtained did not concur with quantitative data as quantitative data indicated that gender parity reduced teachers' stress. These findings were consistent with Senthil *et al* (2013), in their study in India, where they established significant association between gender and stress of teachers. The stress is due to the many and complicated demands that arise when there is gender disparity of students.

BOM involvement in school management activities reduced teacher stress. That is, for every one percent increase in BOM involvement in school management activities, teacher stress reduced by .190 percent as signified by the coefficient of - .190. Board of Management can provide teaching and learning resources to teachers to improve students' performance, they ease teaching pressure much hence reducing the teachers stress. It was established that board of management involvement in school activities is a predictor of teacher stress. The demands from the Board of Management can be very realistically high to be attained and hence motivate the teacher. During the interviews with the Principals, it was revealed that teachers feel that the Board of Management speaks on behalf of the Principal and so when the Principal has a negative attitude towards the teacher, the attitude is passed to the Board of Management. In this respect, the TSC county director said:

> When even more pressure is added from administrators, stress levels increase and burnout worsens. Unfortunately, this causes many teachers to never see beyond their fifth year in the teaching profession. Most Principals don't protect their teachers. Sometimes if they have personal issues with the teacher, they influence the Board of Management to be against the teacher too. So this has always made teachers to have a negative attitude towards them.

The qualitative finding differed with that of quantitative with qualitative findings indicating that BOM engagement reduces stress of teachers, while qualitative findings indicating that BOM increases stress of teachers. Notwithstanding the quantitative and qualitative findings, the findings of this study concur with those of Curtaz (1997) that teachers are stressed when there are problems with management. This is because many stakeholders get concerned and involved. Thus teachers feel obliged to spend many hours day and night working toward keeping the schools off the closure list. This specifically include several meetings after school and sometimes late into the night, contacting and working with parents, as well as getting the community's support. These findings further disagrees with those of Kaur (2011) cited in Siddiqui (2012) who established that teachers' stress is the outcome of school management's disability to fulfill teachers needs and demands.

Evaluation policy on students increased teacher stress by .129 percent as signified by the coefficient of .129 percent. That is, for every one percent increase in evaluation policy, teacher stress increased by .129. Indeed the number of examinations done in school determines the amount of paperwork in the school, the more the paperwork, the more the stress on the part of the teachers, During the interviews with the Principals, it was revealed that teachers feel that the too many examinations increased stress. It was established that in some schools, students sat for five examinations while in others four examinations in a term. In this respect, the (P, 19) Principal said:

> Teachers complain so much when they have to do more than three examinations in a term. They feel that examinations increases workload on the many lessons that they already have. This is especially when they are given short deadlines.

Indeed too many examinations causes stress in real life situation as the teacher has to carry some work home. Some schools do two examinations while some do uncountable many examinations. In a situation where so many examinations are done, teachers get stressed as they do not have time to revise and cover the syllabus. It was revealed from open ended question that in some schools students sit for three examinations in a term while in others they do many examinations. Teachers are distressed by the marking that is done especially when the class population is big. Language teachers are stressed by the marking of compositions. Teachers feel they need time to mark, do corrections before submitting the marks and sometimes the deadlines given are short and so teachers are distressed. Information from document analysis also revealed that in some schools, students were doing more than three sets of the examinations.

These findings are further supported by Ozturk (2011), in a study on public primary school teachers' perceptions of their working conditions and job stress: cases from Istanbul and Stockholm found out that for teachers working in Istanbul, the main reasons of job stress were paperwork and too much work. This is further supported by Sichambo, Maragia and Simiyu (2012) who revealed that apart from the normal classroom teaching, teachers had a number of remedial lessons to attend to, larger classes to handle, a lot of paper work and some had to stay in their work stations other than their normal school timings in order to complete various tasks which included marking students' work. All these factors were contributing in burnout among teachers which were badly impacting their performance.

Benchmarking policy increased teacher stress by .117 percent as signified by the coefficient of .117 percent. That is, for one percent increase in benchmarking policy teacher stress increased by .117. The study established that teachers were stressed when they have to go to other schools performing better than them to get data on how to better their results. They were also distressed by the fact that they were forced to go for benchmarking to other schools, and the reception they were given in most schools was bad. Teachers felt that they were given a bad reception by teachers in other schools, they felt inferior in other schools and that really stressed them. In benchmarking, the school administration adopted what could favour them while what was favouring the teachers was done away with. It was also noted that benchmarking was increasing paper work and workload in school.

Indeed benchmarking can be stressful especially when teachers have to go to schools performing much better than them, they felt inferior and this distressed them so much. Benchmarking involves a teacher going to unfamiliar environment to get data. Depending on the kind of reception the teacher is given determines the level of stress the teacher is bound to receive. Good reception motivates the teacher and reduces stress while bad reception increases stress on the teacher.

Location of the school reduced teacher stress by .022 percent as signified by the coefficient of -.022. That is, for every one percent change in location of the school, teacher stress reduced by .022 percent. Location of secondary schools in Kakamega North Sub-county reduced teacher stress. Teachers choose where to teach. Only few teachers are forced to teach in some areas. When teachers are seeking employment, they are given a contract to sign that

demands that they have to stay in the current station for five at least five years, this makes the newly employed teachers do not to get stressed about the location of the school. For the other teachers, when requesting for a transfer, they are to give three schools they prefer to go to and so most teachers are not affected so much by the location of the school. In this respect, the TSC county director stated:

> Newly employed teachers are forced to sign a contract that forces them to stay in the station for five years and so most of them don't get stressed up with the issue as they feel it's something beyond their control. As for the other teachers, they have a choice to transfer to the areas they prefer with valid reasons. Only few teachers are forced to teach in areas they don't like and it could be because we have not gotten a suitable replacement for the teacher.

The findings of this study are in line with the findings of Ang'alika, Aloka and Raburu (2016) in their study on school physical environmental factors responsible for stressful experience among teachers in Kenyan special primary schools that there was a statistically significant relationship between school physical environmental factors and stress. School physical factors contributing to stress among teachers included travelling far distances to schools and lack of enough latrines. However, the relationship that existed was positive while in the current study, the relationship is negative. According to Ang'alika, Aloka and Raburu (2016), location of the school leads to increase in stress among teachers while in the current study, one unit increase in location of the school leads to a reduction of stress among teachers.

Indeed when a teacher has to travel for a long distance to school, this distresses him or her teacher has to spend more money on transport and so this stresses the teachers and so improvement on location reduces the teachers' stress. Since regression analysis is a stronger statistic that Pearson's "r" for measuring influence of predictor variables, the study

concluded that the six factors were the ones that significantly influenced teacher stress. Regression model is $Y = 2.345 - .022X_1 + .129X_2 - .192X_3 + .117X_4 - .190X_5 + .199X_6$.

To determine the influence of school factors on teacher stress, regression analysis was done and the results were as shown in Table 4.7.

Table 4.7: Regression Analysis of the Influence of School Factors on Stress among Teachers

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.238[a]	.057	.046	.475879

a. Predictors: (Constant), School Factors

From Table 4.7, it can be observed that school factors accounted for 4.6% of the teacher stress as signified by adjusted R square .046. This means that 95.4% could have been due to other factors that were not subject to this study. The influence was generally small but practically significant. To determine whether school factors were significant predictors of teacher management related stress, ANOVA was computed and the results were as shown in Table 4.8.

Table 4.8: Analysis of Variance on the Influence of School Factors on Stress among Teachers in Public Secondary Schools

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.647	6	.357	2.028	.022[b]
	Residual	10.042	92	.176		
	Total	19.689	98			

a. Dependent Variable: Teacher management related Stress

a. Predictors: (Constant), School Factors: Location, Evaluation policy on students, Gender parity of students, Benchmarking policies, BOM management of schools, School ethos and customs and traditions

From Table 4.8, it can be observed that school factors were significant predictors of stress among public secondary school teachers in Kakamega North sub-county (F (6, 92) =2.028<.05).

4.6 Influence of Employment Factors on Stress among Teachers

The research hypothesis was: There is no statistically significant relationship between employment factors and teachers' stress among public secondary school teachers. To respond to the research hypothesis, Pearson's r correlation was used to compute the relationship between employment factors and teacher stress. The results were as shown in Table 4.9

Table 4.9: Relationship between Employment Factors and Teachers stress

		Teachers Stress
Employment factors	Pearson Correlation	.343
	Sig. (2-tailed)	.001
	N	99

From Table 4.9, it can be observed that there was a weak positive relationship between employment factors and teacher management related stress. The relationship was significant as the calculated p-value was .001 which was less than the critical value .05. The null hypothesis was rejected. This means that increase in employment factors would lead to increase in stress levels among public secondary school teachers.

The individual employment factors were then correlated with teacher stress to establish linear relationship as a prerequisite for stepwise regression analysis so as to determine employment factors that influence teacher stress. The results were as shown in Table 4.10.

Table 4.10: Relationship between Employment Factors and Teachers Stress

	Factors/Life event		Teacher Stress coefficient (Index)
X_1	Teachers job groups/ salary	Pearson Correlation	.472
		Sig. (2-tailed)	.000
		N	99
X_2	Career development opportunities	Pearson Correlation	.067
		Sig. (2-tailed)	.513
		N	99
X_3	Teachers dress code	Pearson Correlation	-.117
		Sig. (2-tailed)	.247
		N	99
X_4	Teachers promotion policy	Pearson Correlation	.253
		Sig. (2-tailed)	.011
		N	99
X_5	Role conflict	Pearson Correlation	.284
		Sig. (2-tailed)	.005
		N	99
X_6	Teachers involvement in Government policy decisions	Pearson Correlation	-.044
		Sig. (2-tailed)	.670
		N	99
X_7	Government policy on cheating in examinations	Pearson Correlation	.029
		Sig. (2-tailed)	.775
		N	99
X_8	Teachers medical allowance	Pearson Correlation	.230
		Sig. (2-tailed)	.023
		N	99
X_9	Teachers house allowance	Pearson Correlation	.215
		Sig. (2-tailed)	.034
		N	99
X_{10}	Teachers commuter allowance	Pearson Correlation	.274
		Sig. (2-tailed)	.006
		N	99
X_{11}	Government decision on teachers strike	Pearson Correlation	.35
		Sig. (2-tailed)	.000
		N	99
X_{12}	Study leave policy	Pearson Correlation	.41
		Sig. (2-tailed)	.000
		N	99
X_{13}	Retirement policy	Pearson Correlation	.368
		Sig. (2-tailed)	.000
		N	99

X_{14}	HIV and AIDs policy	Pearson Correlation	-.011
		Sig. (2-tailed)	.916
		N	99
X_{15}	Staffing policy	Pearson Correlation	.082
		Sig. (2-tailed)	.420
		N	99
X_{16}	Workload	Pearson Correlation	.155
		Sig. (2-tailed)	.127
		N	99
X_{17}	Deployment policy	Pearson Correlation	.201
		Sig. (2-tailed)	.048
		N	99
X_{18}	Teachers transfer policy	Pearson Correlation	.428
		Sig. (2-tailed)	.000
		N	99
X_{19}	Five year employment policy	Pearson Correlation	.164
		Sig. (2-tailed)	.108
		N	99
X_{20}	Policy on Invigilation of KNEC examinations	Pearson Correlation	-.187
		Sig. (2-tailed)	.067
		N	99
X_{21}	Sick leave policy	Pearson Correlation	-.122
		Sig. (2-tailed)	.232
		N	99
X_{22}	Maternity leave policy	Pearson Correlation	-.066
		Sig. (2-tailed)	.518
		N	99
X_{23}	Annual leave policy	Pearson Correlation	-.094
		Sig. (2-tailed)	.360
		N	99
X_{24}	Working hours	Pearson Correlation	-.046
		Sig. (2-tailed)	.654
		N	99
X_{25}	Paternity leave policy	Pearson Correlation	-.005
		Sig. (2-tailed)	.964
		N	99

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

From Table 4.10 it can be noted that, a number of employment factors had influence on teacher stress. The following factors had moderate positive and statistically significant relationship with teachers stress. These are: teachers job groups (r= .472, N=99, P<.000), study leave policy (r= .410, N=99, P<.000) and teachers transfer policy (r= .428, N=99, P<.000.)

The following employment factors had a weak positive and significant relationship with teacher stress. These are: Teachers promotion policy (r=.253, N=99, P<.011), masters degree incremental credit (r= .284, N=99, P<.005), teachers' commuters' allowance (r= .274, N=99, P<.006), Government decision on teachers strike (r= .355, N=99, P<.000).

The following employment factors had a weak positive and not significant relationship with teacher stress, these were: career opportunities, policy on examination cheating, teachers medical allowance, teachers house allowance, staffing policy, workload and five year employment policy.

The following employment related factors had a weak negative and not significant relationship with teacher stress, these are: Teachers dress code, Government policy decisions, HIV and AIDS policy, policy on invigilation of KNEC examination, sick leave policy, maternity leave policy, annual leave policy, working hours and paternity leave policy.

The Basic Education Act 2013, Teacher Service Commission Act 2012, Labour Laws 2007 and the Constitution of Kenya 2010 regulate operations of the teaching profession. For

majority of teachers, these legislations coupled with reorganization of the education system mean a lot. The reorganization is associated with many challenges, positive and negative, which culminate in stress for teachers. Once a newly qualified teacher joins the teaching profession, he is automatically subjected to the following demands and challenges: Job categorization, Employers rights, career development opportunities, dress code, salary incremental credits, policy formulation, examination, decision making compensation rights, policies and privileges among others as listed in Table 4.10.

The study established that teachers are contracted (employed) to serve anywhere in the country where their services are most needed. Entry into a school as a newly employed teacher and transfer of a teacher from one school to another presents more or less the same challenge. First it means leaving the security of a familiar environment, working either in a larger and more complex school or a smaller school; teaching students who have a much wider range of abilities, behaviour and attitudes; and adapting to major organizational and curricular changes. Some of these changes become threats and are viewed with apprehension, which makes teaching stressful. This is because some schools are managed and administered by benevolent autocratic father–figures who are highly dreaded. This means that for some teachers, they find it difficult to develop the sense of belonging to the school due to slow and uneasy process of adjusting to the new institution. This manifests in very large schools where there is a risk that the school is perceived as so impersonal and so fragmented that a sense of common purpose is very difficult to achieve.

In these circumstances it becomes difficult to find points of identification with fellow teachers and students. For teachers who previously had served in small schools where they felt the job satisfaction was shared become depressed. What stresses them are aspects like split-site working, complicated disciplinary procedures, impersonal communication systems and new administrative structures which include executive teams, policy and planning committees and staff working parties. These teachers are also disturbed by the intensity of their own emotional reactions in classrooms, laboratories, and staffrooms. These findings concur with those of Anbu (2015) who in a study titled professional stress of higher secondary school teachers in Nagercoil Region, India established that professional stress is often associated with overachievers. High levels of self-induced stress usually characterize these individual stress. However, it is also associated with under load institutions. That is job under load may also create higher levels of anxiety, depression and physical illness as job overload due to long period of boredom.

The demands made on the teachers are compounded in many schools by school ethos. The onus is on the teachers to cope with students of both sexes, all ages and abilities, with a plethora of new methods, curricular and attitudes which often are stressful. The stressors (employment factors) are not staggered to give teachers the opportunity of adjusting to one after another before coping with the next one. They are rather simultaneous. Pressures arising from the many different kinds of stressors (employment factors) are perpetual. These stressors include low salaries, delayed promotions, cheating in examinations, low house allowances, meager commuter allowances, heavy workload, unfriendly personnel policies and poor medical schemes.

The expansion of the education sector has led to growth of urgent financial problems. The relative costs in educational expenditure were imposing serious pressures. These pressures included reductions in staffing at all levels in educational institutions, a virtually complete embargo on all appointments, the restriction of building, repairs and maintenance; and failure to review salaries periodically as required by labour laws. Two other important stressors (employment factors) are staff allocation and redeployment. For the last three decades schools have experienced increase in access and suffered relative cuts in public spending which has led to reduced staffing allocation for schools. This has led to employment of teachers on temporary terms by Boards of Managements, who are poorly paid. The redeployment stressor undermines the confidence of the teacher since the teacher may be "passed on" and depending on the attitudes of principals who are the recipients. Hence in some cases redeployment becomes traumatizing. The effect of redeployment on the school as a whole should also be considered, because the pressures do affect more people than is at first apparent. During the interview, Principals (P, 11) stated:

> The following problems have been experienced when going through the redeployment procedures: first the identified staff feels rejected by his school, he feels he is no good and that he has no future in the profession. This is emotional and traumatic to the families of the affected teachers. Secondly, the colleagues to the affected staff feel guilt and uncertain on how to react. Thirdly, the relationship between the teacher and senior colleagues is destroyed, particularly when the teacher is surrendered.

The government's decisions and reaction to industrial action (Teachers' strikes) had made teachers to feel resentful, depressed and devalued, with the consequence that some had committed suicide. What was common place is that there is considerable rise in the levels of stress experienced by teachers. Frustration is caused by an increase in summons by principals and teachers were not so cooperative. In fact one teacher wrote in the questionnaire "You feel

so bloody insulted that the principal is telling you, you are lazy, slow learner and need to be retrained." Another teacher wrote "I am stressed because of my colleagues' growing disillusionment with the teaching job. For instance, two of my fellow teachers are leaving teaching without having a job to go to." These findings concur with the findings of Anbu (2015), Gebrekirtos (2015), and Sultana, Bano, Bano and Shafa (2012) whose findings indicated that the teaching profession is stressful. Anbu (2015) asserts that stress means pressure, tension or worry resulting from problems in one's life and is considered as a factor of several illnesses.

According to him environmental events, interpersonal conflicts or personal deficiencies trigger off stress. Professional stress means the difficulty experienced by teachers working in educational institutions. Professional stress is often associated with overachievers and underachievers, triggered by high level of achievement and boredom due to underload respectively. Gebrekirstos (2015) emphasizes that studies have suggested that teachers perceive their profession as a major stressful work situation compared to other professions. He adds that interpersonal, organizational and students problems trigger off stress. Sultana, Bano, Bano and Shafa assert that stress factors were inextricably connected with the professional, personal and financial dimension of teachers' life. It is important to note that the major pressures of stress are the increasing complexity and accountability of the job, for instance performance contracting which principals of schools are being compelled to sign and the demands by parents on teachers to produce excellent students' academic performance.

There is lack of forward planning and discussion on how to handle these issues in the best way possible. The marked changes in parents' and students' attitudes is stressful. They need more counseling and support. This is because parents and students are challenging the school rules and regulations more frequently and even harassing teachers in the classroom during teaching time. Principals also demand more from teachers to cover the syllabus in time. The teachers have no free time from class even though some of them have additional administrative and consultant responsibilities. The emphasis on excellent Kenya Certificate of Secondary Examination results has brought radical change to the role of teachers. The essential requirements of excellent performance are regular assessments which involve new approaches of working for many members of staff. The changes have resulted in increased paperwork, meetings, workshops, benchmarking and moderation of assessments. The teachers were of the perception that the pressure was becoming unbearable, emanating from many sources, that is, the government, parents, Boards of Managements, the media, local authorities, and pressure groups to put teachers on performance contract and retraining. These gestures are perceived as strong indicator that the values which should guide teachers' performance of their roles are those of market place economics that is cost effectiveness, cost-cutting, profit and increased efficiency. The central theme is value for money. All these demands coupled with meagre financial resources and shortage of staff has made teaching stressful.

Role conflict is a major stressor in the teaching profession. In this respect one of the Principal (P, 12) in open-ended section of the questionnaire noted; "I believe it is unethical to know

too much about students. Of course I cannot ignore a disruptive or depressed student but I always make sure I am not too involved."

Dressing code was not a big issue to the teachers. During the interviews with the Principals, it was revealed that teachers dressing code was not a big issue to them as they had been given a clear guideline on what they should wear. The relationship between teachers dressing code and teachers stress was weak, negative and not significant. In this respect Principal (P, 13) stated:

> Teachers are comfortable with their dressing code. With the modern times we are not very strict on what they wear. We want results. Those affected are those in Muslim schools. They are not restricted on what to wear but they feel odd one out when they don't dress appropriately in the current environment.

The study findings also showed that maternity leave, paternity leave and sick leave had a weak negative and not significant relationship with teachers stress among teachers in public secondary schools in Kakamega North sub-county. This could be because the leaves are granted anytime a teacher requires them as long as relevant documents are availed. It was revealed from open ended question that female teachers could go for maternity leave while male teachers could go for paternity leave, though they felt the leaves could start a little bit early to give them enough time to prepare for the new born. They also didn't have much of a problem with the leaves though they felt maternity leave should be given at least four months.

The study also revealed that teachers' workload had a weak, positive and not significant relationship with teachers stress on stress. Teaching profession is demanding as teachers

have to attend to meetings almost on daily basis, and this makes them feel stressed, because it takes extra time. Teaching profession is always continuous; you never finish your work. It is a good job, but there is no end. The study revealed from open ended questions that majority of the teachers had twenty to twenty eight lessons per week. These were within the acceptable range according to the teachers' employer, Teachers Service Commission. However remedial teaching, holiday and weekend tuition, class discussions and intensive testing policies have added to the teachers' workload making work overwhelming. This causes stress and eventually burnout. During the interviews with the Principals, it was clear that teachers were comfortable with workload of 20 lessons and below. Above 20 lessons stresses the teacher. For instance, one Principal (P, 2) said:

> Before I was given this responsibility, I used to feel more like a social worker than a teacher, with the amount of attention these students demanded from me. I used to handle 28 lessons at the same time deal with students' issues. I used to get stressed and I even thought of leaving the profession. Stress resulting from work overload could be attributed to the introduction of the new curriculum, understaffing or poor teacher-pupil ratio.

Another Principal (P, 16) stated:

> We are understaffed in our school. A teacher is forced to handle more than 25 lessons. Most teachers complain that they don't have life of their own. Teaching consumes most of their time to the detriment of family life and social activities every night, every weekend, they are grading, planning, communicating with parents and they miss having life on their own.

The TSC County director said:

> Many teachers want to leave the teaching profession. They complain that they report to school at 7 am and don't leave the school until at least 4.30 pm and sometimes later and often take some extra work home to finish. By the time they are done, they are very tired.

The study findings are in line with Allan, Chan, Elaine (2009) in their study on work stress of teachers from primary and secondary schools in Hong Kong that heavy workload was the

most frequently reported source of stress. The results also support the findings of Kyriacou and Chien (2004) in their study on teacher stress in Taiwanese primary schools that the dominant sources of stress in Taiwan appear to be a heavy workload and coping with educational reforms. Karaj and Rapti (2013) teacher job stress in Albania: examining the role of students' classroom disruptive behavior and other factors in the school context, workload was found to be significant predictors of teachers' job stress.

The findings of this study are supported by Mapfumo, Mukwidzwa and Chireshe(2014) in their study on sources and levels of stress among mainstream and special needs education teachers in Mutare urban in Zimbabwe that teachers were stressed by perceived lack of government support, lack of resources, heavy workload and time spend on individual pupil for those in special schools. However, Mapfumo, Mukwidzwa and Chireshe (2014) did not indicate the actual contribution of each item on stress among teachers. The findings are further supported further by Chona and Roxas (2009) that teachers in their study on stress among public elementary school teachers in Baguio city that excessive paperwork or documentation is a major contributor of stress among teachers.

Inadequate salaries cause a great deal of stress, especially when taking into account the sacrifices they make to ensure that students do well in National examinations. That is perhaps the reason why some teachers embark on second jobs, mostly to the detriment of the school and the learners. Others look for other propositions and change to completely new jobs for the sake of better incomes. With the high cost of living, teachers rely on the medical allowance, teachers' house allowance and commuter allowance to boost their net salary. However, teachers are stressed because civil servants in the same Job group earn more than

them. During the interviews, one Principal (P, 17) stated: “We have had so many strikes; the main reason is we need money. We cannot be earning lesser than the civil servants. Civil servants earn more commuter allowance, house allowance and medical allowance.” These findings are in line with the findings of Education International European Trade Union Committee for Education (1999) on stress that teachers are not remunerated according to the same salary scale as a majority of other professions, and this weighs heavily upon them financially and sends a message that there work is not highly valued. The findings are also in line with findings of Okeke and Dlamini (2013) in their study on an empirical study of stressors that impinge on teachers in secondary schools in Swaziland study revealed contractual problems as the major stressor for teachers and this component included the lack of power and influence, threat of job losses, performance related incentives, poor pay, lack of accommodation, badly planned changes, temporary contracts, and shortage of teachers.

On the five year employment policy for new teachers, the study findings showed that many teachers wished to transfer to other schools, but the contract of five years had tied them up. Teachers are forced to be in an environment that is not conducive and this really stresses the teacher. Information from documents analyzed showed that majority of teachers had been in their stations for three and more years. Facing the same routine and challenges for long was monotonous. These teachers had requested for transfers but had not been granted. It was further revealed from open ended questions that most teachers who had requested for a transfer were much stressed. Exposure to new work experiences would revitalize the teachers. It was further established that teachers were mainly stressed due to the following: fear of being voluntary transferred to another school due to rightsizing and rationalization.

The study findings also showed that the decision of the Government on teachers strike has a high influence on stress among teachers in Kakamega North sub-county. The decision of the Government to withhold teachers September pay (2015) really stressed teachers as they had to get loans for their upkeep. Teachers also feel that the Government has a negative attitude towards teaching profession and this stresses them. During the interviews with the Principals, it emerged that the Government stand on teachers' salary had really demoralized teachers and most of them were planning to leave the profession in future. Teachers rely on their pay for everything and so the issue of sourcing money for upkeep from other sources really stressed them.

The study findings also showed that an achievement of a master's degree incremental credit had a high influence on stress among teachers in public secondary schools in Kakamega North sub-county. Teachers want to better their lives. They want better pay and that is the reason behind most of them going back to school. It was found out from open ended questions that teachers who had achieved a master degree were very stressed as they had not received their increment. They had hoped that achieving an extra degree will assist them earn slightly higher but they had achieved nothing. They were paying loans they had taken to educate them. They wished they could have bought plots with the money.

The study findings also showed that some factors had low influence on stress among teachers in public secondary schools in Kakamega North sub-county. These are: policy on examination cheating, HIV policy, staffing policy, deployment policy, working hours, paternity leave policy and maternity leave policy and annual leave policy.

Many teachers are forced to pursue a masters degree in degree causes that are offered over the weekends and school based because they are not given an opportunity to go for regular causes, this is enough to stress a teacher. From the open ended questions, it was revealed that teachers were not happy with the current study leave policy, most teachers wished to further their studies but the Government had not given them the opportunity. It was also revealed that the study leave was to be granted after serving the Government for five years, unfortunately it was not automatic. It was further revealed that those who wished to further their PHD degrees were only to be given study leave without pay and this was really stressing teachers who wished to study.

On the whole, employment related factors had a weak positive and significant relationship with teachers stress in Kakamega North sub-county. This a unit increase in employment related factors leads to an increase in stress among teachers in Kakamega North sub-county. Employment factors of the teachers stress level could be accounted for by other factors. These included clocking in and clocking out of the school, attending of academic days on Saturday and imprest policy as was indicated by qualitative data from open ended items in the questionnaire and interview findings. In this respect, one Principal (P, 18) stated: Teachers complain so much when academic days are scheduled on Saturday. Teachers feel that Saturday is their relaxation day and so many don't attend such meetings which leads to confrontation between teachers and the administration.

In view of the foregoing, it was clear that there was a linear relationship between employment factors and teacher stress. Step-wise regression was therefore computed to

determine significant factors that real influenced teacher stress. The output of stepwise regression was as shown in Table 4.11.

Table 4.11: Stepwise Regression Analysis on influence of Employment Factors on Teachers stress

	Model	Unstandardized Coefficients	Standardized Coefficients	Standardized Coefficients	t	
		B	Std. Error			Sig.
	(Constant)	1.179	.371		3.176	.002
x_1	Teachers job groups	.088	.042	.228	2.083	.041
x_2	Teachers promotion policy	.085	.037	.222	2.288	.025
x_3	Role conflict	.095	.048	.254	2.009	.048
x_4	Teachers house allowance	-.204	.097	-.424	-2.102	.039
x_5	HIV and AIDS policy	.101	.048	.240	2.086	.041
x_6	Deployment policy	.139	.052	.375	2.664	.010
x_7	Teacher transfer policy	.092	.059	.222	1.569	.121
x_8	Working hours	-.312	.080	-.813	-3.881	.000
x_9	Paternity leave policy	.390	.074	1.066	5.298	.000

b. Dependent Variable: Teacher management related stress

Regression Equation $Y = \beta 0 + .\beta X_1 + .\beta X_2 + .\beta X_3 - . \beta X_4 + .\beta X_5 + .\beta X_6 .\beta X_7 - . \beta X_8 + .\beta X_9$

Where;

$Y =$ is the dependent variable

$\beta_0 =$ is the constant or intercept

$\beta_1 X_1$---- = is the slope or change in Y, given one unit change in X_1-------

X_1 ---- = is the independent variable

In stepwise regression analysis independent variables were added into the equation model one by one and at each stage, any variable which was already included in the model but whose extra sum of squares (R^2) contribution had declined to a non-significant level was eliminated. Selection stopped when all non-significant variables were eliminated and all variables that were significant were retained.

From Table 4.11, it can be observed that employment factors that influenced stress were: teachers' job groups, teachers' promotion policy, role conflict, HIV and AIDs policy, teacher transfer policy, working hours, paternity leave policy, deployment policy and teachers' house allowance.

Teachers' job groups positively influenced teacher stress. That is, for every one percent increase in teacher job group there was an increase in teacher stress by .088 percent as signified by the coefficient of .088. Moving from job group K to L is easy but teachers stagnate in job group L for years and this stresses them so much. The lower the job group, the lower the salary. The findings from open ended question showed that many teachers had stagnated in the same job group for years and this stressed them so much. Teachers were also stressed by the fact that civil servants were promoted to the next group faster than them and the fact that civil servants in the same job group were earning more than them.

During the interview with the Teachers Service Commission county director, it was revealed that teachers were stressed by the fact that teachers were promoted basing on their Kenya Certificate of Secondary Education Examinations results. Moving from one job group to the other means increment in the teachers' salary. When a teacher stagnates in one job group, it means the salary will stagnate too and so this will stress a teacher.

Teachers' promotion policy was a predictor of teacher stress, such that for every one percent improvement in promotion policy teachers' stress increased by .085 percent as signified by the coefficient of .085. Many teachers indicated they were unable to gain further promotion.

This had led to discontent among teachers, which affects their interpersonal relations with the hierarchy. The situation is worsened in cases where the principals and their deputies share out their workload to teachers who already felt frustrated at their inability to gain promotion. This findings concurs with those of Sichambo, Maragia and Simiyu (2012) who in their study on causes of burnout among secondary school teachers in Bungoma North Sub-county, Kenya revealed that apart from normal classroom teaching, teachers had a number of remedial lessons to attend to, larger classes to handle a lot of paper work and some had to stay in their workstations beyond normal class time in order to complete various tasks delegated to them by principals. Wangai's (2012) study titled factors affecting job satisfaction among secondary school teachers of Mwatate District, Kenya supports these findings by indicating that poor pay was the most dissatisfying job factor. Mark you promotion has a high correlation with medical allowances, commuter allowances and house allowances.

In this respect, the Teacher Service Commission County director stated:

> Teachers are very sensitive on what they put in their pockets. Poor pay and performance incentives do reduce the teachers' happiness in their work situation as well as their ability to perform. Money motivates a teacher. As much as there are other motivators, money becomes the most valued motivator by teachers and that is the reason behind so many strikes within the teaching profession in Kenya.

In addition the Teachers Service Commission county director stated:

> Teachers in young schools feel disadvantaged as their mean grades are low. Their students' entry behaviour is sometimes below 250 marks yet when they go for an interview; they are forced to compete with teachers from old schools with good academic records.

Role conflict was a factor in prediction of teacher stress such that for every one percent increase in role conflict teacher stress increased by .095 percent as signified by the coefficient of .095. During the interviews with the Principals, it was noted that teachers were distressed when they have to attend to many roles. In this respect one of the teachers in open ended section of the questionnaire noted:

> I am expected to meet different and conflicting roles at once. For instance, those of a counselor, a social worker, a parent, a disciplinarian and a role model. To keep my sanity and my priorities right I always remind myself that I was trained and licensed to teach, impart knowledge, and that in no way should I be compelled to deal with students' personal matters.

Notwithstanding these views of principals, it is in public domain that the teachers' roles have expanded based on the argument that student's development: social, emotional, physical, moral, interpersonal and mental should be accepted as the responsibilities of teachers because teachers are in-loco-parentis. This is what is known as the "whole child approach." In a nutshell the role of the teacher has expanded to include that of social worker, psychiatrist, counselor, motivational arouser, policeman and many other roles. Indeed many teachers feel untrained and unable to deal with these pressures. Nevertheless the nature and work of a teacher is subject to these pressures and all the teachers' are required to develop and recommend appropriate measures to reduce stress resulting from these pressures. This could include smaller Student-Teacher Ratio among others. All these stressful events are compounded by lack of time, large classes, poor and shortage of teaching-learning resources, poor communication, lack of information, dilapidated infrastructure, low salaries, allowances and shortage of infrastructure. Besides, the nature of the teaching profession in Kenya, legislative changes in the education sector have contributed immensely to stress among teachers. Many of the changes are very positive, but the problem is implementation. For

instance the Free Secondary Education policy, Re-entry policy, bursary scheme, curriculum changes, physical punishment ban, mental harassment ban, and the right to education and constitutional enactment. The implementation of these legislative changes is haphardly done lead to disillusionment of teachers which is highly demotivating and frustrating

Teachers' house allowance predicted teacher stress in that for every one percent increase in teacher house allowance teacher stress reduced by .204 percent as signified by a coefficient of -.204. Inadequate salaries cause a great deal of stress, especially when taking into account the sacrifices they make to ensure that students do well in National examinations. That is perhaps the reason why some teachers embark on second jobs, mostly to the detriment of the school and the learners. Others look for other propositions and change to completely new jobs for the sake of better incomes. With the high cost of living, teachers rely on the medical allowance, teachers' house allowance and commuter allowance to boost their net salary. However, teachers are stressed because civil servants in the same Job group earn more than them. During the interviews, Principal (P, 7) stated: "We have had so many strikes; the main reason is we need money. We cannot be earning lesser than the civil servants. Civil servants earn more commuter allowance, house allowance and medical allowance." These findings are in line with the findings of Education International European Trade Union Committee for Education (1999) on stress that teachers are not remunerated according to the same salary scale as a majority of other professions, and this weighs heavily upon them financially and sends a message that there work is not highly valued. The findings are also in line with findings of Okeke and Dlamini (2013) in their study on an empirical study of stressors that impinge on teachers in secondary schools in Swaziland study revealed contractual problems

as the major stressor for teachers and this component included the lack of power and influence, threat of job losses, performance related incentives, poor pay, lack of accommodation, badly planned changes, temporary contracts, and shortage of teachers.

HIV and AIDS policy was established as a predictor of teacher stress. That is, for every one percent improvement on HIV and AIDs policy, teacher stress increased by .101 percent as signified by the coefficient of .101. Indeed an improvement in the policy increased stress as it increased workload on some people as they had to attend to the duties assigned to other people either affected by HIV and AIDs stigma or infected by HIV and AIDs while on permission to seek medication or take care of the affected.

Deployment policy had positive influence on teachers stress, such that for every one percent change in deployment policy increased teacher stress by .139 percent as signified by the coefficient of .139. When a teacher moves to unfamiliar environment, he is bound to experience stress especially when redeployed to an area he feels he feels not comfortable with. During the interviews Principal (P, 19) stated:

> The following problems have been experienced when going through the redeployment procedures: first the identified staff feels rejected by his school, he feels he is no good and that he has no future in the profession. This is emotional and traumatic to the families of the affected teachers. Secondly, the colleagues to the affected staff feel guilt and uncertain on how to react. Thirdly, the relationship between the teacher and senior colleagues is destroyed, particularly when the teacher is surrendered.

Teacher transfer policy was a predictor of teachers stress. That is, for every one percent change in teacher transfer policy, teacher stress increased by .093 percent as signified by the coefficient of .093. On the five year employment policy for new teachers, the study findings

showed that many teachers wished to transfer to other schools, but the contract of five years had tied them up. Teachers are forced to be in an environment that is not conducive and this really stresses the teacher. Information from documents analyzed showed that majority of teachers had been in their stations for three and more years. Facing the same routine and challenges for long was monotonous. These teachers had requested for transfers but had not been granted. It was further revealed from open ended questions that most teachers who had requested for a transfer were much stressed. Exposure to new work experiences would revitalize the teachers. It was further established that teachers were mainly stressed due to the following: fear of being voluntary transferred to another school due to rightsizing and rationalization.

These findings are in line with the finding of Santavirta, Solovieva and Theorell (2007), who found out that teachers experienced high levels of stress as a result of poor remuneration packages and fringe benefits in spite of the volume and challenging work that they do. These findings are also line with the findings of Dlamini, Okeke and Mammen (2014) in their study on an investigation of work-related stress among high school teachers in the Hhohho region of Swaziland that showed that high school teachers in the Hhohho region of Swaziland are moderately stressed.

Working hours had a negative influence on teachers stress, such that for every one percent change in working hours reduced teacher stress by .312 percent as signified by the coefficient of -.312. These findings are in disagreement with the interview findings which showed that increase in working hours increased stress among the teachers. An employee's

desire for performing better diminishes when he is forced to sit for long hours and his level of stress increases with increase in the hours he work. Teachers are responsible for everyday matters concerning their students, including making contact when appropriate with parents, dealing with pastoral matters, and dealing with students. During the interview with the Principals and the TSC County, it was revealed that teachers were moderately stressed by the number of hours they attended to school activities. In this respect, Principal (P, 3) stated:

> Teachers work from 7.00am to 4.00 pm and sometimes extend to 6.00 pm. This stresses them because they don't have time to attend to their personal issues. They are sometimes forced to carry some work home and this leads to disagreements with the family members.

The regression model is $Y = 1.79 + .088X_1 + .085X_2 + .095X_3 - .204X_4 + .101X_5 + .139X_6 .092X_7 - .312X_8 + .390X_9$

To determine the influence of employment factors on teachers stress regression analysis was done and the results were as shown in Table 4.12.

Table 4.12: Regression Analysis of the Influence of Employment Factors on Stress among Teachers in Public Secondary Schools

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.343[a]	.118	.109	.446291

a. Predictors: (Constant), Factors: Teachers job groups, Teachers promotion policy, Role conflict, HIV and AIDs policy, Teacher transfer policy, Working hours, Paternity leave policy, Deployment policy and teachers' house allowance.

From Table 4.12, it can be observed that employment factors accounted for 10.9% of teacher management related stress. Eighty nine point one percent (89.1%) was due to other factors

that were not investigated by this study. These findings agree with those of Okeke and Dlamini (2013) who found that in Swaziland teachers in secondary schools were stressed by poor pay, badly planned changes, and temporary changes among other factors. These findings also concurred with those of Bibi et al (2012) who found that in Pakistan salary increases and promotions had an impact on teacher stress. Furthermore these findings are in line with those of Govindarajan (2012) and Kyriacou and Chien (2004) who in their studies found that changing education policies of the government was a main source of stress to teachers in Tamilnadu and Taiwan. Working hours which translate to workload was also identified by these studies as a factor that influenced teacher stress. Ekundayo and Kolawole (2013) in Nigeria, Barbara (2011) in Uganda and Ng'eno (2007) in Kericho Municipality, Kenya also concur with these findings that salaries and workload influenced teacher stress. On the whole these findings are not only of statistical significance, but also of practical significance despite the magnitude of the change they account for in teacher stress.

To determine whether employment factors were significant predictors of teacher management related stress, ANOVA was computed and the results were as shown in Table 4.13.

Table 4.13: Analysis of Variance on **the Influence of Employment Factors on Stress among Teachers in Public Secondary Schools**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.582	9	2.582	12.964	.001[b]
	Residual	19.320	89	.199		
	Total	21.902	98			

a. Dependent Variable: Teacher management related Stress

b. Predictors: (Constant), Factors: Teachers job groups, Teachers promotion policy, Role conflict, HIV and AIDs policy, Teacher transfer policy, Working hours, Paternity leave policy, Deployment policy and teachers' house allowance.

From Table 4.13, it can be observed that employment factors were significant predictors of stress among secondary teachers in Kakamega North sub-county ($F(9, 89) = 12.964$, $P<.05$). This means that the nine factors namely; teachers job groups/salary, teachers promotion policy, role conflict, HIV and AIDS policy, teacher transfer policy, working hours, paternity leave policy, deployment policy and teachers' house allowance were the employment factors out of the twenty five that were found to be determinants of teacher stress. These factors can be relied upon in predicting levels of teacher stress.

4.7 Influence of Stress among Teachers on Students Academic Performance in Public Secondary schools

The research hypothesis responded to was: There is no statistically significant relationship between teacher stress and students academic performance. The teachers' stress predictor variable, Table 4.3 and students' academic performance, dependent variable Table 4.14 were correlated using Pearson's r.

Table 4.14: 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 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 4.15.

Table 4.15: Relationship between Teacher Stress and Students Academic Performance

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

From Table 4.15, 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 that 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. These findings concur with those of Khan and Azam (2013) who found that there was negative relationship between job stress and 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 4.16.

Table 4.16: 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[a]	.017	.006	1.372298

Predictors: (Constant), Teacher Stress

From Table 4.16 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 KCSE. 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.

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 4.17.

Table 4.17: 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[b]
Residual	178.904	97	1.883		
Total	181.912	98			

a. Dependent Variable: Performance
b. Predictors: (Constant), Teacher Stress

From Table 4.17 it can be observed that stress level among secondary school teachers was not significant predictor of students' academic performance in Kakamega North Sub-county ($F(1,97)=1.597> 0.5$). 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.

4.6.1 Influence of Low Stress Level among Teachers on Students' Academic Performance

The low stress level (1.45-2.44) of teachers was correlated with students' academic performance and the results were as shown in Table 4.18.

Table 4.18: Relationship between Low Levels of Stress among Secondary School Teachers and Students' Academic Performance

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

From Table 4.18, 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. 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 results 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 Wheeless (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).

This 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.

4.6.2 Influence of Moderate Stress Level among Teachers on Students Academic Performance

The moderate stress level (2.45-3.44) of teachers was correlated with students' academic performance and the results were as shown in Table 4.19.

Table 4.19: 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
		0.096
	N	37

From Table 4.19, it can be observed that moderate stress level had a weak positive influence on students' academic performance. The influence was not significant as the calculated p-value was 0.96, greater that the set critical value of 0.05.

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 these 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 perfectively 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."

The study further sought to estimate the actual influence of moderate stress level on students' academic performance. The results were as shown in Table 4.20.

Table 4.20: **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, 4.20, 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 4.21.

Table 4.21: 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[b]
	Residual	58.576	35	1.674		
	Total	63.465	36			

a. Dependent Variable: Performance

b. Predictors: (Constant), Moderate Stress Level

From Table 4.21, 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.

4.6.3 Influence of High Stress Level among Teachers on Students Academic Performance

The high stress level (3.44-4.45) of teachers was correlated with students' academic performance and the results were as shown in Table 4.22.

Table 4.22: 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 4.22, 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.

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.

The study further sought to estimate the actual influence of high stress levels among teachers on student academic performance. The results were as shown in Table 4.23.

Table 4.23: 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[a]	.000	.018	1.36252

a. Predictors: (Constant), High Stress Level

From Table 4.23, 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.

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.

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 4.24.

Table 4.24: 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[b]
	Residual	100.249	54	1.856		
	Total	100.277	55			

a. Dependent Variable: Performance

b. Predictors: (Constant), High Stress Level

From Table 4.24, 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.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter contains summary, conclusions and recommendations and suggestions for further research.

5.2 Summary

The findings of the study were summarized as follows:

5.2.1 Teachers Stress Levels

The study established that six (6.06%) of the teachers were experiencing low stress level, 37(37.37%) of the teachers were experiencing moderate stress level while 56(56.57%) of the teachers were experiencing high stress level. This means majority of the teachers in public secondary schools in Kakamega North sub-county were experiencing high stress level. On average teachers in public secondary schools in Kakamega North sub-county were experiencing moderate stress levels. This means that teachers in Kakamega North sub-county are operating on moderate stress level which is a level at which at which a teacher acts in a constructive manner, is stimulated and encouraged to better his /her performance.

5.2.2 Influence of School Factors on Stress among Teachers

The study established that the school factors that had a negative influence on teacher stress were location of the school (-.022), gender parity of students (-.192) and BOM involvement in school management activities (-.190). The school factors that had positive influence on teacher stress were: evaluation policy on students (.129), bench marking policy (.117); and

school ethos, customs and traditions (.199) for teacher stress. The regression equation is Teacher stress $=2.345+.129X_1+.129X_2 +.129X_3+.117X_4+.190X_5+.199X_6$. Regression analysis revealed that school factors accounted for 4.6% of variance in teacher stress.

5.2.3 Influence of Employment Factors on Teacher Stress

The study established that teachers house allowance (-.204) and working hours (-.312) had a negative influence on teacher stress. Teachers' job groups (.088), teachers' promotion policy (.085), role conflict (.095), HIV and HIDs policy (.101), deployment policy (.139), teacher transfer policy (.092) and paternity leave policy (.390) had a positive influence on teacher stress. The regression equation is Teacher stress $= 1.179 +.088x_1+.085x_2+.095x_3.-.204x_4+.101x_5+.139X_6+.092x_7.-.312x_8+.390x_9$. Regression analysis revealed that employment factors accounted for 10.9% of the variance in teacher stress.

5.2.4 Influence of Stress among Teachers on Students' Academic Performance

The study established that low stress had a weak negative influence on students' academic performance. Low stress level among teachers reduced students' academic performance as signified by Pearson's r coefficient of -.220. However, the influence was not significant (Pearson's r =- .220; N =6, and p > .05).

Moderate stress level had a weak positive influence on students' academic performance. Moderate stress level enhanced students' academic performance as signified by Pearson's coefficient .278. However, the influence was not significant. Pearson's r =.278; N =37, and p > .05).

The study established that high stress among teachers had a weak negative influence on students' academic performance. High stress level among teachers reduced students' academic performance as signified by Pearson's r coefficient of -.017. However, the influence was not significant (Pearson's r =- .017; N =56, and p > .05).

5.3 Conclusion

In light of the findings of this study, the following conclusions were made:

5.3.1 Teachers Stress Levels

Teachers experience stress and work overload; interpersonal relations, school culture, family size, class size, domestic chores, student discipline and setting of examinations are the main reasons for stress. Considering the three levels of stress, most teachers recorded high stress levels. However, on average teachers in Kakamega North Sub County were moderately stressed.

5.3.2 Influence of School Factors on Stress among Teachers

Location of school, gender parity of students and BOM of schools had a negative influence on teacher stress while evaluation policy on students, benchmarking policy and school ethos customs and tradition had positive influence on stress among public secondary school teachers.

5.3.3 Influence of Employment Factors on Teachers Stress

Employment factors have negative influence on teacher stress. That is, they reduced teacher stress. Teachers' house allowance and working hours had negative influence on teacher stress while HIV and AIDs policy, teachers' job groups, role conflict, deployment policy, teachers'

transfer policy and paternity leave policy had a positive influence on stress among public secondary school teachers.

5.3.4 Influence of Stress among Teachers on Students' Academic Performance

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.

5.4 Recommendations

The following recommendations were made based on the findings and conclusions of the study:

i. In light of the finding that school ethos, customs and traditions increases teachers stress, the study recommends that changes be made on customs, ethos and traditions of the school to help in reducing stress that is caused by the teachers having to go through the same every time.

ii. With regard to the finding that bench marking increases teachers stress, the study recommends a reduction of benchmarking activities in the school and the administration makes proper investigation before selecting a school for benchmarking.

iii. With regard to the finding that teachers job groups increased teachers stress, the study recommends that the government allows faster movement of teachers from one job group to another to reduce stress originating from stagnation in one job group.

iv. In light of the finding that paternity leave is the major stressor, the study recommends that paternity leave be extended from two weeks two one month to enable the father to bond with the new borne.

v. In light of the finding that deployment policy increases stress among teachers, the study recommends that when deploying teachers, teachers involved be given a chance to select a school of their choice.

vi. In light of the finding that teachers transfer policy increases stress among teachers, the government should allow teachers to transfer to places where they can feel comfortable as that will make the teacher to become motivated to teach and this will culminate into better students' performance.

vii. With regard to the finding that evaluation policy on students increases stress among teachers, the study recommends that the formative examinations deadlines be extended to give teachers humble time to mark and revise the examinations done in schools.

viii. In light of the findings that teachers promotion policy increases stress among teachers, the study recommends that teachers promotion policy to be amended to allow faster mobility.

5.5 Suggestions for Further Research

The study had the following suggestions for further research as exposed by this study:

i. Influence of students entry behaviour on students' academic performance in Kakamega North sub-county.

ii. Influence of stress among students on their academic performance.

The justification for this suggestions is that stress was found not to be responsible for students performance while qualitative findings indicated that these factors could be having influence on academic performance hence the need for empirical studies to verify.

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APPENDIXES

APPENDIX 1

TEACHERS' QUESTIONNAIRE

I am a PHD student at the University of Maseno conducting a research on stress among teachers and its influence on student performance in secondary schools in Kakamega sub-county, Kenya. Please respond to the questions as honestly as possible. Your responses will be treated with utmost confidentiality.

Section A: Demographic Information

Gender: Male ( ) Female ( )

Marital status: Married ( ) Single ( ) Divorced ( )

Age 20-29 ( ) 30-39 ( )

40-49 ( ) 50 and above ( )

Level of education:

Certificate ( )

Diploma in Education ( )

Bachelor or Education ( )

Masters in Education ( )

Teaching experience: 1-5 years ( ) 6-10 years ( )

11-15 years ( ) 16 and above ( )

Your subject mean score for 2015……..

SECTION B: STRESS LEVELS AMONG SECONDARY TEACHERS

Stress is a product of demands on a person. It causes tension in a person and prompts him/her into action that maybe positive or negative in his/her place of work. Teachers work in an environment that has many demands which include administrative demands, students' demands and demands from colleagues. When at home, they also experience demands which have a bearing on their work as teachers because when they leave school, school work continues at home for instance preparation of lesson plans, marking students work and preparation of lesson notes. Stress therefore is important as it involves expending energy, motivation, decision making and many activities that culminates in the performance of teachers as signified by students' performance. The purpose of this questionnaire therefore is to estimate your level of stress. Kindly estimate your stress level on increasing 5-point rating scale by ticking(√) the numerical that best describes your stress level status on each of the listed life events you have experienced in the last four years(2012-2015) while handling your lessons for the past four years whose results were released in the year 2016 March 3rd where

1 = to life event which was experienced once every year which translates to very low stress level.

2 = to life event which was experienced twice in a every six month which translates to low stress level.

3= to life event which was experienced three times in every 3 which translates to moderate stress level.

4= to life event which was experienced four times in every month which translates to high stress level.

5= to life event which was experienced five times in every week which translates to very high stress level.

This instrument was adapted from Holmes and Rahe (1967) by replacing the life events with those that are experienced at school and at home that affects their professional work. The life events used were 50 where as those that were used by Holmes and Rahe (1967) were as 43 in number. The adaptation involved tailoring them to Kenyan situation based on day to day experiences of teachers in their operations. The instructions to the respondents were precise and concise to enable them objectively rate their stress levels the fact that they were

assured of confidentiality enhanced their degree of objectivity. The instrument was piloted and reliability was 0.82.

	Aspect of Teachers' Work	**RATINGS**				
		1	**2**	**3**	**4**	**5**
1	Fatigued by hours of work	( )	( )	( )	( )	( )
2	Depressed by school policy on remedial teaching	( )	( )	( )	( )	( )
3	Upset by basic salary	( )	( )	( )	( )	( )
4	Stressed by medical allowances based on job groups	( )	( )	( )	( )	( )
5	Irritated by commuter allowance based on job groups	( )	( )	( )	( )	( )
6	Irritated by house allowance based on job groups	( )	( )	( )	( )	( )
7	Experienced difficulty while in organization of co-curriculum activities e.g. games and clubs.	( )	( )	( )	( )	( )
8	Experienced tension while being assessment internally by heads of department	( )	( )	( )	( )	( )
9	Experienced tension while being assessment externally by the quality assurance officers	( )	( )	( )	( )	( )
10	Irritated by the Principals' democratic management style	( )	( )	( )	( )	( )
11	Angered by the students demands	( )	( )	( )	( )	( )
12	Fatigued by your teaching work load in the school	( )	( )	( )	( )	( )
13	Worries about student discipline e.g. use of drugs, and obedience.	( )	( )	( )	( )	( )
14	Stresses by the school routine e.g. reporting and departing.	( )	( )	( )	( )	( )
15	Irritated by the school culture e.g. tea, meals and time off.	( )	( )	( )	( )	( )
16	Upset by the teaching facilities e.g. state of the class rooms and text books.	( )	( )	( )	( )	( )
17	Hostility in the requisition procedure of teaching materials i.e. requisition to acquisition	( )	( )	( )	( )	( )
18	Fatigued by marking of students' work	( )	( )	( )	( )	( )
19	Fatigued by lesson preparation	( )	( )	( )	( )	( )
20	Worries about invigilation of examinations	( )	( )	( )	( )	( )

21	Irrational decisions in the demands by the sponsor e.g. attending church service	( )	( )	( )	( )	( )
22	Worries by on expected school K.C.S.E results in my school	( )	( )	( )	( )	( )
23	Nervousness in the setting of examinations	( )	( )	( )	( )	( )
24	Irritated by teacher-teacher relation i.e. male-female,	( )	( )	( )	( )	( )
25	Upset teacher-teacher relation i.e. female-female	( )	( )	( )	( )	( )
26	Upset teacher-teacher relation i.e. male- male	( )	( )	( )	( )	( )
27	Irrational decisions in the organization of staff meetings i.e. beginning, middle and end term.	( )	( )	( )	( )	( )
28	Worried by ministry of Education Science and Technology policies on physical punishment	( )	( )	( )	( )	( )
29	Hostility in teacher-parent relationship	( )	( )	( )	( )	( )
30	Stressed by academic days on Saturday	( )	( )	( )	( )	( )
31	Fatigued by the educational tours in the school	( )	( )	( )	( )	( )
32	Upset by Imprest policy	( )	( )	( )	( )	( )
33	Stressed by transfer policy	( )	( )	( )	( )	( )
34	Angered by promotion policy	( )	( )	( )	( )	( )
35	Irritated by teaching and non teaching inter-personal relationship	( )	( )	( )	( )	( )
36	Happy about study leave with pay	( )	( )	( )	( )	( )
37	Annoyed about study leave without pay	( )	( )	( )	( )	( )
38	Annoyed about student-teacher relationship	( )	( )	( )	( )	( )
39	Fatigued by school responsibilities	( )	( )	( )	( )	( )
40	Fatigued by school workload	( )	( )	( )	( )	( )
41	Worried about setting of examinations	( )	( )	( )	( )	( )
42	Worried about K.C.S.E.	( )	( )	( )	( )	( )
43	Anxious about academic days in the school	( )	( )	( )	( )	( )
44	Dissatisfied by the home diet/menu	( )	( )	( )	( )	( )

This instrument was adapted from Holmes and Rahe (1967) by replacing the life events with those that are experienced at school and at home that affects their professional work.

Any other ……

……

…….

SECTION C: FACTORS INFLUENCING TEACHERS' STRESS

1. Influence of school factors on stress among secondary teachers

Thinking about your current job as a teacher in this school, with the rating of: 1 for very low influence (VL), 2 for low influence (L), 3 for moderate influence (M), 4 for high influence(H) and 5 for very high influence (VH), indicate how each of these school factors impact on your stress level.

	Life events	**RATINGS**				
		1	2	3	4	5
1	Location of the school	( )	( )	( )	( )	( )
2	Class size of below 45 students	( )	( )	( )	( )	( )
3	Class size of 45 students	( )	( )	( )	( )	( )
4	Class size of above45 students	( )	( )	( )	( )	( )
5	Students' entry behaviour of below 250 marks	( )	( )	( )	( )	( )
6	Students' entry behaviour of above 300 marks	( )	( )	( )	( )	( )
9	Students' transfer policy	( )	( )	( )	( )	( )
10	Delegation policy	( )	( )	( )	( )	( )
11	Channel of communication in the school	( )	( )	( )	( )	( )
12	Evaluation policy on students	( )	( )	( )	( )	( )
13	Gender parity of students	( )	( )	( )	( )	( )
14	Gender parity of staff	( )	( )	( )	( )	( )
15	Parental support	( )	( )	( )	( )	( )
16	Student teacher ratio	( )	( )	( )	( )	( )
17	Decision making in school	( )	( )	( )	( )	( )
18	Office space	( )	( )	( )	( )	( )
19	Sanitation	( )	( )	( )	( )	( )
20	Co-curriculum activities policy	( )	( )	( )	( )	( )
21	Benchmarking policy	( )	( )	( )	( )	( )
22	Board of management involvement in school management activities	( )	( )	( )	( )	( )
23	School Ethos-customs and traditions	( )	( )	( )	( )	( )
24	School routine	( )	( )	( )	( )	( )
25	Teacher-teacher relationship	( )	( )	( )	( )	( )
26	Students' dressing code	( )	( )	( )	( )	( )
27	Monitoring students' attendance	( )	( )	( )	( )	( )

This instrument was adapted from Marther, Elizabeth and Mathew (1988). The adaptation involved tailoring them to Kenyan situation based on day to day experiences of teachers in their operations. These instrument was tested and the reliability coefficient was 0.8

Any other ……
……
…….

2. Influence of employment factors on teachers' stress

Thinking about your current job as a teacher in this school, with the rating of: 1 for very low (VL), 2 for low (L), 3 for moderate (M), 4 for high (H) and 5 for very high (VH), indicate how each of these school factors impact on your stress level

	EMPLOYMENT FACTORS	**RATINGS**				
		1	2	3	4	5
1	Teachers job groups	( )	( )	( )	( )	( )
2	Career development opportunities in teaching	( )	( )	( )	( )	( )
3	Teachers dress code	( )	( )	( )	( )	( )
4	Teachers' promotion policy	( )	( )	( )	( )	( )
5	Role conflict	( )	( )	( )	( )	( )
6	An achievement of masters degree incremental credit	( )	( )	( )	( )	( )
7	Teachers involvement in Government policy decisions	( )	( )	( )	( )	( )
8	Government policy on cheating in the examinations	( )	( )	( )	( )	( )
9	Teachers' medical allowance	( )	( )	( )	( )	( )
10	Teachers' House allowance	( )	( )	( )	( )	( )
11	Teachers' commuter allowance	( )	( )	( )	( )	( )
12	Government decision on teachers strikes	( )	( )	( )	( )	( )
13	Study leave policy	( )	( )	( )	( )	( )
14	Retirement policy	( )	( )	( )	( )	( )
15	HIV and Aids Policy	( )	( )	( )	( )	( )
16	Staffing policy	( )	( )	( )	( )	( )
17	Workload	( )	( )	( )	( )	( )
18	Deployment policy	( )	( )	( )	( )	( )
19	Teacher transfer policy	( )	( )	( )	( )	( )
20	Five year employment policy	( )	( )	( )	( )	( )
21	Policy on invigilation of KNEC examinations	( )	( )	( )	( )	( )
22	Sick leave policy	( )	( )	( )	( )	( )
23	Maternity leave policy	( )	( )	( )	( )	( )
24	Annual leave policy	( )	( )	( )	( )	( )
25	Working hours	( )	( )	( )	( )	( )

This instrument was adapted from Marther, Elizabeth and Mathew (1988). The adaptation involved tailoring them to Kenyan situation based on day to day experiences of teachers in their operations. These instrument was tested and the reliability coefficient was 0.8.

Any other ……

APPENDIX II

PRINCIPALS' AND TSC COUNTY DIRECTOR INTERVIEW GUIDE

(i) How often do you get fatigued by the school workload?

Probe:

(ii) How often do you worry about K.C.S.E.?

Probe:

(iii) How often are angered by students' demands?

Probe:

(iv) Do teachers complain when they are deployed to new stations?

Probe:

(v) How do teachers react when asked to benchmark in other schools?

Probe:

(vi) How often are teachers promoted to the next level?

APPENDIX III

DOCUMENT ANALYSIS GUIDE

NO	ITEM	DOCUMENT	REMARKS
1	Teachers KCSE results for 2015	KNEC results print out	
2	Teachers experience	Minutes of subject allocation	
3	Teachers workload	Teachers timetables	
4	Class size	Students registers	
5	Staffing	Daily attendance register	
		Timetable	
6	Clocking in and out	Clocking in and out register	

APPENDIX IV

STRESS LEVELS OF THE TEACHERS

Respondents	Items responded to	Mean	Std. Deviation
K_1	43	4.0000	1.38013
K_2	44	1.9091	.80169
K_3	44	3.6818	1.49063
K_4	44	3.3409	1.36302
K_5	42	3.9762	.84068
K_6	44	2.4545	1.19016
K_7	44	2.1818	1.29889
K_8	44	3.7727	1.58281
K_9	44	3.3409	1.46181
K_10	44	3.7727	1.58281
K_24	44	3.3864	1.41776
K_23	44	4.0000	1.44673
K_22	44	4.1591	1.27486
K_21	44	3.8409	1.59859
K_20	44	3.3636	1.41571
K_19	44	3.6818	1.62499
K_18	44	3.8182	1.16684
K_17	44	3.3864	1.63132
K_16	44	3.6591	1.56923
K_15	43	3.5581	1.40242
K_14	44	3.3182	1.42686
K_13	44	3.6136	1.64551
K_12	44	3.5909	1.28168
K_11	44	3.7955	1.57863
K_33	44	3.8409	1.55434
K_32	44	3.1818	1.54427
K_31	43	3.5814	1.60702
K_30	44	3.3864	1.45020
K_29	44	3.2727	1.53052
K_28	44	3.5909	1.57477
K_27	44	3.8636	1.35700
K_26	44	3.9091	1.30862
K_25	44	3.9545	1.38017
K_39	44	3.5682	1.30112
K_38	44	3.4773	1.53242
K_37	44	3.3636	1.68566
K_36	44	3.6818	1.39389
K_35	44	3.3864	1.36766

K_34	44	3.6591	1.44581
K_46	44	2.9318	1.79661
K_45	44	3.3636	1.33104
K_44	44	3.0909	1.49134
K_43	44	3.0909	1.49134
K_42	44	3.6591	1.32846
K_41	44	3.6364	1.27755
K_40	44	3.5227	1.43848
K_48	44	3.4545	1.54701
K_47	44	3.0909	1.50686
K_53	44	3.7955	1.57863
K_52	44	3.7955	1.57863
K_51	44	3.4545	1.50123
K_50	44	3.6136	1.16571
K_49	44	3.3864	1.41776
K_54	44	3.5455	1.60601
K_55	44	3.7273	1.42018
K_56	44	3.3864	1.43407
K_57	44	3.5227	1.56248
K_58	43	3.6279	1.63333
K_59	44	3.1818	1.46704
K_60	44	3.6591	1.46181
K_61	44	3.3636	1.41571
K_62	44	3.0682	1.20845
K_63	44	3.7500	1.48049
K_64	44	3.6591	1.64166
K_65	44	3.7500	1.48049
K_66	44	3.7727	1.13841
K_67	44	3.5909	1.64696
K_68	44	3.5455	1.56197
K_69	44	3.3864	1.61700
K_70	44	3.5455	1.51664
K_71	44	2.7045	1.26821
K_72	44	3.7955	1.57863
K_73	44	3.8409	1.18013
K_74	44	3.5909	1.51455
K_75	44	3.3409	1.27486
K_76	43	3.3721	1.52789
K_77	44	3.2045	1.67859
K_78	44	2.5682	1.51577
K_79	44	3.7500	1.51158
K_80	44	3.0227	1.32048
K_81	44	2.9545	1.44600

K_82	44	3.2273	1.39540
K_83	44	3.9773	.92733
K_84	44	3.9773	.95208
K_85	44	1.7500	.89248
K_86	44	2.7273	1.40371
K_87	43	3.0233	1.10170
K_88	44	2.1364	.85156
K_89	44	4.0682	.87332
K_90	44	3.7045	1.59329
K_91	44	3.7955	1.57863
K_92	44	3.0000	1.20077
K_93	44	3.1136	1.49753
K_94	44	2.8864	1.43407
K_95	44	4.4318	.69542
K_96	44	2.9318	1.31887
K_97	44	3.7955	1.57863
K_98	43	3.6977	1.47252
K_99	44	2.4091	1.08517

APPENDIX V
STRESS LEVEL RATED PER ITEM

	Items responded to	Respondents	Mean	Std. Deviation
1	Fatigued by hours of work	1	2.68	1.817
2	Depressed by school policy on remedial teaching	2	2.42	1.519
3	Upset by basic salary	3	4.27	1.008
4	Stressed by medical allowances based on job groups	4	4.12	1.052
5	Irritated by commuter allowance based on job groups	5	4.08	.944
6	Irritated by house allowance based on job groups	6	3.92	.944
7	Experienced difficulty while in organization of co-curriculum activities e.g. games and clubs.	7	3.76	1.051
8	Experienced tension while being assessment internally by heads of department	8	3.92	1.131
9	Experienced tension while being assessment externally by the quality assurance officers	9	3.72	1.270
10	Irritated by the Principals' democratic management style	10	3.91	1.262
12	Angered by the students demands	11	3.16	1.468
13	Fatigued by your teaching work load in the school	12	3.09	1.578
14	Worries about student discipline e.g. use of drugs, and obedience.	13	2.91	1.506
15	Stresses by the school routine e.g. reporting and departing.	14	2.98	1.616
16	Irritated by the school culture e.g. tea, meals and time off.	15	3.23	1.484
17	Upset by the teaching facilities e.g. state of the class rooms and text books.	16	3.70	1.403
18	Hostility in the requisition procedure of teaching materials i.e. requisition to acquisition	17	4.05	1.179

19	Fatigued by marking of students' work	18	4.22	1.165
20	Fatigued by lesson preparation	19	4.22	1.121
21	Worries about invigilation of examinations	20	4.36	.963
22	Irrational decisions in the demands by the sponsor e.g. attending church service	21	3.72	1.559
24	Worries by on expected school K.C.S.E results in my school	22	3.80	1.450
25	Nervousness in the setting of examinations	23	3.48	.952
26	Irritated by teacher-teacher relation i.e. male-female,	24	3.01	1.313
27	Upset teacher-teacher relation i.e. female-female	25	3.05	1.312
28	Upset teacher-teacher relation i.e. male- male	26	2.93	1.296
29	Irrational decisions in the organization of staff meetings i.e. beginning, middle and end term.	27	3.69	.986
30	Worried by ministry of Education Science and Technology policies on physical punishment	28	2.98	1.186
35	Hostility in teacher-parent relationship	29	2.43	1.188
36	Stressed by academic days on Saturday	30	2.74	1.404
37	Fatigued by the educational tours in the school	31	3.30	1.594
38	Upset by Imprest policy	32	2.84	1.627
39	Stressed by transfer policy	33	4.16	1.173
40	Angered by promotion policy	34	4.16	1.076
41	Irritated by teaching and non teaching inter-personal relationship	35	3.76	1.560
42	Happy about study leave with pay	36	3.55	1.593
43	Annoyed about study leave without pay	37	3.42	1.318

44	Annoyed about student-teacher relationship	38	3.94	1.315
45	Fatigued by school responsibilities	39	3.09	1.363
46	Fatigued by school workload	40	3.47	1.626
47	Worried about setting of examinations	41	2.73	1.806
48	Worried about K.C.S.E.	42	2.17	1.565
49	Anxious about academic days in the school	43	2.95	1.798
50	Dissatisfied by the home diet/menu	44	3.05	1.820
	Means		**3.44**	**1.349**

Key: 1.00-1.44 Very Low influence 1.45-2.44 Low influence
2.45-3.44 Moderate influence 3.44-4.44 High influence
4.45-5.00 Very high influence

APPENDIX VI

TEACHERS STRESS LEVELS

R	M	SD	R	M	SD	R	Mean	SD
1	4.00	1.38	43	3.09	1.49	85	1.75	0.89
2	1.91	0.80	44	3.09	1.49	86	2.72	1.40
3	3.68	1.49	45	3.36	1.33	87	3.02	1.10
4	3.34	1.36	46	2.9	1.80	88	2.14	0.85
5	3.98	.84	47	3.09	1.51	89	4.07	0.87
6	2.45	1.19	48	3.45	1.55	90	3.70	1.59
7	2.18	1.30	49	3.39	1.42	91	3.80	1.58
8	3.77	1.58	50	3.61	1.17	92	3.00	1.20
9	3.34	1.46	51	3.45	1.50	93	3.11	1.50
10	3.77	1.58	52	3.80	1.58	94	2.89	1.43
11	3.80	1.58	53	3.80	1.58	95	4.43	0.70
12	3.59	1.28	54	3.55	1.61	96	2.93	1.32
13	3.32	1.43	55	3.73	1.42	97	3.80	1.58
14	3.32	1.43	56	3.39	1.43	98	3.70	1.47
15	3.56	1.40	57	3.52	1.56	99	2.41	1.09
16	3.66	1.57	58	3.63	1.63			
17	3.39	1.63	59	3.18	1.47	**Overall mean**	**3.44**	**1.40**
18	3.82	1.17	60	3.66	1.46			
19	3.68	1.62	61	3.36	1.42			
20	3.36	1.41	62	3.07	1.21			
21	3.84	1.60	63	3.7	1.48			
22	4.16	1.27	64	3.66	1.64			
23	4.00	1.45	65	3.75	1.48			
24	3.39	1.42	66	3.77	1.14			
25	3.95	1.38	67	3.59	1.65			
26	3.91	1.31	68	3.55	1.56			
27	3.86	1.36	69	3.39	1.62			
28	3.59	1.57	70	3.55	1.52			
29	3.27	1.53	71	2.71	1.27			
30	3.39	1.45	72	3.80	1.58			
31	3.58	1.60	73	3.84	1.18			
32	3.18	1.54	74	3.59	1.51			
33	3.84	1.55	75	3.34	1.27			
34	3.66	1.45	76	3.37	1.53			
35	3.39	1.37	77	3.20	1.68			
36	3.68	1.39	78	2.57	1.52			
37	3.36	1.69	79	3.75	1.51			
38	3.48	1.53	80	3.02	1.32			
39	3.57	1.30	81	2.95	1.45			
40	3.52	1.44	82	3.23	1.40			
41	3.64	1.28	83	3.98	0.93			
42	3.66	1.33	84	3.98	0.95			

Key:
R- Respondents **M-** Mean **S-** Standard Deviation
Source: Field data

APPENDIX VII

PRELIMINARY SURVEY

Stress is a product of demands on a person. It causes tension in a person and prompts him/her into action that maybe positive or negative in his/her place of work. Teachers work in an environment that has many demands which include administrative demands, students' demands and demands from colleagues. When at home, they also experience demands which have a bearing on their work as teachers because when they leave school, school work continues at home for instance preparation of lesson plans, marking students work and preparation of lesson notes. Stress therefore is important as it involves expending energy, motivation, decision making and many activities that culminates in the performance of teachers as signified by students' performance. The purpose of this questionnaire therefore is to estimate your level of stress. Kindly estimate your stress level on increasing 5-point rating scale by ticking (√) the numerical that best describes your stress level status on each of the listed life events you have experienced in the last four years(2012-2015) while handling your lessons for the past four years whose results were released in the year 2016 March 3rd where

1 = to life event which was experienced once every year which translates to very low stress level.

2 = to life event which was experienced twice in a every six month which translates to low stress level.

3= to life event which was experienced three times in every 3 which translates to moderate stress level.

4= to life event which was experienced four times in every month which translates to high stress level.

5= to life event which was experienced five times in every week which translates to very high stress level.

This instrument was adapted from Holmes and Rahe (1967) by replacing the life events with those that are experienced at school and at home that affects their professional work. The life events used were 50 where as those that were used by Holmes and Rahe (1967) were as 43 in number. The adaptation involved tailoring them to Kenyan situation based on day to day experiences of teachers in their operations. The instructions to the respondents were

precise and concise to enable them objectively rate their stress levels the fact that they were assured of confidentiality enhanced their degree of objectivity. The instrument was piloted and reliability was 0.82.

	Aspect of Teachers' Work	**RATINGS**				
		1	**2**	**3**	**4**	**5**
1	Fatigued by hours of work	( )	( )	( )	( )	( )
2	Upset by basic salary	( )	( )	( )	( )	( )
3	Irritated by commuter allowance based on job groups	( )	( )	( )	( )	( )
4	Experienced difficulty while in organization of co-curriculum activities e.g. games and clubs.	( )	( )	( )	( )	( )
5	Experienced tension while being assessment externally by the quality assurance officers	( )	( )	( )	( )	( )
6	Fatigued by your teaching work load in the school	( )	( )	( )	( )	( )
7	Stresses by the school routine e.g. reporting and departing.	( )	( )	( )	( )	( )
8	Upset by the teaching facilities e.g. state of the class rooms and text books.	( )	( )	( )	( )	( )
9	Fatigued by marking of students' work	( )	( )	( )	( )	( )
10	Worries about invigilation of examinations	( )	( )	( )	( )	( )
11	Nervousness in the setting of examinations	( )	( )	( )	( )	( )
12	Upset teacher-teacher relation i.e. female-female	( )	( )	( )	( )	( )
13	Irrational decisions in the organization of staff meetings i.e. beginning, middle and end term.	( )	( )	( )	( )	( )
14	Hostility in teacher-parent relationship	( )	( )	( )	( )	( )
15	Fatigued by the educational tours in the school	( )	( )	( )	( )	( )
16	Stressed by transfer policy	( )	( )	( )	( )	( )
17	Irritated by teaching and non teaching inter-personal relationship	( )	( )	( )	( )	( )
18	Annoyed about study leave without pay	( )	( )	( )	( )	( )
19	Fatigued by school responsibilities	( )	( )	( )	( )	( )
20	Worried about setting of examinations	( )	( )	( )	( )	( )
21	Anxious about academic days in the school	( )	( )	( )	( )	( )

This instrument was adapted from Holmes and Rahe (1967) by replacing the life events with those that are experienced at school that affects their professional work.

Any other ……

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RESULTS OF PRELIMINARY SURVEY OF TEACHERS STRESS LEVELS IN KAKAMEGA NORTH SUB COUNTY

Ratings	Level of Stress	Frequency	Percentages
1.00-1.44	Very low	0	0
1.45-2.44	Low stress	3	8
2.45-3.44	Moderate stress	8	32
3.45-4.44	High stress	14	56
4.45-5.00	Very high stress	0	0

APPENDIX VIII

LOCATION OF KAKAMEGA NORTH SUB COUNTY