

**THE INFLUENCE OF TEACHER STRESS ON ACADEMIC PERFORMANCE
OF SECONDARY SCHOOL STUDENTS: A CASE OF ELDORET
MUNICIPALITY**

BY

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DECLARATION

DECLARATION BY THE CANDIDATE

This thesis is my original work and has not been presented to any other institution for the award of degree or diploma. No part of this thesis may be produced without prior permission of the author and/or Moi University.

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DEDICATION

To Elice and late Elijah Koross

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ABSTRACT

Most societies have high expectations on what education can do for them. On the other hand, teachers perceive that the resources to accomplish these tasks are limited. The demand by the society on teachers may induce teacher stress. Teacher stress affects the individual teacher, the school and the entire society. The study therefore, sought to investigate the influence of teacher stress in secondary school student's academic performance in Eldoret Municipality.

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. Schools that had not presented candidates for KCSE in the last three years were excluded. At the school level, the researcher used purposive sampling 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. The results showed that teachers found teaching in school with poor performance had higher levels of occupational stress than teachers found teaching in schools with average and high performance. Teachers found teaching in high performing schools had lower levels of teacher stress than teachers teaching in schools with average and poor performance. Male teachers had higher levels of teacher stress than female teachers. Teachers with a teaching experience of 9 years and below had higher levels of teacher stress than teachers with 10 and above years of experience. Teachers with a teaching experience of above 20 years had the lowest levels of teacher stress.

The study revealed that teacher stress influences secondary school student's academic performance. The results showed that there was a negative relationship between teacher stress levels and student's performance. The findings of the study revealed that teacher stress was present in the teaching fraternity. Therefore, some recommendations were made. There is need to minimize teacher stress. Guidance and counseling centers should be established for teachers. Teachers need to be educated on emerging issues and trends. Newly employed teachers should make realistic and achievable goals.

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LIST OF ABBREVIATIONS AND ACRONYMS

ANOVA	-	Analysis of Variance
ASBJ	-	American School Board Journal
EAP	-	Employee Assistant Programme
EFA	-	Education for All
GAS	-	General adaptation syndrome
KCSE	-	Kenya Certificate of Secondary Education
KNUT	-	Kenya National Union of Teachers
NEA	-	National Education Association
VTU	-	Victoria Teachers Union
UNESCO	-	United Nations Education Scientific and Cultural Organization

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0 Introduction

This chapter presents the background of the study, specifies the problem of the study, describes its significance, states the objectives of the study and presents the hypotheses to be tested. It also concludes by noting the purpose of the study, research questions, assumptions, limitation of the study and theoretical framework underpinning this study.

1.1 Background of the Study

Education is considered a fundamental human right. According to UNESCO, some of the factors that determine the quality of an education system include inputs such as curriculum content, instructional materials, quality, and number of teachers, school atmosphere, teacher pupil ratio, learning duration, cost, and guiding policies. Teachers are the engines of the provision of knowledge to most students. Students who spend more time with their teachers enhance their achievement. Considering the huge investment many people undertake in educating their children, any factor that limits the teachers output can not be overlooked. To be productive and wealthy, a country is expected to take care of the health of their teachers. This can be by providing them with the best terms and conditions of service and training them well (Philips, 2004).

The government therefore needs to invest on teachers to have a positive productivity in education. The success of any system of education in any country rests on the shoulder of teachers. Providing finances for free and compulsory education is one dimension of providing for education. However, the major strength lies in motivating teachers and

sustaining their motivation. The teachers need to be consulted on education policies in order to bring about improvement in real terms. The cost of not involving teachers by determining policies is higher than the cost of not involving them. In Kenya the educational system has undergone considerable changes in the last two decades that are pointers to teacher stress (Koech Report, 1999). According to the report, constant curriculum changes, increasing numbers of school going children, school riots among others have made the education sector in Kenya significantly uncertain.

It is evident that the working conditions of teachers have changed a great deal as a result of rapture in technological change, unpredictable economic conditions, constant and persistent syllabus reorganization, as well as changing costs of living. These changes may induce stress among the teachers. These factors had also been captured earlier by the Canadian Mental Health Association (1984), which lamented that:

Clearly the working Canadian of the 1980s faces a more diverse and complex employment scene than ever existed before in history (:1)

In Kenya, Kyalo, Maiyo, and Mwaka (2006) outlined several factors that have limited the productivity of teachers in various schools across the country. These include poor working conditions, sustained conflicts with supervisors, traumatic events, or intentional harassment among other factors. These factors were earlier identified and outlined by Karl and Cooper (1987) who noted that Lower productivity from teachers, absenteeism, turnover, poor quality of workmanship, and a decrease in teachers' morale were also concerns of schools coping with job tension.

Based on the above facts, lower productivity, teacher's absenteeism, and sustained conflicts with others as well as harassment of the teachers has been linked remotely to

psychological problems of the teacher. However, when these occur in an erratic and irregular pattern and occurrence is occasional, then signs of stress are truly in the offing (Otto, 1982).

Though stress can neither be inevitable nor avoided, when it reaches above a certain threshold as to be nuisance to the third party, then it becomes harmful. The whole, ideology of stress was summed by Gray and Freeman (1998: 4) dictum:

Stress can be stimulating or energizing in which case it is positive
And beneficial, or it can be the cause of feelings of anxiety or
discomfort, here it is a negative and harmful condition.

Dr. Gachutha while commenting on work related stress and burnout said that:

Offices are becoming centers of madness; people are working
like machines, some for as long as sixteen hours a day. Human
beings are not that mechanical. We are bound to experience
emotional consequences if we work like this regularly
(Daily Nation, 2nd March 2007: 44).

Chepkonga (2004) conducted a study on stress in Baringo District Hospital and found out that the main causes of stress among employees were: Job insecurity, lack of resources, low morale at work, hostile and unsupportive administrators, monotony of work and discrimination at the work place. Carl and Cooper (1987) reported that teachers experience higher levels of stress. Carolyn Wiley (2003) noted that:

While the incidence of anxiety may be no greater for teachers
than for other professional groups, the possible negative effect
for students could be serious....that anxiety may affect as many
as 200,000 teachers and through them 5 million pupils (:161).

Pine and Cafry (1981) observed that helping professionals such as teachers experience stress frequently. This they noted is because: They do emotionally taxing work; they

share certain personality characteristics that make them choose human service as a career; they set high standards for themselves and others, i.e. are typically punctual, hurried, easily bored, have an external locus of control, are flexible, and tend to withdraw from others when stressed.

In as much as scanty statistics concerning stress among teachers may be available in the Ministry of Education and with limited access, elaborate studies concerning teacher stress within Eldoret Municipality are lacking and the little information available is scanty and fragmented. This therefore has created a huge gap in knowledge concerning the influence of teacher stress among the teachers and how this can influence the academic performance of the students. This study therefore hoped to determine the influence of teacher stress on the academic performance of the students within Eldoret Municipality.

1.2 Statement of the Problem

Many parents invest large sums of money in educating their children through the formal school education system. The school is expected to reciprocate by ensuring that the students in their custody have passed and attained higher echelons of education. Failure to achieve higher educational performance by the students will be blamed directly on the school management and teachers. The parents will acknowledge no mention of the students' weakness. This has created a huge pressure on the teachers to perform their duties, which according to the parents involves, providing the right information to the students so as to successfully go through the education system.

The teachers role are therefore put under scrutiny if the student they teach do not become successful. It has been established that the success of many students in their academic endeavors is tied to their links with the teachers than many school based factors (Phillips, 2006). However, the success of the teachers is usually hindered by several problems, in their day to day life. The major problems being occupational stress, which can have the potential of making the teachers perform below their threshold and hence reflect negatively in their outputs. Without systematic research on the stress level among the teachers, then many students may continue to under perform because of the influence of the occupational stress on the teachers' outputs, which will ultimately be reflected in the overall school performance.

Human resources are considered the most important component that could enhance long-term education. However, societal demand and increased public demand on education have produced adverse stressful classroom situation that have led to increased emotional and physical disability among teachers. Such work related sources of stress impact on a teacher's job performance. According to the Kenyan Secondary School Head Association 600 teacher leave the profession within a period of six months (Daily Nation, 5th may 2008:6).The ex-secretary general of KNUT lamented that there was a shortage of teacher attrition rate arising out of natural processes like death, resignation, and retirement (UNESCO).

It is against this background that researcher sought to investigate the influence of teacher stress on secondary school students academic performance in Eldoret municipality.

1.3 Purpose of the Study

The principle purpose of this study was to investigate the influence of teacher stress on secondary school students' academic performance.

1.4 Specific Objectives of the study

The study sought to achieve the following objectives:

- i. To determine the differences in the level of teacher stress in schools where Students' performance is poor, average and high.
- ii. To examine the differences in the level of teacher stress between male and female teachers in schools where students' performance is poor, average and high.
- iii. To determine the influence of teaching experience on the level of teacher stress.

1.5 Research Questions

- i. What is the level of teacher stress among teachers in schools where students' performance is poor, average and high?
- ii. What is the level of teacher stress of male and female teachers in schools where students' performance is poor, average and high?
- iii. What is the influence of teaching experience on the level of teacher stress?

1.6 Research Hypotheses

The hypotheses that guided the study were derived from the research questions. The following research hypotheses stated in null form were tested in the study:

HO₁: There is no significant difference in the level of teacher stress among teachers in schools where students' performance is poor, average and high.

HO₂. There is no significant difference in the level of teacher stress between male and female teachers in schools where students' performance is poor, average and high.

HO₃. There is no significant influence of teaching experience on the level of teacher stress.

1.7 The Scope of the Study

This study was mainly concerned with the influence of teacher stress on academic performance of secondary school students. The target population was all secondary school teachers in Eldoret Municipality. The study involved 100 teachers sampled from six secondary schools. The study was carried out during the month of June, 2008 using a questionnaire and document analysis. The findings of the study could be generalized to all other schools in the municipality.

1.8 Assumptions of the Study

The following assumptions were made in the study:

- (i) Other non occupational stressors such as home factors had an insignificant influence on students' performance.
- (ii) The respondents provided accurate information.

1.9 Limitation of the Study

In view of the nature of the research problem, it would be ideal if the study was conducted in all schools in Kenya. However, because of time and financial constraints a smaller sample was used. Therefore, the generalization of the findings of this study

is a limitation because factors that may influence secondary school students' performance may differ from region to region. However, the findings of the study may be generalized with caution to regions with similar characteristics.

1.10 Justification of the Study

In Kenya, many people including the parents, students, as well as the society as a whole, hold high expectation for their teaching force. Teachers are expected to instill values, teach basic and high order thinking skills, and nurture the development of the students to become independent and better or surpass certain basic performance standards that can guarantee them a better future. While most societies have high expectations on what education can do, teachers perceive that the resources to accomplish these tasks are limited.

The demand by the society on teachers may cause occupational stress. Occupational stress affects the teacher, his or her school, and the society. Teacher stress not only affects the individual teacher but his or her school and the society. Teacher stress may have a negative output on the students' performance. Teachers are implementers of the national curriculum and failure by the teachers to successfully implement the national curriculum affects the entire society. For instance a study conducted by Kaplan (1957) observed that there was a relationship between anxiety and teacher performance. As anxiety increased, performance declined because teachers become more concerned with their safety than that of the students. It is important that sources of occupational stress are minimized among teachers for improved performance in the school and society.

In developing countries and in particular Africa little is known about occupational stress among teachers. Obure (2003) carried out a research on the prevalence and severity of teacher stress factors among primary school teachers in Eldoret Municipality. He recommended that similar studies be carried out on teachers in other levels of teaching. Obure's study did not consider the consequences of teacher stress. This study therefore fulfilled this existing gap and added to the existing knowledge on teacher stress.

1.11 Theoretical Framework

This study was based on Lazarus' (1990) Transactional Model. The Transactional Model was considered ideal for the study because it considers both the amount of stress in the environment and the individual's response. The model also emphasizes the psychological factors that allow some people to cope with more stress in the environment than others. This model is relevant in that it takes into account wide variations in the experience of stress. For instance some events may be considered more stressful than others. Moreover, individuals differ in the way they respond to similar events. For example, some people panic at the very thought of a deadline while others do their very best when they are working under pressure. Therefore, what some people find stressful, others find it benign and even beneficial or exciting. One determinant of whether or not we feel stressed depends on how we feel or appraise a situation.

The nature of human beings is such that they can evaluate events, assess the threat, their own vulnerability and how they might cope. From this perspective, a life event is not necessarily a source of stress, the individual's evaluation of its impact is what determines

its stressfulness. It is the perception of vulnerability and lack of control that creates a stressful situation.

Lazarus suggested that the process of determining whether a situation is threatening, challenging or harmful is one of appraisal. Our initial impression or primary appraisal of the situation generates emotions in relation to judgment: a threat or the anticipation of harm, fear, anxiety, disappointment, anger, sadness, challenge or confidence in the face of a difficult demand.

Following the initial appraisal, a secondary appraisal is made. This is the formation of an impression about our ability to cope with the situation. It is a consideration of the possible options, the chances of employing them and whether the action will work. Reappraisal may follow in the light of new information.

As a result of the foregoing, it is crucial to forewarn and at the same time forearm the teacher with stress management skills so that once they experience occupational stress they can handle the situation with calm and responsibility. This will ensure that occupational stress though present does not affect their day-to-day activities and hence the attainment of set objectives.

1.12: Operational Definition of Terms

Academic performance: refers to the student's academic performance. Academic performance was gauged from the mean grade of the school based on individual scores of the students in K.C.S.E performance.

Gender: Refers to the teacher's response as to whether they are male or female.

Teacher stress: Refers to a situation in which job related factors interact with the teacher to change his or her psychological or physiological condition such that he or she is forced to deviate from normal functioning. Occupational stress can be used in place of teachers stress. Teacher stress in this study was indicated by the teacher's response to occupational stressors on: school management and administration, workload and time pressure, students' behavior and learning, working relationship at the work place, and reward recognition at work. Levels of teacher stress were categorized as low, average, and high.

School type: Refers to how a school has been categorized in terms of performance. A school with a mean of 4 and below was recorded as of low performance; a school with a mean of between 4.1 and 7.9 was recorded as of average performance while a school with a mean of 8 and above was recorded as of high performance.

Teaching experience: Refers to the number of years a teacher has been in the teach profession. A teacher who had taught for above 20 years was considered as a highly experienced teacher while a teacher who had taught for between 10-20 years was considered as of average teaching experience. A teacher who had taught for 9 years and below was considered as of low teaching experience. However, only

teachers who had been teaching in the school for the last 3 years preceding the study participated.

1.13 Conclusion

In this chapter it is clear that research on the influence of teacher stress on students' academic performance is required in order to document the possible finding of the study and recommend an appropriate approach to dealing with teacher stress. In the next chapter, review of literature related to this study is presented.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews literature that is related to the research study. This information was drawn from primary and secondary sources, as well as the internet. Specifically, it dealt with evidence on the concept of stress, occupational stress, and teacher stress. The chapter also reviewed literature on the relationship between occupational stress, performance, gender, and teaching experience. A critical review of stress among teachers is presented.

2.1 The Concept of Stress

The term stress could have different connotations applicable in many social environments. Deckens (2004) defines stress as any circumstance that threatens or is perceived to threaten individuals well being and thereby tax the individual's adaptive capacities. Trist (1977) had earlier identified stress as having been in existence from evolutionary times. Weiten (1986) observed that the past ways of resolving threats are no longer sufficient in the modern world because of the changing nature of stress. Unlike the past where stressful events were short lived, the modern society seems to be strewn with many stressors that linger for longer periods.

The scientific connotation of stress is relatively recent, as (Trist, 1977) observed that animals respond quickly to life threatening challenges in the environment in order to survive. Depending on the specific circumstances, the appropriate reaction would be

either to fight as when faced with a weaker opponent or flee when faced by a superior enemy. Accordingly, Trist characterized the standard response to danger as the fight or flight reaction.

The most prominent researcher in the field of stress and coping is Hans Selye (1976). Selye dates the origin of the concept of stress to an experience he had in 1936, as a student of medicine at the University of Prague. Selye was puzzled that a hematologist, Von Jaksch was able to diagnose diseases without complicated instruments or chemical examinations. Out of this puzzle the concept of stress was born. From these Selye formulated the most widely used theoretical model of stress reactions, called the general adaptation syndrome (GAS). According to Selye the GAS consist of three stages: The alarm reaction, the stage of resistance and the stage of exhaustion.

In the alarm reaction stage the body musters its resources to combat the stress, leading to a multitude of physiological reactions. The physiological reactions are as a result of the release of the hormones catecholamine and corticosteroids into the blood stream. These hormones are designed to help the body confront the challenges of stress. The alarm reaction stage represents a general call to arms of the body's defense and is accompanied by such typical symptoms of injury as increased heart beat, increased blood flow, increased respiration, increased perspiration, increased muscle tone, and inhibited digestive processes. Other signs of this stage include persistent irritability, anxiety, bruxism, insomnia, memory loss and inability to concentrate. During the second stage i.e. of resistance the body tries to limit the effects of the stressful situation. The symptoms of

the first stage diminish or disappear. The organism at this stage is prepared for either flight or fight.

During the third stage, the choice between flight and fight may be unsuccessful in reducing stress. During this stage the principle problem is that some of the bodily chemicals summoned to combat the stress may damage internal organs if they remain at high levels for too long or the supply of certain important chemicals may be exhausted. As a result the organism's ability to adapt to the situation fails. This may result in tissue breakdown or even death. Symptoms of severe exhaustion include chronic sadness, chronic mental and physical fatigue, chronic stress related illness, isolation, withdrawal, and self-destructive thoughts. According to Selye, if these physiological changes do not occur, the organism is not experiencing stress.

Stressful situations affect individuals differently, depending on their biological makeup, training, dietary deficiencies, and other factors (Selye, 1976; Weiten, 1986). Selye also pointed out that not all stress is bad; in fact, too little stress can also have negative effect. Therefore he distinguished between the positive, creative and motivating aspects, which he referred to as "eustress" and the negative Debilitating and aversive ones which he called "distress. Melgosa (2001) noted that eustress results in achievements and exhilaration.

Stress becomes dangerous when it is prolonged, comes too often or concentrates on one particular organ of the body (Selye, 1974). Stress that is too intense or prolonged can

have destructive physiological and psychological effects. If the initial attempts at coping are unsuccessful, anxiety intensifies and the individual becomes more rigid in his or her efforts and less able to perceive alternative solutions to the problem.

According to Forshaw (2002) when stressful situations go unresolved, the body is kept in a constant state of activation, which increases the rate of wear and tear to the biological system. As a result, fatigue or damage occurs. The ability of the body to repair and defend itself can become seriously compromised. As a result the risk of injury or disease escalates.

Melgosa (2001) noted that stress has an effect on performance. As a general rule as the level of arousal increases performance also increases. Thus, the individual is well motivated and the performance is at the optimal level. However, if the arousal becomes excessive, performance deteriorates and the body's functioning becomes disrupted. According to Glass (1977) our response whether physiological, cognitive, emotional or behavioral, becomes maladaptive.

Weiten (1986) observed that stress is addictive and cumulative. Everyday hassles may add up over time until a state of crisis is reached and symptoms of stress begin to appear (Melgosa, 2001). These symptoms may manifest themselves psychologically as irritability, anxiety, impaired concentration, mental confusion, poor judgment, frustration and anger. The common physical symptoms of stress include; muscle tension, headache,

low back pain, insomnia and high blood pressure (Cole, et al. 1989). Untreated these symptoms may lead to physical illness and sometimes death.

While there is no single definition of stress, we have all experienced it at one time or another, and because of its potential harm, physiologically and psychologically, psychologists, psychiatrists and others agree that it is essential that we try to understand in order to prevent it or at least minimize it. Cox (1990) identified three models of stress around which definitions and research have evolved. These are the engineering model, physiological model and the transactional model.

The engineering model sees external stressors as giving rise to a strain reaction within the individual. Stress is therefore what happens to a person and not what happens within the person. According to the model, stress is inevitable and can be tolerated. The model also considers the fact that moderate levels of stress are beneficial while too much or too little stress is harmful. The model does not account for individual differences in the perception of stress (Kasl and Cooper, 1987).

The physiological model is primarily concerned with what happens within the person, which is with the response aspects of the engineering model. The response to stress are mainly physiological changes and to a lesser extent psychological changes. The impetus for this view of stress was Selye's (1976) definition that stress is the non-specific response of the body to any demand made upon it. The model is primarily concerned with the question "How do we react to physiological stress?"

The transactional model represents a kind of blend of the engineering model and the physiological model. The model sees stress as arising from an interaction between people and their environment i.e. when there is an imbalance between the person's perception of the demand being made of them by the situation and their ability to meet the demand, and when failure to cope is important. The model allows for important individual differences in what are sources of stress and how much stress is experienced. The model is also concerned with how people cope with stress.

2.2 Occupational Stress

Occupational stress is stress, which is derived specifically from conditions in the workplace (Otto, 1982). The occupational stressor may either cause stress initially or aggravate the stress already present from other sources. In today's workplace stress is seen as becoming increasingly more common. People appear to be working for longer hours, taking on higher levels of responsibility, and exerting themselves more strenuously to meet rising expectations about job performance.

Kahn et al. (1990) noted that in the organization environment, stress has been implicated in the deterioration of performance efficiency by both managers and subordinates. According to Kahn et al. when performance efficiency suffers, the quality of the overall organizational environment and productivity deteriorates. A deterioration of the organizational environment is usually accompanied by deterioration in organizational communication.

An aspect of life that has received much attention from researchers is work, which is said to be a major source of stress (Piece et al, 1990). Work fulfils a number of basic human needs. Stress may arise when there is a failure to satisfy these needs or when there is a perceived threat to their satisfaction. Beech et al. (1982) and Cole et al. (1981) identified several stress factors at work. These are broadly discussed as problems of work and problems of occupational frustrations.

Physical and mental health is adversely affected by unpleasant working conditions such as noise vibrations, lighting, temperature variations, and excessive or inconvenient working hours, crowding, and air pollution. Work overload is when the job demands are such as to exceed the individual's perceived ability to meet the demands. Several types of overload may be identified, namely: quantitative overload, qualitative overload and a combination of quantitative and qualitative overload. Quantitative overload is having too much work to do in a given period of time. One may be fully competent in his job but time pressure, long hours, unrealistic deadlines, frequent interruptions, infrequent rest breaks etc, and can all elicit a stress reaction. Most organizations and institutions have time pressure over their employees, deadlines for work projects, and reports. Chronic time urgency can lead to over arousal with the consequence that the cardiovascular system may be adversely affected (Kasl and Cooper, 1987).

Qualitative overload is when work exceeds the technical or intellectual competence of the individual. The job may demand continuous concentration, innovation and meaningful decision-making. The higher the inherent difficulty of work, which may require a great

deal of sophisticated information and high-level academic skills, the more stressful the job. This form of overload may be experienced by individuals working in research and development organizations. Consequences of this type of stressor are emotional and mental fatigue, gastro-intestinal disorders and headaches (McGrath, 1982). Stress may be directly related to the multi-faceted nature of decision making. A combination of quantitative and qualitative overload may frequently occur in Management and administrative positions (Beech et al. 1982).

Work under-load occurs when a job may fail to provide meaningful stimulation or adequate reinforcement. A job that involves monotony, lack of opportunity to use acquired skills and expertise, an absence of any intellectual involvement and repetitive performance, provide instances of under-load. Selye (1976) refers to these problems as “deprivational stress.” Reaction to these types of stressors include; hysteria, poor productivity, absenteeism and high turnover. One consequence of derivational stress is that employees work at minimally acceptable levels showing no real interest in the work during the week, while at the weekend they engage in a vocational pursuit as a compensation device. Such an attitude can have adverse effects on the organization and can be traced back to poor job satisfaction.

2.2.1 Problems of Occupational Frustrations

Stress reactions may result when the job actually blocks or inhibits the attainment of goals. This leads to important components of occupational frustration. Job characteristics or role ambiguity occurs when there is lack of clarity about work procedures or

objectives, responsibilities and expectations from colleagues (Beehr, 1995). There could also be inadequate information about which tasks should take priority and lack of feedback, which may result in job dissatisfaction, which may, in turn lead to confusion, frustration, helplessness and stress.

Role conflict occurs when the job of the individual contains roles, which may directly conflict with each other i.e. conflicting job demands, differences of view with superiors or problems related to conflicts with personal, professional or societal values. Role conflict is most commonly seen in middle-level managers who find themselves trapped between top level management and lower level management. Role conflict can result in stress reactions due to frustrations and job dissatisfaction (Beech et al, 1982). High degree of specialization is when a job calls for a high degree of specialization, the goal of which is innovation, increased efficiency and improved quality of work. However, over-specialization can lead to occupational frustration. This is because there is usually too little opportunities to identify with the company or institution and its policies. Poor development guidance is also a major source of stress. Stress reaction from job frustration may exist when there is lack of career guidance. This calls for the need for employee assistance programme (EAP) to assist in counseling the employees.

Poor communication is the most frequently reported single major source of frustration in any organization (Kahn et.al.1990). Good decision making, adequate planning and organization's functioning depend on effective communication. Communication should flow from one level to another and horizontally from department to department. Effective

communication can lead to increased job satisfaction and improved motivation and performance.

Ubiquitous stressors encountered in work place are change and adaptation (Claxton, 1989). How the individual perceives the change is important. Any change can be stressful because it disrupts behavioral, physiological and cognitive patterns of functioning and because it requires adaptation. The most important forms of occupational or job change includes: scientific development, promotion, organizational restructuring, re-location, redundancy, retirement and organizational restructuring. Computer and other technological advances are contributing to increased efficiency in a variety of work functions from top-level management decisions to office processes. Jobs may become obsolete and new training and adaptation may be necessary. This may involve stress reactions especially for those who are directly affected. It is important that changes are carefully planned and the employees educated as to the nature and purpose of the change. The implementation of the change must be non-threatening if debilitating stress associated with the change is to be avoided (McGrath, 1976).

Promotion also leads to important changes in job functioning, which may involve increased responsibility for people and for production (Rathus and Nevial, 1991). Promotion leads to accountability to higher levels of management and changes in social roles. Whether these changes are viewed as positive or negative, they require adaptation and may lead to stress.

Adaptive stress reactions may be involved when moving to a new area, either vocational or residential (Larson,1980).This may evoke stressful responses because of severing of interpersonal relationships, the physical problems of moving possessions, the adjustment needed in a new area and possibly, culture, new interpersonal relationships, and different socio-economic conditions. Although such changes may be stimulating, nevertheless, adaptive energy is required and such changes may be stressful.

Consequences of redundancy may be poor self-esteem, financial insecurity and depression. Beech et.al (1982) in discussing the relationship between redundancy and ill health noted that in the United States, each increase in unemployment of 1% causes about 37,000 deaths over the succeeding six years due to cardiovascular problems and stress promoted suicide. Another source of adaptive stress is related to the adjustment of retirement. When a man retires, particularly if he retires from a job providing a great deal of reinforcement, the consequences are likely to include a loss of self- esteem, a feeling of worthlessness, a depressed state, decreased appetite and sexual drive, sleep disturbance, apathy and loss of motivation.

There are many other possible sources of job stress. These may include poor interpersonal relationships at work and responsibility. Good relationships are a central factor in individual and organizational health. Beech et. al. (1982) defined poor relations as those which include, low trust, low supportiveness and low interest in listening and trying to deal with problems that confront organizational -member relationships. Stress may result from feelings of being unaccepted or failure to recognize particular expertise,

which an individual feels he possesses. Feelings of being discriminated against by influential individuals or the organization itself may also arise. It has been observed that, the greater the levels of responsibility for people at work, the greater the possibility of stress-related reaction.

2.2.2 Consequences of Occupational Stress

The consequences of stressors commonly associated with occupational stress tend to vary widely. Consequences are felt not only by individuals, but also by their families, the organizations they work for, and by the society.

At the individual level according to Juniper (1991) workers may simply resort to daydreaming or fantasizing. Alternatively, employees may react more actively by creating interpersonal and intra organizational conflicts involving escalating levels of communication problems. Workers may also experience effects in their psychological and physical health. Psychological consequences may include; anxiety, boredom, and low self esteem forgetfulness, depression, anger, apathy, or worry. Physical consequences may include headaches, backaches, chest pain, heart disease, respiratory disorders, gastro-intestinal problems, diabetes, hypertension, decline in physical appearance and chronic fatigue. According to Juniper workers may also exhibit deviations in their behavior. Examples of departures from normal behaviors may be overeating, loss of appetite, smoking, alcohol abuse, sleeping disorders, emotional outbursts, or violence and aggression.

From the organizational aspect occupational stress has several consequences. Cox (1980) observed that consequences of occupational stress at the organizational level include: absenteeism, tiredness, accidents, sabotage, turnover, reduced productivity, reduced motivation, low morale, reduced satisfaction, reduced effectiveness, poor communication, poor performance, higher costs, and poor relationships. According to Jarvis (2002) absenteeism, results in 40% of the work hours which are lost and that translates into million of dollars annually.

At the societal level consequences of occupational stress include high levels of drug and alcohol abuse, increased smoking and associated diseases, dropouts, broken families, higher levels of health care costs and reduction in economic output (Cox, 1990). Job burnout is a term that is frequently used in association with occupational stress. Job burnout has been found to be present in all occupations (Maslach, 1982). Job burnout is held to result from the combined effects of work related factors that create unrelieved work stress, which in turn leads to a generally debilitated psychological condition in individuals.

According to Maslach (1982) certain behaviors associated with job burnout have been observed in a wide variety of occupations. Maslach noted that these behaviors include: an individual blaming others in an organization for ones own problems, increased absenteeism, and increased involvement in interpersonal conflict and confrontation, and increasing isolation from others in the organization. Maslach observed that individuals suffering from job burnout frequently attempt to remove themselves from the situations

they perceive to be the sources of their problems without actually terminating their jobs. According to Maslach their strategies in such attempts involve a breakdown in communications, and such individuals are often damaging to both their organizational and to their own careers.

Many researchers have confirmed the existence of occupational stress. A report into the scale of occupational stress in the year 2000 found that the groups in the UK reporting high stress (in order) were teachers, nurses, managers and professionals (Jarvis, 2002). Other groups included were those in education and welfare, road transport and security. In all these groups at least one in five people reported high stress levels. For teachers it was two in five. Therefore it would be appropriate that teacher stress be reviewed.

2.3 Teacher Stress

The concept of occupational stress in teachers has been used in research in stress to describe a situation in which factors related to the job are perceived to cause poor health and well being of the employee (Lazarus, 1990). Teacher stress is borne out of the demands on the individual teacher by his or her school or students. According to Wiley (2003) many substitute teacher costs are a direct result of teacher stress. The costs associated with this stressful occupation can be high in physical, economic, and academic terms.

Several studies have been done on teacher stress and therefore there are different definitions for teacher stress. Dunham (1992) defines teacher stress as a process of

behavioral, emotional, mental, and physical reactions caused by prolonged, increased, or new pressures within the teaching environment which are significantly greater than the teachers coping resources. According to Dunham teacher stress factors include teacher's appraisal of job demands and their coping strategies, their anticipation of future demands and readiness to deal with them and their preparation and possessions of skills to handle work pressure. According to Cooper (1980) occupational stress among teachers is as a result of "a discrepancy between the teacher's work needs, value and expectations and the failure of the work environment to provide occupational rewards, job demands and his or her capacity to meet these requirements" (P 135).

This study used Kyriacou's definition of teacher stress as "the experience by a teacher of unpleasant emotions, such as tension, frustration, anger, and depression resulting from aspect of his work as a teacher"(Kyriacou, 1987, p. 146). Having defined teacher stress it would be pertinent to review the major sources of teachers stress. The sources of teacher stress are those that are chronic and persistent and not those that are episodic.

2.3.1 Causal Factors in Teacher Stress

There are unquestionably a number of causal factors in teacher stress. Stress always involves a transaction between the individual and their environment (Cox,. 1980). In this study causal factors were divided into four broad categories; factors intrinsic to teaching, cognitive vulnerability of teachers, systematic factors operating at the institutional and political level, and individual and background variables.

In this context the term 'systemic' was used to denote a broad cluster of organizational factors that are not intrinsic to the nature of teaching, but rather dependent on the climate of the educational institution or the wider context of education including the political domain. Travers and Cooper (1997) found that teachers named lack of government support, lack of information about changes, constant change and the demands of the National curriculum as among their greatest sources of stress. These 'trickle-down' systemic factors act in addition to and feed into the dynamic individual organizations (Jennings & Kennedy, 1996).

Two of the most frequently recognized organization contributors to teacher burnout are role conflict and role ambiguity (Crane & Iwanicki, 1986; Schwab & Iwanicki, 1982; Byrne, 1992). Role conflict occurs when an individual is faced with two conflicting sets of inconsistent but expected role behaviors. Stress results from the individual's inability to reconcile the inconsistency. Role ambiguity is the lack of clear, consistent information regarding the rights, duties and responsibilities of a person's occupation and how they can best be performed (Kahn, et al. 1990). Stress results from this ambiguity.

Schwab, et. at. (1982) found that in addition to role conflict and role ambiguity other organizational factors contributed to higher stress levels. First, individuals with lower levels of burnout felt they had more freedom and autonomy in deciding what and how to teach. Secondly, teachers who believed they were able to participate in school- related decision-making processes also reported a lower incidence of stress. Thirdly, teachers

who felt their organization had a system providing contingent reward for good work and contingent punishment for sub-par efforts were less stressed.

Leadership style has also emerged as a significant organization factor. Harris (1991) assessed teacher stress and leadership in three American primary schools, using the Wilson stress profile for teachers. The principal in each school was classified differently, and teachers had significantly lower stress in the school where the principal was classified as high in both task and relationship focus. This leadership style was associated with both strategic vision and a close personal relationship with staff. Hoel et.al (1999) surveyed English teachers and found that 35% reported having been bullied by a manager in the last five years, as opposed to an average of 24% across all occupational sectors. Cooper interpreted this in terms of managers failing to cope with workloads and resorting to bullying as a maladaptive coping strategy.

At the level of the institution factors such as social support amongst colleagues and leadership style were found to be more important in affecting levels of stress. Dussault et.al (1999) assessed isolation and stress in 110 Canadian teachers and, as hypothesized, found a strong positive correlation. In another study et. al (1999) questioned 424 teachers from across all German sectors about their work stress, social support and physical illnesses. It was found that social support had both a direct positive effect on health and a buffering effect in respect of work stress. In this regard, it is important to note that social support from one's colleagues has been shown to be more important than administrative support.

Vandenberg he (1986) viewed the staff room as a place where competition, hidden conflicts, and striving for power mostly in a covert way determine the behavior of most teachers. In this regard it is important to note that social support from one's colleagues has been shown to be more important than administrator support. An effective support group includes people who provide emotional comfort, confront the individual in humane ways when the individual's behaviors are inappropriate, provide work-related support, present technical challenges that promote individual growth, serve as active listeners, and share similar values, beliefs, and perceptions of reality (Pine et al. 1981).

Unfortunately, the science of personality inventories and tests is far from perfect, and comprehensive instruments are difficult, time consuming and expensive to design and administer. Consequently many studies have examined isolated personality characteristics and their relationship to teacher burnout, rather than holistically looking at personality differences and their contribution to burnout. McIntyre et. al (1984) found that teachers with an external locus of control were inclined to feel that their destiny was not in their own hands and others control their lives. They believe luck, fate, or powerful others are responsible for what happens to them. Individuals with an internal locus feel that events in one's life are within one's own control.

Anderson et. al (1984) found that when teachers felt that their higher order needs were addressed in their work they were less likely to experience job burnout. Higher order needs include self-actualization i.e. need for success achievement, achieving full potential and self-esteem. In addition, several background factors are related to levels of burnout.

Studies have shown that men are more likely to experience burnout than women. Teaching at elementary school is less stressful than at the middle and secondary level, single people experience higher levels of stress than married individuals, and teachers in large and urban schools experience more stress (Burke et al, 1989; Schwab et al 1982; Malonowski *et al*, 1984).

Travers and Cooper (1997) conducted a study on stressors intrinsic to teaching among teachers in England and France. The study revealed that workload and long working hours emerged as particular issues for English teachers as opposed to colleagues in France. A factor related to workload is role overload, which takes place when an employee has to cope with a number of competing roles within their job. Pithers and Soden (1998) conducted a study that highlighted role overload as a significant stressor in teachers. Pithers and Soden assessed stress in 322 Australian and Scottish vocational lecturers. In the study strains were found to be average in both national groups but there were higher levels of stress with role overload emerging as the major cause.

Some research has identified a cyclic pattern in the effects of overwork contingent on the academic year. Hargreaves (1990) assessed 142 teachers by repeated self report during the autumn and spring of an academic year. It was established that recovery from stress occurred each weekend during the spring terms but that by the end of the longer autumn term weekend, recovery no longer took place.

Classroom discipline is also a significant source of stress arising from being unable to discipline pupils in the way they would in general. Maintaining discipline emerged as a stressor, with those worst affected being teachers who placed particular emphasis on pupils empowerment. A study conducted by Morton et.al (1997) on 1000 teachers, revealed that classroom management was their second greatest source of anxiety, the greatest being evaluation apprehension. The study also revealed that of all the stressors reported, classroom management anxiety was the only one that did not decline following teaching practice.

Evaluation apprehension is an issue of increasing importance, as quality assurance procedures increasingly demand lesson observations. Carpel (1997) questioned student teachers following their first and second teaching practice on their levels and sources of anxiety. Evaluation apprehension emerged as the stressor in both practices. Similarly, the Morton et.al study (1997) found that of all the sources of stress for student teachers evaluation apprehension was the greatest, although it declined following teaching practice, suggesting that evaluation apprehension is reduced by exposure and positive experiences of observation feedback.

An issue identified as a major stressor by teachers around the globe concerns the students they are responsible for educating (Kyriacou, 1987). Teachers indicate that the poor work attitude of students and their lack of motivation are among the most stressful issues faced on a daily basis. Farber (1991) reported that student misbehavior, lack of attentiveness and low enthusiasm for learning material were significant contributors to burnout in

Israeli educators. Similar findings have been reported in separate studies with teachers in New Zealand (Dewe, 1986), Japan (Nonimmiya and Okata, 1990), the United Kingdom (Kyriacou, 1997) West Indies (Payne and Furnham, 1997) and Canada (Byrene, 1992), and the United States (Goodland, 1984).

Time pressure may be a cause of teacher stress. This is because there are high levels of demands made on a teacher within a short period of time. According to Kivi (1998):

Teachers work at superhuman speed and will spend the first days of a two week holiday trying to slow down to the pace of normal human beings (:20).

Claxton (1989) when commenting on teachers' time pressure stated that:

When you spend your days feeling stretched to the limit and emotionally drained, it is small wonder that you want to spend the evening dozing in front of the television instead of preparing for lessons (:45).

According to Claxton this only creates more time pressure, more stress, and more desire to relax when you have time, leading to more time pressure.

A substantial body of contemporary research has examined the cognitive factors affecting individual susceptibility to stress amongst teachers. Chorney (1998) investigated self-defeating beliefs by asking 41 teachers to identify what they must do to be a good teacher. Ninety two percent of responses were couched in absolute terms, such as 'must' and 'need.' In the study, endorsement of these beliefs was widespread and was significantly associated with high levels of stress.

Bibou-Nakou, et. al (1999) conducted a study on the role of attributions. Two hundred teachers were presented with four hypothetical class management situations and questioned as to their attribution in each case. The study revealed that there was a significant association between internal attribution and symptoms of burnout, suggesting that teachers who blame themselves for difficulties are more vulnerable to stress.

Self-efficacy has been researched on as a cognitive vulnerability factor. Friedman (2000) examined the self reports of newly qualified teachers. Respondents revealed sharp declines in self-efficacy as they found they could not live up to their ideal performances. Brouwers and Tomic (2000) carried out a study to analyze the relationship between self-efficacy and burnout in 243 secondary school teachers. The study revealed that self-efficacy had a synchronous effect on personal accomplishment and a longitudinal effect on personalization. However, low self- efficacy had a synchronous effect on emotional exhaustion. The study therefore suggested that cognitive interventions designed to improve self-efficacy may mediate the effects of stress.

It is evident that there are several factors that may cause occupational stress among teachers. It is therefore important to review studies on the consequences of teacher stress.

2.4 Consequences of Teacher Stress

Teacher stress has impacts on the individual teacher, which in turn affects the entire educational system. Some of the educational consequences of teacher stress include; lower performance, withdrawal, lower job satisfaction, and high turnover, declining productivity, absenteeism and moonlighting. These eventually interfere with student's achievement.

According to and Chance (1992) a relationship exists between occupational stress and teacher performance. For example a teacher who is already fatigued due to time pressure may not take advantage of free time. As a result such teachers loose their creativity and concentration leading to poorly motivated students.

Kaplan (1957) as cited in Coates and Thoreson observed that studies, which used direct behavioral observation to determine the relationship between anxiety and teacher performance, showed there was a positive relationship .Kaplan noted that at some level anxiety in classroom teachers may become detrimental to students and the teachers themselves. Kaplan also noted that teachers even use obsessions as defense mechanisms against anxiety. According to Kaplan some teachers are so obsessed with discipline in the classroom. Admiraal, Korthagon, & Wubbels, (2000) revealed that the general manifest anxiety level of teachers may influence the test-anxiety level. As a result they suggested that school mental health workers should be alert to those circumstances in which high anxiety on the part of the teacher may have an undesirable effect on students.

Anderson et .al (1984)supports these findings by adding that high anxiety on the part of teachers may have a negative effect on teachers' performance as well as affect the manner in which the teacher handles responsibilities in the educational setting. Swick et.al (1980) reported that teachers with high anxiety use significantly less task-oriented behavior with students. Swick et. al noted that such teachers also tend to provide fewer positive reinforcements for their students

Borg et. al (1989) carried out a study to determine the relationship between occupational stress, job satisfaction, and career commitment among teachers. The findings of the study revealed that teachers who reported more stress were less satisfied with their job and less committed to choosing a teaching career were they to start life over again.

Many teachers suffering from low morale contemplate moving to a new career. According to the National School Board Association (2001) a study of Texas Public School teachers found that 44 percent of the teachers surveyed were “seriously considering” leaving the profession. The study found that more than one third of these teachers attributed their decision to working conditions, while about one-fifth cited low salaries.

Teachers who are under constant heavy stress are unable to function effectively. The term ‘burnout’ has been coined to describe this phenomenon. Burnout denotes the inability to function effectively in one’s job as a consequence of prolonged and extensive work related stress (Byrne, 1992). The case of teacher burnout is a very extreme case of teacher stress in which the teacher is already aware that they cannot carry on due to the stress they are under. As a result schools face costs associated with recruiting and replacing burned-out teachers who opt to leave the profession (Swick et. al, 1980).

After examining national and state efforts to recruit new teachers, Good, and Brophy (1987) concluded that the teacher shortage problem had been misdiagnosed. Good, and Brophy Strongly asserts that the problem is not recruitment, but retention of teachers.

According to Good and Brophy teachers are poorly trained then treated badly. For this reason they quit teaching in droves. Grossnickle (1980) strongly agreed with Good and Brophy that the best remedy for teacher shortage is to focus on retention of qualified teachers, rather than teacher recruitment. Teachers who perceive lack of support and poor treatment were more likely to view their work as more stressful. As a result teachers leave the profession in the early years of their career.

According to the American School Board alleviating teacher stress can be a cost saving measure. The ASBJ also noted that teacher occupational stress lead to increased absenteeism, sending substitute teacher costs skyrocketing. Some researchers, according to the journal have shown that students whose teachers fail to show up also tend to have higher than average absenteeism.

A study conducted by Cole (1989) among teachers revealed that one in five teachers visited a doctor for stress related illness. Moreover, teachers universally agree that their physical and mental ailments are most severe during the school term. The study also revealed that teachers took about the maximum off duty days that was paid.

Brophy et. al (1974) clinical observations show that in stressful situations, such as an uneasy school atmosphere, teachers concerns for survival take precedence over their direct teaching activities. Dunham (1992) indicated that absenteeism, leaving teaching, sickness and early retirement are forms of withdrawal associated with situations which become too stressful.

Stress also takes its toll on teachers outside the classroom. According to a study among Midwestern teachers by Minnesota-based Optum Research as cited in ASBJ (2003), high levels of job stress affect family life. The study also revealed that job stress affected the teachers' physical health, job performance, mental health and their, academic achievement.

Whether teacher stress results in differential student performance is a primary question facing instructional theorist's .Teachers' self report from three National Education Association surveys indicate that teachers experience a significant amount of stress. The implications are that this strain is likely to affect the teacher's personality, and ultimately affect classroom teaching and learning. For example, poor or ineffective teaching is often attributed to personality shortcomings, such as insufficient warmth, zeal, sensitivity, or perhaps excessive authoritarianism and rigidity (Swick et. al 1980).

2.4.1 The Influence of Occupational Stress on Performance

A study conducted by Chepkonga (2004) on employee stress in organizations revealed that occupational stress impacts on performance negatively. According to the study performance of the hospital employees declined with the occurrence of stress at their place of work. In the study the indicators of poor performance were: poor quality of work, increased number of deaths in the hospital, conflicts among employees and absenteeism.

Kothusar, Dogar and Ghazal (2006) conducted a study to examine the relationship between occupational stress and the performance of employees. The results of the study revealed that there was no significant relationship between the level of stress and performance of employees. According to the study only the workload factor had a significant impact. This study therefore sought to establish the influence of teacher stress on students' academic performance.

2.5. The Influence of Gender on the Perception of Occupational Stress

Beehr et al. (1995) conducted a study on the potential ameliorating effects of social support on occupational stress. The study sample was composed of 117 employees mainly from the social services. The study showed that there was a relationship between occupational stress and gender.

Bradley and Euchas (1995) conducted a study on occupational stress in higher educational institutions in the United Kingdom during a period of considerable organizational change. All the employees were invited to participate in the study. The findings suggested that female employees were at a greater risk from adverse effects of occupational stress was a significant problem and further investigation needed to be carried out in other institutions.

A study conducted showed by Michelson (2006) showed that female teachers had dual roles. According to the study the female teachers had to juggle between teaching and domestic responsibilities. These dual roles were responsible for: the high rate of

absenteeism, abandonment of the profession or decline in productivity among female teachers. According to the study several head teachers had to prohibit absorptions of married female teachers and in some cases they had been pressurized to take transfers. The present study sought to establish the relationship between gender and level of teacher stress.

2.6. The Influence of Teaching Experience on the Perception of Occupational Stress

Roe and Gray (1995) conducted a study on teachers' professional self-esteem in the light of occupational stress factors. The study revealed that teachers with 11-19 years of teaching experience perceived interaction with colleagues as a very stressful factor. The study also revealed that, this group of teachers faced a higher than average workload, had increasing responsibilities, and were exposed to negative commitment.

A study conducted by Isaac Friedman (2000) established that beginning teachers experienced more occupational stress. This was because the beginning teachers imposed impossibly high standards on themselves. According to the study these teachers also often failed to live up to their expectations and as a result they ended up being emotionally and physically exhausted. In many cases, the study revealed, these teachers, packed up, and left the profession.

A study conducted by Galabawa (2003) also revealed similar findings. The study by Galabawa revealed that teachers who were single, of graduate status, and with fewer years of teaching experience had a higher level of burnout. A study conducted by

Victoria Teachers Union (1986) established that the longer a teacher stayed in the teaching profession the more stressed he or she feels. However a study conducted by NSW teachers Federation (1988) revealed that older more experienced teachers experienced less emotional exhaustion and teacher burnout than younger less experienced teachers.

A study conducted Van Dick et al (1989) revealed that there was no significant difference between teachers with less than 10 years of teaching experience and those with more than 10 years of teaching experience. Therefore according to Van Dick et al the length of teaching experience had no effect on the perception of stress. The present study aimed at establishing the relationship between teacher stresses and teaching experience.

2.7. Summary of the Reviewed Literature

The findings of the study show that the total volume of research into teacher stress is substantial. Research has also demonstrated that overwork, long working hours and discipline among others have been identified as stressors in teaching. However, there is little information on how teacher stress may influence the student's academic performance. There is scanty information on how gender and teaching experience may influence perception on teacher stress.

It is clear from this review that more research in the area of teacher stress is needed to elucidate the nature and extent of occupational stress in the teaching profession in Kenya. The researcher intended to detect gaps and fill them in the present study. Most of the

studies were not done in Africa and they did not explain the influence of teacher stress on students' academic performance. This chapter has reviewed literature related to; the concept of stress, occupational stress, teacher stress, gender, and perception of occupational stress, teaching experience and perception of occupational stress.

The next chapter discusses the research design and methodology of the study.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This chapter deals with the research design and procedures that were followed in carrying out the study. The chapter also describes the study area, sample and sampling procedures, data collection procedures, the research instruments that were used and data analysis.

3.1 Geographical Location of the Study

The study was carried out among secondary schools teachers in Eldoret Municipality within Uasin Gishu District, Rift Valley Province, in the Republic of Kenya. Eldoret Municipality is within Uasin-Gishu District that lies between latitude 00°30' E and longitude 35° 16' east. The District is located 350 km North West of Nairobi the capital city of Kenya. The district has an altitude of 2095m above sea level. Uasin- Gishu is bordered by seven other districts namely: Trans - Nzoia to the North, South Nandi to the South West and Elgeyo - Marakwet to the North East, Nakuru to the East, Kakamega to the West, Lugari to the North West and Koibatek to the South East. The district has a total area of 3784 square kilometers .The municipality is a fast growing industrial town in Western Kenya. According to the 1999 census report the municipality had a population of about 196,000 people.

Eldoret Municipality is suitable for the study for various reasons. First there are various schools types that provide different teaching environments. Within the municipality there are private secondary schools and public secondary schools. There are day schools as

well as boarding schools. Within the municipality there is a national school, as well as provincial schools, and district schools. Secondly the municipality by virtue of its location attracts teachers with different backgrounds and characteristics. Thirdly most of schools were accessible to the researcher. The area is familiar to the researcher and as a fast growing urban centre the municipality has more teachers.

3.2 Research Design

This study used the ex- post facto research design. The ex-post facto research design was used in the study because the design is used to explore relationships between variables .The main purpose of the study is to determine reasons or causes of the current status of the phenomena under study .In this design causes are studied after they have exerted their effect on another variable. The design has the advantage of allowing a comparison of groups without having to manipulate the independent variables.

3.3 Variables

A dependant variable is an attribute, which is measured by researcher as an indicator of the outcome of the study (Stratton & Hayes, 1988). A dependent variable is a variable that a researcher manipulates in order to determine its effects on another variable. The independent variables were gender, school type, and teaching experience whereas the dependant variable was the level of teacher stress. Therefore, the levels of teacher stress among the independent variables of the stated attributes were investigated.

3.4 Research Population and Sample

The study was carried out in secondary schools in Eldoret Municipality. Schools selected were placed in categories in relation to students' academic performance.

3.4.1 Target Population

In order to achieve the objective of this study, the target population was 389 secondary school teachers in 20 secondary schools in Eldoret Municipality. The 20 schools had presented candidates for KCSE examinations for 3 or more years. The teachers were selected because they are concerned with the teaching and learning processes in secondary schools. Teachers are implementers of the national curriculum and by virtue of their profession they are likely candidates for neurotic stress. The purpose of this study was to find out if teacher stress influences secondary school students academic performance.

3.4.2 Sample Size

Given the financial constraints and the procedure of data collection, not the entire the targeted population of 20 schools within the municipality was used. A sample was therefore drawn from the schools. A sample of 100 teachers drawn from 6 schools in the municipality was involved. From the high performance category 24 teachers were sampled, from the average performance category 49 teachers were sampled while 27 teachers were sampled from the poor performance category. In terms of gender 41 male

teachers and 59 female teachers were sampled. This was considered a good representation of the study population (Kerlinger, 1983).

3.4.3 Sampling Procedure

The sampling methods, which were used for the purpose of this study, were stratified, multi-stage, and purposive sampling techniques. Schools were categorized into strata according to performance (High, average and poor). Six schools were selected from the three strata's. Using multi-stage sampling technique in the high performance category the researcher randomly selected one school. In the average performing category the researcher randomly selected 2 out of 9 schools. In the poor performance category the researcher randomly selected 3 out of 10 schools. This accounted for 30 % of the schools in each category. At the school level the researcher used purposive sampling. Teachers who had taught for more than three years in the school were selected to fill the questionnaire. A total of 100 teachers were sampled from the 6 secondary schools. The sample size was deemed adequate for the study since;

we can't study every case of whatever we are interested in, nor should we want to. Every scientific enterprise tries to find out something that will apply to everything of a certain kind by studying a few examples the results of the study being as we say, generalisable (Newman, 2000).

The simple random sampling plan ensured that each member of the target population had an equal and independent chance of being included in the sample. Teachers in sampled schools participated in the study. Head teachers and their deputies were deliberately excluded from the study because they were likely to be seen by teachers as a source of stress.

3.5 Development of Research Instruments

The researcher developed a closed ended-questionnaire after scrutinizing and critically studying those designed by Fimian (1987), Michelson and Harvey (2000) and Obure (2003). Some of the questions used by Michelson and Harvey were modified and incorporated into the instrument. The designed questionnaire was a modification of that designed by Obure (2003) who had used it to solicit information regarding the prevalence and severity of teacher stress factors among primary school teachers in Eldoret Municipality. The Wording of Obure's instrument was changed. Some items in his tool were not incorporated into the instrument while other items were added to it to bring out the appropriate responses. The questionnaire was used because it gave the respondents' time to provide well thought out responses. A questionnaire is less biased and lot of information can be obtained within a short period of time.

Document analysis was also used because it shows immediate content changing over time and the values that such changing contents manifest. (Mugenda and Mugenda, 1999). The documents that were analyzed were the Uasin-Gishu District KCSE performance, and Uasin-Gishu secondary school staffing statistics.

3.5.1 Teacher's Questionnaire

The secondary school teacher's questionnaire on teacher stress was divided into 2 parts. Part one sought to obtain information on biographic data i.e. teachers' gender and teaching experience. Part two measured the teachers' level of occupational stress. Information on the teacher's level of stress was sought using 48 items of Likert- scale

type containing five alternative responses (Appendix III). The section contained six sub scales: sub scale I sought information on school management and administration (item 1-10). Sub scale two sought information on workload and time pressure (item 11 -20). Sub scale 3 sought information on student behavior and learning (item 21-27). Sub scale 4 sought information on relationships at the workplace (item 28-37) sub scale 5 sought information on reward and recognition of work (item 38-41). Subscale 6 sought information on parental factors and other external factors (item 42-48).

3.6 Validity of Data Collection Instrument

Anastasi (1982) noted that the validity of the test enables examiners to ascertain whether the test really measures what it purports to measure and how well it does so. Therefore validity deals with the content of the test and the purpose for which it was designed (Ndurumo, 1993).

Content validity involves examining the instrument to ascertain whether the content is a comprehensive representative of the behavior domains to be measured. The instrument constructed took into consideration all the elements under study. The issues of teacher stress, gender, teaching experience and school type as related to the sample was incorporated into the instrument. The designed questionnaire was derived after critically scrutinizing and analyzing existing instruments on occupational stress.

To determine the content validity of the questionnaire items, two experts in the Department of Educational Psychology, Moi University examined them and their

suggestions and comments were used as a basis to modify the research items and make them adaptable to the study. Based on the feedback offered by those who examined the questionnaire the wording of the questionnaire was modified and some items were excluded completely.

3.7 Reliability of Data Collection Instrument

Reliability is consistency in measurement. To check on reliability of the instrument, the questionnaires were pre-tested through a pilot study to ascertain their effectiveness in soliciting the information intended. A pilot study was carried out in order to determine the questionnaires' internal consistency and to detect any difficulties that the respondents were likely to face when responding to the items.

A pilot study was carried out in 4 selected secondary schools within Eldoret Municipality among male and female teachers. The selected schools did not constitute the final sample for study. The questionnaires were administered to 16 teachers drawn from the four schools. The split half technique was used to test reliability because it eliminates chance error due to differential test conditions as in test- retest or the equivalent-form technique. Split half technique was used to obtain X and Y scores. X distribution took odd positioned items, whereas Y distribution took even positional items. Pearson product moment correlation (r) was used to calculate the reliability coefficient. The Pearson product moment correlation coefficient was used in the study because it is a measure of correlation that shows the type and strength of the relationship between two variables (Kothari,1990).The coefficient obtained was then converted into an appropriate

correlation for the entire test using Spearman Brown prophecy formula. A correlation coefficient of +1 implies there is a positive correlation between the two variables. A correlation coefficient of -1 indicates a perfect negative relationship between the two variables. The reliability coefficient of 0.5 and above was accepted as a good measure of reliability. Computation using the above formula yielded a reliability coefficient of 0.8, which was judged as a good measure of reliability.

3.8 Scoring of the Instrument

Different forms of scoring were used depending on the nature of the measuring instrument. For items on occupational stress, respondents were required to rate statements concerning teacher stress on a five point Likert type scale. This scale was used because it is more reliable and is used in opinion research. The responses that were used were: Strongly Agree (5 points), agree, (4 points) undecided (3 points), disagree (2 points) and Strongly Disagree (1 point) for positive questions. Strongly Disagree, Disagree, Undecided, Agree and Strongly Agree were rated as 1, 2, 3, 4, and 5. This way the instrument yielded a total score for each respondent's favorableness to the given point of view. The teacher's responses were placed into 3 categories. This was described as most favorable, favorable and unfavorable to the given point of statement on teachers stress. 1 and 2 were taken as the most favorable response to the given points of view, 3 stood for neutral while 4 and 5 was unfavorable to the given point of view. The scores for any teacher would fall between 48 and 240. A teacher with a score of above 169-240 was considered as experiencing high level of teacher stress while a teacher with a score of 48-84 was considered as experiencing low level of teacher stress while a teacher with a score

of 85-168 was considered as experiencing moderate level of teacher stress. For document analysis, the mean of each school's KCSE performance for the last three years was computed. Using the KCSE national grading system with the maximum mean being 12, the school's mean was categorized as high, average, and poor. A school with a mean of 8 and above was considered as of high performance and a school with a mean of between 4.1 and 7.9 was considered as of average performance and a school with a mean of 4 and below was considered as of poor performance.

3.9 Data Collection Procedure

Permission to collect data was obtained from the Ministry of Science and Technology and then from the District Education Office, Uasin- Gishu District. An introductory letter was obtained from the District Officer to the Head teachers of secondary schools in Uasin-Gishu District. The researcher then visited each school and sought consent from the school administrator to conduct the research after explaining to the school administrator on the purpose of the study. The actual number of teachers who had been in the school for more than three years was obtained from the school administrator.

As instructed by the school administrator, the head of department (guidance and Counseling) or academic officers were approached and given instruction on how the questionnaires were to be filled in and the mode of collection. It took about two weeks to collect the filled questionnaires instead of one week. Most of the teachers felt that they had a lot of work administering and marking mid- year exams. All the questionnaires were returned.

3.10 Data Analysis Procedure

After data collection, responses from all items were crosschecked to facilitate coding and processing for analysis using Statistical Programme for Social Sciences (SPSS v.12) computer package and excel programme. Frequencies and percentages were obtained. The chi-Square test and ANOVA were then used to measure the relationship between variables. The chi-square was used because it is used to compare the differences between categorical frequencies when data is categorical and drawn from a population with a uniformed distribution in which all alternative responses are equally likely. The ANOVA was used because it compares the means of two or more groups in order to decide whether the observed differences them represent a chance occurrence or due to a true systemic effect All data were analyzed at a level of 95% or $\alpha = 0.05$.

3.11 Ethical Consideration

Despite the high value of knowledge gained through research, knowledge cannot be pursued at the expense of human dignity. The major ethical issues of concern are; informed consent, privacy and confidentiality, anonymity and researchers responsibility. In this study, the researcher informed the participants on the purpose of the research. Participants were assured of the confidentiality of the information given. All participants remained anonymous. The results of data analyses are presented in chapter four that follows.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter presents analyses and interprets the data collected from the respondents by means of questionnaires and documents analysis. Data collected was analyzed using descriptive and inferential statistics. Frequencies and percentages were used. The Chi-Square and ANOVA were utilized.

The purpose of the study was to investigate the influence of teacher stress on academic performance of secondary school students. The specific objectives of the study were;

- i. To determine the differences in the level of teacher stress in schools where students performance is poor, average and high.
- ii. To examine the differences in the level of teacher stress between male and female teachers in schools where student's performance is poor, average and high.
- iii. To determine the influence of teaching experience on the level of teacher stress

The hypotheses were tested to determine the relationship between the levels of teacher stress, gender, teaching experience and students' academic performance.

4.1 Background Information of the Respondents

In order to establish the nature of the respondents sampled, the researcher established the background information of the respondents. The background information sought included; the gender of the teachers and teaching experience of the teachers who responded to the questionnaires.

Information on the gender difference of teachers sampled is shown in Table 4.1.

Table 4.1: Gender of the Respondents Sampled during the Study

Gender	Frequency	Percent
Male	41	41.0
Female	59	59.0
Total	100	100

From the table, a total of 100 respondents were sampled out of, which 41% were male while the remaining 59% were female.

Table 4.2 provides the information on the proportion of teachers' sampled teaching in various types of school.

Table 4.2: Type of schools Sampled during the Study

School type	Frequency	Percent
High	24	24.0
Average	49	49.0
Poor	27	27.0
Total	100	100

Out of the 100 respondents sampled, about a half of the teachers sampled were obtained from average performing schools. About a quarter of the teachers were from high performing schools while the other a quarter were sampled from poor performing

schools. The sampling frame had a higher proportion of average performing schools because in any normally distributed sample, performance of schools often follow a normal distribution where the average performers are usually dominant in a population when compared to schools performing extremely well or those performing poorly.

The teaching experience of the sampled teachers was also determined. The results of the teaching experience of the sampled teachers are presented in Table 4.3.

Table 4.3: Teaching Experience of the Respondent Sampled during the Study

Teaching experience (Years)	Frequency	Percent
9 years and below	40	40.0
10-20	39	39.0
Above 20	21	21.0
Total	100	100

About two fifth of the teachers sampled had either 9 years and below or 10-20 years of teaching experience while the rest (21.0%) had over 20 years teaching experience.

4.2. Levels of Stress among Teachers within Eldoret Municipality

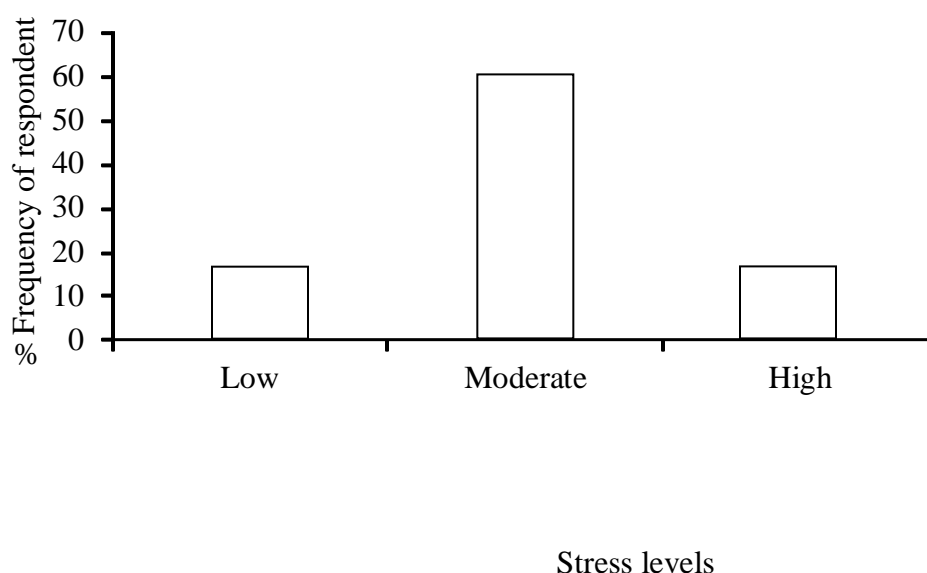
The first objective of the study was to determine the differences in the level of teacher stress in schools where students' academic performance is poor, average and high.

The researcher sought to establish the teacher's level of stress, which would be useful in determining the relationships between the students' academic performance and the level

of teacher stress. To determine the level of teacher stress, the Likert scale ranking system was used. Analyses of the stress were done using the respondents' 48 items of the questionnaires (Appendix I). Likert scale scores based on the 48 items had a minimum value of 48 and maximum possible value of 240.

The researcher started by establishing the overall level of stress of the teachers, followed by gender differences in the level of stress, and lastly stresses levels among teachers with different teaching experience. The researcher sought to establish the overall stress of the teachers with a view of getting the relationships between the level of teacher stress and their overall performance. The overall stress levels of the teachers are depicted in Figure 4.1.

Figure 4.1: Overall Stress Levels among the Teachers in Eldoret Municipality



As shown in figure 4.1 about 65% of the teachers had a moderate level of stress, 17% had low stress levels and the remaining 18% of the teachers had high stress levels. There was

a statistical significant difference in the stress levels among the teachers sampled (Chi-square test, $\chi^2 = 48.148, df=2, P=0.000$).

4.2.1 Levels of Stress among Teachers of Different Gender

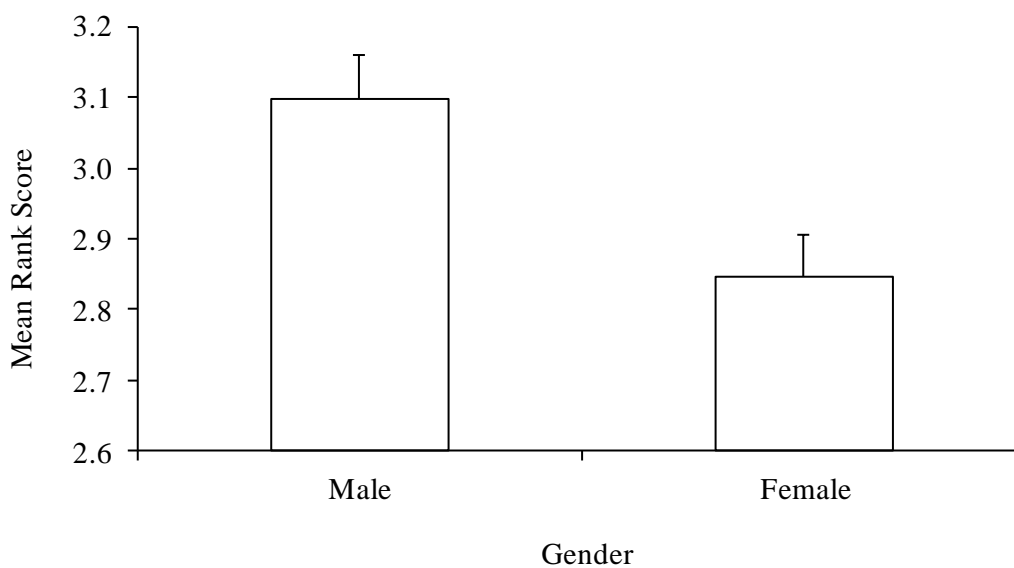
Levels of teachers stress among the teachers were not homogenous prompting the researcher to test the differences in teachers stress levels between male and female teachers using statistical methods. The result of the gender differences in the occupational teachers' stress is presented in Table 4.4.

Table 4.4: Levels of Stress among Teachers of Different Gender

Gender	Levels of teachers stress			
	Low	Moderate	High	Total
Male (n = 41)	12.0	78.0	10.0	100
Female (n = 59)	22.0	67.0	11.0	100

More female teachers (22%) when compared to male teachers (12%) had low levels of stress. More male teachers (78%) than female teachers (67%) had moderate levels of stress. An almost similar proportion of male and female teachers had high stress levels. There were significant differences in the levels of teacher stress between male and female teachers ($\chi^2 = 8.712, df = 2, P = 0.037$).

The researcher calculated the mean rank scores of stress levels among teachers of different gender (Figure 4.2).

Figure 4.2: Rank scores of stress levels between male and female teachers

Generally, female teachers had low amounts of stress levels (Mean rank score = 2.8 Out of 5) than their male counterparts (Mean rank score = 3.2 out of 5). The differences when tested by Analysis of Variance (ANOVA) test and was found to be statistically significant ($F = 13.22$, $df = 4$, $P = 0.002$).

4.2.2 Levels of Stress among Teachers from Various Types of Schools

The stress levels of teachers were also compared for the various types of schools. The results of the teachers stress from various schools are presented in Table 4.5.

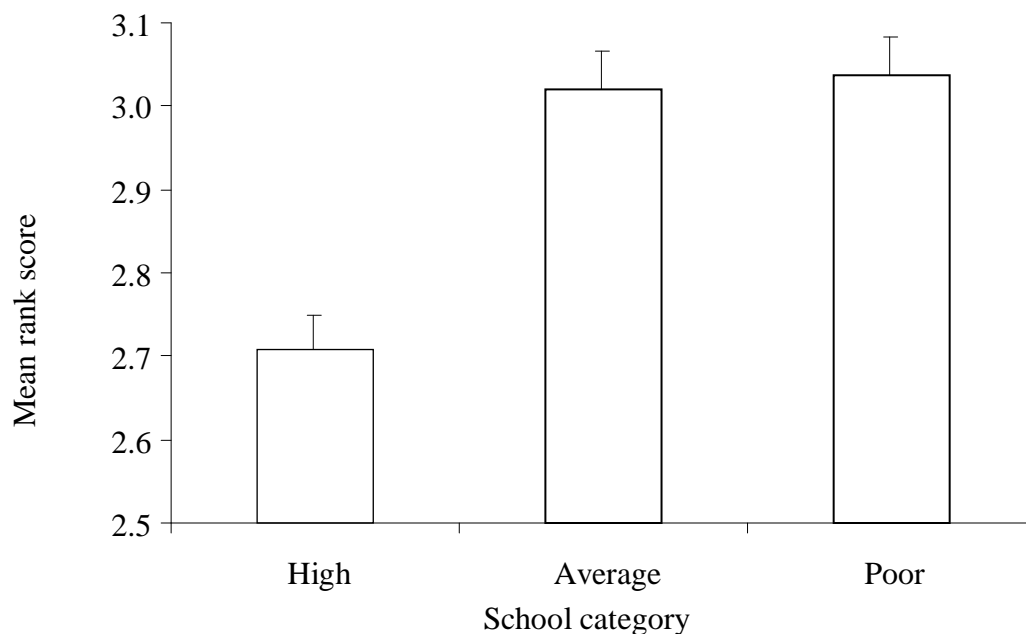
Table 4.5: Levels of Stress among Teachers Teaching in Various Types of Schools

Type of school	Levels of teachers stress			Total
	Low	Moderate	High	
High	25.0	72.0	3.0	100
Average	19.0	76.0	5.0	100
Poor	22.0	69.0	9.0	100

From the table about 25%, 11% and 15% of the teachers in high, moderate and poor performing schools respectively had low levels of stress. In general, few teachers had high levels of stress in all categories of schools. Moderate levels of stress were found to affect more teachers in average performing schools followed by teachers in high performing schools and lastly in the poor performing schools. The differences in the level of teacher stress were significantly different ($\chi^2 = 14.859$, $df = 4$, $P = 0.021$) among the various types of schools.

The researcher ranked the levels of stress among teachers from various types of schools using the Likert scale scoring method, (Figure 4.3).

Figure 4.3: Rank Scores of Stress Levels in Teachers from High, Average and Poor performing Schools.



The levels of stress was highest in teachers teaching in poor performing schools (Mean rank score = 3.3 out of 5), which was followed by the stress levels of teachers in average performing schools (Mean rank score = 3.1 out of 5). In high performing schools, the teachers stress levels was found to be low (Mean rank score = 2.7 out of 5). The scores of teachers stress was compared by the use of analysis of Variance (ANOVA). The result indicated that the teachers stress levels was significantly different among the teachers drawn from the various types of schools ($F = 14.556$, $df = 2$, $P = 0.001$).

4.2.3 Levels of Stress among Teachers with Different Years of Teaching Experience

The levels of stress among teachers' of different years of teaching experience (9 years and below, 10-20 years and above 20 years) were compared and the results are presented in Table 4.6.

Table 4.6: Stress Levels among Teachers with Different years of teaching Experience

Teaching experience	Levels of teachers stress			
	Low	Moderate	High	Total
9 years and below	23.0	62.0	15.0	100
10-20	15.0	72.0	13.0	100
Above 20	5.0	91.0	4.0	100

Low levels of stress was found to affect more teachers with less teaching experience (9 years and below) followed by teachers with 10-20 years of teaching experience while the low stress levels was established to affect a less number of teachers with above 20 years of teaching experience. A higher number of teachers with over 20 years teaching experience had moderate levels of stress, followed by teachers with 10-20 years of teaching experience and least among teachers with 9 years and below teaching experience. High stress levels affected more teachers with 9 years and below teaching experience followed by teachers with 10-20 years and least in teachers with over 20 years

of teaching experience. The teachers stress levels differed significantly ($\chi^2 = 36.679$, $df = 4$, $P = 0.000$) among the teachers with different years of teaching experience.

The scores of the stress levels among teachers with various years of teaching experience were ranked using the Likert scale scoring (Figure 4.4).

Figure 4.4: Rank Score Stress levels of the Teachers with Different Years of Teaching Experience



The stress level was highest among teachers with 9 years and below teaching experience (Mean rank score = 2.9 out of 5) followed by teachers with 10-20 years of teaching experience (1.4 out of 5). Teachers with over 20 years of teaching experience had the lowest levels of stress (Mean rank score = 1.2 out of 5). The rank scores of teachers stress was compared by the use of ANOVA test and the result indicated that the teachers stress

levels was significantly different among the teachers with different years of teaching experiences ($F = 31.117$, $df = 2$, $P = 0.000$).

4.3 Influence of Teacher Stress on Students Academic Performance

This section describes the influence of teacher stress on the students' academic performance. The overall mean score of schools sampled within Eldoret Municipality (Table 4.7) was 6.645 out of the possible 12 points score with a standard error of the mean being 0.117. The minimum score was 4.10 and the maximum score was 8.70. The overall range was 4.10. Results of normality indicated that the data score were normally distributed with a skewness value of -0.012 , which is about zero hence assuming normal distribution (Kothari, 1990). This is shown in Table 4.7 below.

Table 4.7: Descriptive Statistics of the Score obtained by where the Sampled Teachers were teaching

	Maximum	Mean		Std.	Skewnes
	Statistic	Statistic	Std. Error	Statistic	Statistic
SCORE	8.70	6.6450	.1171	1.1705	-.120

In order to establish the relationships between the teachers stress levels and students performance, a parametric ANOVA test was performed on the stress level of teachers and students performance. The dependent variable here is, mean scores of performance and the fixed factor being teacher stress levels.

The overall influence of levels of teacher stress on performance is presented in Figure 4.5. There were significant differences in students' performance in relation to the levels of teacher stress (One-Way ANOVA; Table 11). Performance of the students for teachers with low levels of stress levels was the best at a mean score of 8.1 while the performance of students for teachers with high stress levels was lowest at a mean score of 6.1. When the relationships between levels of teacher stress was subjected to Spearman Bivariate Correlation and regression analysis, it was found that there were generally negative relationships between teachers stress levels and students performance; students performance was better when teachers stress levels was higher and poorer when teacher stress levels were lower.

Figure 4.5: Overall Influence of Teachers Stress on Students Performance

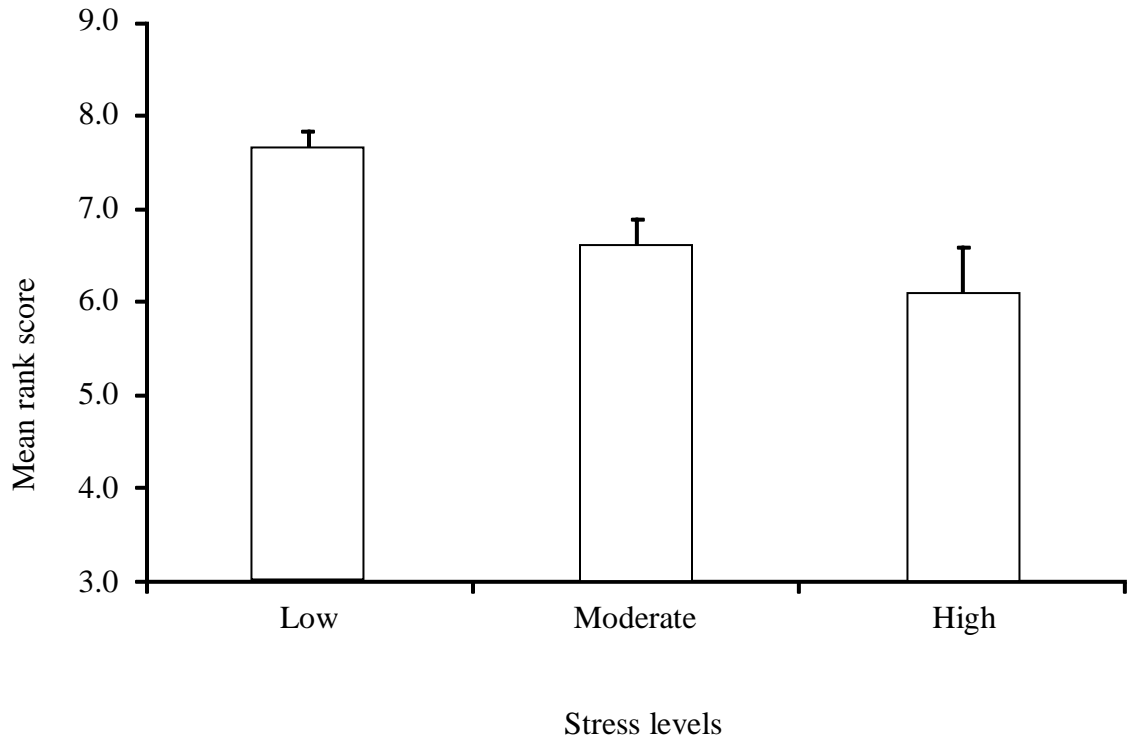


Table 4.8: ANOVA Table for Differences in Students Performance based on their Teachers Level of Stress.

		Sum of Squares	df	Mean Square	F	Sig.
SCORE * LEVELS	Between Groups	9.333	4	2.333	1.755	.144
	Within Groups	126.315	95	1.330		
	Total	135.647	99			

4.4 Factors Contributing to Teacher Stress among Teachers in Eldoret Municipality

The researcher analyzed the factors that affect the teachers stress among the teachers. The factors extracted by principal component analysis as affecting performance of teachers are presented in Table 4.9. All factors with Eigen values greater than one were considered as factors that affect students' performance. From the 48 factors considered, a total of 12 factors affecting performance were extracted, which together accounted for 93.0% of the observed variations in the students' performance. These factors were broadly categorized into-teacher relationships (problem with teachers, teacher's role in group discussion, teachers as role models, teachers missing classes), teachers' academic inputs (being good in all subjects, responsibility) and workload for students (syllabus organization, opinion, less student workload) as well as luck.

Table 4.9: Factors causing Teacher Stress among the teachers in Eldoret Municipality

Component	Initial Eigen values		
	Total	% of Variance	Cumulative %
1	10.92	23.25	23.25
2	7.59	16.16	39.41
3	5.71	12.15	51.56
4	3.72	7.91	59.48
5	3.31	7.04	66.52
6	2.29	4.88	71.41
7	2.10	4.48	75.89
8	1.71	3.63	79.53
9	1.53	3.25	82.79
10	1.34	2.86	85.65
11	1.19	2.48	88.20
12	1.00	2.14	90.35

The factors that contributed to the teachers stress levels among the different gender were extracted and presented in Table 4.10. From the 48 factors considered, a total of 8 factors affecting performance were extracted, which together accounted for 90.4% of the observed variations in the students' performance. These factors were broadly categorized into-teacher relationships (problem with teachers, teachers' role in group discussion, teachers as role models, teachers missing classes), teachers' academic inputs (being good

in all subjects, responsibility) and workload (syllabus organization, opinion, less student workload) as well as luck.

Table 4.10: Factors causing Teacher Stress among the teachers of Different Gender in Eldoret Municipality

Component	Initial Eigen values		
	Total	% of Variance	Cumulative %
1	10.97	33.2	10.9
2	6.93	42.9	7.6
3	6.12	22.0	5.7
4	5.12	19.6	3.7
5	3.31	17.7	2.3
6	2.28	15.7	2.1
7	2.06	13.6	1.0
8	1.09	33.2	10.9

The factors that contributed to the teachers stress levels among the teachers from various types of schools were also extracted and presented in Table 4.11. From the 48 factors considered, a total of 8 factors affecting performance were extracted, which together accounted for 90.4% of the observed variations in the students' performance. These factors were broadly categorized into-teacher relationships (problem with teachers, teachers' role in group discussion, teachers as role models, teachers missing classes),

teachers' academic inputs (being good in all subjects, responsibility) and workload for students (syllabus organization, opinion, less student workload) as well as luck.

Table 4.11: Factors causing Teacher Stress among the teachers from different categories of schools in Eldoret Municipality

Initial Eigen values			
Component	Total	% of Variance	Cumulative %
1	13.92	29.22	29.22
2	6.59	22.15	51.4
3	4.71	17.22	68.6
4	3.61	9.23	77.8
5	3.29	7.21	85.0
6	2.12	2.22	87.3
7	1.74	2.01	89.3

Finally, the factors that contributed to the teachers stress levels among the teachers with different teaching experiences were also considered and the results are presented in Table 4.12 From the 48 factors considered, a total of 7 factors affecting performance were extracted, which together accounted for 90.4% of the observed variations in the students' performance. These factors were broadly categorized into-teacher relationships (problem with teachers, teachers' role in group discussion, teachers as role models, teachers missing classes), teachers' academic inputs (being good in all subjects, responsibility)

and workload for students (syllabus organization, opinion, less student workload) as well as luck.

Table 4.12: Factors Causing Teacher Stress among the Teachers with Different Years of Teaching Experience in Eldoret Municipality

Initial Eigen values			
Component	Total	% of Variance	Cumulative %
1	10.927	23.25	23.25
2	7.598	16.166	39.416
3	5.712	12.152	51.568
4	3.72	7.914	59.482
5	3.311	7.045	66.527
6	2.298	4.888	71.415
7	1.009	2.146	90.351

4.5 Summary of Chapter Four

From the above findings it can be established that occupational stress is a reality in the teaching fraternity. The presence of low and high levels of stress among teachers may impact negatively on the students' academic performance. The teachers' level of occupational stress was related to students performance, gender, and teaching experience. The next chapter presents: discussion, Conclusion, recommendations, and suggestions for further research.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter focuses on discussion of the study findings, conclusions, recommendations, and suggestions for further research. The major purpose of this study was to investigate the influence of teacher stress on academic performance of Secondary school students' in Eldoret municipality. The need for the study arose from the concern that workplace conditions for teachers have changed a great deal. These may induce stress among teachers. Such work related stress may affect the teachers performance and thereby the students performance.

The research design adopted in this study was ex post facto design. One hundred teachers across the three categories of schools duly filled and returned their questionnaires in the study. The researcher collected data using questionnaire and document analysis. Data generated by the questionnaire was coded and entered into the statistical package for social sciences (SPSS) computer program for further analysis and interpretation. Frequencies and percentages were also used in the analysis of data. The statistical tests used were the chi- square and ANOVA. The hypotheses were either accepted or rejected at 0.05 or 95% level of significance.

5.1 Discussion of the Findings of the Study

The discussion in this chapter is based on the findings presented in chapter 4 of this thesis and in accordance with the objectives and null hypotheses of the study. The major

findings are highlighted, discussed and compared to earlier studies and reports on occupational stress.

The first objective was to determine the difference in the level of teacher stress in schools where student's academic performance is high, average and poor. The findings of this study showed 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. On the strength of these findings the null hypothesis was rejected. The findings are in direct support of the study of Fletcher (1988) and Chepkonga (2004.) According to their study there was a relationship between occupational stress and performance. Performance declined with the occurrence of stress at the work place. However the findings of this study disagree with that of Kothusar, Dogor and Ghazal (2006).According to their findings there was no relationship between occupational stress and performance.

The second objective of the study was to examine the difference in the level of teacher stress between male and female teachers in schools where students' performance is high, average, and poor. The results obtained showed that the level of teacher stress differed significantly between male and female teachers in the various school types. The study revealed that male teachers had higher levels of occupational stress when compared to their female counterparts. On the strength of these findings the null hypothesis was rejected. These findings concur with that of Nhundu (1999) and disagree with those of

Michelson and Harvey (2001) and Obure (2003). This difference in the level of teacher stress could be that although women experience more occupational stress, they are better placed to manage stress. This is probably because women produce several different hormones in response to stress. Oxytocin boosted by estrogen encourages women to tend to their needs and other peoples needs. Women also seek out for support from good friends in times of strain (Melgosa, 2001).

The third objective in the study was to determine the influence of teaching experience on the level of teacher stress. This study found out that those teachers with high teaching experience had the lowest level of teacher stress; teachers with low teaching experience had the highest level of teacher stress. This finding is supported by those of NSW (1988), Friedman (2000) and Galabawa (2002) .However the finding contradicts that of VTU (1986). The fact that less experienced teachers reported higher levels of teacher stress may be as a result of these teachers being hard on them and setting unrealistic goals. Such teachers may find that their expectations of the profession are not being met. These teachers therefore feel frustrated, some of them may opt to leave the profession and look for more satisfying jobs. Such teachers are not enthusiastic about their work.

5.2 Conclusion of Major Findings

The following conclusions where made based on the research findings:

1. There was a relationship between level of teacher stress and students performance. Teachers with the highest levels of teacher stress were those found teaching in poor performing schools.

2. Male teachers had higher levels of teacher stress than their female counterparts.
3. Less experienced teachers had higher levels of teacher stress than the more experienced teachers.

5.3 Recommendations

The study established the existence of teacher stress among teachers. The study also revealed that teacher stress influenced the student's academic performance.

5.3.1 Theory and Practice

The study dealt with the influence of teacher stress on secondary school students' performance in Eldoret Municipality. The discussion generated various findings and conclusions.

- The findings adduced from the study suggested that academic performance of students can be a function of the influence of teacher stress. Since it is not practical to eliminate teacher stress, effort should be made to minimize it. Some of the issues of teacher stress may be addressed at the workplace level. For example, the development of a more collegial school culture, school consultative committee processes, the local implementation of clauses relating to the introduction of change into the workplace, health and safety legislation and associated codes of practice. Union organizing, training strategies and policy development processes need to accommodate this change.

- The study showed that both the male and female teachers experienced teacher stress. There is need for schools to establish up to date and equipped counseling centers for teachers. If these centers cannot be established in schools, then teachers should be

provided with stress management allowances to enable them visit such centers. There is need for the ministry of education to organize seminars, conferences, workshops and other symposium where experts can be invited to educate and advice teachers on emerging trends and issues.

- From the findings of the study less experienced teachers had higher levels of teachers stress. School administrators need to ensure that inexperienced teachers joining the school are well inducted into the school system. Their progress should be reviewed from time to time. Teachers joining the profession need to make realistic and achievable goals.

5.4 Suggestions for Further Research

It is proper that by the end of a process a research raises more questions than it sought to answer. The study suggested the following areas for further research:

- This study limited itself to an urban environment in Uasin-Gishu District. The study can be replicated in other districts in Kenya. This will make it possible to determine whether the findings documented in this study hold the same for other districts.
- Further studies involving the use of participatory observation and interview schedules in a similar area should be carried out in order to supplement the information obtained by using questionnaires.
- Further research should attempt to focus on the specific teacher stressors in the teaching profession e.g. reward and recognition
- .Factors that may influence a teacher's perception of teacher stressors need to be investigated

- Other teacher related factors other than teacher stress that may influence the students' academic performance need to be investigated.

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APPENDICES**APPENDIX 1: LETTER TO THE SCHOOL PRINCIPAL**

MARY C. KOROSS,

P.O.BOX 6789,

ELDORET.

THE PRINCIPAL:

Dear Sir/Madam,

RE: REQUEST TO CARRY OUT REASEARCH IN YOUR SCHOOL

I am a student at Moi University pursuing a Master of Philosophy Degree Course in Guidance and Counseling in Education. As part of the course, I am required to carry out research on the influence of teacher stress on secondary school students' academic performance. The purpose of this letter is to request you to allow me to collect the required information from teachers in your school. If allowed I Promise to abide by your rules. Attached are copies of my permit, questionnaire, and a letter from the District Education Officer.

Thank You in advance,

Yours faithfully,

Mary Koross.

APPENDIX II: LETTER TO THE TEACHER.

Dear sir/madam,

I am a graduate student in the faculty of Education at Moi University researching on teacher stress. You are kindly requested to spare some of your precious time to provide the information asked as genuinely as possible. Since this is not a test there is no correct or wrong response. Note that the information is purely for the purpose of this research and will be treated with utmost confidence. Do not indicate your name or name of your school anywhere in this questionnaire.

Thank you.

Yours faithfully,

Mary Koross.

APPENDIX III: TEACHER'S QUESTIONNAIRE

PART A: BACKGROUND FACTORS

TICK (✓) where appropriate

1. Indicate your Sex: Male () Female ()
2. Indicate your Teaching experience in years
 - (a) 9 and below ()
 - (b) 10-20 ()
 - (c) Above 20 ()

Part B: TEACHERS STRESS QUESTIONNAIRE

Instruction.

The following are statements about teacher stress. On the right hand side is rating from where at one extreme end of the scale there is a strong agreement with the given statement and at the other strong disagreement with the statement and between them lay intermediate points. Please indicate for each statement your opinion. There are therefore five opinions for each section in which you can express your opinion about the statement.

For the following statements, the key words in which you can express your opinion are:

Strongly agree (SA)

Agree (A)

Undecided (U)

Disagree (D)

Strongly disagree (SD)

Please indicate your view about each statement by putting a (✓) as appropriate.

Item	SA	A	U	D	SD
1. I feel that my school has adequate facilities/equipments.					
2. I am satisfied with promotion opportunities in teaching.					
3. Sometimes I feel that I am not involved in policy-making issues concerning the curriculum.					
4. I feel that my job does not provide sufficient stimulation and motivation.					
5. Sometimes I have problems resulting from poor performance of my students.					
6. I do not like negative statements made in relation to the poor performance of my students.					
7. I feel that the discipline processes and procedures in my school are not well defined.					
8. Sometimes I feel that I am assigned roles that may directly conflict with each other.					
9. I am not satisfied with the evaluation procedures that are used to assess teacher performance.					
10. I feel that I do not have autonomy in what and how I teach.					
11. Very often I feel the demands on an Individual teacher are high.					

12. I feel that my responsibilities are increasing.					
13. Sometimes I do school work at home in order to meet deadlines					
14. I feel that I work under tight schedule and deadlines.					
15. I feel that I spend a lot of hours in school.					
16. I feel that my teaching workload is large.					
17. Sometimes I feel trapped in a daily routine.					
18. I often feel that I do not have time to be alone.					
19. I feel that I have enough time to complete all my schoolwork.					
20. I feel that the classes I teach have large numbers of students.					
21. In school, I feel that I engage in several activities at any one given time.					
22. I feel that I am not able to provide individual academic help to my students because of their large numbers.					
23. Sometimes I feel that my students are poorly motivated.					
24. The students have never questioned my authority as a teacher.					

25. Sometimes I feel that most of the students I teach are not committed to their work.					
26. I have never experienced difficulties with students who are not able to do their work.					
27. Sometimes I feel that the students I teach are not well disciplined.					
28. Sometimes I feel that the mode of communication in my school is not effective.					
29. Sometimes I feel that the staffroom is a place where there is hidden competition and thirst for power.					
30. Sometimes conflicts arise as a result of what my head teacher expects me to do and what I feel I should do.					
31. Sometimes I feel that the support given to me by the school administration is not sufficient enough.					
32. Sometimes I feel that my working relationship with the school is not good.					
33. I am satisfied with the quality of staffroom communication.					
34. I am satisfied with the quality of consultation with my colleagues.					
35. I have never felt threatened when interacting with colleagues at work.					
36. I have never felt bullied by the head teacher.					

37. I feel that the head teacher of my school provides contingent rewards and punishment.					
38. I feel that my salary is inadequate in relation to my training.					
39. Sometimes I feel that the school authorities do not recognize and appreciate my contribution in school.					
40. I feel that there is lack of respect in the society for teachers.					
41. I feel that I am not satisfied with my professional status as a teacher.					
43. I often feel that the help and support given to me by the community is insufficient.					
44. Sometimes I feel that there is lack of parental interest in their children's academic work.					
45. Sometimes I feel that there is lack of parental support for the discipline procedures in the school.					
46. I dislike the unreasonable expectations from parents and the general public regarding their students' performance.					
47. I actively and freely participate in school related decision-making processes.					
48. I dislike teachers being criticized in public.					

APPENDIX IV: LIST OF SCHOOLS INVOLVED IN THE STUDY

	SCHOOLS	NO. OF TEACHERS	STUDENT CAPACITY	K.C.S.E MEAN FOR 2003,2004, and 2005
1	Eldoret Secondary	12	360	2.58
2	Elgon View Girls	10	180	4.45
3	Herman Gneimer Secondary	11	180	5.25
4	Hill School	31	480	6.04
5	Immaculate Heart Juniorate	19	360	5.70
6	Moi Girls High School	45	720	9.48
7	Mother of Apostles	19	360	8.70
8	Mwiruti Secondary School	16	310	4.20
9	PGC	8	110	3.53
10	Sage Secondary School	11	180	3.56
11	Sirikwa Secondary School	16	360	3.65
12	Sixty Four	15	360	3.19
13	Testimony School	11	180	5.61
14	Uasin-Gishu High School	47	720	7.74
15	Umoja Secondary School	20	360	5.08
16	Wareng Secondary	31	480	5.73
17	Kapsoya Secondary School	21	180	4.51
18	Eldoret Harambee	24	360	5.60
19	Kapsaos Secondary School	13	360	3.38
20	Kapkeben Secondary School	9	180	3.93

APPENDIX V: RESEARCH PERMIT

PAGE 2

PAGE 3

THIS IS TO CERTIFY THAT:

Prof./Dr./Mr./Mrs./Miss MARY
KOROSS

of (Address) P.O. BOX 3900
ELDORET

has been permitted to conduct research in.....

Location,

UASIN GISHU District,

RIFT VALLEY Province,

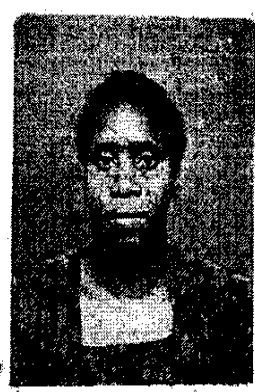
on the topic THE INFLUENCE OF OCCUPATIONAL
STRESS ON SECONDARY SCHOOL TEACHERS
PERFORMANCE

for a period ending 30TH JULY 2008

Research Permit No. MOST 13/001/37C 614

Date of issue 12.9.2007

Fee received SHS.500.00



MINISTRY OF
SCIENCE AND TECHNOLOGY
M.O. ONDIEKI

M.O. Ondieki
Applicant's
Signature

FOR: Permanent Secretary
Ministry of
Science and Technology