Effects of Motivation Stress Factors on the Performance of Employees in Public Universities in Kenya

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Abstract- The aim of this study was to assess the effects of staff motivation on the performance of employees at the public universities in Kenya. Specifically the study seeks to find out the effect of motivation stress factors on the performance of employees in public universities in Kenya. The study employed a cross-sectional evaluation survey approach. This used both qualitative and quantitative methods in the selection of the participants and collection of data. Cluster sampling was employed to select 384 respondents. Data collection instruments included interviews, questionnaires and document reviews. The collected data was captured in MS Excel and analyzed using SPSS version 24 (Statistical Package for Social Scientists). Linear regression analysis and Pearson's correlation coefficient were run to determine relationship between stress factors and workers performance. The analyzed data was presented in suitable graphs, charts and tables. By correlating the determinants of stress with performance, the study found out that the determinants of stress include movement, motivation, workers relationships, management and working facilities. The study found a significant relationship (F (3,342) =57.717, p<0.05) between Motivation and Management and employee performance. The nature of the relationship was found to be positive in the sense that unit increase in Worker's relationship, Worker's movement, Workplace facilities and Management leads to an increase in Employee performance as demonstrated by the equation: Employee performance= 2.286+.096 Management+ .277 Motivation

Index Terms - motivation, stress factors, employee performance

I. INTRODUCTION

W orkers stress is defined by Manjula (2010) as the harmful physical and emotional responses that can happen when there is a conflict between job demands on the worker and the amount of control a worker has over meeting these demands. In general, the combination of high demands in a job and a low amount of control over the situation can lead to stress.

Rosania et al.' (2009) however defined workers' stress as the experience by a worker of unpleasant emotions, such as tension, frustration, anxiety, anger, and depression, resulting from aspects of work. In recent years, steadily increasing costs and consequences of workers stress has received growing concern. To reduce the negative effects stress has on workers, more attention needs to be placed on this growing epidemic (Nilufar, Zaini, David &Sayeed, 2009).

High level of stress at work is a major threatening factor to both physical and psychological health of individuals (Dar, Akmal, Naseem& Khan, 2011) and affects their cognitive processes involving memory, recall of knowledge and attention (Addae, Parbooteah &Velinor, 2008).Stress management therefore has dominated many forums both locally and internationally. In the public academician congress in the university of Khang Valley (Nilufar et al., 2009), job stress and its effects was discussed. Working staff in the universities worldwide have found themselves in dissatisfactions that have greatly manifested themselves in different ways.

Workers in the Universities have often found themselves in dissatisfactions that have manifested them greatly in the recent past. In November 2011, a major strike was held nationwide in Kenya by all the public universities workers. This led to the closure of several universities. This strike among other things affected learning, examinations and graduation programmes. Concurrently there was a go slow in Brazil in October and November by dissatisfied university lecturers. It is with this background that the researcher seeks to carry out a study in selected universities in Kenya to establish the effects of occupational stress on employees' performance and provide practical coping strategies that can be employed to reduce or completely alleviate stress in public universities.

In achieving the Universities objectives, the workers play an important role. The performance of the workers determines to a large extent, the quality of the student experience of University education and has a significant impact on student learning and thereby on the contributions that such institutions can make to society (Ramzan, 2012). Report by the National Institute for Occupational safety indicates that stress in organisations caused by poor management, inadequate facilities, lack of motivation, poor relationships and constant movement of workers due to job allocation or shifts, if not addressed leads to poor performance of the employees. When people are under stress, they are often less concerned, less vigilant and less efficient (Dar et al, 2011).

According to Waswa and Swaleh (2012) minimal attention has been given towards ensuring workers in public universities have been provided with the necessary resources, motivation, effective job allocation measures and management to avert continuous strikes that have lowered the standards of education in the country. Additionally Owino et al (2013) argues that lack of resources, motivation, poor leadership and negative relationships leads to stressed employees and poor performance. Zhimin and Ramani (2012) advices that stress factors should be met to enhance conflict resolution within Kenya's public universities. This study therefore seeks to assess the effects of

motivational stress factors on employee performance of public universities and their contribution to the performance of workers. The study aimed at determining the effect of motivation stress factors on the performance of employees in public universities in Kenya. This study shall shed light on the causes of increased rate of stress at workplaces in the public universities that has not yet been addressed. The findings of this study may be used by policy makers in the universities, both the management and workers' unions to strengthen stress relieving activities, motivation and create programmes that will be of help in stress management. With the findings of this study and recommendations implemented, the universities will have less absenteeism due to sickness, with the rate of sickness reduced; medical expenses will also be reduced hence economic growth and a healthier lifestyle. Workers will be present at work and will have high productivity. With other researches done in this field, this study will increase the pool of academic knowledge in the area. Finally, the findings from this study may also generate knowledge that can be useful to other scholars for further research.

II. LITERATURE REVIEW

2.1 Theoretical framework

This section discusses the theories explaining workers stress factors and their effects on workers performance. The theories underpinning this study therefore include the relational theory, homeostasis theory, Welford's performance and demand theory and the Hertzberg's two factor theory.

2.1.1 Relational theory

In his theory, Lazarus regards stress as a relational concept, that is, stress is not defined as a specific kind of external stimulation or a specific pattern of physiological, behavioural, or a subjective reactions. Instead, stress is reviewed as a relationship between individuals and their environment. Psychological stress involves relationship with the environment that an individual appraises as significant for his or her well-being and in which the demands tax or exceed available coping resources. These definitions points to two processes as central mediators within the person-environment transaction: cognitive appraisal and coping.

This concept is based on the idea that emotional processes (including stress) are dependent on actual expectancies that persons manifest with regard to the significance and outcome of a specific encounter. This concept is necessary to explain individual differences in quality, intensity, and duration of an elicited emotion in environments that are objectively equal for different individuals. The most important factors on the personal side are motivational dispositions, goals, values and generalized expectancies. Relevant situational parameters are predictability, controllability, and imminence of a potentially stressful event.

2.1.2 Homeostasis theory

According to Mojoyinola (2008), the body possesses internal mechanism to maintain a stable bodily functioning or equilibrium. As the environment presents the organism with various challenges, the body must respond to each new situation and by adjusting various physiological systems to compensate for the resources being taxed. A classic example of this type of compensation involves fluid regulation. When an organism ingests a large amount of water, the kidney releases more waste fluid into the bladder for eventual disposal in an effort to maintain bodily equilibrium. Many of the feedback mechanisms that regulate blood pressure presented in the body share similar characteristics with bodily systems that maintain homeostasis. According to Mojoyinola (2008), failure of the body to respond to environmental challenges by maintaining bodily homeostasis results in damage to target organs and eventually death. The concept of homeostasis introduced therefore proves to be very valuable in explaining how acute physiological stress responses to threats of survival would lead toward chronic stress responses.

2.1.3 Hertzberg's two factor theory

Hertzberg's two factor theory has been used to explain occupational stress. He carried out his now famous survey in 200 accountants and engineers from which he derived his initial framework for his theory (Steers & Porter, 1987). The theory argues that job satisfaction depends on the motivator factors which include variables such as achievement, recognition, the work itself, responsibility advancement and growth. Conversely dissatisfying experiences called hygiene factors resulted largely from extrinsic, no job related factors such as company policies, salary and supervisory style. Cox (1980) in his studies on stress posits that lack of job satisfaction results to stress and improving the hygiene factors by redesigning and enriching jobs will promote satisfaction. This will in return reduce stress and improve performance. Hertzberg's work is credited for its stimulating thought of introducing motivation at the workplace and therefore giving people a better understanding of job related stress. Critics of this theory argue that it does not give sufficient attention to individual characteristics which are very important in understanding human behaviour (Bloona 2007).

2.1.5 Stress Theory Model

A model is a systematic organization of knowledge on some topic. There are several models developed to provide an insight on stressors and their coping strategies. This study will however major on only two models to explain stressors and one model focusing on stressors and their coping strategies.
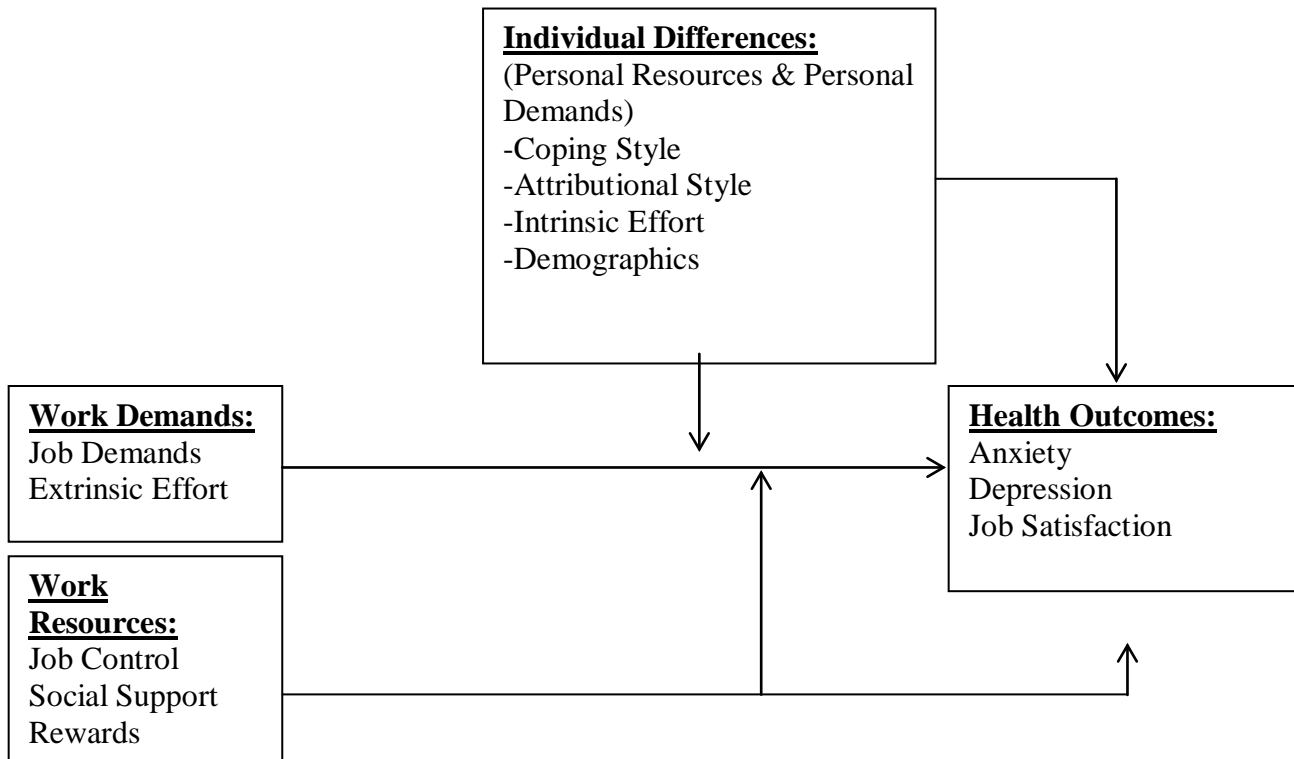
a) Demands, Resources, and Individual Effects model

In light with the literature on stress models, Mark and Smith (2008) suggested the DRIVE model that perhaps elucidates stressors effectively. In this model they acknowledge the important role played by psychosocial workplace stressors in the stress process, and tries to account for the role of important individual difference factors in the development of subjective experiences of stress, and in influencing the possible health-related outcomes that result from subjective stressful perceptions. This framework aims to represent key aspects of the stress process, without getting bogged down in the minutiae of more complex theories and mental processes.

They developed and tested the model shown below which simultaneously compared a number of job characteristics and individual difference variables in the prediction of anxiety, depression, and job satisfaction, in a working population. Independent variables included: job demands, social support, decision authority, and skill discretion; extrinsic effort, intrinsic effort and rewards; 40 coping behaviours which included the categories of problem focused coping, seeking advice, self blame, wishful thinking, and escape/avoidance; attributional/explanatory styles; and age, gender, and

demographic variables. This framework was called the Demands, Resources, and Individual Effects model (DRIVE).

Source: Mark and Smith (2008)

Figure 2.1 The DRIVE model

In the model, workplace and individual characteristics are conceived of in terms of work demands and resources, and individual demands and resources. Other work demands and resources could include workload, bullying, job security, management style, feedback etc, and other personal demands and resources could include self efficacy, locus of control, personality, home environment, experience, work/life balance, role conflict, etc.

The model proposes that work demands, individual differences, and work resources are all proposed to have main effect relationships on anxiety, depression, and job satisfaction (other outcomes could include organizational commitment, musculoskeletal disorders, gastro-intestinal disorders, heart disease, absence). It is also proposed that work resources and individual differences may moderate the relationship between work demands and health outcomes. The individual difference variables of positive coping (problem focused coping) and attributional styles can be seen as personal resources, and intrinsic effort, negative coping (self-blame) and attributions as "personal demands", as maladaptive behaviours are effectively self-induced demands. This model makes no predictions about the "importance" of the different variables in predicting outcomes, and gives each type of variable (work and individual demands and resources) a theoretical equivalency.

b) The cognitive theory of psychological Stress and coping

Lazarus and Folkman's theory of psychological stress and coping (1980) is perhaps the most theoretically influential transactional theory. Sometimes known as the Cognitive-Relational approach, the individual and their environment are seen as coexisting in a dynamic relationship, where stress is the psychological and emotional state that is internally represented aspart of a stressful transaction (Folkman, Lazarus, Gruen&DeLongis, 1986).

The two key concepts in this process are appraisal and coping (Cox et al., 2000).Folkman et al (1986) describe primary appraisal as the first stage of the appraisal process, where encounters are subjectively evaluated to see what is at stake in terms of potential risk (Perrewe&Zellars, 1999) and these assessments allow for the influence of individual differences, because the nature of what is considered stressful is individual-specific (Park &Folkman, 1997).

In later work, Park and Folkman (1997) write that the attribution of meaning that individuals give to events, can be framed by existing beliefs based on their global meaning. These are enduring beliefs and valued goals, based on fundamental assumptions, theories of reality (e.g. religion), self-worth, life experience etc. Park and Folkman (1997) propose that the making of situational meaning is what occurs when an individual's global beliefs and goals interact with the specifics of a particular person-environment transaction which are defined by the processes of appraisal and coping.

If a situation is evaluated as potentially stressful, then secondary appraisal occurs, which is where the individual evaluates if the potential harm can be altered, avoided or prevented (Park &Folkman, 1997), where to assign blame or

credit, and what future expectations are. Potential actions or ways of coping are assessed, informed by past coping experience, personality, personal resources (and presumably global meaning). Folkman and Lazarus (1980) described many types of coping behaviours, and suggested that they could be aggregated into two major categories of coping response: problem-focused coping (attempts to cope using more rational problem solving type approaches) or emotion-focused coping (emotional-oriented coping approaches) each of which are suitable in different kinds of situation.

While the problem focused/emotion focused distinction has been popular in research, many argue that it is important to split coping into more distinct categories (many based on Folkman and Lazarus' work) such as problem focused coping, seeking social support, blamed self, wishful thinking, and avoidance (Vitaliano, Russo, Carr, Maiuro& Becker, 1985) and action oriented coping, accommodation, positive thinking, seeking support, self-blame and defence (Falkum, Olff &Aasland, 1997). Once possible coping methods are assessed and selected, then the final stage of the model occurs, where coping is implemented. Coping has been characterized as (Folkman et al, 1986) "cognitive and behavioural efforts to manage (reduce, minimise, master, or tolerate) the internal and external demands of the person-environment transaction that is appraised as taxing or exceeding the person's resources". Robbins, Judge and Sanghi (2009), suggest that coping is the main method by which incongruence between global meaning and situational meaning is managed. A failure to cope successfully (from excessive demands or lack of resources) is likely to lead to stress and negative health and organizational outcomes (Chaudhry, 2012). Motivation involves the ability to make somebody want to do something especially something that involves hard work. Research has shown that having a say in what happens in the workplace helps employees to generate greater ownership over their work, to address or avoid stressful situations, and over all, to achieve higher levels of well-being (Noblet, 2003).

The challenge for the universities involved in the present study is to address the perception of salary inequity and ensure that employees feel they are fairly recognized and rewarded for their work. This research will adequately address the question of motivation to clearly establish whether workers in the selected universities are properly motivated and whether lack of motivation could have been the cause of demonstrations and strikes in public universities in the recent past. This study therefore hypothesises that:

2.2 Empirical Studies carried on causes and effects of Stress
The literature indicates that there is a relationship between age, gender, marital status, educational level, position, length of service and working experience with occupational stress(Landa et al. 2008; Lu, Siu & Cooper, 2005) but the results of a study that was conducted on urban police officers in the USA, showed that dynamic factors such as work environment and coping mechanisms, contributed more to explain variance of police stress than static factors such as race and gender (He, Zhao & Ren, 2005).In several studies income, heavy workload, lack of workspace, lack of resources (including equipment and material to do tasks), absence of proper company procedures, insufficient time to perform duties, meeting deadlines imposed by others,

have been introduced as stressors related to work environment (Botha &Pienaar, 2006). In other studies external accountability, responsibility, work relationships, insufficient consultation, communication, inadequate feedback on performance and organizational changes have been introduced as sources of occupational stress (Sveinsdottir, Biering&Alfons, 2006).

According to Beehr, (2005) work overloads and time constraints were significant contributors to work stress among community nurses. Workload stress can be defined as reluctance to come to work and a feeling of constant pressure(i.e. no effort is enough) accompanied by the general physiological, psychological, and behavioural stress symptoms(Larson, 2004).Al-Aameri (2003) has mentioned in his studies that one of the six causes of occupational stress is pressure originating from workload. Alexandros-Stamatios, et al. (2003) also argued that "factors intrinsic to the job" means workload, variety of tasks and rates of pay.

Grwywacz (2004) conducted a research on stress and education level among 1031 workers. He found out that less educated people suffer few stressful days but when they suffer stress it's more severe and had a large impact on their health. Combs (2004) on the other hand, conducted a research on marital status and stress among 300 workers and found that married couples reported more stress than their single counter parts.

Karatepe et al (2012) conducted a research on role stress, emotional exhaustion and turnover on frontline hotel employees in Cyprus. The results showed that the positive effect of role conflict and emotional exhaustion on turnover intentions was weaker among the frontline employees with longer tenure. Cavanaugh et al (2010) also conducted a research on role conflict and personality among managers .They found that individuals with type B personality managed conflict better and were better off at managing large organizations.

Philips Campbell and Morrison (2010) conducted a research on satisfaction, stress and spousal support among 242 married veterans. Both genders reported that income and time required for work was the greatest dissatisfaction .Males reported more spousal support on their careers. They proposed a study on the interactive effect among combination of stressors that are commonly found in the world of work. No differences were found between the genders on the effect of work related stress.

Sultana (2012) carried out a study on the nature and impact of teacher stress in the private schools of Gilgit-Baltistan in Pakistan. Analysis of the findings of the study resulted in categorizing them into three groups: personal stress, professional stress and financial stress. However, the impact of each one of the three groups of teacher stress (i.e. personal, professional and financial) was different for different teachers. It looked like some teachers felt more stressed because of a variety of personal and domestic factors, whereas other teachers felt more constrained because of financial issues. Furthermore, the data analysis also highlighted the sources of teacher stress, which could be easily identified as the "inside-school" and the "outside-school" sources of stress. The various findings related to each one of the two categories are revealing as they show the significance and degree of enormity of stress factors related to these groups.

Blomme, Rheede and Tromp (2010) conducted a research on work life programmes and firm productivity among 658 US organizations. It was fully established that organizations that had

extensive work life programmes enjoyed productivity benefits .They suggested further research that takes into accounts other organizational variables such as job satisfaction and organizational commitment.

Deaconu (2011) conducted a research on stress management and performance among 180 sales people. He established that Bio feedback and counselling enhanced performance of sales personnel.

Barnett (2004) conducted a research on work hours and stress outcomes among 211 dual income earner couples with children. He found that long hours of work had an effect on marital quality, psychological distress and work- family conflict. He proposed further research on the linkages both individually and within couples between long working hours and health behaviours such as regular exercises, routine medical checkups and healthy eating.

In Kenya a lot of research on causes of workers stress in educational institutions had focused on teachers. Gathungu and Wachira (2013) carried out a study on the job satisfaction factors that influence the performance of secondary school principals in their administrative functions in Mombasa district, Kenya. They found out that the determinants of stress include job satisfaction, job enhancement, team work, promotion, cooperation, mentoring and training needs, the development, management and recognition of success.

Yambo, et al. (2012) focused on investigating high school principals' stress in relation to their job experience in schools in Southern Nyanza Region of Kenya. They found out that the sources of stress: Role Based, Task Based, Conflict Mediating and Boundary Spanning had a correlation and dependable relationship with High School Principals' job Experience in schools.

Mairura (2009) conducted a research on counselling, self-esteem and stress among 130 teenagers in Nairobi day schools .He found that counselling was effective in managing stress experienced by teenagers and raised their self-esteem. He suggested further research on the same area, expanding the approach to include a larger or more representative sample.

Obwogi (2011) conducted a research on the factors that affect quality of teaching staff in universities in Kenya supplementing Ngoma's research in 2010 on the massive growth of university education in East Africa and the challenges facing the sector from 2000 to 2011. From both studies it's clear that something is not right among the university workers and something needs to be urgently done even as the work load increases in the public universities.

In response to the issue of universities workers problems, Muceke (2012) observed that most of the studies on academic staff retention were based on the corporate sector. There was only one from the public universities done by Tettey in 2009. Muceke (2012) noted the problem of academic staff retention in Kenyan public universities is a pertinent issue and it is expected to be worse with the double intake in 2011/2012 academic year. Musyoka et al (2013) in their research on the role of stress management in reducing stress and enhancing corporate performance concluded that the Government of Kenya is responsible for all workers through the ministry of labour. It has the duty to set regulations on minimum pay, health and safety of workers among others. They suggest that FKE and COTU should come-up with regulations that will prevent or manage stress. They further suggest that Human Resources Manager who works in these corporations must be able to handle traumatic incidents, mediate conflict situations at work and organize for drug-alcohol abuse programmes for the staff. Getting in touch with employees brings the important aspect of social support which helps employees improve their perception and realize that they are valued, and in turn enhances their self-esteem and confidence at the work place. This translates to higher job performance among employees and is reflected by improvement of the measures of corporate performance such as customer satisfaction, employee creativity, productivity, higher market share and profitability. Critical to organizations supportive culture is sensitizing supervisors to be sympathetic to employees desire to seek balance between work and family needs. Finally managers should organize seminars for employees to educate them on time management, financial management, team work enhancing programmes and healthy living seminars in order to manage their own stress.

III. RESEARCH METHODOLOGY

The study adopted both exploratory and descriptive research designs. Creswell (2014) argues that a flexible research design which provides opportunity for considering many different aspects of a problem is considered if the purpose of the research study is that of exploration. When the purpose happens to be an accurate description of a situation or of an association between variables, the suitable design will be one that minimizes bias and maximizes the reliability of the data collected and analyzed (Kothari, 2004). Given this advice and the nature of this study, a non-experimental hypothesis testing design was adopted as most appropriate for this study. The study sought personal views, opinions, attitudes, and perceptions about causes of workers stress and their effect on the performance of the public universities which could be subjected to experimental design (Silverman, 2013).

The research design used for the study was a cross-sectional evaluation survey. This study collected information from workers in selected universities in Kenya thus making a survey effective in executing the research. An evaluation on the other hand involves the study of an organizational change, curriculum or innovation (Robert, 2002), which involved the evaluation of workers stress causative factors in public universities. However, the survey was cross-sectional survey since the data was collected at one particular time across the selected universities (Schurink, 2009). This research design was applied by the use of both suitable qualitative and quantitative research methods.

Quantitative research makes use of questionnaires, surveys and experiments to gather data that is revised and tabulated in numbers, which allows the data to be characterized by the use of statistical analysis (Denzin and Lincoln, 2005). Quantitative researchers measure variables on a sample of subjects and express the relationship between variables using effect statistics such as correlations, relative frequencies, or differences between means; their focus is to a large extent on the testing of theory. The study intended to establish the relationship between motivation and workers' stress. The factors were tabulated in the questionnaires and expressed using relative frequencies.

On the other hand, Creswell (2014) points out that there are several common characteristics of qualitative research, which includes: the data is collected in the field at the natural setting; researcher is a key instrument and they also use multiple forms of data collection such as interviews, observations, and documents rather rely on a single data source. This study employed qualitative research while generating data from specific participants on causes and effects of stress on performance and their coping strategies using interviews.

The target population refers to the subjects who posses attributes which the researcher wishes to study and a universe of units from which the sample is to be drawn Devos (2000). Bless and Higson-Smith (1995), define a target population as a set of elements on which the researcher focuses and from which the results obtained by testing the sample can be generalized.

The target population for this study was the staff of three selected public universities in Kenya. This included Jomo Kenyatta University of Agriculture and Technology, University of Nairobi, and Kenyatta University. This refers to the individual workers; in all levels of employment, at the selected higher institutions as well as representatives from the staff welfare department and the institutions' administration in charge of human resources. Various departmental heads are also targeted as their responsibilities from time to time involve human resources management. This gave a total target population of 12,805 workers from the three selected public universities as shown on table3.1 below.

Table 3.1: Population of Workers in the Selected Public Universities

Selected public universities	University workers population
Jomo Kenyatta University of Agriculture and Technology	2,131
University of Nairobi	4,874
Kenyatta University	5,800
TOTAL	12,805

Source :(KUSU, 2014)

Cluster sampling technique was employed for the survey. The cluster sampling design involves the dividing of the population into mutually exclusive groups and then drawing random samples from each group to interview (Kumar R, 2005). This was necessary so as to ensure that the samples selected from each group are represented in the entire sample, which was selected for the study, in proportion to their numbers in the entire targeted population.

The Fishers formula was used to determine the appropriate sample size of this study. This was because the target population consists of a large number of units (public university workers) (Yates, 2004). The researcher assumed 95% desired level of confidence, which is equivalent to standardized normal deviate value of 1.96, and an acceptable margin of error of 5% (standard value of 0.05).

$n = Z^2pq/d^2$

Where:

n = the desired sample size (if target population is large)

z = the standard normal deviate at the required confidence level.

P = the proportion in the target population estimated to have characteristic being measured.

$q = 1-p$

d = the level of statistical significance set.

Assuming 50% of the population have the characteristics being measured, $q=1-0.3$

Assuming we desire accuracy at 0.05 level. The Z-statistic is 1.96 at this level

Therefore $n = (1.96)^2(.5)(.5)/(.05)^2 = 384$

The targeted respondents from the selected public universities were categorized into three groups. These groups will include: The academic staff; the administrative staff; and the operative staff.

The cluster samples from the three selected universities were composed of respondent workers as shown on table 3.2.
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Table 3.2: Composition of the Cluster Samples

Selected Public Universities	Academic staff		Administrative staff		Operative staff		Total Respondents	
	Actual	Cluster	Actual	Cluster	Actual	Cluster	Actual	Cluster
JKUAT	702	21	923	28	506	15	2,131	64
University of Nairobi	1,411	42	1,647	49	1,816	55	4,874	146
Kenyatta University	900	27	1,700	51	3,200	96	5,800	174
GRAND TOTAL	3,013	90	4270	128	5,522	166	12,805	384

The data collection tools used for the study were a questionnaire and interview schedules to obtain data from primary sources and a document review and analysis for secondary sources. These tools were selected after carefully considering the nature of the data to be collected, the target

population, the time frame and the objectives/ research questions of the study.

a) Interviews

Interviews were important in situations where we cannot observe behaviour or when we do not know how participants experience their world (Cohen et al., 2007). Face-to-face interviews allowed the researcher an opportunity to explore the meaning participants attach to their experiences (Richards, 2003) in causes of their stress and how they are coping with such stress situations. Face-to-face interview as well allowed the researcher to observe non-verbal cues and appropriately react or modify his inquiry in response to non-verbal cues (Yin, 2003) of participants particularly when they elicit confusion, uncertainty, or waning motivation.

The interviews were based on a prepared set of questions but these were only used as a guide. The research took the same position as Silverman (2013), that in qualitative study, questions are only used as a guide and departures from the guidelines are not seen as a problem but are often encouraged. The interview schedules involved the interviews of some key informants from the selected institutions of higher learning who are in one way or another involved in the welfare of the workers.

b) Questionnaires

Questionnaire has the advantage of being taken to a wider audience compared to interviews, but has a disadvantage of not being possible to customize it to individuals as it is possible with other methods of data collection. The questionnaire was the main data collection tool and it contained both open ended and closed ended questions. This study used two questionnaires that included: Self-evaluation of the determinants of workers' stress (Appendix 1) which was taken by participants in the pilot as well as the actual study to investigate the causes and effects of occupational stress among university workers; this questionnaire also attempted to determine their attitude towards such factors; and Self-evaluation of the effects of the stress factors on their performance and coping strategies employed by the workers in dealing with their stress and stressful situation, was taken by the participants during the actual study.

Primary data was gathered using interview guides and questionnaires which were self-administered. Cooper & Schindler (2004) state that self-administered interviews help to reach a large number of potential respondents in different locations. The questionnaires also helped to collect data from a large population of respondents at a short period of time.

The questionnaire and interview schedule were used to obtain both qualitative and quantitative data from the targeted respondents. Primary data collection was conducted by research assistants and me because of the different locations of institutions of higher learning. The data was collected over a period of one month to be able to meet the requirements of a cross-sectional survey. Secondary data was obtained from literature review and documents about workers stress in institutions of higher learning. The questionnaires with open ended questions on workers stress in public universities in Kenya were administered to selected workers representatives within the selected public universities in Kenya. This informed the second phase of data generation.

The second phase involved: a) administering questionnaires to the respondents who included university workers in the selected public universities; and b) conducting interviews with some key informants from the selected institutions of higher learning who are in one way or another involved in the welfare of the workers by use of interview guides. The questionnaires and the interview guides contained questions on the major issues raised in first phase.

Kombo and Tromp (2006) posit that after constructing a research instrument or questionnaire the researcher should try it out on a small sample of the population. This way of pre-testing or piloting of the instrument enables the researcher to ensure that the questions measure what they are supposed to; that the wording is very clear and unambiguous; that the questions provoke the intended responses and the researcher was able to analyze and know whether the questions posed are skewed towards certain issues more than others.

The questionnaire was pretested before its administration to ensure validity and reliability of the data to be collected. Validity was determined by the use of face validity and content validity. Face validity tests if the questions appear to be measuring the intended sections. On the other hand, content validity tests whether all the important aspects of the sections are measured. This was done by first testing the instruments on 10% of the target population and reviewing the findings. Reliability of the responses was tested using the Cronbach alpha. Normally, α should be between 0.7 – 0.9 (Santos, 1999).

Data processing operations carried out included data editing/ cleaning and classification. Data editing/ cleaning is the examination of the collected data so as to detect omissions and errors and to correct them whenever possible. Data classification is the arranging of the collected data in classes or groups with common characteristics. The similar data was then tabulated before further analysis is conducted.

The tabulated data was then analyzed using both qualitative and quantitative techniques. Descriptive statistics was used for the analysis of the collected data, and this included parameters such as measures of central tendencies and the measure of dispersion. Inferential data analysis techniques such as regression and correlation analysis were also used to analyze the collected data. These parameters were used to determine and evaluate the relationships of the variables being measured. Data analysis and presentation of findings was carried out using statistical software which includes SPSS version 24 and Microsoft Excel. These software aided in the generation of suitable graphs, charts and tables which were used in drawing conclusions as well as presenting the research findings.

Regression is an important approach to modelling the relationship between the dependent variable (y) and one or more independent variable (x). A regression equation describes how the mean value of a response variable relates to specific values of the predictor variables (Bhattacharyya, 2011). The study used logistic regression analysis to test the statistical significance of the independent variables on the dependent variables.

Logistic regression is used to refer specifically to the problem in which the dependent variable is binary, that is, the number of available categories is two (Hosmer and Stanley, 2000). The probabilities describing the possible outcomes of a single trial were modelled, as a function of the explanatory variables, using a logistic function (Hosmer and Stanley, 2000). Logistic regression was therefore used to measure the relationship between the categorical dependent variable and the

independent variables by using probability scores as the predicted values of the dependent variable (Agresti, 2002).

The study used Binomial logistic regression. Binomial logistic regression refers to the instance in which the observed outcome can have only two possible types (Greene, 2003). The outcomes were coded as "0" and "1", as this lead to the most straightforward interpretation. The target group, the workers whose performance is affected (referred to as a "case") were coded as "1" and the reference group, workers whose performance is not affected (referred to as a "non-case") was coded as "0".

Logistic regression was used for predicting binary outcomes rather than continuous outcomes. It takes natural logarithm off the odds (logit or log-odds) to create a continuous criterion. The logit of success was then fitted to the predictors using regression analysis (Howell, 2010). The results of the logit were converted back to the odds via the inverse of the natural logarithm. Although the observed variables in logistic regression are categorical, the predicted scores were modelled as a continuous variable (the logit). The logit is referred to as the *link function* in logistic regression – although the output in logistic regression is binomial and displayed in contingency table, the logit is an underlying continuous criterion upon which linear regression was conducted (Howell, 2010).

Faraway (2002), states that regression analysis is a statistical tool for the investigation of relationships between variables. Regression methods have become an integral component of any data analysis concerned with describing the relationship between a response variable and explanatory variables (Hosmer and Stanley, 2000).

The logistic regression equations for performance of workers being affected was expressed as follows:

$$Y= \beta_0+\beta_1 X_1+\beta_2 X_2+\beta_3 X_3 +e$$
(3.1)

Where; Y   =   Performance of workers being affected.

β_0 =   Is the constant or coefficient of intercept.
X_1 =   Management stress.
X_2 =   Movement stress.
X_3 =   Motivation stress.
$\beta_1...\beta_2$ =   The corresponding coefficients for the respective independent

variables.

β_3 =   Corresponding coefficients for the moderating variable.

Regression analysis was used by Gathungu and Wachira (2013) who studied the job satisfaction factors that influence the performance of secondary school principals in their administrative functions in Mombasa district, and Obwogi (2011) who studied the factors that affect quality of teaching staff in universities in Kenya.

The study was guided by the independent variables of Management stress, Movement stress and Motivation stress. Working facilities stress was measured by evaluating respondent's opinions on the contribution of the physical facilities available on their environment and the working conditions on their workplace stress.

Management stress was measured based on the respondents' opinion on the contribution of organizational structure, ambiguity of roles, and participation in decision-making on workers' stress. Movement stress was measured by determining the respondents' opinion on the contribution of job shifts, job transfers and replacements on workers stress while motivation stress was measured by assessing the contribution of under promotion, over promotion and Lack of job security on the stress of the workers. The dependent variable for the study was the performance of the selected public university workers. The workers performance was measured by assessing the physiological and psychological responses that are attributed to exposure to a stress factor.

IV.   RESEARCH FINDINGS AND DISCUSSION

The most common internal consistency measure known as Cronbach's alpha (α) was used. It indicates the extent to which a set of test item can be treated as measuring a single latent variable (Cronbach, 1971); Cronbach's alpha reliability coefficient that ranges between 0 and 1. 0 implies that there is no internal reliability while 1 indicated perfect internal reliability. Cronbach's alpha reliability coefficient value of 0.7 or higher is considered sufficient (Sekaran, 2009). The recommended value of 0.7 was therefore used as a cut-off of reliability (Sekaran, 2009). Reliability results for all the set of variables in the questionnaires gave a cronbach alpha statistics of more than 0.7, thus the threshold value of 0.7 were met.

Table 4.1: Summary of Reliability Test

Variable	Cronbach's Alpha	N of Items
Motivation	.812	10-questions
Management	.884	11-questions
Employee performance	.832	13-questions

To evaluate motivation 10 survey items on five point likert scale were used. Almost all of the respondents (90%) agreed that they are encouraged to find new and better ways to do their work. More than three quarters (78%) of the respondents agreed that when they put extra effort in their work they can be appreciated. Almost three quarters (73%) of the respondents supported the statement that they are encouraged to take initiative in their work. My organization gives enough recognition and rewards for work well done were supported by 66% of the respondents. More than three quarters of the respondents (79%) agreed that creativity and innovation are valued at their organization. My department often holds social activities for motivation of staff members was agreed upon by 90% of the respondents.

Table 4.2: Motivation

Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am encouraged to find new and better ways to do my work	8%	2%	0%	41%	49%
When I put extra effort in my work I can be appreciated for this	0%	4%	17%	37%	42%
I am encouraged to take initiative in my work	0%	6%	21%	40%	33%
My organization gives enough recognition and rewards for work well done	4%	10%	18%	33%	34%
Creativity and innovation are valued at my organization	0%	2%	20%	39%	40%
My department often holds social activities for motivation of staff members	0%	0%	10%	31%	59%
It is easy to discuss or share personal problems with my boss or members of the department	0%	6%	21%	40%	33%
We are occasionally taken to trips for purposes of team building and reducing monotony at my department or section	4%	10%	18%	33%	34%
Promotion is based on performance	0%	2%	20%	39%	40%
Appraisals are regular and focused on personal development	8%	14%	17%	49%	12%

Segregation by respondent's University, great discrepancies in responses were not observed.

Table 4.3: Motivation

	Variable	University Total	JKUAT	UoN	KU
e1	I am encouraged to find new and better ways to do my work	4.2	4.2	4.2	4.2
e2	When I put extra effort in my work I can be appreciated for this	4.2	4.1	4.2	4.2
e3	I am encouraged to take initiative in my work	4.0	3.9	4.0	4.0
e4	My organization gives enough recognition and rewards for work well done	3.8	3.9	3.8	3.8
e5	Creativity and innovation are valued at my organization	4.2	4.3	4.2	4.1
e6	My department often holds social activities for motivation of staff members	4.5	4.5	4.5	4.5
e7	It is easy to discuss or share personal problems with my boss or members of the department	4.0	3.9	4.0	4.0
e8	We are occasionally taken to trips for purposes of team building and reducing monotony at my department or section	3.8	3.9	3.8	3.8
e9	Promotion is based on performance	4.2	4.3	4.2	4.1
e10	Appraisals are regular and focused on personal development	3.4	3.5	3.4	3.4
	Average	**4.0**	**4.1**	**4.0**	**4.0**

Motivation in this study was evaluated using 10 items. The five point likert scale of (10) data items, was used to measure and determine the extent to which Motivation comprised of the desired outcomes. A correlation was first done on all the data items under Motivation and only those that significantly correlated to each other were further reduced into few principal components. Results from correlations showed that "I am encouraged to take initiative in my work –e3", "Creativity and innovation are valued at my organization-e5", "My department often holds social activities for motivation of staff members-e6", "It is easy to discuss or share personal problems with my boss or members of the department-e7" and "Promotion is based on performance-e9" did not correlate with most of other items and were therefore eliminated before running factor analysis.

Table 4.4: Correlations of Motivation items

	Statistic	e1	e2	e3	e4	e5	e6	e7	e8	e9	e10
e1	Pearson Correlation	1	-.233**	-.165**	-.243**	-.357**	-.181**	-.165**	-.243**	-.357**	.297**
	Sig. (2-tailed)		.000	.002	.000	.000	.001	.002	.000	.000	.000
	N	354	354	354	354	354	354	354	354	354	354
e2	Pearson Correlation	-.233**	1	.468**	.196**	-.011	.661**	.468**	.196**	-.011	-.178**
	Sig. (2-tailed)	.000		.000	.000	.838	.000	.000	.000	.838	.001

	N	354	354	354	354	354	354	354	354	354	354
e3	Pearson Correlation	-.165**	.468**	1	.079	.005	.296**	1.000**	.079	.005	-.156**
	Sig. (2-tailed)	.002	.000		.139	.922	.000	.000	.139	.922	.003
	N	354	354	354	354	354	354	354	354	354	354
e4	Pearson Correlation	-.243**	.196**	.079	1	.178**	.003	.079	1.000**	.178**	-.260**
	Sig. (2-tailed)	.000	.000	.139		.001	.960	.139	.000	.001	.000
	N	354	354	354	354	354	354	354	354	354	354
e5	Pearson Correlation	-.357**	-.011	.005	.178**	1	.092	.005	.178**	1.000**	-.123*
	Sig. (2-tailed)	.000	.838	.922	.001		.083	.922	.001	.000	.021
	N	354	354	354	354	354	354	354	354	354	354
e6	Pearson Correlation	-.181**	.661**	.296**	.003	.092	1	.296**	.003	.092	-.170**
	Sig. (2-tailed)	.001	.000	.000	.960	.083		.000	.960	.083	.001
	N	354	354	354	354	354	354	354	354	354	354
e7	Pearson Correlation	-.165**	.468**	1.000**	.079	.005	.296**	1	.079	.005	-.156**
	Sig. (2-tailed)	.002	.000	.000	.139	.922	.000		.139	.922	.003
	N	354	354	354	354	354	354	354	354	354	354
e8	Pearson Correlation	-.243**	.196**	.079	1.000**	.178**	.003	.079	1	.178**	-.260**
	Sig. (2-tailed)	.000	.000	.139	.000	.001	.960	.139		.001	.000
	N	354	354	354	354	354	354	354	354	354	354
e9	Pearson Correlation	-.357**	-.011	.005	.178**	1.000**	.092	.005	.178**	1	-.123*
	Sig. (2-tailed)	.000	.838	.922	.001	.000	.083	.922	.001		.021
	N	354	354	354	354	354	354	354	354	354	354
e10	Pearson Correlation	.297**	-.178**	-.156**	-.260**	-.123*	-.170**	-.156**	-.260**	-.123*	1
	Sig. (2-tailed)	.000	.001	.003	.000	.021	.001	.003	.000	.021	
	N	354	354	354	354	354	354	354	354	354	354

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

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

The next table is used as to test assumptions; essentially, the Kaiser-Meyer-Olking (KMO) statistic should be greater than 0.500 and the Bartlett's test should be significant (e.g. p < .05). The Kaiser-Meyer-Olkin of sampling adequacy was above the threshold of 0.5 (KMO=0.666) indicating that the sample size was adequate for the variables entered into analysis. The Bartlett's Test of Sphericity was significant ($\chi2$=699.742, df=18, P<0.001) showing that factor analysis using principal component was relevant for the data set and there were some relationships between the variables.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.666
Bartlett's Test of Sphericity	Approx. Chi-Square	699.742
	Df	18
	Sig.	.000

The table below shows the eigenvalues (variances of the principal components) associated with each linear component (factor) before extraction, and after extraction. The extraction converged in two iterations with two significant components with Eigenvalues accounting for 69.554% of the variance explained.

Table 4.5: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.369	47.374	47.374	2.369	47.374	47.374	1.992	39.836	39.836
2	1.109	22.180	69.554	1.109	22.180	69.554	1.486	29.718	69.554
3	.829	16.581	86.135						
4	.693	13.865	100.000						
5	-9.185E-17	-1.837E-15	100.000						

Extraction Method: Principal Component Analysis.

Being above the threshold of 50% it indicated that the one-component factor model derived fitted the data appropriately. Items loading greater than 0.6 for the component combined to form the two principal components and the variables that clustered into them are shown in table below.

Table 4.6: Rotated Component Matrix

	Component	
Variable	1	2
e1	-.116	.748
e2	.068	-.655
e4	.985	-.166
e8	.985	-.166
e10	-.178	.665

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

The effect of motivation on performance was examined by calculating the correlations.

Table 4.7: Correlation between Motivation and performance

	Not depressed	Don't feel lazy and boredom	Does the best possible job	Enjoy work	Job Commitment	Responsible for actions at work	Motivated, productive and creative	Stress produce poor work	Stress reduces productivity	Employees have high morale	Serves the customers efficiently	Produce accurate work	Efficient service delivery
e1	.443**	.085	.012	.059	-.054	.071	.006	-.065	-.010	-.053	-.173**	-.118*	-.078
e2	.206**	-.032	-.017	.018	-.013	-.059	-.062	-.028	.044	-.007	.118*	.107*	.035
e3	.181**	-.047	-.102	.038	-.029	.001	-.046	-.020	-.009	.022	.094	.055	.109*
e4	-.097	.041	-.059	-.018	-.024	.014	-.001	.098	.047	.014	.016	.023	.065
e5	.314**	-.036	.018	-.007	-.032	-.047	.033	.043	-.084	.005	.032	.010	.030
e6	.278**	-.080	.016	.005	-.052	-.019	-.010	.058	.030	.031	.153**	.089	.013
e7	.181**	-.047	-.102	.038	-.029	.001	-.046	-.020	-.009	.022	.094	.055	.109*
e8	-.097	.041	-.059	-.018	-.024	.014	-.001	.098	.047	.014	.016	.023	.065
e9	-.314**	-.036	.018	-.007	-.032	-.047	.033	.043	-.084	.005	.032	.010	.030
e10	.171**	-.008	-.013	-.078	-.057	.118*	-.110*	-.025	-.042	-.075	-.020	-.032	.022

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

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

Results showed that lack of depression and effective performance was significant at 0.01 level of significance on being encouraged to find new and better ways to do work (.443); being appreciated when one put extra effort at work (.206); being encouraged to take initiative at work (.181) valuing creativity and innovation (.314); department often holding social activities for

motivation of staff members (.278); ease of discussing or sharing personal problems with the boss or members of the department (.181); promotion being based on performance (-.314) and appraisals being regular and focused on personal development (.171).

Ability to serve the customers efficiently was significantly correlated to being encouraged to find new and better ways to do work (-.173); being appreciated when one puts extra effort in their work (.118) and department often holding social activities for motivation of staff members (.153). Having efficient service delivery was significantly correlated to being encouraged to take initiative in work (.109) and ease of discussing or sharing personal problems with the boss or members of the department (.109).

To assess management respondents were presented with a list of statements on a five point likert scale and asked to rate their agreement with each. 51% of the respondents, agreed to be aware of their organization structure. More than half of the respondents (54%) were either neutral or disagreed with the statement on their Organization Structure being appropriate. Most of the respondents (79%) agreed that people are held accountable for the quality of work they produce. Two thirds of the respondents agreed that their supervisor asks for their input to help make decisions. More than half of the respondents (59%) supported the statement that their supervisor tells them when they do their work well. However, most of the respondents (55%) disagreed with the statement that their supervisor tells them when their work needs improvement. More than two thirds (69%) of the respondents agreed that their supervisor delegates work effectively. On the other hand slightly more than half of the respondents (53%) felt adequately utilized in their job. Management is sensitive to employee problems was agreed upon by 53% of the respondents while another 57% agreed to being involved in decision making in their organization.

Table 4.8: Management

Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am aware of my Organization Structure	6%	20%	23%	39%	12%
The Organization Structure is appropriate	10%	19%	25%	32%	14%
People are held accountable for the quality of work they produce	6%	9%	6%	43%	36%
My supervisor asks for my input to help make decisions	2%	10%	21%	37%	30%
My supervisor tells me when I do my work well	4%	10%	27%	31%	28%
My supervisor tells me when my work needs improvement	12%	20%	23%	33%	12%
My supervisor delegates work effectively	2%	16%	12%	49%	20%
I feel adequately utilized in my job	4%	14%	29%	49%	4%
Management is sensitive to employee problems	8%	10%	28%	39%	14%
I am involved in decision making in my organization	8%	12%	23%	47%	10%

Segregation by respondent's University, great discrepancies in responses were not observed.

Table 4.9: Management by University

	Variable	Total	JKUAT	UoN	KU
			University		
f1	I am aware of my Organization Structure	3.3	3.3	3.3	3.3
f2	The Organization Structure is appropriate	3.2	3.1	3.2	3.2
f3	People are held accountable for the quality of work they produce	3.9	3.9	4.0	4.0
f4	My supervisor asks for my input to help make decisions	3.8	3.8	3.8	3.8
f5	My supervisor tells me when I do my work well	3.7	3.8	3.7	3.7
f6	My supervisor tells me when my work needs improvement	3.1	3.2	3.1	3.1
f7	My supervisor delegates work effectively	3.7	3.6	3.7	3.7
f8	I feel adequately utilized in my job	3.4	3.4	3.3	3.3
f9	Management is sensitive to employee problems	3.4	3.5	3.4	3.4
f10	I am involved in decision making in my organization	3.4	3.3	3.4	3.4
	Average	**3.4**	**3.2**	**3.5**	**3.3**

Management in this study was evaluated using 10 items. The five point likert scale of (10) data items, was used to measure and determine the extent to which management comprised of the desired outcomes. A correlation was first done on all the data items under management and only those that significantly correlated to each other were further reduced into few principal components. Results from correlations showed that "The Organization Structure is appropriate-f2" and "f3 People are held accountable for the quality of work they produce-f3" did not correlate with most of other items and was therefore eliminated before running factor analysis.

Table 4.10: Correlations among management items

	Statistic	f1	f2	f3	f4	f5	f6	f7	f8	f9	f10
f1	Pearson Correlation	1	.208**	.013	.509**	.295**	.159**	-.139**	.443**	.466**	.180**
	Sig. (2-tailed)		.000	.806	.000	.000	.003	.009	.000	.000	.001
	N	354	354	354	354	354	354	354	354	354	354
f2	Pearson Correlation	.208**	1	-.049	.016	.009	.126*	.290**	-.089	.138**	.019
	Sig. (2-tailed)	.000		.355	.770	.871	.018	.000	.096	.009	.725
	N	354	354	354	354	354	354	354	354	354	354
f3	Pearson Correlation	.013	-.049	1	.378**	.091	.221**	.138**	.230**	.092	.342**
	Sig. (2-tailed)	.806	.355		.000	.089	.000	.009	.000	.083	.000
	N	354	354	354	354	354	354	354	354	354	354
f4	Pearson Correlation	.509**	.016	.378**	1	.424**	.310**	-.108*	.409**	.452**	.495**
	Sig. (2-tailed)	.000	.770	.000		.000	.000	.043	.000	.000	.000
	N	354	354	354	354	354	354	354	354	354	354
f5	Pearson Correlation	.295**	.009	.091	.424**	1	.097	-.173**	.329**	.356**	.323**
	Sig. (2-tailed)	.000	.871	.089	.000		.067	.001	.000	.000	.000
	N	354	354	354	354	354	354	354	354	354	354
f6	Pearson Correlation	.159**	.126*	.221**	.310**	.097	1	-.128*	.185**	.432**	.400**
	Sig. (2-tailed)	.003	.018	.000	.000	.067		.016	.000	.000	.000
	N	354	354	354	354	354	354	354	354	354	354
f7	Pearson Correlation	-.139**	.290**	.138**	-.108*	-.173**	-.128*	1	-.024	-.169**	-.010
	Sig. (2-tailed)	.009	.000	.009	.043	.001	.016		.649	.001	.854
	N	354	354	354	354	354	354	354	354	354	354
f8	Pearson Correlation	.443**	-.089	.230**	.409**	.329**	.185**	-.024	1	.168**	.115*
	Sig. (2-tailed)	.000	.096	.000	.000	.000	.000	.649		.002	.030
	N	354	354	354	354	354	354	354	354	354	354
f9	Pearson Correlation	.466**	.138**	.092	.452**	.356**	.432**	-.169**	.168**	1	.246**
	Sig. (2-tailed)	.000	.009	.083	.000	.000	.000	.001	.002		.000
	N	354	354	354	354	354	354	354	354	354	354
f10	Pearson Correlation	.180**	.019	.342**	.495**	.323**	.400**	-.010	.115*	.246**	1
	Sig. (2-tailed)	.001	.725	.000	.000	.000	.000	.854	.030	.000	
	N	354	354	354	354	354	354	354	354	354	354

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

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

The Kaiser-Meyer-Olkin of sampling adequacy was above the threshold of 0.5 (KMO=0.669) indicating that the sample size was adequate for the variables entered into analysis. The Bartlett's Test of Sphericity was significant ($\chi2$=699.742, df=28, P<0.001) showing that factor analysis using principal component was relevant for the data set and there were some relationships between the variables.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.669
Bartlett's Test of Sphericity	Approx. Chi-Square	699.742
	Df	28
	Sig.	.000

The table below shows the eigenvalues (variances of the principal components) associated with each linear component (factor) before extraction, and after extraction. The extraction converged in three iterations with one significant component with Eigenvalues accounting for 64.812% of the variance explained.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% Variance	of Cumulative %	Total	% Variance	of Cumulative %	Total	% Variance	of Cumulative %
1	3.026	37.829	37.829	3.026	37.829	37.829	2.227	27.833	27.833
2	1.127	14.081	51.910	1.127	14.081	51.910	1.838	22.978	50.811
3	1.032	12.901	64.812	1.032	12.901	64.812	1.120	14.001	64.812
4	.847	10.583	75.394						
5	.711	8.889	84.283						
6	.598	7.479	91.762						
7	.375	4.682	96.444						
8	.284	3.556	100.000						

Extraction Method: Principal Component Analysis.

Being above the threshold of 50% it indicated that the one-component factor model derived fitted the data appropriately. Items loading greater than 0.5 for the component combined to form the one principal component and the variables that clustered into it are shown in table below. The third component comprised of one item which was eliminated further analysis.

Table 4.11: Rotated Component Matrix

	Component		
Variable	1	2	3
f1	.775	.103	-.172
f4	.661	.501	-.008
f5	.606	.210	-.162
f6	.024	.795	-.167
f7	-.060	-.011	.923
f8	.790	-.025	.127
f9	.405	.515	-.374
f10	.173	.797	.170

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

The effect of management on performance and was examined by calculating the correlations.

Table 4.12: Correlation between management and performance

	Not depressed	Don't feel lazy and boredom	Does the best possible job	Enjoy work	Job Commitment	Responsible for actions at work	Motivated, productive and creative	Stress produce poor work	Stress reduces productivity	Employees have high morale	Serves the customers efficiently	Produce accurate work	Efficient service delivery
f1	.114*	.031	-.068	.008	.012	.056	-.027	-.046	.051	-.007	-.015	-.038	-.125*
f2	.152**	-.032	.092	.078	-.097	-.058	.096	-.041	.059	.051	-.091	-.036	-.138*
f3	.132*	-.016	-.008	-.035	.123*	.008	-.027	-.006	-.024	-.068	.003	.021	-.077
f4	.156**	.037	-.027	-.045	.021	.107*	-.018	-.057	.020	-.030	-.018	-.045	-.059
f5	.207**	.028	.001	-.064	.010	.098	-.068	-.014	-.097	-.095	-.084	-.093	-.110*
f6	.299**	.049	.082	.005	.078	.008	.069	-.042	-.070	.025	-.087	-.097	-.097
f7	.153**	-.091	.008	.025	-.033	-.003	.014	-.018	.045	.037	.000	.013	.072
f8	.019	-.077	-.036	-.084	-.016	.006	-.101	-.029	-.073	-.028	.126*	.073	.022
f9	.057	.133*	.011	.054	.045	.074	.123*	-.039	.034	-.047	-.216**	-.150**	-.178**
f10	.088	.060	.113*	-.002	.042	.165**	-.015	-.043	.023	-.030	-.126*	-.170**	-.081

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

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

Results showed that lack of depression and effective performance was positively and significantly correlated to being aware of Organization Structure (.114); organization Structure being appropriate (.152); People being held accountable for the quality of work they produce (.132); supervisor asking for employees' input to help make decisions (.156); supervisor telling employees when they do my work well(.207); supervisor telling employees when their work needs improvement (.299); and supervisor delegating work effectively (.153).

Being committed to their jobs was positively and significantly correlated to People being held accountable for the quality of work they produce (.123). Taking responsibility for our actions within the job environment was positively and significantly correlated to supervisor asking for employees' input to help make decisions (.107) and being involved in decision making in their organization (165). Having efficient service delivery was significantly correlated to being aware of organization structure (-.125) and organization Structure being appropriate (-.138).

To evaluate employee performance, respondents were presented with 13 statements on five pint likert scale and asked to rate their agreement with each statement. From the results most of the respondents (74%) agreed that they are not aggressive and depressed at work and therefore can perform duties effectively. Slightly over half of the respondents (55%) agreed that they do not always feel lazy, boredom and headache lowering their output. Surprisingly more than two thirds of the respondents (68%) agreed to not doing their best possible job. Over half of the respondents (53%) agreed that they enjoy their work. We are committed to our jobs was supported by 53% of the respondents. Most of the respondents (63%) disagreed that they take responsibility for their actions within the job environment. More than three quarters of the respondents (80%) admitted to being always motivated, productive and creative. Stress makes me produce poor quality work was agreed upon by 85% of the respondents while 81% agreed that stress reduces their productivity at work. On the other hand 60% of the respondents disagreed that employees in their University have high morale or commitment. Most of the respondents (57%) disagreed that they are able to serve the customers efficiently while 53% disagreed to being able to produce accurate work as expected by their organization. We have acquired efficient service delivery and quality of services in this University was disagreed by 60% of the respondents.

Table 4.13: Employee Performance

Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am not aggressive and depressed at work and therefore can perform my duties effectively	7%	8%	12%	34%	40%
I do not always feel lazy, boredom and headache lowering my output	0%	8%	37%	31%	23%
You do not do the best possible job	5%	11%	16%	40%	28%
I enjoy my work	11%	17%	19%	34%	19%
We are committed to our jobs	12%	15%	21%	43%	10%

We take responsibility for our actions within the job environment	18%	26%	19%	21%	16%
We are always motivated, productive and creative	0%	5%	16%	51%	29%
Stress makes me produce poor quality work	1%	1%	13%	53%	32%
Stress reduces my productivity at work	0%	5%	15%	53%	28%
Employees in this University have high morale or commitment	4%	31%	25%	28%	12%
I am able to serve the customers efficiently	17%	18%	22%	33%	10%
I am able to produce accurate work as expected by my organization	14%	14%	26%	39%	8%
We have acquired efficient service delivery and quality of services in this University	13%	22%	24%	28%	12%

To provide a comparative description for the responses across the three universities, the average for each statement were obtained as shown below. Great discrepancies among the respondents from the three universities were not observed.

Table 4.14: Employee Performance

	Variable	Total	University JKUAT	UoN	KU
g1	I am not aggressive and depressed at work and therefore can perform my duties effectively	3.9	4.0	4.0	3.8
g2	I do not always feel lazy, boredom and headache lowering my output	3.7	3.6	3.7	3.7
g3	You do not do the best possible job	3.8	3.2	3.8	3.9
g4	I enjoy my work	3.3	3.3	3.2	3.5
g5	We are committed to our jobs	3.2	3.2	3.3	3.2
g6	We take responsibility for our actions within the job environment	2.9	2.8	2.8	3.0
g7	We are always motivated, productive and creative	4.0	4.0	4.0	4.1
g8	Stress makes me produce poor quality work	4.1	4.1	4.1	4.2
g9	Stress reduces my productivity at work	4.0	4.0	4.0	4.1
g10	Employees in this University have high morale or commitment	3.1	3.0	3.1	3.2
g11	I am able to serve the customers efficiently	3.0	3.2	3.1	2.9
g12	I am able to produce accurate work as expected by my organization	3.1	3.2	3.2	3.0
g13	We have acquired efficient service delivery and quality of services in this University	3.0	2.9	3.0	3.1
	Average	**3.4**	**3.2**	**3.4**	**3.5**

Factor analysis for Employee Performance

Employee Performance in this study was evaluated using 13 items. The five point likert scale of (13) data items, was used to measure and determine the extent to which Employee Performance comprised of the desired outcomes. A correlation was first done on all the data items under Employee Performance and only those that significantly correlated to each other were further reduced into few principal components. Results from correlations showed that "I am not aggressive and depressed at work and therefore can perform my duties effectively-g1", "You do not do the best possible job-g3", "We are committed to our jobs-g5"and " Stress reduces my productivity at work-g9" did

not correlate with most of other items and was therefore eliminated before running factor analysis, Table 4.67 in the appendix.

The Kaiser-Meyer-Olkin of sampling adequacy was above the threshold of 0.5 (KMO=0.540) indicating that the sample size was adequate for the variables entered into analysis. The Bartlett's Test of Sphericity was significant ($\chi 2$=646.288, df=36, P<0.001) showing that factor analysis using principal component was relevant for the data set and there were some relationships between the variables.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.540
Bartlett's Test of Sphericity	Approx. Chi-Square	646.288
	Df	36
	Sig.	.000

The table below shows the eigenvalues (variances of the principal components) associated with each linear component (factor) before extraction, after extraction and after rotation. The rotations converged in four iterations with four significant components with Eigenvalues accounting for 62.319% of the variance explained.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	of Cumulative %	Total	% of Variance	of Cumulative %	Total	% of Variance	of Cumulative %
1	2.311	25.673	25.673	2.311	25.673	25.673	2.027	22.521	22.521
2	2.010	22.331	48.004	2.010	22.331	48.004	1.822	20.245	42.766
3	1.288	14.315	62.319	1.288	14.315	62.319	1.760	19.553	62.319
4	.943	10.477	72.796						
5	.755	8.386	81.183						
6	.630	6.995	88.178						
7	.526	5.849	94.027						
8	.310	3.443	97.470						
9	.228	2.530	100.000						

Extraction Method: Principal Component Analysis.

Being above the threshold of 50% it indicated that the two-component factor model derived fitted the data appropriately. Items loading greater than 0.6 for each component, except for e11, combined to form the four principal components and the variables that clustered into each are shown in table below.

Table 4.15: Rotated Component Matrix

Variable	Component		
	1	2	3
g2 I do not always feel lazy, boredom and headache lowering my output	-.225	.731	-.009
g4 I enjoy my work	-.171	-.094	.772
g6 We take responsibility for our actions within the job environment	-.467	.309	-.553
g7 We are always motivated, productive and creative	-.085	.451	.638
g8 Stress makes me produce poor quality work	.079	.684	-.034
g10 Employees in this University have high morale or commitment	.161	.553	.574
g11 I am able to serve the customers efficiently	.886	-.021	-.134
g12 I am able to produce accurate work as expected by my organization	.873	.029	-.002
g13 We have acquired efficient service delivery and quality of services in this University	.376	.452	.320

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Linear Regression analysis was employed to predict Employee performance from Worker's motivation. Model summary shows the coefficient of determination (R^2) which tells us the percentage of the variation in Employee performance explained by the model. From the results of the table below, the regression model containing Worker's motivation as the independent variable explains 11.2% of the variation in Employee performance. The size of Durbin Watson statistic which depends on the number of predictors and number of observation, as conservative rule of thumb, values less than 1 or greater than 3 are definitely cause for concern. Durbin-Watson value of 1.694 indicates that the model did not suffer significantly from autocorrelation.

Table 4.16: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.334[a]	.112	.109	.48785	1.694

a. Predictors: (Constant), Worker's motivation

b. Dependent Variable: Employee performance

The table below displays ANOVA results that test the significance of the R^2 for the model. An F statistics of 44.184 with a p-value less than the conventional 5% indicates that the overall model was significant at 95% confidence level.

Table 4. 17: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	10.516	1	10.516	44.184	.000[a]
Residual	83.777	352	.238		
Total	94.293	353			

a. Predictors: (Constant), Worker's motivation

b. Dependent Variable: Employee performance

In order to detect whether multicollinearity was a problem to the model, condition index; the variance-inflation factor (VIF); and tolerance of each variable was calculated. VIF values are considered a problem when they go beyond 10, and tolerance values below .10 should be a cause for concern. A condition index over 30 suggests serious collinearity problems and an index over 15 indicates possible collinearity problems. The data were duly tested for multicollinearity by using Pearson's correlation and conditional index. The Table below, showed no serious problem of multicollinearity.

Table 4. 18: Collinearity Diagnostics

Model	Dimension	Eigenvalues	Condition Index	Variance Proportions (Constant)	Worker's motivation
1	1	1.987	1.000	.01	.01
	2	.013	12.326	.99	.99

a. Dependent Variable: Employee performance

Table of coefficients below presents the unstandardized and standardized coefficients of the model, the t statistic for each coefficient and the associated p-values. The predictor variable had significant positive relationship with Employee performance. The findings confirm that there is a statistically significant influence of Worker's motivation on Employee performance. This implies that an increase in Worker's motivation leads to an increase in Employee performance as demonstrated by the equation below.

Employee performance= 2.358 + .277Worker's motivation

Table 4.19: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	2.358	.161		14.658	.000		
Worker's motivation	.277	.042	.334	6.647	.000	1.000	1.000

a. Dependent Variable: Employee performance

Linear Regression analysis was employed to predict Employee performance from Management. Model summary shows the coefficient of determination (R^2) which tells us the percentage of the variation in Employee performance explained by the model. From the results of the table below, the regression model containing Management as the independent variable explains 23.9% of the variation in Employee performance. The size of Durbin Watson statistic which depends on the number of predictors and number of observation, as conservative rule of thumb, values less than 1 or greater than 3 are definitely cause

for concern. Durbin-Watson value of 2.614 indicates that the model did not suffer significantly from autocorrelation.

Table 4.20: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.489[a]	.239	.237	.45144	2.614

a. Predictors: (Constant), Management

b. Dependent Variable: Employee performance

The table below displays ANOVA results that test the significance of the R^2 for the model. An F statistics of 110.676 with a p-value less than the conventional 5% indicates that the overall model was significant at 95% confidence level.

Table 4. 21: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.556	1	22.556	110.676	.000[a]
	Residual	71.737	352	.204		
	Total	94.293	353			

a. Predictors: (Constant), Management

b. Dependent Variable: Employee performance

In order to detect whether multicollinearity was a problem to the model, condition index; the variance-inflation factor (VIF); and tolerance of each variable was calculated. VIF values are considered a problem when they go beyond 10, and tolerance values below .10 should be a cause for concern. A condition index over 30 suggests serious collinearity problems and an index over 15 indicates possible collinearity problems. The data were duly tested for multicollinearity by using Pearson's correlation and conditional index. The Table below, showed no serious problem of multicollinearity.

Collinearity Diagnostics

Model	Dimension	Eigenvalues	Condition Index	Variance Proportions (Constant)	Management
1	1	1.976	1.000	.01	.01
	2	.024	9.050	.99	.99

a. Dependent Variable: Employee performance

Table of coefficients below presents the unstandardized and standardized coefficients of the model, the t statistic for each coefficient and the associated p-values. The predictor variable had significant positive relationship with Employee performance.

The findings confirm that there is a statistically significant influence of Management on Employee performance. This implies that an increase in Management leads to an increase in Employee performance as demonstrated by the equation below. Employee performance= **2.285 + .402Management**

Table 4.22: Coefficients

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	T	Sig.	Collinearity Statistics Tolerance	VIF
1 (Constant)	2.285	.110		20.792	.000		
Management	.402	.038	.489	10.520	.000	1.000	1.000

Multivariate linear Regression analysis was employed to predict Employee performance from the joint contribution of Motivation and Management. Model summary shows the coefficient of determination (R^2) which tells us the percentage of the variation in Employee performance explained by the model. From the results of the table below, the regression model containing Motivation and Management as the predictor variables explains 61.0% of the variation in Employee performance. The size of Durbin Watson statistic which depends on the number of predictors and number of observation, as

conservative rule of thumb, values less than 1 or greater than 3 are definitely cause for concern. Durbin-Watson value of 1.851 indicates that the model did not suffer significantly from autocorrelation.

Table 4.23: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.781[a]	.610	.582	.02779	1.851
b. Dependent variable: employee performance					

The table below displays ANOVA results that test the significance of the R^2 for the model. An F statistics of 57.717 with a p-value less than the conventional 5% indicates that the overall model was significant at 95% confidence level.

Table 4. 24: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	31.687	3	10.562	57.717	.000[a]
Residual	62.037	339	.183		
Total	93.724	342			
a. Predictors: (Constant), workplace facilities, Worker's relationship , Worker's movement					
b. Dependent Variable: employee performance					

Table of coefficients below presents the unstandardized and standardized coefficients of the model, the t statistic for each coefficient and the associated p-values. The predictor variables had significant positive relationship with Employee performance except motivation.

The findings confirm that there is a statistically significant influence of Worker's Management on Employee performance.

This implies that unit increase in Worker's relationship, Worker's movement, Workplace facilities and Management leads to an increase in Employee performance as demonstrated by the equation below.

Employee performance= 2.286+.096 Management

Table 4.25: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	2.286	.344		6.637	.000		
Motivation	.009	.049	.009	.187	.851	.914	1.094
Management	.096	.045	.135	2.135	.033	.488	2.047
a. Dependent Variable: Employee performance							

On the influence of workers' motivation on Employee motivation, the findings confirm that there is a statistically significant influence of Worker's motivation on Employee performance. This implies that an increase in Worker's motivation leads to an increase in Employee performance as demonstrated by the equation below.

Employee performance= 2.358 + .277**Worker's motivation**

The above findings postulate that lack of motivation among employees may lead to stress that is negatively related to performance. However provision of motivation will come a long way in minimising stress and improving performance of the employees. These results are similar to previous studies which indicated that motivation of employees in an organisation which

largely emanates from access to financial rewards, good pay and incentives will reduce stress and improve workers performance. White (2006) found out that when employees think that they are not rewarded according to the efforts they are putting in; it creates stress among them and therefore their work performance decreases. Additionally, Giga (2011) also found out that effective motivation can create a productive work force, but a lack of motivating factors can leave employees searching for reasons to give their maximum effort.

On the influence of management on employee performance, the findings confirm that there is a statistically significant influence of Management on Employee performance. This implies that an increase in Management leads to an increase in Employee performance as demonstrated by the equation below.

Employee performance= 2.285 + .402 **Management**

Following from these results, employees will perform better in an environment where they consider the management to be positive either in supporting them or in their management. Efficiency in management leads to positive employee performance. These results echo past studies which indicated that poor management of work leads to workplace stress and reduce the performance of the workers. Bashir (2010) found out that role conflict makes the employee incompatible to complete well his or her job task and this causes job stress. Dar et al. (2011) also found out that performance is hindered by job description conflict because with it the individual faces either a lack of knowledge about the most effective behaviours to engage in or an almost impossible situation for doing everything expected. The findings also supports those of Robbins et al. (2009) who found out that workload can lead to severe stress which can have insalubrious effect on the lives of employees, which can lead to reduced effectiveness, less inspiration and increase in non-appearance in office.

V.   SUMMARY, CONCLUSION AND RECOMMENDATIONS

Employees in institutions of higher education have a major role to play in achieving the objectives of the institution. The performance of the staff, both as teachers, researchers and managers, determines to a large extent, the quality of the student experience of higher education and has a significant effect on student learning and thereby on the contribution that such institutions can make to society. Responsibility for others is often associated with significant occupational stress. Each of the sources of stress that were assessed in this study was found to be significant and that each is a strong determinant of performance of the employees in the public universities and therefore should be given attention.

Motivation involves the ability to make somebody want to do something especially something that involves hard work. In a university work environment, employees will feel motivated to do their work effectively and efficiently if they are rewarded accordingly and are given an opportunity to participate in decision making. Reward does not only involve salaries but other sources of remuneration such as gifts and awards as well as opportunities for promotion. The reward however needs to be fair or at least employees need to perceive the reward to be fair. The stress 'salary not as good as other people doing similar work' is connected to two key expectations that employees have when they begin employment with an organization; that they will be treated fairly and that they will be recognized for the work they do.

Additionally, employees will feel motivated to work within the public universities and hence minimise cases of stress at the workplace, if they are exposed to policies and procedures that appear to not to discriminate unfairly between employees, or tend to value some employees more than others. The results also indicate that when public university workers are able to ascertain that within the organisation there are financial incentives, involvement in decision making, and a career path that leads to management, the cases of stress and subsequently poor performance is minimised.

Results of the study indicate that while workers in public universities perceive the organisations as offering them motivation by: being appreciated when they put extra effort at work; department often holding social activities for motivation of staff members; and, promotion being based on performance, motivation among public university workers is still a major source of stress that undermines their performance.

Management in this study refers to how the organization supervisors or leaders assign roles to their subordinates and how effectively those roles are assigned to enhance productivity. Working in a large, hierarchical, bureaucratic organization where employees have little control over their jobs can be very stressful. Additionally, when there is a high concentration of assignments at work: excessive work or work that is outside one's capability, employees gets stressed and perform poorly.

Since in management supervisors hold each employee accountable to their actions and duties, and for the quality of work they produce, role conflict that relates with mismatched role potentials, and role ambiguity which explains the uncertainty of what is expected, leads to stress and eventually interferes with the performance of the university workers.

Respondents were neutral on the statement of whether they were not depressed at work and therefore can perform their duties effectively. Respondents did not also know how to rate whether they felt always lazy, bored and headache lowering their output. Most of the respondents felt that they did not do the best possible job. However, most of the respondents enjoy their work and are committed to it.

Keeping in view the important role of university workers in ensuring that the institution achieves its objectives of sustaining economic and social development of the country, the concept of university workers performance has achieved a strategic significance. The performance of university workers is affected by intra as well as extra organizational factors, which act as impediments to normal routine functioning of the workers. Once the routine functioning of the workers is disrupted, then the university workers develop feelings of exhaustion and frustration, and if the disrupted situation persists then negative dysfunctional feelings hit the workers which can be termed as stress, which is a reaction to the unwanted environmental stressors.

Workers under stress cannot perform well. Their job satisfaction and motivation levels are decreased and they show unwanted behaviours like absenteeism, mistakes during work, drugs use and abuse and violence at work. Furthermore they have more health related physical and psychological complaints. The university employees' satisfaction level is also decreased in such way that the university cannot offer quality education to the students. The resultant effect include complaints from parents and other stakeholders on the status of service delivery at the institutions, frequent strikes, dissatisfied employees and poor performance of the universities in general, and eventually overall image of the educational institution gets damaged.

Motivation involves the ability to make somebody want to do something especially something that involves hard work. In public universities, there is a lot of work as depicted by the results of the study and therefore motivating employees will ensure that they are committed to delivering on their duties. When employees feel motivated to work within the public

universities there will be minimal cases of stress at the workplace leading to positive performance. Effective motivation creates a productive work force, but a lack of motivating factors can leave employees searching for reasons to give their maximum effort. In conclusion the findings confirm that there is a statistically insignificant influence of Worker's motivation on employee performance.

The management of public universities is responsible for ensuring that there are smooth operations within the institution. This calls for ensuring that employees are effectively and efficiently assigned roles that are in line with their abilities to perform. When employees are subjected to a high concentration of assignments at work: excessive work or work that is outside one's capability, employees get stressed and perform poorly. Additionally cases of role ambiguity and role conflict can minimise the ability of the employees to deliver of their roles effectively. As such their performance and productivity will be lowered. It hence follows that poor management exposes the employees to stress, reducing their performance. Conclusively the study confirms that there is a statistically significant influence of management on employee performance. This implies that a positive increase in management score leads to an increase in employee performance.

This study has some limitations. It confined its focus to three universities only. Hence, future research should examine the effects of occupational stress affecting the performance of employees incorporating most of the universities in Kenya. This study and its findings should be viewed as a starting point for more extensive research related to determinant and effects of occupational stress.

Research on other variables presumed related, either directly or indirectly to employee performance should be researched on. Whereas this research has relied on quantitative approaches to examine the effects of occupational stress affecting the performance of employees, an in-depth analysis of individual responses can generate useful inductive information and provide a richer understanding of the factors important in predicting occupational stress affecting the performance of employees.

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APPENDIX 3: TABLES
Table 4.26: Correlations for Employee Performance

	Statistic	g1	g2	g3	g4	g5	g6	g7	g8	g9	g10	g11	g12	g13
g1	Pearson Correlation	1	.009	.012	-.080	.069	.033	-.067	-.019	-.011	-.060	-.037	-.033	-.098
	Sig. (2-tailed)		.871	.833	.153	.205	.544	.217	.726	.845	.273	.498	.541	.075
g2	Pearson Correlation	.009	1	-.025	-.070	.110	.176**	.286**	.141*	-.188**	.265**	-.147**	-.074	.139*
	Sig. (2-tailed)	.871		.658	.229	.053	.002	.000	.013	.001	.000	.009	.197	.016
g3	Pearson Correlation	.012	-.025	1	.104	-.037	-.025	.030	-.016	.028	-.008	-.075	-.059	-.006
	Sig. (2-tailed)	.833	.658		.064	.502	.645	.582	.776	.618	.881	.172	.284	.920
g4	Pearson Correlation	-.080	-.070	.104	1	.076	-.113*	.248**	.040	.261**	.309**	-.261**	-.121*	-.061
	Sig. (2-tailed)	.153	.229	.064		.169	.041	.000	.473	.000	.000	.000	.028	.278
g5	Pearson Correlation	.069	.110	-.037	.076	1	.022	-.121*	.015	-.157**	.136*	.151**	.277**	-.063
	Sig. (2-tailed)	.205	.053	.502	.169		.682	.025	.778	.004	.011	.005	.000	.249
g6	Pearson Correlation	.033	.176**	-.025	-.113*	.022	1	-.155**	.117*	.081	.068	-.273**	-.358**	-.209**
	Sig. (2-tailed)	.544	.002	.645	.041	.682		.004	.030	.134	.212	.000	.000	.000
g7	Pearson Correlation	-.067	.286**	.030	.248**	-.121*	-.155**	1	.162**	.211**	.462**	-.214**	-.140**	.228**
	Sig. (2-tailed)	.217	.000	.582	.000	.025	.004		.003	.000	.000	.000	.009	.000
g8	Pearson Correlation	-.019	.141*	-.016	.040	.015	.117*	.162**	1	.118*	.312**	.022	-.005	.237**
	Sig. (2-tailed)	.726	.013	.776	.473	.778	.030	.003		.028	.000	.688	.933	.000
g9	Pearson Correlation	-.011	-.188**	.028	.261**	-.157**	.081	.211**	.118*	1	.176**	-.070	-.026	-.048
	Sig. (2-tailed)	.845	.001	.618	.000	.004	.134	.000	.028		.001	.194	.637	.382
g10	Pearson Correlation	-.060	.265**	-.008	.309**	.136*	.068	.462**	.312**	.176**	1	.101	.107*	.345**
	Sig. (2-tailed)	.273	.000	.881	.000	.011	.212	.000	.000	.001		.061	.049	.000
g11	Pearson Correlation	-.037	-.147**	-.075	-.261**	.151**	-.273**	-.214**	.022	-.070	.101	1	.693**	.192**
	Sig. (2-tailed)	.498	.009	.172	.000	.005	.000	.000	.688	.194	.061		.000	.000
g12	Pearson Correlation	-.033	-.074	-.059	-.121*	.277**	-.358**	-.140**	-.005	-.026	.107*	.693**	1	.218**
	Sig. (2-tailed)	.541	.197	.284	.028	.000	.000	.009	.933	.637	.049	.000		.000
g13	Pearson Correlation	-.098	.139*	-.006	-.061	-.063	-.209**	.228**	.237**	-.048	.345**	.192**	.218**	1

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

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