INFLUENCE OF JOB DESIGN ON WORKPLACE STRESS IN PUBLIC UNIVERSITIES IN KENYA: A CASE OF JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

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ABSTRACT

This study attempted to investigate the influence of job design on workplace stress in public universities in Kenya with focus on Jomo Kenyatta University of Agriculture and Technology. The specific objectives are to: establish the influence of role ambiguity on workplace stress in public universities and examine the influence of role conflict towards workplace stress in public universities. The research employed a descriptive survey design. The target population was the 2,442 employees of Jomo Kenyatta University of Agriculture and Technology who included both academic and non-academic staff from which a sample size of 100 respondents was drawn. The data was collected by use of a questionnaire. Data was analyzed descriptively by the aid of computer analysis software known as Statistical Package for Social Sciences (SPSS) version 20. The results from the regression analysis revealed that role conflict had a positive significant effect on the workplace stress as an increase in conflicts emanating from different roles led to increase workplace stress. In addition, the factor of role ambiguity also provided a significantly positive effect towards workplace stress. This implied that role ambiguity and role conflict were found to have a significant effect on workplace stress among the higher learning institutions. It therefore recommended that the institutions of higher learning should come up with ways to reduce or manage stress among their employees.

Keywords: Role Conflict, Role Ambiguity, Workplace Stress, Job Design, Public Universities in Kenya
INTRODUCTION

In the recent past years, stress has turned out to be an evolving dilemma in many organizations and hence caused unfavorable effects on employees’ performance (Ling & Bhatti, 2014). There are many dilemmas that influence employees at their workplace; among them is work stress, which occurs at the place of work. The factor of work stress has turned out to be a problem that affects the organization as well as the employees.

According to Dwamena (2012), Stress experienced in several institutions across the globe, has led to a startling increment in the negative effects on production of workers. For instance, firms operating in East and Central Africa, America, West Africa, Caribbean, United Kingdom, the as well as parts of the world. According to American Academy of family Physicians report by the indicated that around two-thirds of the visits to family physicians are as a result of stress-related symptoms (Henry & Evans 2008).

Olaniyi (2013) observed that excessive work related stress is bound to adversely affect the performance of employees in Ireland. Khan, Yusoff and Azam (2014) stated that university teachers in Pakistan were experiencing workplace stress. High level of stress brought about by factors of job design is a major threatening issue to both physical and psychological health of individuals (Dar, et. al., 2011) and affects their cognitive processes involving memory, recall of knowledge and attention (Addae, Parbooteah & Velinor, 2012). In addition, higher levels of stress are connected to lower employee performance, whereas higher job satisfaction point out higher performance (Ali, Hassan, Ali & Bashir, 2013).

Kusi, Mensah and Gyaki (2014) noted that there were several causes of stress among the university staff in Ghana and these include: insufficient preparation for lectures, excessive workload and difficulties in supervising students’ research projects. Mkumbo (2014) indicated that there is a significant proportion of academic staff in Tanzania experiencing high stress, where employees of public universities were found to be more stressed than their counterparts in private universities.

According to Shah and Hasnu, (2013) stress has become a familiar element in organization and nowadays the job design has become more complicated, and this could lead to negative impacts to the employees compared to positive impacts. Stress among workers is greater than before which also effect on the whole performance of the organization. Dwamena (2012) reiterated that job design has been receiving increasing attention, in the area of occupational health, over the past three decades. Therefore, the work and business world has become increasingly subject to fast changing forces like increased competition, the pressure of quality, innovation and an increase in the pace of doing business. The demands on employees grew equally dramatically and this created stress within employees.

Karihe, Namusonge and Iravo (2013) argued that work facilities can be determinants of workplace stress and were found to affect performance of employee in Kenya. On the same note, Nyangahu and Bula (2015) observed that workplace stress had an impact of the performance of employees working in transit hotel in Nairobi City County. Numerous studies found that job stress influences the employees’ job satisfaction and their overall performance in their workplace, because most of the current organizations are more demanding for better job outcomes (McGrath, et. al., 2013).

University staff has a major role to play in achieving the objectives of the institution. The performance of the staff; teaching, non-teaching staff and also as managers, determines to a large extent, the quality
of the student experience in the Universities and has a significant impact on student learning and thereby on the contribution that such institutions can make to the society (Kumar, 2013). This could therefore imply that workplace stress can be a killer of many organizations of which Jomo Kenyatta University of Agriculture and Technology is no exception.

According to the current World Health Organization’s (WHO) (2007), occupational or work-related stress is the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope. Steve (2011) described workplace stress as any condition that results from a reaction of an employee when certain demands, pressures and professional aspects have to be faced at the workplace which does not match their knowledge levels there by posing a challenge and threat to the capabilities of the employee which in turn would create a struggle for existence in terms of being employed in a place.

Higher learning institutions (HLIs) create and cultivate knowledge for building a modern world where leaders are groomed to lead the nation with social justice. There are many factors that should be considered especially with regards to the welfare of human resource in achieving the mission and vision of the universities. One of these factors is job satisfaction, as it is important for retaining employees (Masum, Azad, & Beh, 2015).

Numerous studies found that job stress influences the employees’ job satisfaction and their overall performance in their workplace, because most of the current organizations are more demanding for better job outcomes (McGrath et. al., 2013). University staffs have a major role to play in achieving the objectives of the institution.

Jomo Kenyatta University of Agriculture and Technology (JKUAT), was established in 1994 as a non-profit public higher education institution and is located in the suburban setting of the large city of Nairobi. This institution has also branch campuses in Mombasa, Taita Taveta, Nakuru, Kisii, Kitale, Arusha (Tanzania). It is officially accredited/recognized by the Commission for University Education (CUE), Kenya. JKUAT provides several academic and non-academic facilities and services to students including a library, housing, sport facilities and/or activities, financial aids and/or scholarships, study abroad and exchange programs, online courses and distance learning opportunities, as well as administrative services.

Just like any other recognized higher learning institutions, JKUAT experiences a bourgeoning student population which also places stresses on the university’s staff to deliver services as outlined in the services charter. The problem is exacerbated by the lack of space to provide employees with the conducive environment to perform their tasks. Looking at the Institution as it is, there are quite a number of observable behaviors that one may want to look at and get a feeling of and realize that help in terms of counselling may be of great necessity.

High levels of lateness in reporting to work and or duty station is an area of great concern among University employees. Staff have made a habit and found it normal to be late to work unless there is an important and prior arrangement of a particular activity that will necessitate the coming to work early or on time.

This is also observed in the number of days in terms of absenteeism from work place and/or work station, by staff as being late can easily lead to not appearing at all. There is also the habit of story-telling at the corridors which end up taking a lot of time for the institution. These challenges have a
potential for work-related stress among employees which are more likely to affect their performance and their productivity leading to inefficiency in public universities services. Employees are also bound to transfer the work-related stress to their social and family life and therefore affect their interpersonal relationships.

**Statement of the Problem**

Workplace stress is a general concern which can harm employees physically or emotionally and this can occur with presence of conflicts that arise through job demands of employees and the control level of which an employee is able to meet those demands (Mohanraj & Manivannan, 2013). Most organizations with the aim of attaining higher productivity end up burdening employees with overload of work in order to meet deadline and this might have psychological and physical effects on the employees which may result in something contrary to what these organizations want to achieve (Dwamena, 2012). Although organizations are paying more attention than in the past to the consequences of the stress among their employees when they place extra-ordinary demands on them, there is still more room for improvement (Ling & Bhatti, 2014).

Several studies have been conducted on the workplace stress. Nationwide survey conducted in Ghana indicated that, about 58% of the workforce in organizations suffers from stress – related problems (The Weekly Mirror, 2006). Olaniyi (2013) found out that excessive work related stress is bound to adversely affect the performance of employees. Similarly, a study done by Khan, Yusoff and Azam (2014) indicated that there was a relationship between factors on both intra and extra organizational environments of universities in Pakistan. Kusi, Mensah and Gyaki (2014) discovered that there are several causes of stress among the university staff, which included excessive workload, insufficient preparation for lectures and difficulties in supervising students’ research projects.

A study done by Mkumbo (2014) indicated that there was a significant proportion of academic staff in Tanzania who were reported to experience high stress, with respondents in public universities reporting being more stressed than their counterparts in private universities. Karihe, Namusonge and Iravo (2013) study disclosed that there was a statistically significant influence of working facilities on employee performance. Furthermore, Nyangahu and Bula (2015) study findings showed that there was significant relationship between work stress and employee performance and that work stress significantly affected the performance of an individual and stress management techniques are not highly regarded or utilized by management.

Although there were existing researches done to better understand the concept of work stress, there was still a wide range of research opportunities since they presented both conceptual and contextual gaps in this subject matter that need more research to help further build on related theories. Therefore, this study attempted to address this issue through a quantitative research on the effect of job design (proxied by role ambiguity and role conflict) on workplace stress in higher academic settings.

**Objectives of the Study**

To examine the influence of job design on workplace stress in public universities in Kenya with focus on Jomo Kenyatta University of Agriculture and Technology. The specific objectives of this study were:-
To establish the influence of role ambiguity on workplace stress in public universities
To examine the influence of role conflict towards workplace stress in public universities

LITERATURE REVIEW

Theoretical Review

Welford’s Performance and Demand Theory

Welford’s performance and demand theory state that stress arises whenever there is a departure from optimum conditions of demand which the person is unable to correct. Organisms including man appear to have evolved so that they function best under conditions of moderate demand. An individual’s performance is less than maximum efficiency if they experience either too high or too low level of demand. Margetts (2010) offers a similar approach in terms of stimulus input. Living organisms adjust themselves to maintain a reasonable input of stimuli. If the input of stimuli is excessive or insufficient for the individual organism, the excess or insufficiency can be considered stressful. The organism’s homeostasis is threatened by stress, and if it cannot manage the threat, it goes into a state of disequilibrium or breakdown. This may be temporary, pending readjustment, or may proceed to a more profound disorder, leading to functional or structural pathology. This theory is credited for using the inverted U when explaining the relationship between demand and performance, which has some biological validity (Nakata et. al., 2012). Bloona (2011) argues that just like the response based theory, the Welford performance and demand theory leaves out individual characteristics which explain why people perform differently under the same stressor. Cox et. al. (2010) proposed a more complex theory, which grew out of the need to systematically understand the transaction between the individual and his environment. The primary focus of this theory is on individual perceptual phenomena rooted in psychological process. They explain the role of cognitive appraisal of potentially stressful situation in determining how one will react. Welford’s performance and demand theory benefitted this study since it supported the objective one which was dealt with establishing the effect of work load on workplace stress in public universities. The presence of this perceptual factor allows for operations of a wide variety of orgasmic variables such as personality which contributes to the existence of individual characteristics. This theory is credited for introducing the individual variation aspect since it considers the status of the individual in relation to his environment and also brings in the individual characteristics which are often forgotten in laboratory studies. Critics of this theory argue that it does not account for situations that place psychological demands without the immediate involvement of other more physiological processes (Cox et. al., 2010).

Herzberg’s Two Factor Theory

Hertzberg’s two factor theory has been used to explain occupational stress. He carried out his now famous survey on 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 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, none job related factors such as company policies, salary and supervisory style. Cox (2010) in his studies on stress suggests that lack of job satisfaction results to stress and improving the hygiene factors by redesigning and enriching jobs will promote satisfaction which will in return reduce
stress and improve performance. Hertzberg’s theory benefitted this study through establishment of the influence of role ambiguity on workplace stress in public universities. In any given work environment, work is credited for its stimulating thought of introducing motivation at the workplace and therefore giving employees 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, 2011).

Conceptual Framework

Role Ambiguity
- Positions allocated
- Number of tasks repeated
- Meaningless tasks done

Role Conflict
- Roles accomplished
- Number of roles delegated
- Disagreement cases handled

Workplace Stress
- Amount of work
- Type of rewards
- Workplace relationship

Independent Variables

Dependent Variable

Empirical Literature Review

Role Ambiguity

Srikanth and Jomon (2013) defined role ambiguity based on classical role theory as lack of information available to perform one’s responsibilities effectively. Role is an expectation from an organization towards behavior of employees who hold positions in an organization. Role ambiguity is mentioned as a prediction towards a person’s behavior responses and clarification of a person's role or behavior requirement. Role ambiguity mostly indicates that an employee is not clear or does not know their responsibility at their workplace or their job description. Onyemeh (2013) mentioned that job performance of employees was affected by role ambiguity and role conflict. Besides this, job anxiety would increase when the role of an employee was not understandable to him or her and it frankly would decrease their job performance. Jamal and Preena (2013) stated that when there is an imbalance between job demand or job control, an employee would experience job ambiguity therefore underperforming leading to increase of stress levels as he would be unable control or handle situations at work. Wright and David (2013) argue that when an employee is not affected by role ambiguity, is very clear about his or her job description and the expectations of the job, his or her job satisfaction will automatically increase therefore increasing their productivity in an organization. Similarly, Singh (1993) conducted a study to examine the negative relationship between role ambiguity and job performance among 472 sales and marketing executives (SME) from small and medium size business in America (USA). As predicted, the results indicated that role ambiguity was negatively related to job performance. The study also mentioned that job performance was strongly affected by role ambiguity as per the findings from the research. June and Mahmood (2011) conducted a study to examine the negative relationship between role ambiguity and job performance among 1500 employees from the service sector in Malaysia. The results showed that role ambiguity had a negative relationship with job performance. In addition, a study conducted by Celik (2013) reported a significant and negative relationship of role ambiguity towards job performance and job satisfaction among 200 principals in high schools in the city of Denizli and...
In a sample of 169 administrators of auditors in New Zealand, Fisher (2001) found a significant and negative relationship between role ambiguity with job performance and job satisfaction. Knight, Kim and Crutsinger (2013) also examined the effects of role stress on job performance among 259 participants from sales department at a supermarket in the United States of America. The results showed that role ambiguity was negatively and significantly related to job performance.

**Role Conflict**

Role conflict is defined as a multi role play by an individual creating incompatibility of conditions and expectations of the role (Rizzo et. al., 2010). Role conflict is highly attained in the jobs that require critical thinking and high level decision making. These researchers further defined the role conflict by employee impact as lack of wider resources, bent rules or policies fixed by an organization, and employees who receive conflicting requests. Fried et. al. (2012) mentioned that role stressors which affect job performance in various ways like lack of employee effort to work proved in the theoretical and empirical studies that role conflict negatively affects job performance. Similarly, (Frone, 2010) stated that conflict between supervisors and workers not only affected the emotions of employees, but also the job outcome hence leading to burnout. Substantial amount of past studies has shown that role conflict has negatively related to the workers' behavior causing poor job performance. For instance, Fogarty, Singh, Rhoads and Moore (2010) carried a research on the influence of role conflict and job satisfaction on performance of employees in an organization. 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 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 out that individuals with type B personality managed conflict better and were at an advantage of managing large organizations. Rum, Troena, Hadiwidjoyo and Surachman (2013) conducted a study on role conflict towards employee performance and examined that role conflict had a negative and significant relationship with job performance among 131 Civil Servants in Regional Apparatus Work Unit (RAWU) in Indonesia. The study established that role conflict decreased job performance.

**Workplace Stress**

Steve (2011) explained workplace stress as an employee reaction resulted when certain demands, pressures and professional aspects have to be faced at the work place which does not match their knowledge levels thereby posing a challenge and threat to the capabilities of the employee which in turn would create a struggle for existence in terms of being employed in a place. According to Olulana (2015) and Jaffe, Smith and Segal (2007) different professional context also creates stress conditions to the employees at the work place. For instance, when the employee feels that he or she is not being supported by their managers, leaders or colleagues, when they don’t have control over the work they do, they end up lacking the knowledge of completing a task or meeting the requirements of the given task and the constraints that they would have to face in doing so. 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 was dissimilar for different teachers. Gathungu and Wachira (2013) carried out a study on the job satisfaction factors that influenced the performance of secondary school principals in their administrative functions in Mombasa County, Kenya. They found out that the determinants of stress included 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. 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 was responsible for all workers through the Ministry of Labour and had the duty to set regulations on minimum pay, health and safety of workers among others. They suggested that FKE and COTU should come-up with regulations that will prevent or manage stress. They further suggested that Human Resource Managers who work 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.

RESEARCH METHODOLOGY

The study employed a descriptive survey design to determine the influence of job design on workplace stress in public universities in Kenya. Descriptive survey designs were used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification (Orodho, 2004). This study was conducted among the academic and non-academic staff in Jomo Kenyatta University of Agriculture and Technology. This was done to ensure proportionality in the survey in order to avoid biasness. There are 2,442 staff members working in JKUAT, all of whom were targeted. Data was collected using a questionnaire. The primary data was gathered by use of questionnaire which included questions on all aspects covered in the study. The closed questions included in the questionnaire made it easier to process answers, as they enhanced comparability of answers thus making it easier to show the relationship between variables. The study used both descriptive and inferential analysis to analyze collected data. The computer software Statistical Package for Social Sciences (SPSS) version 20 was used to aid in analysis by generating data array which was used for subsequent analysis.

FINDINGS AND PRESENTATION

There was a target of 100 respondents anticipated by the study to respond to survey questionnaire on the aspect of job design and workplace stress. However, out of that total number estimated, only eighty three (83) of them responded by filling in and returning the questionnaires. Thus, the projected response rate was 83 percent. An implication that, the remaining seventeen (17) questionnaires were either not answered properly or were not return. The research resolved to ascertain to know the duration of which the respondents had been working at the Jomo Kenyatta University of Agriculture and Technology. The findings showed the duration of time in years which was put in various sensible categories ranging from 1 – over 10 years. The findings reported indicated that 36.1% of the respondents had worked at the university for a period of between 1 – 3 years. About 26.5% had been working with this institution for an estimated number of between 4 – 6 years; those who had
worked with the university for a period of between 7 – 10 years were represented by 21.7% while 15.7% of the respondents indicated to have worked at JKUAT for a lengthy time of over 10 years. These findings could imply that JKUAT was consistent in its employment of labour force and that the respondents who participated in this research had been at this institution, for a sizeable number of years and therefore able to understand the institution activities. As regards the highest educational level, the results showed that majority (38.6%) of the respondents from which data was gathered, were holders of a bachelor’s degree as their highest level of education. An estimate of 26.5 percent had attained a highest education level of master’s degree, 14.5% were found to have a doctoral degree. Furthermore, 12 percent of the respondents from JKUAT were found to have attained diploma as their highest educational level, while 8.4 percent of the respondents were reported to have secondary certificates. This findings had an indication that the respondents whose researched was conducted on had prerequisite educational level and this would have facilitated their understanding of the concepts being investigated by the study.

**Descriptive Statistics**

**Role Ambiguity**

The first objective was to establish the influence of role ambiguity on workplace stress in public universities. The following sub-sections were comprised of the findings of this objective.

On presence of role ambiguity at JKUAT, The research sought find out whether there were role ambiguities at the institution under investigation. From the findings displayed in Table 1, it was discovered that majority (89.9%) of the employees under study felt that role ambiguities were being experience at JKUAT.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role ambiguity experienced</td>
<td>71</td>
<td>89.9</td>
</tr>
<tr>
<td>Role ambiguity not experienced</td>
<td>8</td>
<td>10.1</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>100</td>
</tr>
</tbody>
</table>

On contrary, 10.1% felt otherwise. The findings echoes that of Celik (2013) which indicated a significant relationship of role ambiguity towards job performance and job satisfaction. To add on that, the findings were in line with that of Fisher (2001) that there is a significant relationship between role ambiguity with job performance and job satisfaction.

On the extent of role ambiguity influencing workplace stress, the findings of the study are as specified in Table 2. These findings showed that 27.8% of the respondents were of the view that this factor affected workplace stress to a very large extent. An estimated of 19% of them felt that to a large extent, role ambiguity influenced workplace stress. Those who said that role ambiguity influenced workplace stress moderately had 17.7%, while those felt that this factor influenced stress at workplace to a little extent and to no extent were also represented by 17.7% each. The findings were agreeable with that of Singh (1993) which shoed indicated that role ambiguity had a significant relationship with job performance.
Table 2: The Extent of Role Ambiguity Influencing Workplace Stress

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very large extent</td>
<td>22</td>
<td>27.8</td>
</tr>
<tr>
<td>Large extent</td>
<td>15</td>
<td>19.0</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>14</td>
<td>17.7</td>
</tr>
<tr>
<td>Little extent</td>
<td>14</td>
<td>17.7</td>
</tr>
<tr>
<td>No extent</td>
<td>14</td>
<td>17.7</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>100</td>
</tr>
</tbody>
</table>

In rating the influence of role ambiguity on workplace in the higher learning institutions, the study findings are as shown in Table 3. It was seen that 35.4% of the respondents were neutral on the aspect of work stress among employees being highly influenced by role ambiguity. The respondents who disagreed with this opinion had a representation of 32.9%. Those who agreed to it had 20.3%, about 6.3% of them strongly disagreed and 5.1% of those JKUAT employees investigated strongly agreed that work stress among employees is highly influenced by role ambiguity.

On the opinion of whether the employees at JKUAT were not clear or did not know the real responsibility in their work or job description, 38% of the respondents were neutral on this aspect, 29.1% of them agreed with it, 16.5% of the respondents strongly agreed with this statement, 11.4% disagreed with fact that they were not clear or did not know the real responsibility in their work or job description, while only 5.1% strongly agreed with this statement.

The study as well sought to know the level of respondents’ agreement with statement that role ambiguity increased job anxiety which decreased their job performance. Approximately, 38% of the respondents agreed with this statement, 20.3% had neutral opinion on this aspect, 16.5% strongly disagree with this phrase, while those who strongly agreed and disagreed had 12.7% each.

Table 3: Rate of Response of Statements on Role Ambiguity

<table>
<thead>
<tr>
<th>Respondents Opinion on Role Ambiguity</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work stress among employees is highly influenced by role ambiguity</td>
<td>6.3%</td>
<td>32.9%</td>
<td>35.4%</td>
<td>20.3%</td>
<td>5.1%</td>
<td>100%</td>
<td>2.85</td>
<td>0.99</td>
</tr>
<tr>
<td>Employees in our institution are not clear or do not know the real responsibility in their work or job description</td>
<td>5.1%</td>
<td>11.4%</td>
<td>38.0%</td>
<td>29.1%</td>
<td>16.5%</td>
<td>100%</td>
<td>3.41</td>
<td>1.06</td>
</tr>
<tr>
<td>Role ambiguity increases job anxiety which decrease the job</td>
<td>16.5%</td>
<td>12.7%</td>
<td>20.3%</td>
<td>38.0%</td>
<td>12.7%</td>
<td>100%</td>
<td>3.18</td>
<td>1.29</td>
</tr>
</tbody>
</table>
performance of an employee
Employees in our institution are always assigned monotonous tasks
Tasks available in our institutions are under-stimulating
Some of the tasks assigned to employees are meaningless
Unpleasant tasks are normally assigned to employees unwillingly
Some of the tasks assigned to employees by the management are aversive

<table>
<thead>
<tr>
<th>Overall Mean</th>
<th>3.2</th>
</tr>
</thead>
</table>

The findings given on phrase of workers of higher learning institutions being assigned monotonous tasks point out that majority (44.6%) of the respondents gave neutral views. It was observed that 23% of the strongly disagreed with this idea, 16.2% agreed to it, 9.5% disagreed and 6.8% strongly agreed that their institution always assigned them monotonous tasks. In view point of tasks available in higher learning institutions being under-stimulating, respondents had divided opinion on their responses as those who agreed and disagreed each had a percentage of 29.1. In addition, 21.5% of the respondents gave neutral views on this declaration, while those who strongly agreed had a representation of 13.9% and 6.3% stand for those who strongly disagreed.

On the issue of some of the tasks assigned to employees being meaningless, 27.8% of the employees from which the study was carried out strongly disagreed with it, 22.8% strongly agreed with this narration, while those who were neutral and those who agreed with this sentence had a representation of 17.7% each, and a small number of 13.9% agreed that some of the tasks assigned to them were meaningless. Moreover, the study sought the respondents’ opinion on the question of whether unpleasant tasks were being assigned to employees unwillingly and the responses show that 40.5% of them strongly agreed with this statement, 32.9% agreed, those who disagreed and strongly disagreed had representations of 11.4% and 10.1% respectively, while only 5.1% were neutral on this aspect.

About 46.8% of the respondents agreed with the statement that some of the tasks assigned to them by their management are aversive, 39.2% of them disagreed with this statement, while those who were neutral on it and those who strongly agreed had a representation of 63.3% and 7.6% respectively. The results support that of June and Mahmood (2011) that role ambiguity is statistically related to job performance. Furthermore, the findings of Knight, Kim and Crutsinger (2013) showed that role ambiguity was negatively and significantly related to job performance.

Role Conflict
The last objective was to examine the influence of role conflict towards workplace stress in public universities. This section therefore presents the findings on the responses given on questions of objective four.

On presence of role conflict at JKUAT, there was need to inquire whether the employees of JUAT were experiencing role conflicts at their workplace.
The results of the findings given in Table 4 had an indication that all the respondents (100%) unanimously agreed that they were experiencing role conflicts at their place of work.

Table 4: Presence of Role Conflict at JKUAT

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role conflict experienced</td>
<td>83</td>
<td>100.0</td>
</tr>
<tr>
<td>Role conflict not experienced</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

This could imply that role conflict was one of the major indicators of stress among the employees of Jomo Kenyatta University of Agriculture and Technology. In support to this revelation, a study by Karatepe et. al. (2012) discovered that the effect of role conflict was positive and the emotional exhaustion on turnover intentions was weaker among the frontline employees with longer tenure.

To a moderate extent, 47% of the employees felt that role conflicts caused stress at their institution. Those who thought that it affected workplace stress to a very large extent had a representation of 36.1%. While 16.9 of the respondents believed that it affected stress of workplace to a large extent. An indication that, role conflict was among the major factors that cause workplace stress. The findings corresponded to that of Rum, Troena, Hadiwidjyo and Surachman (2013) that role conflict was significantly affecting job performance negatively.

Table 5: Extent to Which Role Conflict Cause Stress at Workplace

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very large extent</td>
<td>30</td>
<td>36.1</td>
</tr>
<tr>
<td>Large extent</td>
<td>14</td>
<td>16.9</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>39</td>
<td>47.0</td>
</tr>
<tr>
<td>Little extent</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No extent</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

On the rate at which role conflict influence workplace stress , the statements of role conflict were rated based on a likert scale of 1 – 5, where 1 represented strongly agreed, 2 was a representation of disagree, 3 was equal to neutral, 4 represented agree, and 5 meant strongly agree. Based on the findings given Table 6, it was clear that 47% of the respondents were neutral on the view point that role conflict affected the job performance in institutions of higher learning. On the same note, 31.3% of the employees
investigated agreed with this perception, while 21.7% strongly agreed with it. An overwhelming majority (70.5%) of the respondents agreed with the opinion that job stress was being experienced in universities due lack of role clarity. Similarly, 14.1 strongly agreed to this sentence, 6.4% were neutral, while those who disagreed and strongly disagreed had a representation of 5.1% and 3.8% respectively. On whether employees experience conflict of roles within the same job, 32.9% agreed to this statement, 31.6% were neutral, 29.1% strongly agreed, while 6.3% strongly disagreed with it.

On the aspect of some employees being aware of their responsibility at workplace, the results show that 42.2% of the respondents strongly agreed with this assertion, 36.1% of them were neutral, 16.9% agreed to it and 4.8% disagreed. In addition, this sub-section sought to investigate the level to which the respondents were agreeable with the assertion that job stress was experienced by employees who continuously deal with other people’s problems. In response to this, employees had equally divided views by some being neutral and some agreeing on this statement with each being represented by 38.6%. Some who strongly agreed to this point were 18.1% and a few 4.8% disagreed.

Table 6: Rate at Which Role Conflict Influence Workplace Stress

<table>
<thead>
<tr>
<th>Respondents Opinion Role Conflict</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role conflict affect the job performance in our institution</td>
<td>0.0%</td>
<td>0.0%</td>
<td>47.0%</td>
<td>31.3%</td>
<td>21.7%</td>
<td>100%</td>
<td>3.75</td>
<td>0.79</td>
</tr>
<tr>
<td>Job stress is experienced in our institution due lack of role clarity</td>
<td>3.8%</td>
<td>5.1%</td>
<td>6.4%</td>
<td>70.5%</td>
<td>14.1%</td>
<td>100%</td>
<td>3.86</td>
<td>0.86</td>
</tr>
<tr>
<td>We experience conflict of roles within the same job</td>
<td>6.3%</td>
<td>0.0%</td>
<td>31.6%</td>
<td>32.9%</td>
<td>29.1%</td>
<td>100%</td>
<td>3.78</td>
<td>1.07</td>
</tr>
<tr>
<td>Some employees are aware about their responsibility at workplace</td>
<td>0.0%</td>
<td>4.8%</td>
<td>36.1%</td>
<td>16.9%</td>
<td>42.2%</td>
<td>100%</td>
<td>3.96</td>
<td>0.99</td>
</tr>
<tr>
<td>Job stress is experienced by employees who continuously deal with other people’s problems</td>
<td>0.0%</td>
<td>4.8%</td>
<td>38.6%</td>
<td>38.6%</td>
<td>18.1%</td>
<td>100%</td>
<td>3.70</td>
<td>0.82</td>
</tr>
<tr>
<td>Conflict between supervisors and workers not only affect the emotion of employees, but affect the job outcomes and it leads to burnout</td>
<td>0.0%</td>
<td>4.8%</td>
<td>42.2%</td>
<td>36.1%</td>
<td>16.9%</td>
<td>100%</td>
<td>3.65</td>
<td>0.82</td>
</tr>
<tr>
<td>Role conflict has negatively related to the workers' behavior causes a drop in the job performance</td>
<td>0.0%</td>
<td>4.8%</td>
<td>48.2%</td>
<td>27.7%</td>
<td>19.3%</td>
<td>100%</td>
<td>3.61</td>
<td>0.85</td>
</tr>
<tr>
<td>Overall Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.76</td>
<td></td>
</tr>
</tbody>
</table>

An estimate of 42.2% of the employees from whom study was carried out were neutral on the opinion that conflict between supervisors and workers not only affected the emotion of employees, but affected the job outcomes leading to burnout. On identical statement 36.1% of them agreed to it,
16.9% strongly agreed, while 4.8 disagreed with the said statement. In relation to the feedback on role conflict having negatively related to the workers' behavior causing a drop in the job performance, 48.2% had neutral views, 27.7% agreed with this statement, 19.3% strongly agreed to it while 4.8% of the respondents felt that role conflict had not negatively related to the workers' behavior that caused a drop in the job performance. Cavanaugh et. al. 2010) found out that individuals with type B personality managed conflict better and were at an advantage of managing large organizations. Rum, Troena, Hadiwidjoyo and Surachman (2013) examined that role conflict had a significant relationship with job performance.

**Workplace Stress**

This research further included questions of the dependent variable which was workplace stress. Therefore, this section comprises of the feedback of questions under this portion.

**Table 7: Percentage Distribution on Experience of Workplace Stress**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experienced</td>
<td>70</td>
<td>84.3</td>
</tr>
<tr>
<td>Not experienced</td>
<td>13</td>
<td>15.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

On extent to which workplace stress is experienced, about 28.9% of those who were experiencing general workplace stress reiterated that this occurred to a very large extent. Those who experienced regular stress at their place of work to a moderate extent and to no extent had a representation of 21.7% each. To a large extent, 16.9% of the respondents were experiencing general workplace stress, while 10.8% of them experienced regular stress just but to a little extent as indicated in Table 8.

**Table 8: Extent to Which Workplace Stress is Experienced**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very large extent</td>
<td>24</td>
<td>28.9</td>
</tr>
<tr>
<td>Large extent</td>
<td>14</td>
<td>16.9</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>18</td>
<td>21.7</td>
</tr>
</tbody>
</table>
This could be an indication that university workers experience common stress which emerged from their daily routines. Gathungu and Wachira (2013) found out that employees experienced stress which was determined by mentoring and training needs, team work, job satisfaction, cooperation, job enhancement, the development, promotion, management and recognition of success.

On rating statement on workplace stress, respondents were required to rate the opinions related to workplace stress and the finding are as stated in Table 9. On the level of agreement with the opinion that workplace stress come around due to job tension, 43.4% of the respondents had neutral responses. Those who agreed and strongly agreed, each was represented with 14.5%, 16.9% of the respondents strongly disagreed with this statement, while 10.8% of the respondents disagreed.

About 42.2% of the respondents agreed with the fact that some of the job demands experienced in higher learning institutions can lead to workplace stress. On the similar note, 27.7% of them disagreed with this opinion, 16.9 of the respondents were neutral, while 13.3% strongly agreed with statement that some of the job demands experienced in their institution had a possibility of leading to workplace stress.

The other statement was on whether the workers of institution of higher learning got workplace stress through irritability. 32.5% of the respondents provided neutral views on this aspect, around 21.7% agreed with this claim, 18.1% disagreed with it, 16.9% strongly agreed that employees in their institution get workplace stress through irritability, while those who strongly disagreed had a representation of 10.8%. Additionally, 26.5% of the respondents equally strongly disagreed and were neutral on the issue of employees being stressed due to limited control at workplace, 21.7% of them disagreed, 16.9% agreed and those who strongly agreed had a representation of 8.4%.

The study further saw it wise to seek the level of respondents’ agreement of the statement of lack of support can lead to stress at the workplace of employees. Based on the findings, 30.1% agreed to this opinion, 25.3% were neutral, 16.9% strongly agreed, while those who disagreed and strongly disagreed were represented by 12% and 15.7% respectively.

Table 9: Rating Statement on Workplace Stress

<table>
<thead>
<tr>
<th>Respondents Opinion Workplace Stress</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace stress come around due to job tension</td>
<td>16.9%</td>
<td>10.8%</td>
<td>43.4%</td>
<td>14.5%</td>
<td>14.5%</td>
<td>100%</td>
<td>2.99</td>
<td>1.23</td>
</tr>
<tr>
<td>Some of the job demands experienced in our institution can lead workplace stress</td>
<td>0.0%</td>
<td>27.7%</td>
<td>16.9%</td>
<td>42.2%</td>
<td>13.3%</td>
<td>100%</td>
<td>3.41</td>
<td>1.04</td>
</tr>
<tr>
<td>Employees in our institution get</td>
<td>10.8%</td>
<td>18.1%</td>
<td>32.5%</td>
<td>21.7%</td>
<td>16.9%</td>
<td>100%</td>
<td>3.16</td>
<td>1.22</td>
</tr>
</tbody>
</table>
workplace stress through irritability

Due to inadequate control at workplace, employees are stressed
Lack of support leads to workplace stress
Our institution experience poor working relationship among employees

Overall Mean

<table>
<thead>
<tr>
<th></th>
<th>26.5%</th>
<th>21.7%</th>
<th>26.5%</th>
<th>16.9%</th>
<th>8.4%</th>
<th>100%</th>
<th>2.59</th>
<th>1.28</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.7%</td>
<td>12.0%</td>
<td>25.3%</td>
<td>30.1%</td>
<td>16.9%</td>
<td>100%</td>
<td>3.20</td>
<td>1.30</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>27.7%</td>
<td>36.1%</td>
<td>24.1%</td>
<td>12.0%</td>
<td>100%</td>
<td>3.20</td>
<td>0.98</td>
<td></td>
</tr>
</tbody>
</table>

On whether JKUAT experienced poor working relationship among employees, 36.1% of the respondents were neutral, 27.7% disagreed, 24.1% agreed and 12% strongly agreed with this statement. These research findings were in line to that of Yambo, et. al, (2012) who found out that the sources of stress were role based, task based, conflict mediating and boundary spanning. Furthermore, Gathungu and Wachira (2013) discovered that workplace stress was real among the employees and some of the determinants highlighted by their study were: mentoring and training needs, team work, job satisfaction, cooperation, job enhancement, the development, promotion, management and recognition of success.

CONCLUSION AND RECOMMENDATIONS

Overwhelming majority of the employees under study felt that role ambiguities were being experienced at JKUAT. Most of the respondents were of the view that this role ambiguity affected workplace stress to a very large extent. A substantial number of the respondents were neutral on the aspects of workplace stress among employees being highly influenced by role ambiguity and that of employees at JKUAT not being clear or not knowing the real responsibility in their work or job description. Interviewees were agreeable to the statement that role ambiguity increases job anxiety which decrease workers’ job performance. The findings given on phrase of workers of higher learning institutions being assigned monotonous tasks point out that majority of the respondents had neutral views as far as this opinion is concerned.

In view point of tasks available in higher learning institutions being under-stimulating, respondents had divided opinion on their responses as those who agreed and disagreed were leading with the same percentages. Most of the respondents strongly disagreed with the issue that some of the tasks assigned to employees were meaningless. On the other hand, majority of them strongly agreed with the statement that unpleasant tasks were being assigned to employees unwillingly. An average number of the respondents agreed with the statement that some of the tasks assigned to them by their management were aversive.

With respect to role conflict, the study discovered that all the respondents who participated in this study unanimously agreed that they were experiencing role conflicts at their place of work. When asked the extent to which role conflicts had caused stress at their institution most of the respondents indicated that this happened to a moderate extent. Averagely, the respondents were neutral on the view point that role conflict affected the job performance in institutions of higher learning. However, an overwhelming majority of the
respondents agreed with the opinion that job stress was being experienced in universities due lack of role clarity. On whether employees experience conflict of roles within the same job, a good number of them agreed to this statement. The findings revealed that most of them strongly agreed that some employees were aware of their responsibility at workplace. In addition, respondents had equally divided views by some being neutral and some agreeing with the assertion that job stress was being experienced by employees who continually dealt with other people's problems. A large number of the respondents were neutral on the opinion that conflict between supervisors and workers not only affect the emotion of employees, but affect the job outcomes leading to burnout. Last but not least, employees had neutral views on the fact that role conflict has been negatively related to the workers' behavior causing a drop in the job performance.

**Conclusion of the Study**
The main intention of this research was to examine the influence of job design on workplace stress in public universities in Kenya based on data from Jomo Kenyatta University of Agriculture and Technology. Based on the findings of this research it was concluded that employees in the institutions of higher learning experienced stress at their place of work. This was found to be caused by three factors namely role conflicts and role ambiguity.

There was a significant and positive relationship when role conflict was regressed against workplace stress. This revelation led to a conclusion that university employees faced some conflicts rising from roles assigned to them since they unanimously agreed that they were experiencing stress through this factor.

In role ambiguity perspective being regressed by workplace stress, it was also found to have a significant effect on workplace stress among the higher learning institutions. Therefore, this can be seen as another key indicator of stress among the university staff.

**Recommendations of the Study**
For the management of Jomo Kenyatta University of Agriculture and Technology to realize good performance and high production among its employees, it should come up with ways to reduce ambiguity of duties among their employees, since this factor was found to promote workplace stress.

The JKUAT administrators should create a conducive working environment to promote communication among the employees and with proper guidelines on the responsibilities of every staff so as to avoid the perceived effects brought about by role conflict.

**Areas for Further Research**
There is a need for further studies whose data should be based on use of more than one university, which should comprise of a larger sample size to help in understanding more on how job design attributes affect employees at place of work. By doing this, the generalization of the results will be justified. Furthermore, the study suggested that there should be more investigation on the consequences and antecedents of role ambiguity and workplace stress among the administrative and academic staff. This study discovered that job control did not have any influence on workplace stress. This calls for further research in different study areas to help ascertaining the basis of this reality. There exists conflicting results on the aspect of work load and its effect on workplace stress among the employees as some reports found it to have positive effect while others produced negative effect. Therefore, it can be suggested that an empirical study be carried out in different settings, to support the justification and generalization of this construct.
REFERENCES


Salami, O. S. (2010). Job-Related Stress, Personality, Social Support and Burnout among College Education Lecturers. 7 (5) 110 - 124


