INFLUENCE OF EMPLOYEE MOTIVATION ON PERFORMANCE IN SELECTED RESEARCH INSTITUTIONS IN NAIROBI CITY COUNTY, KENYA

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©2019
International Academic Journal of Human Resource and Business Administration (IAJHRBA) | ISSN 2518-2374

Received: 10th September 2019
Accepted: 20th September 2019

Full Length Research

Available Online at:
http://www.iajournals.org/articles/iajhrba_v3_i6_354_374.pdf

Citation: Mwabu, G. M. & Were, S. (2019). Influence of employee motivation on performance in selected research institutions in Nairobi City County, Kenya. International Academic Journal of Human Resource and Business Administration, 3(6), 354-374
ABSTRACT

In this competitive era, Institutes are focusing on developing their workforce and improving performance in their Institutions. One of the tools available to a manager for motivating and influencing the employees is rewarding and promoting them. Many Institutes have realized the importance of attracting and retaining highly skilled, quality employees as a necessary component of their competitive advantage. The purpose of the study was to investigate the influence of employee motivation on work performance in selected research institutes in Nairobi City County. The target population was management personnel: directors, middle-level management managers, and lower-level managers from Kenya Agricultural & Livestock Research Organization and Kenya Medical Research Institute. The target interviewees were 356 respondents, of whom 96 were from Kenya Agricultural & Livestock Research Organization and 260 from Kenya Medical Research Institute. A total of 51 respondents were sampled from Kenya Agricultural & Livestock Research Organization and 137 respondents were sampled from Kenya Medical Research Institute, comprising a sample size of 188. The study used stratified random sampling technique in choosing the sample sizes. The data was collected using questionnaires which were self-administered to the respondents by the researcher by use of drop and pick later method. Quantitative data obtained were analyzed using SPSS (Version, 21). Correlation and regressions methods were used to examine the relationship between the dependent and independent variables. Data were presented in bar charts, graphs and pie charts. Quantitative data was presented in form of frequency distribution tables, pie charts and bar graphs. The study findings indicated that reward management, career growth, work environment and training and development have a positive and significant influence on performance. The study findings led to the conclusion that an increase in reward management practices such as salary, allowances, benefits and bonuses increase in performance. The study further concludes that an improvement in training and development practices involving training programs, training design, induction process and training techniques leads to a better execution of tasks. Another conclusion from the study was that an improvement in work environment practices, such as improvement in equipments, adequacy of resources, health & safety measures as well as security improves performance. Moreover, improvement in career growth practices such as training of employees, employee workshops, availability of career advancement opportunities and study sponsorship programmes leads to an increase in performance.

Key Words: employee motivation, performance, research institutions, Nairobi City County, Kenya
INTRODUCTION

Most organizations affirm that their human asset is the most significant resource. This was pertinent since the worker is the image of the Institute, according to views of their clients. It is therefore important for Institutes to propel and build up their representatives. Motivation is ideal asset inside a worker that enables him or her to play their role to the fullest extent possible given the tools they posses to perform an activity. A positive satisfaction with the work environment is important for employees’ devotion to work (Saks and Gruman, 2014).

While some Institutes emphasize on promotion in order to motivate an employee, all organizations were concerned with what should be done to accomplish sustained high levels of work execution through people. That is, Institutes were giving close attention to how individuals can best be motivated through such means as incentives, rewards, leadership and, importantly, the work they do and the organization context within which they carry out that work. According to Armstrong (2010), The point was to form motivation forms and geographic point that was to ensure that worker convey results as per expectation of management. Motivation theory examines the method of motivation. It explains why individuals at work behave the method they are doing in terms of their efforts and the direction they were taking. It describes what organizations can do to encourage people to apply their efforts and abilities in ways that would further the achievement of the organization’s goals as well as satisfying their own needs.

Armstrong (2010) states that there are two types of motivations: intrinsic (self-generated) and extrinsic (externally-generated). Intrinsically motivated employees are self-motivated by factors that influence their behavior. It is not created by external incentives. This takes the form of motivation by the work itself once people feel that their work is very important, it is attention-grabbing and difficult that provides them with an inexpensive sense of autonomy (freedom to act), chance to realize, and scope to use and develop their skills and talents.

Deci and Ryan (2011) also suggested that intrinsic motivation is based on the needs to be competent and self-determining. Intrinsic motivation can be enhanced by role design (variety of skills, identity of the task, and significance of the task or freedom to act) and feedback. Maslow (1943) developed a theory of motivation on the supposition that human needs are voracious and he built up chain of importance of necessities hypothesis that demonstrated different dimension need of requirement that could not be satisfied through financial incentives. Both occupation fulfillment and motivation establish the eagerness of the work to play out the different hierarchical assignment. In this regard motivation and occupation fulfillment among laborers in the associations are principal for viable work execution. Accordingly I take a look into formal and casual associations that have been performed with a point of clarifying the social structure, associations, and the practical factors affecting organization adequacy. Employment fulfillment and work motivation establish one measurement which has gotten significant consideration for the motivations behind understanding the individual worker and his workplace. It was then
outstanding that when representatives were all around roused, generation in the association was dependably increment because of employment fulfillment (Sharawe, 2012).

There was no doubt that the institute was the main vehicle used to translate and implement some government policies, and goals. Despite the efforts made by selected research Institutes of Kenya to adhere to the principles of meritocracy, professionalism, integrity and fairness in service delivery, and the government introduction of various management systems geared towards improving services, this important sector was shrouded in many demotivating issues. The issues were illustrated by Nyakundi (2013) on an employee survey on a regular basis. This was to guarantee a continued motivation of employees in their job. The study therefore seeks to critically analyze the influence of employee motivation on performance in selected research institutions in Nairobi.

**STATEMENT OF THE PROBLEM**

Motivation has been studied for many years and empirical evidence shows that lack of motivation has led to poor employee performance and turnover (Han, Bonn, & Cho, 2016). Lack of experienced employees has negatively influenced workers’ morale and reduced labour productivity and work quality (Holtom & Burch, 2016). To manage the nature of their work, research institutions need to employ qualified personnel, have the best equipment and provide a good working environment in order to realize better results. To retain such employees, the research institutions need also to embrace better motivation practices. KALRO and KEMRI strategic plans have recognized the role of highly motivated employees in steering institutions to higher levels. Despite that the performance contracting results reveal mixed task execution challenges among research institutes in Kenya. KALRO had a performance index of 2.86 out of 5 while KEMRI had a execution index of 2.49 out of 5. The performance index for KALRO was slightly above average while that for KEMRI was below average government performance report 2011. Mosley, Pietri and Mosley (2012) argued that the reasons that lead to poor task performance was employee demotivation which as significance in productivity in every organization. Employee turnover, increases expenses, absenteeism and a negative effect on the morale of colleagues (Jobber & Lee, 2014). Based on this background, the study examined the influence of employee motivation on tasks execution in selected research institutions in Nairobi. The study was motivated by few research gaps in the studies on the role of motivation on employees’ work execution. For instance, a study by Pratheepkanth (2011) indicated that highly performing employees were driven by non-financial oriented rewards which are an intrinsic motivation system. Khan, Farooq and Ullah (2010) showed that pay played a critical role in employee performance but failed to acknowledge other aspects of motivation that also affect employee performance such as career growth and working environment. In Kenya, Maina, (2013) studied the influence of administrative strategies on teachers’ motivation out in the open optional schools in Kieni East District, Kenya whereby motivation was embraced as a reliable variable as it was opposed to the existing investigation. The consequences of the referenced investigation failed to focus on other aspects of motivation and were limited to other sectors.
GENERAL OBJECTIVE

The main objective of this study was to examine the influence of employee motivation on performance in selected research Institutions in Nairobi County.

SPECIFIC OBJECTIVES

1. To determine the influence of reward management on performance
2. To find out the influence of training and development on performance
3. To establish the influence of working environment on performance
4. To examine the influence of career growth on performance

THEORETICAL REVIEW

Herzberg’s Two-Factor Theory

Herzberg’s (1959) from the study carried out from the group of employees developed a two dimension theory of job satisfaction that is motivation and hygiene factors according to Herzberg’s. The several researches done on motivation and employee performance. several scholars have pointed out that theories try and understand what motivation is, and how it influences individuals (Fincham & Rhodes, 2015).

Syptak (2010), motivators are defined as those components that make fulfillment by satisfying people’s requirements for significant self-awareness. These were issues, for example are, rewarding employees, achievement recognition, the work itself, giving staff allowances and benefits. Herzberg says that once the hygiene areas are addressed, motivators promote job satisfaction and support productivity (Syptak, 2010). Institute policies was of great source of frustration for employees if they were unclear or if not everyone was required to follow them. Hence if an institute requires ensuring that the policies are fair and that they apply equally to all, they were accessible to all members of staff.

Mori (2010) observed that money was not only a motivator hence according to the researcher, compensation was not only compensation for workers yet they would like to be paid fairly. There was a need to conduct a salary survey at a local level to ensure that they were comparable to those of other areas in the same industry. Fair treatment contributes to job satisfaction. This applied where employees were allowed reasonable time for advancement of their careers. This enabled them to develop a sense of recognition and teamwork resulting in job satisfaction.

The studies conducted by researcher revealed the following about the motivators. Achievement: According to Herzberg’s theory, people need to carry out responsibilities to ensure that they are put on a position where they utilize their talents, and pursue clear objectives. There is also need to set guidelines for each position to avoid conflict in roles. Besides, the workers must have knowledge on benchmarks with regard to inputs and employee outputs and relationships needed.
in workplaces to ensure people get along well. Employees wanted to be recognized for their job achievement. A employer needs to acknowledge the work of their subordinates immediately either by rewarding them or by appreciating its benefits.

Publicly thank them for the work well done. Build up a formal acknowledgement program for example, the worker of the month publicity event. This brought about job satisfaction on the employees affected. The theory was considered relevant to understanding how rewards can influence employee motivation through job satisfaction in institutes and hence provide information on what people actually want from their jobs. The respondents had to describe work situation in which they felt good (satisfied) or bad (dissatisfied) in their job. The theory supports the practice of management motivating employees at workplace by recognizing them through bonuses, allowances and benefits (Garry Becker2011).

**Abraham Maslow’s (1943) Hierarchy of Needs Theory**

Abraham Maslow is one of the best known of motivational theorists. Abraham Maslow was an American psychologist who believed that all individuals have a set of hierarchy of needs which they want to be satisfies. On motivation and employee execution, many scholars have postulated theories to try and understand what motivation is, and how it influences employee (Fincham and Rhodes, 2015). One particularly significant theory was developed by Abraham Maslow and is known as the hierarchy of needs theory (Riggio, 2014). At the core of Maslow’s theory is a hierarchy of five need categories.

They are psychological, safety, social, esteem and self-actualization needs (Kreitner and Kinicki, 2016). Physiological needs. These are the basic human needs that require to be satisfied and they include sufficient air, food, water, shelter and clothing, safety and security needs. This was the need for freedom from any form of calls or danger that consists of physical safety and attacks. It is protection against unemployment. Safety needs: this occupies the second level of needs, Safety needs are activated after physiological needs are met. Social needs: A human being is a social being, and is satisfied or motivated by social needs, such as friendship affection, interaction and love (Mainland, 2011).

Self-actualization needs: These are needs to realize one’s full potential as a human being. It was the highest level of needs. Attempts have been made to relate Maslow’s theory to employee’s requirements in the workplace. For example, physiological needs are more concerned in a way that enables a woman to buy food, clothing and have adequate housing (Jennifer and Jones, 2012). Safety needs are linked to such matters as job security, adequate medical benefits, save working conditions, pension scheme, sufficient rest periods and protection from unfair actions. Esteem needs. This represents the fourth level of needs; it includes the needs for self respect and approval by others. Organizations introduce the awards and banquets to recognize or distinguish achievements which help the employee develop productive work habits.

The last three categories have never been fully satisfied since human beings keep wanting more as the ranking need is satisfied. According to various studies carried out in recent years,
motivation comprises a situation where one does the job, because one wants to, unlike where one does the job because he/she had to (Motivation and Empowerment Workbook, 2010). Therefore, employers have ignored what individual employees say they want; instead they tell the employees what they want based on what managers believe most people want under given circumstances. In most cases, such decisions are based on Maslow’s needs hierarchy. However, Maslow’s theory has been criticized for its rigidity, in that, different people may have different priorities and may not necessarily follow the hierarchy of needs as listed by Abraham Maslow. This theory was used in this study to explain the need for training and development and its influence on employee performance.

**Vroom’s Expectancy Theory**

The theory attempts to explain the way institutes work and how the environment surrounding them affects their performance. It was advanced by Vroom (1964). According to Vroom, motivator is a product of three factors, namely, workers must perceive that when they work hard they can execute tasks at a higher level (expectancy); employees need the results that when they perform at a higher level they receive certain outcomes (instrumentality); workers must or want the outcomes they receive if they perform at a higher level (valence). Thus expectancy X instrument = valence-motivation (George, Jennifer and Jones, 2015). If one of these factors, that is valence, instrumentality or expectancy is zero, then motivation has to be zero. This can only occur when the working environment is not conducive.

Expectancy depends on requisite skills and abilities of individual, as also on his perception of the most appropriate way of obtaining his objective. Instrumentality refers to how much trust the employee has in management. If the employee believes that his first level outcome (execution) leads to outcomes that affect the second employee, he or she forms a subjective judgment about the probability that the institute will values those outcomes and reward the effort made accordingly. Thus, what an individual employee does depends on a three thought processes: How important are the various second level outcomes (preferred goals) are considered to be; the assessment of the first level outcomes in relations to the second level job executions; and preferred goal (instrumentality of the job execution, i.e., what the execution of a task is supposed to achieve); and the existing effort needed to achieve a high level of job execution (expectancy).

Although Vroom’s theories do not contribute much to techniques of motivating in an organization, it is of value when analyzing organizational behavior (Maitjland, 2013). It points out that employees can differ greatly on how they seize their chances for success in different jobs.

Thus motivating employees is more than offering them some rewards. They must also feel reasonably convinced that they have the incentive they have gives them the ability to obtain the personal and organizational achievements they desire. The theory also asserts that employees are satisfied with jobs, which are instrumental for providing them with desired tools and equipment plus adequate resources to achieve what they want. They must also know that any rewards or
motivation incentives they get are contingent on good performance on their jobs (Ngumi, 2010). This theory is used to explain the influence of good work environment in institutes on employee work execution.

**Equity Theory**

Equity theory is based on the premise that employees make comparison of their efforts and rewards with those of others in same job situations. According to (Shuck et al., 2014) employees perceive themselves to be valued by the institutes and to be in a fair relationship with management if treated in the same way as other employees, i.e., without favor or discrimination. Equity theory focuses on the concept of fairness. There is a tendency for the employees to compare the fairness of what their jobs require them to do (inputs) with that they receive from the institutes (outputs) (Drafke and Kossen, 2010).

As Vroom’s Equity theory too deals with expectations of what people expect to get from their jobs, that is, the employees whose expectations were not met became dissatisfied, as they perceived that they were responsible for doing more tasks than their paychecks. Dissatisfaction results in less motivation or in acceptance of things as they are (Drafke, 2012). Employees also expect equity in relation to other employees, for example employees get demotivated when they discover that their counterpart performing similar tasks are being allowed for advancement, and others are being taken for workshops and training. Workers generally do accept differences in pay when others have more seniority with the firm, more experience in the industry, more training, are more educated or have greater skills and ability. This theory supports the career-growth explanation of worker motivation.

Researchers came up with many theories on the influence of motivation and employees’ execution of tasks. Popular among these theories include: balanced scorecard theory formulated by Kaplan and Norton (2012) in the Harvard Business Review. It emphasises that learning is more than training, it includes things like mentors and factors within the organization as well as ease of communication among the workers that allows people to get help on a problem when it is needed. It also includes technological tools, and high performance work systems.

Term empowerment on team performance theory: this was defined as an increase in task motivation that is due to team members collective positive assessments of their organization’s tasks (Kirkman & Rosen 2010). Teams experience empowerment on several dimensions: the collective belief of a team that it can be effective; the meaningfulness and the extent to which team members are empowered; and the dynamism of teams.

**Reactance Theory**

The theory was proposed by Brehm (1966) to explain employee performance in regard to their behaviour choices. The theory argues that the employees can perform well if they feel that certain choices are not restricted or denied from them. In most cases, when employees feel threatened or are given forbidden behaviour, they tend to do the opposite. When faced with
restricted actions or denied privileges, the employees may decide to perform the opposite of what is expected of them at workplace. They may engage in reactive behaviour such as taking extra-long breaks or even missing work as well as doing shoddy jobs.

Some of the actions that may make employees develop reactive behaviours were: denied rewards, poor motivation, forced obedience and harsh policies. Based on those, the employees are likely to engage in poor activities as a way of reacting negatively. As such, there was a need to link motivation to better employee performance since well-motivated employees are likely to perform better due to less reactive behaviours.

**EMPIRICAL REVIEW**

**Reward Management**

A study by De Gieter and Hofmans, (2015) sought to challenge the generally held view that employee rewards have the same effect on the behaviour as well as attitudes of every employee. In the study, data from 179 employees was merged on supervisor rated task execution data then examined by the use of cluster wise regression analysis. The study failed to establish employee types or individual differences as far as task execution was concerned. However, three different employee types revealed a unique relationship pattern between satisfaction with financial, material and psychological rewards and turnover intentions were identified. The results therefore demonstrated that in order to fully comprehend the fundamental relationship between rewards and employee outcomes, there was need to use individual differences perspective and methodology when designing work incentives.

Another study by Okoth (2014) explored the influence of reward management on employee duties in hotels in North Coast, Kenya. Descriptive cross sectional survey design was used. Structured questionnaires were employed to collect data from the participants of the study. The study found high correlation between reward management and work execution. The study however found that as much as there was a reward policy in place, it was fairly weak as the reward strategies did not correlate highly with employee performance.

Muchiri, (2016) examined the influence of rewards on employee execution in the hospitality industry in Kenya by considering a case of Nairobi Serena Hotel. A descriptive survey design was used. In this case, stratified sampling technique was employed. The study found that there exists a significant relationship between intrinsic rewards and employee performance. Intrinsic rewards examined in the study included employee’s ability, trust, recognition, and achievement.

The study found the existence of a significant relationship between extrinsic rewards such as salaries and wages, paid vacations, paid leave, travel allowances and bonuses and employee execution. According to the study conducted by Owolabi and Makinde (2012), factors such as good execution, perceived self-determination, good performance, reward and expectancy, positively influence employees’ intrinsic motivation. When employees expect to be rewarded for performing a task well, their motivation will increase so that they can perform it well.
Training and Development

A study by Asfaw, Argaw and Bayissa (2015) was targeted on the impact of coaching and development on worker execution and effectiveness in Ethiopia. Cross-sectional quantitative research method was used and data was obtained by Likert’s scale tool from 100 staff. The results of the analysis indicated that coaching and development absolutely and statistically correlative with worker execution and effectiveness. One amongst the recommendations of the study steered that establishments ought to continue providing worker coaching and development activities, participation of staff in workshops and analysis of coaching and development programs so as to boost their performance.

Ahmad, Iqbal, Mir, Haider and Hamad (2014) sought-after to search out the impact of worker coaching and development on employee’s performance. The target population covered 100 employees of 11 Institutes of northern Punjab, India whereby the data used was obtained from the respondents by the employment of a form. within the study, it was found that there are two determinants of worker coaching and development that are on job coaching and delivery vogue. The results showed vital positive relationship exists between worker coaching and development and performance.

A study by Dodd-McCue and Wright (2013) identified institute innovativeness, fair remuneration, perception of availability of training opportunities, fair implementation of policies, development programmes, personal and career development as the main motivating factors (see Bogg and Cooper (2015). Establishment of employee training and assistance programmes on worksites which varied anywhere from six to fifty three percent, depending on the size of the institute were also important. Research done by Davey and Sheeha (2014) examined employees’ perceptions of the environment. Evident suggests that employee execution was related to emotion experience and wellbeing of workers.

Work Environment

Various studies have been conducted on the work environment as a factor determining employee work execution. A study by Hammer, Saksvik, Nytrø, Torvatn and Bayazit (2014) examined how employee’s perception of their work environment in terms of fulfillment of intrinsic, extrinsic as well as social needs influenced their decision to remain in or quit an organization. Furthermore, work environment perception and employee turnover analyzed, in which, employees were enabled to provide environmental support in the workplace. The results showed employees were satisfied and demonstrated satisfactory levels of commitment towards the organization, resulting in a decrease in employee turnover.

Hameed and Amjad (2010) surveyed thirty institutes whereby the results indicated that comfortable conditions combined with ergonomic office designs provides motivation to employees which considerably augmented their tasks execution. The study also found out that such variables as working conditions, motivation and incentives affect multi-dimensional
execution of tasks by employees. In that case, working conditions had a significant effect on the carrying out of duties by employees in an Indonesian university.

Chevalier (2011) studied the influence of working environment on work execution and indicated that given a valid and comfortable working environment, employees become more prepared to execute their duties more comfortably and effectively. On the same note, the results of Ajala (2012) confirmed the role of environmental elements of the workplace, ranging from adequate light to office layout and design and found that these elements considerably increased employee productivity. A study conducted in Pakistan by Khan et al. (2011) on work environment and execution of work in the education sector indicated that workplace incentives positively and significantly improved employees’ job execution.

**Career Growth**

Samuel and Chipunza (2009) in their study of four South African organizations on why long-term staff remained in their jobs found that the four key factors that served to retain staff were training and development, challenging and interesting work, freedom for innovation, freedom of thought and job security. The study gathered information on the types of training and the influence of training on the conservation of knowledge. The final result showed that training informs on employees' expectations in a positive way. Good training programs lead to greater satisfaction of staff with what they do.

A study by Hassan et al (2013) established that to encourage as well as retain the loyalty of employees, organizations should induce rewards that also factor in career growth opportunities. In this way, employees are provided with good atmosphere within which they are able to embrace skilled growth and therefore the development of skilled skills. The length of the coaching is additionally crucial within the provision of advantages, associated with coaching for workers. Higher-up support plays an important role in increasing enthusiasm among employees. Every organization must consider professional training in its professional conduct as it leads to employee motivation.

Ramaswami and Dreher (2012) conducted a study that found that mentoring helps the mentor to get support by creating networks of mentors that "repay" the mentor. This occurred through the mentee acting as an informant, providing critical information that help the mentor in some way when necessary. This, in turn, helps strengthen the reputation and recognition of a mentor in an organization, improving the mentor's respect and visibility. Negative experiences, however, are occasionally found in organizations with a mentoring program. Negative attributes are most often seen in those organizations without a formal mentoring process, relying instead on informal processes.

**Performance**

Dobre (2013) conducted a study to determine the relationship between employee motivation and organizational duties. The study was conducted among firms registered in the USA. Through a
survey design, the study established that employee motivation was positively related to duty execution of the firms under investigation. It was established that factors such as employee recognition and empowerment improve performance.

Solomon, Hashim, Mehdi and Ajagbe (2012) conducted a study to determine the relationship between worker motivation and structure execution in transnational corporation taking a case of Cadbury in Federal Republic of Nigeria. The study conducted a survey of personnel of Cadbury Nigeria using 100 questionnaires. Through correlation, the findings indicated that provision of adequate motivation by Cadbury Nigeria led to an improvement in employee productivity.

Kuvaas (2006) conducted a study to confirm the link between performance appraisal satisfaction and work outcomes with the anodyne roles of labor motivation. The study was a survey and it established that performance appraisal satisfaction led to high employee motivation which further led to higher execution abilities of employees.

**RESEARCH METHODOLOGY**

**Research design**

This study was carried out through descriptive survey design on the influence of employee motivation on performance which was recorded as received from the respondents. It was considered because it is a process of collecting data to answer questions on the correct status on the subject on the study. Research design according to Yin (2009) is as an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context. Miller (2011) explains that descriptive research design allows the use of quantitative or qualitative method within the same study.

**Target Population**

According to Mugenda and Mugenda (2000) a population refers to the totality of elements under the study. The study targeted two research Institutions based in Nairobi County City, KALRO and KEMRI. This formed the study’s unit of analysis. The unit of observation of the study was top management those were, middle level management managers and lower level management staff. These were directors, heads of departments, managers, assistant managers and supervisors. A total of 356 respondents, 96 from KALRO and 260 from KEMRI were targeted. The focus on these two is based on the performance contracting results which reveal an average performance of 2.86 and 2.49 for KALRO and KEMRI, respectively, which is low on a scale of 5. This prompted an investigation into how their employee motivation practices influences their execution.

**Sampling Frame**

This is the specific list of all members of population from which sample was selected (Watkins, 2011). The sampling frame for the study was a list of top management, middle level management and lower level management staff consisting of directors, heads of departments, managers,
assistant managers and supervisors. A total of 356 respondents, 96 from KALRO and 260 from KEMRI formed the sampling frame.

**Sample Size and Sampling Technique**

Sample is a subset of a population selected which represents the entire group (Saunders *et al.*, 2015). Sampling is the process of selecting a sufficient number of the right elements (a sample) from the population, such that a study of the sample and understanding of its characteristic can make it possible to generalize such characteristic to the population elements. Stratified random sampling was used which involves a process of segregation followed by random selection of subject from each stratum, (Orodho & Kombo, 2013). It involves the subdivision of the population into mutually exclusive groups that were relevant, appropriate and meaningful to the context of the study. Determining a final population for a large population is assumed to be normally distributed at a confidence intervals of 95% thus giving a margin of error 5% sample size (Yamane, 1957) indicate the following formula for obtaining the sample size.

\[ n = \frac{N}{1 + Ne^2} \]

Where: n= Sample size; N= Population size; e= margin of error 5%; n = 356 / (1 + (356 *0.05*0.05)); n=188 respondents

Hence the total sample size of the study was 188 respondents. A total of 51 respondents were sampled from KALRO and 137 respondents were sampled from KEMRI. Stratified random sampling technique is the most efficient among all probability designs as it ensures that all groups are adequately sampled and also allows for comparison among groups and was applied to select the respondents for each sample from each research institution (Mugenda & Mugenda 2009).

**Data Collection Instruments**

The research worker used questionnaires to gather knowledge from respondents. A questionnaire is a pre-formulated written set of questions to which respondents record their answers, usually within closely defined alternatives. This method was considered because it is appropriate for the study. Questions were structured to answer to a specific objective/research questions and allowed every respondent to receive constant set of questions in barely constant method. Questionnaires were used for knowledge assortment as a result of as Kies and Bloomquist (2011) observe, they provide respectable benefits within the administration; they gift a fair input probably to giant numbers of individual at the same time and provides the investigation with a straightforward accumulation of knowledge. Gay( 2010) maintains that questionnaires provide respondents freedom to specific their views or opinion and conjointly to form suggestions to a research worker.
Data Collection Procedures

The researcher was given an introduction letter from Jomo Kenyatta University of Agriculture and Technology (JKUAT). The letter contained the details of the researcher, the research intention, and why the research was being done. The letter also stated that the information collected would be kept confidential. The researcher sought the consent from the management of the institutes before carrying out the research. The researcher used relevant primary sources of data to utilize for the study. Primary data was obtained through a self-administered questionnaire that were delivered to the respondents and collected after one week by the researcher. Respondents were given instructions and assured of confidentiality after which they were given enough time to fill the questionnaires after that the researcher did follow-up through personal visits to facilitate a good response rate. Then later researcher collected the filled-in questionnaires.

Data Analysis and Presentation

Data analysis refers to obtaining meaning out of collected data. Data pertaining to the study was analyzed and tabulated by use of descriptive statistical analysis techniques. Data collected from the field was entered into a computer for analysis using the statistical package for social sciences (SPSS Version 21). The results of data analysis were presented in frequency distribution, and means. Correlation analysis in the statistical tools was used to determine the level of association of the two variables in the study. Correlation analysis established the strength of the link between the freelance variables and dependent variables. Multiple correlation was wont to analyze causative relationships between the study variables. Data was presented using tables and figures. The regression equation was as shown below:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \]

Where: \( Y \) = Employee performance (appraisal scores); \( \beta_0 \) = Constant term; \( X_1 \) = Reward management; \( X_2 \) = Training and development; \( X_3 \) = Work environment; \( X_4 \) = Career Growth; \( \epsilon \) = Error term; \( \beta_1 \); \( \beta_2 \); \( \beta_3 \); and \( \beta_4 \) are coefficients of the various determinants of performance; and \( \epsilon \) is error term.

RESEARCH RESULTS

The study established whether employee motivation influenced performance in selected research Institutions in Nairobi County City in Kenya. The study focused on reward management, training and development, working environment and career growth. The study collected data which was analyzed descriptively and also through correlation and regression. This section discusses the summary of the major findings per objective.

Reward Management

The descriptive findings showed that on average, the respondents agreed on the presence of reward management practices regarding benefits, bonuses, salaries and allowances in research
institutes. Inferential findings showed that reward management has a positive and significant influence on performance among research institutes in Kenya.

**Training and Development**

The descriptive findings showed an agreement on statements on training and development regarding training programs, training design, induction process and training techniques. Inferential findings showed that training and development has a positive and significant influence on performance among research institutes in Kenya.

**Work Environment**

The descriptive statistics indicated that on average, the respondents agreed to the presence of better working environment such as equipment, adequate resources and health & safety measures. Inferential findings showed that work environment has a positive and significant influence on performance among research institutes in Kenya.

**Career Growth**

The descriptive findings showed that on average, the respondents agreed on availability of career growth practices such as training of employees, employee workshops, career advancement opportunities and sponsorship programmes. Inferential findings showed that career growth has a positive and significant influence on performance among research institutes in Kenya.

**INFERENTIAL ANALYSIS**

The descriptive statistics only provided a description of the collected data. However, to determine a relationship between the variables, the study used inferential analysis whereby the association was established through correlation analysis while the relationship was established through regression analysis. Correlation coefficients reveal association between a variable and another. It does not show the influence that an independent variable (e.g., a reward) has on the dependent variable (e.g., performance). Thus, the findings in Table 4.7 indicate the extents to which the dependent and the variables independent variables in this study are negatively or positively correlated. For example, the rewards management has a positive and significant association with staff performance in research institutes in Kenya ($r = .581$, Sig = .000). This shows that an increase in reward management practices such as salary, allowances, benefits and bonuses is associated with an increase in performance. The findings are consistent with Okoth (2014) who found a high correlation between reward management and employee performance.

It was also established that training and development has a positive and significant correlation with performance in research institutes in Kenya ($r = .328$, Sig = .000). This shows that an improvement in training and development practices involving training programs, training design, induction process and training techniques leads to a positive association with performance. The findings are consistent with the findings of Asfaw, Argaw and Bayissa (2015) which showed that training and development positively and statistically correlated with employee performance and
effectiveness. In all cases, the correlations in this section should be interpreted as correlations (see the regression results for causations).

The study also established that work environment has a positive and significant influence on performance in research institutes in Kenya (r = .318, Sig = .000). This shows that an improvement in work environment practices such as improvement in equipments, adequacy of resources, health & safety measures as well as security leads to an increase in performance. The findings are consistent with Hameed and Amjad (2010) who indicated that comfortable conditions combined with ergonomic office designs provides motivation to employees which considerably augmented their performance.

It was also shown that career growth has a positive and significant influence on performance in research institutes in Kenya (r = .363, Sig = .000). This shows that an improvement in career growth practices such as training of employee, employee workshops, availability of career advancement opportunities and sponsorship programmes leads to an increase in performance. The findings are consistent with the findings of a study by Hassan et al (2013) which established that to encourage as well as retain the loyalty of employees; organizations should induce rewards that also factor in career growth opportunities.

The study also used a multiple regression model to analyze causal relationships between the variables, i.e., to determine the change in performance as a result of a unit change in various indicators of employee motivation. The model’s summary findings (R-Squared) in Table 1 revealed that employee motivation practices such as Career Growth, Training and Development, Reward Management and Work Environment account for up to 51.8% of the variation in performance. This means that the remaining 48.2% of the variation in performance is attributed to other factors other than employee motivation.

**Table 1: Model Summary**

<table>
<thead>
<tr>
<th>R</th>
<th>R Squared</th>
<th>Adjusted R Squared</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>.720</td>
<td>0.518</td>
<td>0.447</td>
<td>0.3101</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Career Growth, Training and Development, Reward Management, Work Environment

The study also established whether the regression model linking employee motivation practices to performance was of good fit and whether all the motivation variables were jointly important in influencing performance. That is, whether, the coefficients of all the motivation indicators or variables were jointly different from zero. The findings in Table 2 indicates that the F value was significant (Sig = 0.000) which is less than 0.05 to imply that in the multiple regression model that was estimated the influence on performance of all motivation variables as a group was significantly significant. The F calculated value of 29.104 was also compared to the F critical value of 2.435 from the F distribution tables. Since the F calculated (29.104) was greater than the F critical (2.435), it was similarly concluded that the multiple regression coefficients were jointly statistically significant, i.e., different from zero.
Table 2: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>17.92</td>
<td>4</td>
<td>4.48</td>
<td>29.104</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>22.013</td>
<td>143</td>
<td>0.154</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>39.933</td>
<td>147</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance
b. Predictors: (Constant), Career Growth, Training and Development, Reward Management, Work Environment

The model coefficients findings presented in Table 3 indicated that reward management has a positive and significant influence on performance (Beta = .484, Sig = .000). It has the second most significant influence (t = 6.127). The findings imply that a unit increase in reward management increases performance (appraisal score) by 0.484 units. The findings are consistent with Muchiri (2016) who found that there exists a significant relationship between intrinsic rewards and employee performance.

The findings also showed that training and development has a positive and significant influence on performance (Beta = .190, Sig = .000). It has the third most significant influence (t = 4.872). The findings imply that a unit increase in training and development leads to an increase in performance by 0.190 units. The findings are consistent with the findings of a study by Iqbal, Mir, Haider and Hamad (2014) which revealed that a significant positive relationship exists between employee training and development and performance.

It was also shown that career growth has a positive and significant influence on performance (Beta = .240, Sig = .020). It has the fourth most significant influence (t = 2.353). The findings imply that a unit increase in career growth leads to an increase in performance by 0.240 units. The findings are consistent with the findings of a study by Hammer, Saksvik, Nytrø, Torvatn and Bayazit (2014) which indicated that if employees were enabled to provide environmental support in the workplace, they will be very satisfied and demonstrate satisfactory levels of commitment towards the organization resulting to a decrease in employee turnover.

Table 3: Performance Model Coefficients Estimates

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.550</td>
<td>0.440</td>
</tr>
<tr>
<td>Reward Management</td>
<td>0.484</td>
<td>0.079</td>
</tr>
<tr>
<td>Training and Development</td>
<td>0.190</td>
<td>0.039</td>
</tr>
<tr>
<td>Work Environment</td>
<td>0.314</td>
<td>0.049</td>
</tr>
<tr>
<td>Career Growth</td>
<td>0.240</td>
<td>0.102</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance (the appraisal scores achieved)

The findings also showed that work environment has a positive and significant influence on performance (Beta = .314, Sig = .000). It has the most significant influence (t = 6.408). The
findings imply that a unit increase in work environment leads to significant increase in performance by 0.314 units. The findings are consistent with the findings of a study by Ramaswami and Dreher (2012) which found that mentoring helps the mentor to get support by creating networks of mentors that "repay" the mentor. Therefore, from the findings the regression model becomes:

\[
\text{Performance} = 0.550 + 0.314 \times \text{Work Environment} + 0.484 \times \text{Reward Management} + 0.190 \times \text{Training and Development} + 0.240 \times \text{Career Growth}
\]

The most significant factor is work environment (t = 6.408), followed by Reward management (t = 6.127), then training and development (t = 4.872) and lastly career growth (t = 2.353).

CONCLUSION

The study made conclusions per variable based on the findings of the study. The conclusions played a role in recommendations for policy improvement. This section presents the study conclusions.

**Reward Management**

The study findings led to the conclusion that reward management positively and significantly improves performance among selected research Institutions in Nairobi County City in Kenya. The study also concludes that an increase in reward management practices such as salary, allowances, benefits and bonuses leads to an increase in performance.

**Training and Development**

The study also concludes that training and development positively and significantly improves performance among selected research Institutions in Nairobi County City in Kenya. Similarly, the study concludes that an improvement in training and development practices involving training programs, training design, induction process and training techniques leads to an increase in performance.

**Work Environment**

Another conclusion made by the study is that work environment positively and significantly improves performance among selected research Institutions in Nairobi County City in Kenya. Furthermore, the study concludes that an improvement in work environment practices such as improvement in equipments, adequacy of resources, health & safety measures as well as security leads to a significant increase in performance.

**Career Growth**

The study findings led to the conclusion that career growth positively and significantly improves performance among selected research Institutions in Nairobi County City in Kenya. It can also be concluded that an improvement in career growth practices such as training of employee,
employee workshops, availability of career advancement opportunities and sponsorship programmes leads to an increase in performance.

**RECOMMENDATIONS**

Since the study established that reward management has a positive and significant influence on performance among research institutes in Kenya, the study recommends research institutes to improve reward management practices such as salary, allowances, benefits and bonuses in order to register an improvement in employee performance.

Based on the findings that training and development has a positive and significant influence on performance among research institutes in Kenya, the study recommends the research institutes to improve their training and development practices involving training programs, training design, induction process and training techniques in order to register higher employee performance.

Since the study established that career growth has a positive and significant influence on performance among research institutes in Kenya, the study recommends that research institutes should aim to improve their career growth practices such as training of employee, employee workshops, availability of career advancement opportunities and sponsorship programmes in order to have improved employee performance.

Based on the findings that work environment has a positive and significant influence on performance among research institutes in Kenya, the study recommends that research institutes in Kenya should aim to improve the work environment practices such as improvement in equipments, adequacy of resources, health & safety measures in order to ensure it significantly impacts on the employee performance.

**REFERENCES**


