

EFFECTS OF OCCUPATIONAL HEALTH AND SAFETY MEASURES ON ORGANIZATIONAL PERFORMANCE AT KENYA POWER AND LIGHTING COMPANY: A CASE STUDY OF CENTRAL RIFT

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ABSTRACT

Occupational health and safety is considered by modern organizations as an ingredient to safe and productive workplaces. Even with extensive research in organizational health and safety in the recent years, there is little evidence to understand health and safety measures on organizational performance. This study examined the effect of first aid training, supervision and personal protective equipment on performance of Kenya Power Company (KPLC). Constructivism learning theory, goal freedom alertness theory and distractions theory are the theories upon which the study is anchored. This study utilized the descriptive research design and sampled 290 employees of KPLC working in the Central Rift region. The study administered questionnaires to top management up to shop floor employees working at the various departments. The data collected were analyzed using descriptive statistics, correlation and regression measures. The study results showed that first aid training, occupational health and safety supervision as well as protective equipment had significant relationship organizational performance. The results of the study

conclude that first aid training, OHS supervision and use of PPEs have strong positive association with organizational performance. The study recommends regular first aid training including short courses and in-the-job training, enforcement of safety and healthy work practices, and ensuring safety of workers exposed to risk, hazards and workplace accidents. The implications of the study are that KPLC organization should embrace the occupational health and safety (OHS) measures since they significantly improve its performance. It is therefore crucial for KPLC management to over emphasize on health standards to enable productivity of the employees. Specifically, there should be policies governing first aid training, occupational health and safety supervision and personal protective equipment.

Key words: First Aid Training, Occupational Health and Safety Supervision, Personal Protective Clothing and Equipment and Organizational Performance

INTRODUCTION

Health and safety are highly regarded aspects of integrated operations management and, preventing occupational hazards is deemed to improve organizational outcomes. Occupational health and safety encompasses promoting safety standard of employees by implementing safety standards in an organization. The organization with little or no health and health measures implemented will continue to be burdened by workplace fatalities, illnesses, and injuries. Organizations known for protecting health and safety of employees reflect a high organizational safety culture (Alli, 2008). According to the International Labour Organization (n.d.) organizational safety culture is founded

on practical approaches and policies that reduce incidences, ill health, work-related injuries and deaths. The safety culture is enhanced through safety information and training, safety and health management systems (SHMS), personal protective equipment (PPE), and supervision. It is in the enforcement of these measures that most companies have a dedicated department which ensures employees conform to health and safety standards implied by top management.

Lucchini and London (2014) observe that global organizations especially those from developed nations feature a robust occupational health and safety (OHS) infrastructure. This is based on a greater understanding of OHS practices, relevant education and training and government regulations on organizational safety and health. While investments in OHS come at a significant initial cost to the organization, it reduces absenteeism, workmanship compensation, and conventional turnover (Amponsah-Tawiah, Ntow & Mensah, 2016; Thiede & Thiede, 2015). It also enhances stability in the organization in that employee numbers rarely change after a certain period of time. Meanwhile, developing countries characterized by low to average income experience high underemployment and unemployment. This means that those in employment are less likely to complain about hazardous working conditions. Most of their organizations are willing to hire new workers than spend more on already sickly or injured workers (Mbaye & Gueye, 2018). However, such short-term human resource policies increase compensation demands and ruin the reputation of the organization. Costs arising from employee harm tend to cripple the normal functioning of the organization as the administrative cost of replacing injured employees affect organizations performance.

Occupational hazards, from a global perspective, depict a worrying figure as more than two million employees suffer on job injuries annually (ILO, 2009). Of the injuries recorded, more than three hundred thousand casualties are lethal in nature and highlight the need to urgently safeguard employees from occupational hazards. According to a survey conducted by the Global Burden of Disease in 2015, at least 5% of the global total deaths are accounted as work related mortality (Global Burden of Disease, 2015). These shocking figures have necessitated in-depth research on safety and health of workers, at their workplaces. To achieve positive work results, the institution of health and safety standards needs to be psychologically rewarding to most employees. As a consequence, it will ensure positive work environment and high levels of job satisfaction while enhancing continuity of tasks in the organization.

In the African continent, just like many other developing countries, occupational health remains ignored. This neglect arises from competing political, social and economic challenges. Many organizations in the continent still miss out effective translation mechanisms of scientific findings into effective policies (Courtice, Olsson & Cherrie, 2019). Even so, researchers are optimistic that organizations in developing economies are already giving the much needed attention towards the social context of workers as compared to the earlier focus of the workplace (Nuwayhid, 2004). There remains a discontent between social justice, organizational development and occupation

health. The discontent is attributed to poor policy formulation and implementation at governmental level. Furthermore, occupational health is seen as a luxury and tends to emphasize on the importance of occupation health but adequate interventions for prevention still lacks.

Occupational health and safety provisions in Kenya are provided for under the Occupational Safety and Health Act (2007) and the Work Injury and Benefits Act (2007). The provisions detail the role of employers and employees in ensuring safe workplaces free from occupational hazards and diseases. In the past few years, Kenya has made steady progress in procedural and policy requirements related to OHS and in adjusting to international practices (Mogwambo, 2019). A number of public and private organizations have instituted safety and health measures accrue and are benefiting from a functioning workforce capable of ensuring higher performance (Odongo, 2012). All employers and employees are required to have knowledge about the health and safety laws. In particular, the organizations have added responsibility of conducting regular risk assessments and hazard identification. It is understood from the premise of effective risk management that actions to prevent further occurrence of accidents and injuries are beneficial to the organization.

Safe and healthy work environment provides for a favorable workplace, which prevents accidents, illness and diseases. Furthermore, a highly performing organization reports fewer hazards and incurs minimal costs on compensation and reputational damage repair (Warnsley, 2015). Safer workplaces allows for greater participation and involvement of management, high employee satisfaction and employees in decision-making as well as implementation of safety measures and practices. The management is tasked with formulation and implementation of health and safety measures, and consistent commitment of organizational resources will lead to improved working conditions of employees (Amponsah-Tawiah *et al.*, 2016). Increase the number of the injured or sick employees reflects poorly on the organization because it suffers additional healthcare costs, and other employee medical requirements.

According to International Labour Organization (2009), health and safety measures ensure effective execution of organizational task as employees perform better when the risk of occupational hazards is reduced. The magnitude of the measures applied showcases the association between employees, employers and the interactive workplace environment. Many authors classify work environment as either toxic or conducive (Akinyele, 2010; Oludeyi, 2015). Whereas a conducive work environment impacts positively on employees and even influencing them to change their attitude to that of commitment and responsibility, a toxic work environment impacts negatively on the employees, making them lose interest in their work, resulting to low productivity. It is important that organizations enhance health and safety as it helps them generate stronger bottom-line results.

Many organizations strive to protect their employees in their workplaces by enforcing different health and safety measures. Such measures are enforced through various departments and safety indicators to ensure minimal casualties when performing organizational tasks. Most developed countries tend to adopt proactive measures which are effective in preventing hazards and accidents (Courtice *et al.*, 2019). However, in some cases, reactive measures come in handy when accidents occur. The proactive measures involve isolating and eliminating hazards as well as controlling and reducing things that are hazardous in nature. It is important that the organization not only disseminates information and training on safety and health but also provide PPEs to employees. The practices serve to minimize exposure of employees to hazards while preventing incidences and accidents (Alli, 2008). It is the discipline instilled by the top management that trickles down the health and safety measures to the shop floor employee. Besides, the human resource department plays a critical role in matters safety and health, as well as supervision.

Safety training is necessary for new employees to be inducted into the organization's safety culture, practices and procedures. Even so, old employees are required to perceive health and safety from a perspective of safety-conscious attitude. Safety training can involve distributing safety posters, first aid training, regular drills and general safety education (Burke *et al.*, 2006). Positive reinforcement programs are needed to inculcate safety through supervision support and performance reports. It is through behavior-based safety that employees perform tasks, make observations and benefit from on-site training. Training on health and safety imparts knowledge to workers on safe workplaces, and in addition, reduces operational costs while promoting organizational safety culture (National Safety Council, 2022). Employees in the long-term become responsible and reduce the chances of suffering injuries or ill health.

Supervision underpins a huge role in health and safety of workers in the organization. Proper supervision involves appropriate actions on hazards and risk within the workers' work stations or areas (Abdalla *et al.*, 2017). Personnel in supervisory positions are required to enforce safe work procedures and practices. Supervisors can be department heads, foremen, superintendents, managers and experienced employees designated to supervise. Safer workplaces encompass workers with freedom to report hazards and unhealthy work environments. The supervisor must ensure that there is a written health and safety policy in place and regular review of health and safety is fundamental in preventing work-related illness, injuries and accidents. Supervisors are supposed to be aware of the OHS hazards in order to provide accurate written instructions and procedures. Effective organizations provide supervision and direction on how to take reasonable precaution, access information and instructions, and become aware of hazards.

Personal protective equipment (PPE) is the equipment provided by employers to employees and is worn to minimize workplace injuries and hazards (Kyalo, 2016). The equipment includes gloves, helmets, gowns, shoe and hand covers, masks and respirators as well as other face and eye protection gear. PPEs are provided where administrative controls and work practices do not

guarantee sufficient protection to employees. As observed by Tessema and Sema (2017), employees need protection against elements such as noise, falling objects, sharp edges and moving machine parts and potentially dangerous situations. In Kenya, the PPE certification is consistent with the European Union (EU) regulation 2016/425 on safety products including medical equipment, equipment and accessories, and clothing and footwear. This ensures that the products comply with the regulation, fit for use and guarantee protection of the user.

Kenya Power or 'KPLC' is a Kenyan public utility company that not only transmits but also distributes and retails electricity across the country. Founded in 1922, the company has over 7000 employees involved in network management, street lighting, supply chain, human resource, and infrastructural development among others. While being involved in electricity transmission and distribution systems, employees are vulnerable to workplace hazards, injuries and illness. Given the nature of the duties performed at Kenya power and lighting company, safety measures are inherent. Employees are in constant threat of electrocution from exposed wires and overhead/underground power cables and while handling complex tasks, faulty equipment, and cleaning equipment (Mwangangi, 2018, Oluoch, 2015). It is important that they observe safety and health measures to prevent accidents, injuries and incidences. The institution of such measures is performed through a safety management program, which ensures adequate information is passed to the employees on how to handle certain tasks.

KPLC has adopted some specific measures or indicators of work environment safety. The measures of safety assessment include accident frequency per 100,000 man hours, reportable accidents per 1000 transformers in an area, work environment index (%), compliance with statutory requirements e.g. NEMA, OSHA (Cieslewicz, Araszkievicz, & Sikora, 2019). The fatalities are measured on employee and contractors, public fatalities, and percentage of authorized technical staff. This study explored health and safety measures instituted by Kenya Power and Lighting Company, and how they influenced organizational outcomes and goals.

Statement of the Problem

Several studies in the recent past have looked at factors affecting employee performance at the workplace, and with an interest in the organizational approach to safety and health of the employees. Some have investigated the correlation between OHS measures and employee performance. Others have explored the rate of occupational injuries and accidents in the developing and developed countries. Nonetheless, all agree that health and safety measures are necessary for employee performance. Although the studies show that safety and health measures are generally implemented at the workplace, there are limited studies on how health and safety measures affect organizational performance. Moreover, as much as fatalities at KPLC has reduced over the years, there are growing concerns over the high average accident frequency rate (AFR) of 4.4 which is much higher than the acceptable benchmark of 0.5. The alarming level of accidents,

injuries and incidences is considered to affect the performance and reputation of KPLC as a utility provider. This study investigated the effects of OHS measures on performance of KPLC as an organization.

Objectives of the study

- i. To analyze the effects of first aid training on performance of KPLC
- ii. To establish the effects of occupational health and safety supervision on performance of KPLC
- iii. To examine the effects of personal protective clothing and equipment on performance of KPLC

LITERATURE REVIEW

This section examined theories underpinning the study together with empirical studies and conceptual framework.

Theoretical Framework

Constructivism Learning Theory

This is the main theory in this study. It is originated by Jean Piaget in 1973, who proposed that knowledge is constructed through experiences gathered through mental models and schemas. According to Piaget, information is organized in a cognitive structure where people experience the world and create reflections from those experiences. While building their own representations, they come up with new information that supports the existing knowledge (Bada, 2015). The learner draws current lessons from previous experiences to comprehend and apply existing evidence. Based on this theoretical consideration, teaching intervention on first aid training is based on experiential and active education in OHS. The trainers look for practices and standards that guide the specific discipline within the larger OHS field. Specifically, this aspect of OHS is concerned about workplace injury hazards while hygiene looks at worker exposures. First Aid training recognizes that these disciplines intersect and overlap. This theory was relevant in this study because developing a successful first aid education and training is influenced by how past experiences of employees on health hazards drive current learning practices.

Goals Freedom Alertness Theory

The Goals freedom alertness theory was developed by Kerr in 1957. The theory proposes that workers in a psychologically rewarding work environment have better and safe approach to tasks and activities. He suggested that workers will perform better in an environment where supervisors and managers eliminate accidents, hazards and illnesses. In a psychologically rewarding work

environment, workers are encouraged to participate in pertinent issues around their health and safety (Hosseinian & Torghabeh, 2012). Workers have goals and choices to achieve the goals, and thus occasion instances of increased alertness and focus to perform and accomplish work tasks. Whenever attention and alertness of workers is diverted, the injury susceptibility increases. This is usually observed with complacent workers, especially the ones who have worked for a while longer and perceive themselves to be more experienced in their field of expertise. This study borrowed from this theory, since it focuses not only on identifying effective managerial supervision, but also in recommending possible ways of eliminating accidents, hazards, and illnesses.

Distractions Theory

The distractions theory was proposed by Hinze in 1997 and suggested that health and safety is situational. According to the theory, employees have mental distractions that make them susceptible to hazards and unsafe work conditions. Without protection from hazards and physical harm, employees find it increasingly difficult to complete tasks. On the other hand, workers easily complete well-defined tasks when there are minimal or no mental distractions and hazards (Forster, 2013). The theory presents two situations; dealing with unsafe work conditions and issues unrelated to work tasks. Because workers can be distracted in their work, it is important that they are equipped with preventive measures. In health and safety, personal protective equipment engenders a lower employee probability of injury and leads to higher levels of task achievement. When workers put on personal protective equipment, they have low mental distraction and lower chances of injury. This theory was appropriate in this study as it high-pointed the mental distractions in the workplace and how personal protective equipment can help reduce vulnerability to accidents in the work environment.

Empirical Review

Organizational Performance

Oluoch (2015) investigated the effect of OHS on performance of KPLC employees. From a stratified random sample of 373 employees, the study used descriptive survey and data collected from structured questionnaires. The respondents were obtained using stratified random samples and administered with questionnaires prepared on a five-point likert scale. The study was analyzed the data using descriptive statistics and regression analyses. The results were then presented in visuals such as tables, charts and graphs. From study, it was found that the performance of KPLC employees significantly influenced by the existing OSH programs. It concluded that there is a strong relationship between workplace safety and health and employee performance. This study narrowed down on employee performance of KPLC and left a gap on organizational performance which this study sought to fill.

Wambulwa, Makokha and Namusonge (2018) investigated the effect of OHS on the performance of Nzoia Water Company, Kenya. The study undertook a census of 138 employees of Nzoia Water Services Company and administered questionnaires to the respondents. The study utilized the descriptive research design. After piloting the questionnaires, the study collected the data from the target respondents and later analyzed them using multiple regression measures. The study findings obtained that accident reduction was positively related to organizational performance. The study showed that it is necessary to equip employees with knowledge and skills on health and safety and the top management should show commitment to safety. It also indicated that the organization conducted regular reviews and audits but did not provide effective management and feedback on performance. This study investigated accident reduction measures and left a gap on first aid training, supervision and PPEs which was filled by this study.

First Aid Training and Organizational Performance

Okumu (2014) assessed the effects of OSH practices on the productivity of Mumias Sugar Company. The study sampled 150 low cadre employees using simple random and stratified random sampling considering the various departments at the company. The study also sample 5 participants from the worker's union using purposive sampling. Using a descriptive survey design, the study administered questionnaires to the participants and conducted interviews to managers, supervisors and union officials. The study then analyzed data using descriptive statistics and thematic analysis. The study found that productivity of Mumias Sugar Company significantly improved when the organization put in effective health and safety procedures in place. The OHS practices included first aid kits, ventilations, protective clothing and fire fighters. While the authors investigated the provision of first aid kits to workers, it left a gap on first aid training and their effect on organizational performance which was filled in this study.

Ayalew and Demissie (2020) examined the effect of OHS on the organization productivity of Bahirdar Tannery Factory, India. The study collected data from 112 employees using stratified random sampling from different departments. The study then administered questionnaires to the sampled respondents and analyzed the collected data using descriptive, correlation and regression statistical measures. The study findings showed that biological, chemical and accidental hazards significantly influenced organizational productivity. The study also indicated that the chemical hazard program had the greatest effect on organizational productivity. This study left a gap on the health and safety measures such as first aid training, supervision and PPEs which this study intended to fill.

Occupational Health and Safety Supervision and Organizational Performance

Umugwaneza, Nkechi and Mugabe (2019) assessed the effect of workplace OHS practices on performance of employees in the Rwandan steel industry. The authors sampled 229 respondents

who comprised of employees, supervisors and managers. The managers and supervisors were interviewed while sampled employees were administered with questionnaires. The authors then analyzed data using descriptive statistics and inferential statistical measures and obtained that workers were aware of occupations health and safety concerns and dangers. However, it was obtained that workers neglected wearing PPEs which affected their commitment and performance. The study captured the use of PPEs but did not explore OSH supervision and first aid training which the focus of this study.

Kaynak *et al.* (2016) investigated the effect of OHS practices on employee performance and work alienation as well as employee commitment to the organization. The study focused on dimensions as safety support, first aid training, and OHS rules. The study sampled 439 participants in the SME sector in Kocaeli and administered them with questionnaires. The study found that first aid support and training, procedures on safety and risk management and OHS rules impacted job performance. This study left a gap on the need for OSH supervision and use of PPEs to increase performance of KPLC.

Niskanen, Louhelainen, and Hirvonen (2014) evaluated the effects of OHS inspectors' supervision in workplaces. The study conducted a questionnaire survey on 113 respondents in the chemical companies' plants. The target respondents were workers and managers. The findings were analyzed using statistical measures as descriptive, correlation and regression analytical techniques. The study findings showed a correlation between OHS inspections and the management systems. However, it was established that supervision was not uniformly effected by OSH inspectors and agencies. The study left out on gaps relating to effect of OHS supervision on KPLC performance which was filled in this study.

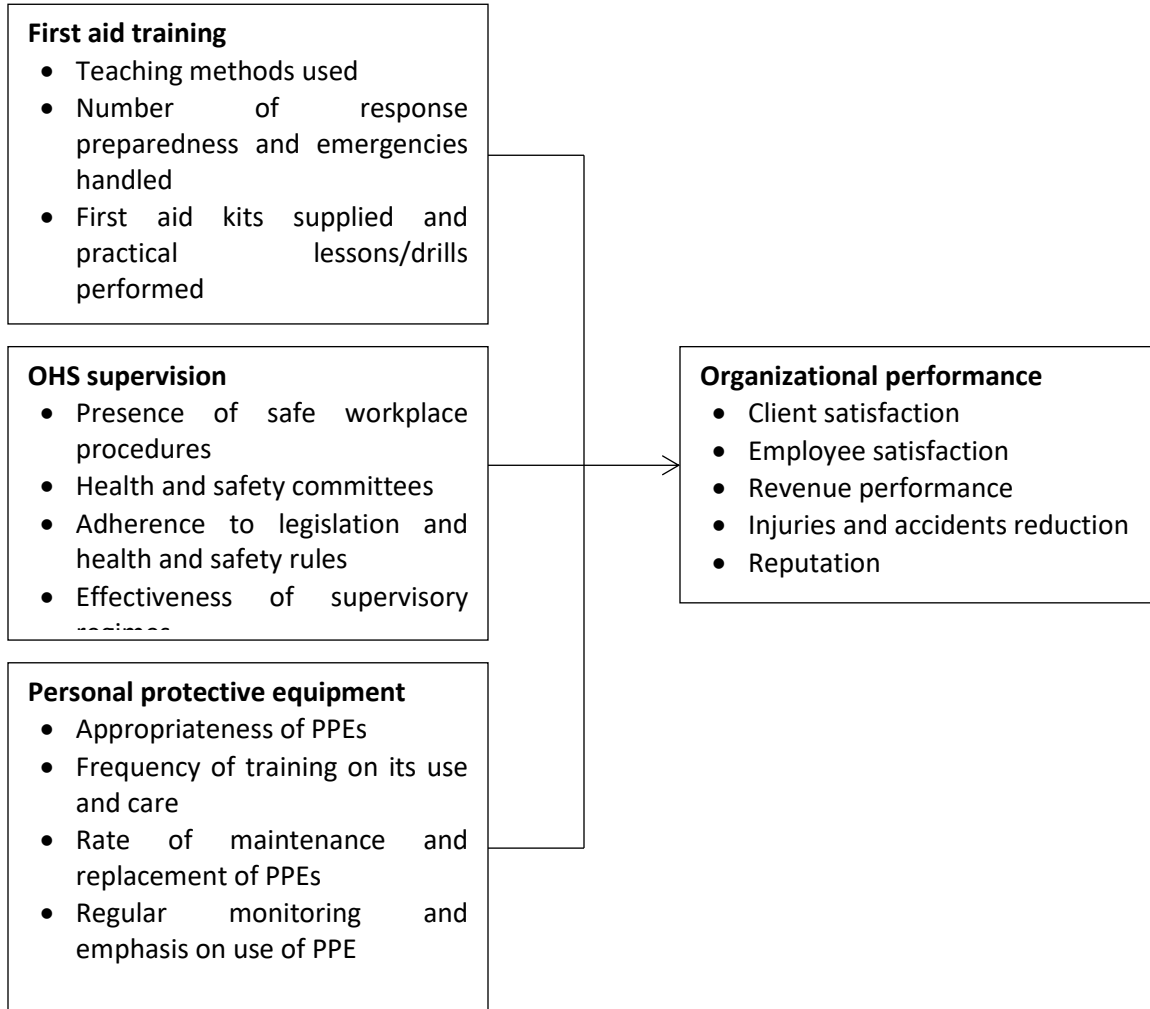
Personal Protective Equipment and Organizational Performance

Omweri and Ombui (2018) investigated the effects of OHS practices on infrastructure development and construction performance in Nakuru County, Kenya. Using descriptive research design, the authors selected 221 respondents through stratified random sampling. The study administered questionnaires to the target respondents and analyzed data using descriptive and inferential statistics. The results of the study indicated that OHS training and PPEs significantly impacted on the performance of building construction. However, the study left a gap on the use of PPEs to improve performance of KPLC which was filled in this study.

Bitire and Chuma (2022) evaluated the OSH strategies on organizational performance of power firms in Ethiopia. Using a case study of Ethiopian Electric Power Corporation, the study analyzed data using descriptive and inferential statistics. The study showed that adequate OSH training, accident prevention and social welfare significantly increased organizational performance. The OHS measures had almost similar measures of central tendency especially the mean and standard

deviation values. Improvement in health and safety values positively increased organizational performance. While this study explored OSH performance on Ethiopian Power Corporation, it left a gap on the study of PPEs on the Kenyan power corporation, KPLC which was filled by this study.

Conceptual Framework



RESEARCH METHODOLOGY

The study used the descriptive survey not only to collect data but also to understand better the implications of variables. The survey method was appropriate because it studied an existing field where the events or conditions have already occurred. The population of the study constituted all the subjects considered in the field of inquiry. Ordinarily, the population comprises of objects, cases or individuals with similar characteristics. The target population included employees from various departments of KPLC in the central rift region, which comprises Nakuru, Baringo, Kericho, Narok, Bomet, Samburu, Nyandarua and part of Laikipia. As of January 2022, the number of KPLC employees was 10,177 and 10% of them are expected to be working in the

counties mentioned above. This indicated that the study's target population is approximately 1,052. The population comprised of both male and female working in the various departments. The target population comprised of KPLC senior, middle-level and lower-level management as well as heads of sections and other employees. Yemane Formula was used to select a sample of 290 employees from 1052 employees of KPLC. Structured questionnaire was used to collect quantitative data which was analyzed descriptive statistics featuring mean and standard deviation while regression utilized the beta values, t-values and their significant levels. The results were presented in data visuals as tables, graphs and charts.

RESULTS AND FINDINGS

The data was collected from the KPLC central rift region comprising of Nakuru, Baringo, Kericho, Narok, Bomet, Samburu, Nyandarua and part of Laikipia.4.2 Response rate. The response rate was 85 percent which is 246 employees out of 290 sampled which was deemed satisfactory. On general information related to gender, Males constituted 71.6 percent of the population while females were less than half the number of males. On age distribution, approximately 109 (43.6%) of the KPLC employees in the Central Rift were aged above 45 years and was closely followed by those aged between 35 and 44 years. About 73% of the KPLC employees were aged above 35 years. This shows that majority of the employees were adults with experience in different disciplines. On academic qualification, majority of the KPLC employees have bachelors' degrees 118(47.2%) followed by those with diploma 65(26.0%). There was an almost equal number of those with certificate 29(11.6%) and masters' degree 32(12.8%). The frequencies also showed a limited number of KPLC employees with doctorate degrees 2(0.8%). On the number of years worked, majority of the KPLC employees had worked between 6 and 10 years 105 (42.7%). An almost similar number were those who had worked in the company for over ten years 104 (42.3%). On the departments in which employees worked, majority of the KPLC employees 86 (35%) were in customer service department and followed closely by those in network and maintenance management 71(28.9%).

First Aid Training Descriptive Analysis

Table 1: Descriptive Measures on First Aid Training

Statements	Mean	Std. Deviation
Excellent visual, auditory and kinesthetic techniques	2.71	1.35
Regular first aid briefings and instructions	2.28	1.07
First aid kits available and accessible	2.46	1.07
CPR preparedness and emergency drills	2.68	0.88
Skills development and written performance	2.76	0.89
Better resourcing and training of appointed first aiders	2.37	1.1
Average	2.54	1.06

Table 1 portrays range of 2.37 and 2.76 mean 2.54 average mean and 1.06 standard deviation for first aid trainings. Highest respondents did not know if first aid training program have aided their skills development by 2.76 mean and 0.89 standard deviation. Secondly, there are no CPR preparedness and emergency drills by 2.68 mean and 0.9 standard deviations. Close to average at 2.46 mean and 1.07 standard deviation feel that first aid kits are not available neither accessible. Few felt that there are no regular first aid briefings and instructions with 2.28 mean and 1.07 standard deviation. There was close variability with responses proving similar opinions of the employees.

OHS Supervision Descriptive Analysis

Table 2: Descriptive Analysis on OHS Supervision

Statements	Mean	Std. Deviation
Well laid out supervisory program on workplace safety and procedures	2.33	1.19
creation of health and safety committees to formulate and implement OHS policies and procedures	1.71	0.72
Supervisors are effective in creating positive work culture and engaging employees	2.14	1.10
Supervisors have identified risks and hazards and taken appropriate actions	2.37	1.01
There is adherence to legislations, and organizational health and safety rules	2.40	1.03
Regularly check and advice on use and disposal of protective devices and equipment	2.82	1.20
Average	2.29	1.04

Table 2 mean ranges 1.71 to 2.83 and 0.72 to 1.20 standard deviation and average of 2.29 mean and 1.04 standard deviation. Creation of health and safety committees to formulate and implement OHS policies and procedures was strongly opposed by 1.71 mean and 0.72 standard deviation. Employees felt that Supervisors are not effective in creating positive work culture and engaging employees with 2.14 mean and 1.10 standard deviations. 2.33 mean and 1.19 standard deviation prove that there are no well laid out supervisory program on workplace safety and procedures. At least supervisors have identified risks and hazards and taken appropriate actions to a moderate extent at 2.37 mean and 1.01 standard deviation. There is slight adherence to legislations, and organizational health and safety rules as proved by 2.40 mean and 1.03 standard deviation. There are regular check and advice on use and disposal of protective devices and equipment as revealed by 2.82 mean and 1.02 standard deviation.

Personal Protective Equipment (PPE) Descriptive Analysis

Table 3: Descriptive Analysis on PPE

Statements	Mean	Std. Deviation
Awareness of types and capabilities of available PPEs	2.46	1.07
PPEs selected are appropriate for the level of protection desired	2.62	0.86
PPEs available offer comfort and fit for necessary employee protection	2.28	1.08
Employees are adequately trained on the use of PPEs	2.16	0.90
There is special attention to PPE sizes, manufacturer’s instructions as well as maintenance and replacement of PPEs	2.51	0.96
managers regularly review and train employees on use and disposal	2.52	0.98
Average	2.42	0.97

Table 3 shows that means are from 2.16 to 2.62 proving close responses on the statements of PPEs with 0.86 to 1.08 standard deviation and average of 2,42 mean and 0.97 standard deviation. PPEs selected are appropriate for the level of protection desired was agreed close to moderate. Some employees feel that there is at least special attention to PPE sizes, manufacturer’s instructions as well as maintenance and replacement of PPEs with 2.51 mean and 0.96 standard deviation. However, Awareness of types and capabilities of available PPEs and potential hazards at the workplace are not necessary emphasized as pointed by 2.46 mean and 1.07 standard deviation. Employees did not agree that they are adequately trained on the use of PPEs by 2.16 and 0.90 standard deviation.

Bitire and Chuma (2022) evaluations on the OSH strategies on organizational performance of power firms in Ethiopia were ascertained. Adequate OSH training, accident prevention and social welfare significantly increased organizational performance. The OHS measures had almost similar measures of central tendency especially the mean and standard deviation values. Improvement in health and safety values positively increased organizational performance.

Organizational Performance Descriptive Analysis

Table 4: Descriptive Analysis on Organizational Performance

Statements	Mean	Std. Deviation
Training on first aid and survival skills has increased employee performance in the organization	2.9	1.9
Employees are motivated to work environment in a safe and has health measures instituted so as to satisfy clients	2.3	1.7
organization has increased its revenue performance per employee	2.2	0.9
Number of accidents and injuries have reduced hence the organization has lowered its operating costs	2.8	1.2
PPEs available offer comfort and fit for necessary employee protection	2.3	1.1
There is special attention to PPE sizes, manufacturer’s instructions as well as maintenance and replacement of PPEs	2.5	1.0
Average	2.5	1.3

Table 4 exhibits average 2.5 mean and range from 2.2 to 2.8 and average 1.3 standard deviation with ranges from 0.9 to 1.9. Employees think that training on first aid and survival skills has slightly increased employee performance in the organization by 2.9 highest mean and 1.9 standard deviation. Similarly, number of accidents and injuries have reduced a little hence the organization has lowered its operating costs by 2.8 mean and 1.2 standard deviation. 2.5 mean and 1.0 standard deviation prove little special attention to PPE sizes, manufacturer’s instructions as well as maintenance and replacement of PPEs. Employees feel they are not motivated to work in a safe environment in a safe with health measures instituted so as to satisfy clients by 2.3 mean and 1.7 deviations. Organization has not really increased its revenue performance per employee by 2.2 mean 0.9 standard

Regression Analysis

Data were regressed to identify the magnitude of first aid training, OHS supervision and personal protective et on the KPLC performance.

Table 5: Regression Analysis

Model Summary				
	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.380 ^a	.145	.122	.47643

a. Predictors: (Constant), Personal Protective, OHS supervision, First Aid Training

Table 5 show multiple determinations coefficient of 0.122 linking that the four independent variables tested that is; Personal Protective, OHS supervision, First Aid Training jointly explained 12 percent of KPLC performance. The model is therefore significant and is applicable for analysis.

ANOVA

This section of the study analysis investigated the effect of first aid training, OHS supervision and use of PPEs on organizational performance. The three are OHS measures used to examine their individual effect on organizational performance. The results of the linear model are shown in the table below.

Table 6: ANOVA Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.261	3	1.420	18.258	.001 ^b
	Residual	25.195	111	.227		
	Total	29.457	114			

A. Dependent Variable: Organizational Performance

B. Predictors: (Constant), Personal Protective, OHS Supervision, First Aid Training

The ANOVA exhibits that regression model fitted at $F(3,111) = 18.258$ of the observed data and probability value was 0.001 hence adoption of 0.05.as the benchmark. The model is significant to validity KPLC performance.

Coefficients

Table 7 prove independent and dependent variables connect ability and that performance is fostered by first aid training, OHS supervision and personal protective equipment impact KPLC performance

Table 7: Coefficients

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	2.373	.255		9.317	.000
	First Aid Training	.118	.066	.166	1.782	.001
	OHS Supervision	.087	.066	.120	1.310	.001
	Personal Protective Equipment	.183	.059	.280	3.108	.002

a. Dependent Variable: *Organizational Performance*

If the three variables that is first aid training, OHS supervision and personal protective are all constantly held at zero, KPLC performance would be 2.373 as pointed in table 4.9 above.

The model thus becomes

KPLC Performance = 2.373+0.118 First Aid Training + 0.087 OHS Supervision + 0.183 Personal Protective Equipment

The researcher viewed first aid training effect on KPLC performance. Table 7 painted that first day training is significant at $\beta=0.166$, $t=0.1782$, $p=0.001$. A single unit increase of first aid training empowers KPLC to 0.118. The p was 0.001 hence $P < 0.05$ level of significance. Hence first aid training affects KPLC performance as indicated.

The researcher viewed OHS supervision impact on KPLC performance. Table 7 painted that first day training is significant at $\beta=0.120$, $t=0.1310$, $p=0.001$. OHS supervision single unit rise empowers KPLC to 0.087. The p was 0.001 hence $P < 0.05$ level of significance. Hence OHS supervision affects KPLC performance as indicated.

The study reviewed impact of personal protective equipment on KPLC performance. Table 7 painted that first day training is significant at $\beta=0.280$, $t=3.108$ $p=0.002$. OHS supervision single unit rise empowers KPLC performance to 0.183. The p was 0.001 hence $P < 0.05$ level of significance. Hence OHS supervision affects KPLC performance as indicated

Conclusion and recommendations

Conclusion

The study results showed that first aid training, occupational health and safety supervision and personal protective equipment had positive significant relationship with organizational performance. Moreover, a unit improvement in each increased KPLC performance. The productivity of KPLC significantly improves when the organization put in effective health and safety procedures in place such as first aid kits, ventilations, protective clothing and fire fighters. It is therefore crucial for KPLC management to over emphasize on health standards to enable productivity of the employees. Specifically, there should be policies governing first aid training, occupational health and safety supervision and personal protective equipment. The study recommends regular first aid training including short courses and in-the-job training, enforcement of safety and healthy work practices, and ensuring safety of workers exposed to risk, hazards and workplace accidents.

Recommendations

The study sought to establish the effect of OHS measures on organizational performance. The OHS measures include first aid training, OHS supervision and PPEs. The recommendations in this study are made in line with the OHS measures and their effect on organizational performance.

To start with, first aid training methods of KPLC employees should involve short courses administered through mobile and online classes. There is also need to use of first aid kits and application of CPR drills on a regular basis as applied in KenGen and KETRACO. The short courses on first aid training should be made in consideration of hazards and risks that KPLC workers face. The sessions of first aid training should be regular and customized to meet the requirements of various employee categories at KPLC.

KPLC should train supervisors on occupational health and safety, out of which they will be expected to take regular assessment and evaluation of the program. OHS supervision is paramount in enforcing the safety and healthy work practices. Supervisors such as superintendents, foremen and managers have a huge role in enforcing policy and ensuring that KPLC employees adhere to the company's act on safety, health and welfare. Supervision should be constantly monitored and assessed to determine compliance and adherence to the regulations.

This study recommends that KPLC should provide safety glasses, flame-resistant clothing, safety shoes, and insulating sleeves, and face shields on a regular basis. These safety equipment and gadgets should be regularly checked for damage and weariness and periodically repaired, if need be, to protect employees from hazards and accidents while at work.

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