INFLUENCE OF IMPLEMENTATION OF OCCUPATIONAL SAFETY PROGRAMS ON EMPLOYEE PERFORMANCE IN THE TELECOMMUNICATIONS INDUSTRY: A CASE OF KENYA DATA NETWORKS (KDN), NAIROBI COUNTY

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A Research Project Report Submitted in Partial Fulfillment of the Requirement for the Award of The Degree of Master of Arts in Project Planning and Management of The University of Nairobi

DECLARATION

This research project report is my original work and has not been presented for award of any degree or any other University.

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This research project report has been submitted for examination with my approval as the University supervisor.

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DEDICATION

I dedicate this work to my husband Antony Mugera children Jeremiah Mugera and Andrew Mugera. You've had to sacrifice a lot for my dreams. I will forever be grateful to have you in my life. To my sister Margaret Rigoro thanks for always being there.

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ABBREVIATION AND ACRONYMS

ССК	-	Communications Commission of Kenya	
EASHW	-	European Agency for Safety and Health at Work	
EU	-	European Union	
FKE	-	Federation of Kenya Employees	
ILO	-	International Labor Organization	
IP	-	Internet Protocol	
KDN	-	Kenya Data Network	
NACOSH	-	National Council for Occupation Health and Safety	
PPE	-	Personal Protective Equipment	
TPB	-	Theory of Planned Behavior	
WHA	-	World Health Assembly	
WHO	-	World Health Organization	
WIBA	-	Work Injuries and Benefits Act	

ABSTRACT

The purpose of this study was to investigate the influence of occupational safety programs on employee performance in the telecommunications industry, Nairobi County, Kenya. According to International Labor Organization (ILO), every year more than 2 million people die from occupational accidents or work-related diseases and rate of injuries and ill-health is much higher than this figure. Studies indicate that the Occupational Health and Safety (OHS) based management systems not only reduce accidents and injury rates but also improves the business and productivity of an organization. The study was guided by the following objectives, safety training programs, modern technology, safety clothing and OHS accident related costs and delimited to Kenya Data Networks Limited (KDN) in Nairobi County, Kenya. This research project's empirical literature was strengthened by two theories; the Theory of Planned Behavior and the Social Exchange Theory. The study employed descriptive research design that targeted an overall unit of analysis of 430 from which a sample size of 44 was extrapolated. The research instruments included questionnaires and interview guides which were first validated and their reliability tested through the test re-test piloting method.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Occupational health and safety issues in telecommunications projects primarily include: electrical safety, electromagnetic fields (occupational), optical fiber safety, elevated and overhead work, fall protection, confined space entry and motor vehicle safety (Seoul Declaration, 2012). Others include noise and hazardous materials and waste. In the Telecommunications industry, Occupational Safety and Health has recently become a much higher priority. This is in light of the growing evidence of great loss, life included and suffering caused by occupational diseases and accidents, ill-health across many different employment sectors, and is of concern to managers, stakeholders including governments and human rights groups without disregarding the fact that, first of all, protection of human life is a matter of human rights.

It is clear that the purpose of Operation Safety and Health is to create a safe working environment and employees are protected from workplace accidents or from adverse events. This is attributed to the factors that drive job satisfaction, such as sup-porting employment condition in which employees care about good working environment for personal comfort and to ease their task because they prefer to work in the physical environment that is not dangerous or troublesome. A good implementation of OSH would foster a sense of security and comfort in the heart of the employee (Robin, Walker, 2000). With the creation of a sense of security and comfort, these in turn would make employees in the better position to avoid work accidents and would not hinder their performance. Thus, the creation of a sense of security and comfort in the workplace would also enable improvement of employee's performance.

Occupational health and safety is posited to be an area that is concerned with the health, safety and welfare of employees. It is further asserted that one of the objects of occupational health and safety programs is to foster a safe and healthy working environment. The aforementioned programs may reach out to protect other stakeholders in the concerned sector (Fanning, 2003). Occupational safety and health is argued to be important from moral, legal, and financial perspectives. It is exemplified that employers have moral obligation to reasonably care for their employees. Furthermore, the Government formulates statutory laws to regulate health and safety at the workplaces. In the same light, appropriate occupational

safety and health programs can go a long way to minimize costs associated with employee injuries and illnesses, medical care, sick leave, and indeed disability benefit costs.

It is alleged (EU-OSHA, 2007) that, employers of most OECD countries are under obligation not only to protect their employees' physical health, but more so their psychological health. Psychological health hazards are said to be associated with the way work is designed, organized, and managed, as well as the economic and social contexts of work. In short, occupational health is argued to be linked to psychological risks such as occupational stress, and violence at the workplaces. These are internationally recognized as grave challenges to occupational health and safety. A survey by the European Agency for Safety and Health at Work (EASHW) observed that the most vital emerging psychological risks include among others, precarious work contracts, enhanced worker vulnerability, job insecurity, and work intensification (EU-OSHA, 2007).

The history of OSH in Kenya dates back to 1950, when it was found necessary to have a legal instrument to manage the safety, health and welfare of people employed in factories. The then colonial government adopted the British Factories Act of 1937. In 1990 the Factories Act was amended to the Factories and Other Places of Work Act, in order to enlarge its scope of coverage. In 2007 this Act was repealed, and was replaced by the Occupational Safety and Health Act. In the same year, the Work Injury Benefits Act was enacted.

Currently, Occupational safety and health services in Kenya are governed by two pieces of legislation: the Occupational Safety and Health Act, 2007 (OSHA 2007) and the Work Injury Benefits Act, 2007 (WIBA, 2007). The purpose of OSHA 2007, is to secure the safety, health and welfare of people at work, and to protect those not at work from risks to their safety and health arising from, or in connection with, the activities of people at work. The purpose of WIBA 2007, is to provide compensation to employees for work-related injuries and diseases contracted in the course of their employment, and for connected purposes. There are also several regulations and subsidiary laws that deal with OSH issues.

According to the European Statistics on Accidents at Work (ESAW), every year in the 15 Member States of the European Union (EU) before the enlargements of 2004 and 2007 about 5,000 workers were killed in accidents at work and about 5 million workers were victims of accidents at work leading to more than three days' absence from work (EU, 2010). In India and China, the rates of occupational fatalities and accidents are similar at, respectively, 10.4 and 10.5 per 100,000 for fatalities, 8,700 and 8,028 for accidents. In Latin America and the

Caribbean, about 30,000 fatalities occur each year and 22.6 million occupational accidents cause at least three days' absence from work. In sub-Saharan Africa, the fatality rate per 100,000 workers is 21 and the accident rate 16,000. This means that each year 54,000 workers die and 42 million work-related accidents take place that cause at least three days' absence from work. The economic costs of these injuries and deaths are colossal, at the enterprise, national and global levels. Taking into account compensation, lost working time, interruption of production, training and retraining, medical expenses; estimates of these losses are routinely put at 4 per cent of global GNP every year.

According to Babcock's Networks Division, a leading telecommunications company in Europe, it recently revised the company's health and safety policy supplemented by a combined health, safety & environmental management procedure and a health and safety manual (Johnes, 2012). These manuals detail the roles and responsibilities of different positions in the company with regards to health and safety from managing director, senior management, to all workers. The Networks Division has a strong ethos of compliance and run dual accreditation for OHSAS18001, ISO14001 and ISO9001 with both the BSI (British Standards Institute) and the LRQA (Lloyds register quality assurance). The company policies and procedures are clearly defined and communicated to each manager and worker in the organization.

Telecommunications is one of the fastest growing sectors of South Africa's economy, driven by explosive growth in mobile telephony and broadband connectivity. With a network that is 99.9% digital and includes the latest in fixed-line, wireless and satellite communication, the country has the most developed telecoms network in Africa. An increase in the number of undersea data cables linking South Africa to the rest of the world, as well as market liberalisation, has seen a shake-up in local internet access (Brand SA, 2012). While mobile phones are driving usage, data costs are being driven down by the increasing number of undersea cables connecting sub-Saharan Africa to the rest of the world. Undersea cable capacity to South Africa at the end of 2011 was 2.69 Terabits a second (Tbps), and that will rise to 11.9 Tbps by the end of 2012. This is expected to double again in 2013. The Seacom submarine fibre-optic cable system linking south and east Africa to global networks via India and Europe was commissioned in July 2009, while the East African Submarine Cable System (EASSy), that links countries along the continent's eastern coast to the rest of the world, started service in August 2010. The West Africa Cable System, Africa's largest capacity submarine fibre optic cable, links southern and western African countries with Europe. The 17 200km system raises South Africa's current broadband capacity by more than 500 Gigabits per second (Gbps). Globalization and the global dynamics of the market are forcing many enterprises, including the telecommunications industry, to develop new strategies. The Telecommunications industry today is a key enabler of productivity across economies and societies. The Telecom industry is not only a significant contributor towards the economic activities of countries, but also towards the growth of other industries (Robson et al., 2012). New technologies and increased globalization of many markets encourage environmental turbulence, such that by understanding all this, managers can come up with strategies that will help them propel through it thus avoiding downfalls and ensuring prosperity. As such, employee performance remains of utmost significance to the telecommunication industry (Sweis et al, 2008).

Employee performance has been an issue in most countries due to poor work ethics, which have developed gradually, poor co-ordination between departments among other factors (Davenport, 2013). There are always gaps between the expected and actual performance (Akuezuilo, 2010). Having a loyal foundation of satisfied clientele within a competitive environment, increases revenues, decreases costs and ultimately improves organizational performance (Armstrong, 2010). The employee job performance can be negatively affected by Occupational health and safety which means if there is lack of high performance in job the organizations performance also gets affected hence also affecting the overall organization performance. For Example: If the telecommunications workplace is not health hazard proof it will cause accidents/ diseases among workforce hence negatively affect the employee job performance and organization performance as affirmed by Karen Danna et al (1999) "Researchers and project managers have generally recognized that health and well-being can potentially affect both workers and organizations in negative ways. For example, workers experiencing poor health and well-being in the workplace may be less productive." Effective managers and supervisors realize that they must take an active and positive role in employee performance to ensure that goals are met. Managing employee performance is one way of empowering employees. To give the organization and its employees the opportunity to achieve high performance, managers and employees must understand their workplace safety thoroughly, in terms of both what they are doing and how they are supposed to do it. Effective managers aim to facilitate performance and stimulate employees for performance (Zeithmal, 2002).

Health at work and healthy work environments are among the most valuable assets of individuals, communities, companies and countries. Occupational safety and health is an important strategy not only to ensure the health and safety of workers as required by law, but also contribute positively to productivity, quality of products, work motivation, job satisfaction and thereby to the overall quality of life of individuals and society (WHO, 1994). Virtually all employees in an organization are affected by occupational safety and health for better or worse. Employees at work environment are out in the open to many of the health and safety hazards as they are exposed to potentially dangerous equipment, machines, tools or chemicals in the workplace. Due to mounting social and public pressure and rising consumer expectations, enterprises are increasingly being expected to go beyond the legal requirements and act more responsibly.

Creating workplaces that are healthy for the employees and that prevent illness and disease, is one way in which companies can meet these rising expectations while also improving productivity and competitiveness (Torrington et.al, 2008).

It is clear that the purpose of OSH is to create a safe working environment and employees are protected from workplace accidents or from adverse events. This is attributed to the factors that drive job satisfaction, such as supporting employment condition in which employees care about good working environment for personal comfort and to ease their task because they prefer to work in the physical environment that is not dangerous or troublesome. A good implementation of OSH would foster a sense of security and comfort in the heart of the employee. With the creation of a sense of security and comfort, these in turn would make employees in the better position to avoid work accidents and would not hinder their performance. Thus, the creation of a sense of security and comfort in the workplace would also enable improvement of employee's performance.

Kenya Data Networks (KDN) is a "Full Service, Data Communications Carrier" that was licensed by the CCK in January 2003 as a "Public Data Network Operator" with a mission to build world-class infrastructure in Kenya. KDN is a Kenyan registered communications company that operates the largest data and Internet backbone in East Africa. They provide a comprehensive suite of services over fibre optic network including Internet Protocol (IP) services, broadband transport, infrastructure services and collocation services. KDN is the second largest IP Network in Africa, having laid out telecommunications infrastructure to cover most of the regions in Kenya and within East Africa, namely Uganda, Rwanda and

Democratic Republic of Congo (DRC) to ensure delivery of excellent service to customers. Currently apart from providing interconnection between cities, the company is expanding and providing interconnection between countries such as Uganda, DRC and Rwanda, so that customers with business partners within these regions, will be able to communicate at lower rates (KDN Report, 2014).

A positive OSH achievement would create a sense of security that could improve performance, because if employees do not feel safe whilst working, they may not do their job well. This study seeks to examine how Occupational safety programs are used or can be used to influence or enhance employee performance.

1.2 Statement of the Problem

According to International Labor Organization (ILO), every year more than 2 million people die from occupational accidents or work-related diseases (ILO Safety and Health at Work, 2010) and rate of injuries and ill-health is much higher than this figure. Studies indicate that the Occupational Health and Safety (OHS) based management systems not only reduce accidents and injury rates but also improves the business and productivity of an organization (Seoul Declaration 2008, ILO-OSH 2001). Extent of such view has increased considerably in the past few years. Fernández-Muñiz et al. (2012) said that occupational accidents and unsafe working conditions not only have a bad effect on human resource but also it damages the material, reduces the productivity and diminishes the motivation of workers.

In 2014, there were close to 3.2 million non-fatal accidents that resulted in at least four calendar days of absence from work and 3 739 fatal accidents in the EU, a ratio of approximately 850 non-fatal accidents for every fatal one.

There are studies; Ndirangu (2013), Gichuki (2013), Smart and Vertinsky (2006) which have been carried out to determine the strategic responses adopted by telecommunication firms to changes in the external environment, to the best of the researcher's knowledge, there is no published study carried out on assessing the influence of occupational safety programs on enhancing employee performance. It is against this knowledge gap that the present study is base. Abuga (2012) conducted a case study at Pyrethrum Board of Kenya which sought to know the effects of occupational safety and health programs on organization effectiveness. Abuga's findings were that employees must be involved in planning of occupational; safety and health programs. Indakwa (2013) also did a cross-sectional study on the perceived influence of occupational health and safety practices on job satisfaction among employees in the sugar industry. The research established that occupational health and safety influence job satisfaction, and the findings of the study was that occupational safety and health influences job satisfaction.

A number of previous studies have focused on occupational safety and health practices, strategies and compliance on performance/productivity of the organization, and their findings have established that occupational health and safety enhances organizational performance. However, none of the studies conducted have provided or linked the relationship between occupational safety and health to performance of employees especially in the energy sector. It is from this knowledge that the study seeks to investigate the relationship between occupational safety and health programs on performance of employees at Kenya Data Networks by answering the following question: What is the effect of occupational safety and health program to performance of employees at Kenya Data Networks?

1.3 Purpose of the Study

The purpose of this study was to investigate the influence of occupational safety programs on employee performance in the telecommunications industry, Nairobi County, Kenya

1. 4 Objectives of the Study

The study was be guided by the following objectives.

- i. To establish the extent to which safety training programs influence employee performance in the telecommunications industry, Nairobi County, Kenya
- To examine the influence of modern technology's influence employee performance in the telecommunications industry, Nairobi County, Kenya
- iii. To determine the influence of safety clothing on employee performance in the telecommunication industry, Nairobi County, Kenya
- iv. To establish the extent of Operation Health and Safety accident costs on employee performance in the telecommunications industry, Nairobi County, Kenya

1.5 Research questions

- i. To what extent does safety training programs influence employee performance in the telecommunication industry?
- ii. How does modern technology influence employee performance in the telecommunication industry?
- iii. What is the influence of safety clothing on employee performance in the telecommunication industry?

iv. How do accidental costs related Operation Health and Safety influence employee performance in the telecommunications industry?

1.6 Significance of the Study

The aim of this research was to study the link between employee performance and health and safety training programs. Not disregarding the fact that, first of all, protection of human life is a matter of human rights issue, selected data are given related to occupational accidents and diseases on both macro and enterprise levels. The research was to portray the importance of implementing health and safety interventions at workplace since they have impacts not only on enterprise level but also on individual and social levels.

The importance of this study can be seen in diverse way, it could provide bases for the formulation of effective occupational health and safety policies across the targeted and similar telecommunications institutions and also by the government in the country. The study may also provide an opportunity for employees, employers to identify their specific respective roles in prevention of major accidents. It will also provide bases for other telecommunication firms in Kenya to adopt the recommendations in the formation of effective major accident prevention. The work can be used as reference material for other researchers interested in this particular field thereby enlightening the issues in other institutions and other counties in Kenya and globally.

1.7 Delimitations of the study

The study sought to assess the influence of occupational safety programs on enhancing employee performance with reference to the Global Systems for Mobile Communications (GSM). Whereas a myriad of aspects exist in this regard, the present study will narrow down the same into four, namely: safety programs, advanced technology, safety clothing and equipment, OHS related accident costs and employee performance. The scope of the study further encompassed top, middle and operational level employees at GSMA.

1.8 Limitations of the Study

Most of the employees across the institution may have unstable or unfavorable work schedules which made conducting of data collection very difficult. Another limitation included the reluctance of the respondents in disclosing information with the view that the information could be disclosed to the outside world and it could be used against the respective institution. Further for confidentiality reasons, the researcher ensured that information given by the respondents were private and confidentially kept. On reluctance the researcher produced an introductory letter to assure respondents that the study is meant for education purposes only.

1.9 Assumptions of the Study

The study assumed that respondents would give factual information when filling out the questionnaire as they were expected to be honest when answering questions; all respondents given the questionnaire would be literate and able to read, understand, and answer the questions on the questionnaire; and that respondents would be willing to participate in the study by filling out questionnaires and giving information that was required in the study.

1.10 Definition of Significant Terms

- Modern Technology This is any trending or the latest telecommunications technology that KDN employs to improve or expose hazardous risks by the employees of the company when performing their duties
- Occupational Safety A multidisciplinary field concerned with the safety, health, and welfare of telecommunication industry's employees at work
- **Safety Training Programs** A health and safety program contains the health and safety elements, protocols and procedures of a telecommunications organization, objectives which make it possible for the company to achieve its goal in the protection of its workers at the workplace.
- Safety Clothing and Equipment Refers to protective clothing, helmets, goggles, or other garments or equipment designed to protect a telecommunication's employee body from injury or infection. The hazards addressed by protective equipment include physical, electrical, heat, chemicals, biohazards, and airborne particulate matter.
- **Telecommunications** Kenya Data Network's use of science and technology of communication at a distance by transmission of electrical impulses, electromagnetic waves, or optical pulses, as by telephone, radio, television, or computer network.

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1.11 Organization of the Study

This study is organized in five chapters. Chapter One deals with background on the research topic, the research questions that will guide the study and the Problem Statement. Chapter Two is to review empirical literature that has been done by scholars and researchers in relation to the study topic. This chapter will be themed as per the objectives and variables in Chapter One. Chapter Three dealt with research methodology including the research design, research population, the instruments employed that is, the questionnaires and showed how data was to be analysed. Chapter Four dealt with data presentation, analysis and interpretation while Chapter Five dealt with discussions of the findings and indicated recommendations for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presented a review of literature relevant to the study. Past research studies were studied in order to give more insight into the topic and to find out the approaches that have been used in earlier studies, compare methodologies used to examine findings obtained in the past and sample current opinions given. The chapter was organized according to research objectives to ensure there was relevance to the research questions; the chapter also discussed empirical literature review, theoretical framework and the conceptual framework of the project study.

2.2 Operation Safety and Health Concept and Employee Performance

Occupational safety and health (OSH), also commonly referred to as occupational health and safety (OHS), occupational health, or workplace health and safety (WHS), is a multidisciplinary field concerned with the safety, health, and welfare of people at work, irrespective of industry or sector. The goals of occupational safety and health programs include fostering a safe and healthy work environment. It also protects co-workers, family members, employers, customers, and many others who might be affected by the workplace environment.

One of the problems faced in this industry is the OHS perception and OHS culture perspectives. This includes not using personal protective equipment during site works, not delivering compulsory training to the working personnel or not tracking such training; Looking at OHS practices as a cost or time losing activity, always are the most common problems.

Occupational health and safety hazards may also arise during construction and are common to other types of construction sites and are described in detail, along with measures for their prevention and control, in the General EHS Guidelines. Excavation, construction, and repair of some components of a telecommunications system may result in workers' exposure to existing aboveground or underground utilities, including aerial or buried electric transmission lines or buried natural gas and petroleum pipelines. Identification and location of all relevant existing underground utilities should be undertaken prior to any excavation and trenching activities (Fernández-Muñiz et al., 2012).

However occupational safety is concerned with prevention of accidents and minimizing the aspect of work environment that has the potential of causing immediate violent harm to employees (Armstrong, 2012). According Mejia (2010) asserts that occupational safety and health is abroad area which includes both physical and emotional well-being. Effectively managing workplace safety and health requires far more than reducing the number of job related accidents and injuries. Health and safety is a positive concept that includes social and personal resources as well as physical capabilities (Nutbeam, 1990). It has been conceptualized as the ability to have and to reach goals, meet personal needs and cope with everyday life (Raphael, Brown, Renwick & Rootman, 1997). The concept of accident proneness is now largely discredited; safety and health programs 5 concentrate as far as possible on ensuring that the employee is suitable for the job and that work is conducted in a safe environment (Graham and Bennet, 1995). Jackson et.al. (2009) states that the term occupational safety and health refers to the physiological – physical and psychological conditions of a workplace that result from work environment provided by the organization.

The Constitution of the Republic of Kenya is supreme, and lays the foundation for all other laws. Although it is not specific on OSH, it provides, in the Bill of Rights, the right for every citizen to fair labour practices, reasonable working conditions, and a clean and healthy environment. Through tripartite consultations the Government has also approved a national OSH policy that will greatly improve the OSH profile when it is implemented (ILO, 2013). The history of OSH in Kenya dates back to 1950, with the introduction of the Factories Act. In 1990 this Act was amended to the Factories and Other Places of Work Act, to enlarge its scope. The Occupational Safety and Health Act (OSHA) and the Work Injury Benefits Act (WIBA) were enacted in 2007, and are now the principal laws that govern OSH in the country. There are other laws that touch on OSH, but they are managed by other government ministries and corporations. In Kenya, OSH is managed by the Directorate of Occupational Safety and Health Services (DOSHS). DOSHS is the designated national authority for collection and maintenance of a database, and for the analysis and investigation of occupational accidents and diseases, and dangerous occurrences. (International Labor Office, 2013). The Directorate's policy and legal mandate are provided by the National Occupational Safety and Health Policy of 2012, OSHA 2007, and WIBA 2007. The body responsible for reviewing national OSH legislation, policies and actions is the National Council for Occupational Safety and Health (NACOSH), whose composition includes the Federation of Kenya Employers (FKE) and the Central Organization of Trade Unions (Kenya) (COTU-K).

It is clear that the purpose of OSH is to create a safe working environment and employees are protected from workplace accidents or from adverse events. This is attributed to the factors that drive job satisfaction, such as supporting employment condition in which employees care about good working environment for personal comfort and to ease their task because they prefer to work in the physical environment that is not dangerous or troublesome. A good implementation of OSH/OHS would foster a sense of security and comfort in the heart of the employee. With the creation of a sense of security and comfort, these in turn would make employees in the better position to avoid work accidents and would not hinder their performance. Thus, the creation of a sense of security and comfort in the workplace would also enable improvement of employee's performance. A positive OSH/OHS achievement would create a sense of security that could improve performance, because if employees do not feel safe whilst working, they may not do their job well.

2.3 Safety Training Programs and Employee Performance

An occupational health and safety program is a definite plan of action, designed for each specific workplace, to prevent accidents and occupational disease. An occupational health and safety program is an important health and safety tool. Effective occupational health and safety programs have been proven to reduce accidents and illnesses in the workplace. The purpose of an occupational health and safety program is to prevent accidents and occupational disease in a specific workplace. To do so effectively, the occupational health and safety program may need to go beyond legislated requirements set out in Acts and regulations. The Act and regulations simply set out the minimum requirements on a wide variety of health and safety issues, without reference to their implementation within each workplace. In contrast, an occupational health and safety program sets out the requirements and procedures needed in each workplace to prevent accidents and occupational illness.

The most effective OHS programs are developed jointly by management and staff. Employers have both general and specific responsibilities related to hazard control and worker health and safety. In carrying out these duties, management, from the chief executive officer through to the first-level supervisor, can demonstrate their commitment to health and safety in the workplace. Workers too have general responsibilities for their own health and safety and that of other workers. In addition, they have the responsibility to refuse unsafe work; discriminatory action cannot be taken against them for refusing to do unsafe work (Clarke, 2013).

In multilingual workplaces, employers must ensure that all health and safety information is available to staff either in their preferred language or in a form that they can understand. Failure to provide this information in an appropriate form could place employees at risk. Many people working in Alberta, Canada have been critical of the continued commitment of huge amounts of resources and time to the OHS Programs which has been producing questionable outcomes for the past decade in relation to employee performance. Mari-Len De Guzman, a Canadian OHS expert, opinioned that Five years ago, it was obvious to those who looked closely that these programs' process was failing (Guzman, 2010). At the time, the worst employers were being targeted by the Alberta government's health and safety officers, and being all but forced into obtaining a Certificate Of Recognition (COR). The problem was that over one-third of the 700 worst employers in Alberta (as measured by their injury results) already had a COR. Creating a safe and healthy workplace requires a commitment of time and money to create a culture and positive accountability system that makes safe work possible. It requires that the company create a safe work environment and set of safe behaviors that can be seen in not only the results (less injuries and illness) but be viewed in the process of work. Very safe companies not only have the documented process of creating safety, but they can demonstrate by the way they work that safety is the "way it is around here." The result of that commitment of working safely is that very few people get hurt and the companies doing this "safety creation" can work long periods of time without anyone being injured or becoming ill (Guzman, 2010).

All employers are required to have an OHS program. The type of program depends on the size of the workforce and the nature and extent of the risks and hazards in the workplace. An OHS program requires a statement of the employer's aims and the responsibilities of the employer, supervisors, and workers in form of a policy. A good health and safety policy should be simply written and easy to understand. It does not need to be longer than a few paragraphs. The written policy should be signed by the CEO or senior manager on-site. It should be dated and reviewed annually. All workers should be made aware of the policy and its importance. For example, it could be given to all new workers and posted in the workplace. Improving employee productivity and occupational health and safety (OHS) have been an important field of interest of industry especially in developing countries. Some common characteristics of such industries include inappropriate workplace design, ill-structured jobs, mismatch between job demands and worker's abilities, adverse environments, poor human-machine system design, and inappropriate management programs.

These factors lead to workplace hazards, poor employee health, mechanical hardware injuries, and disabilities, which reduce the worker productivity and work/product quality and increase the cost (Shikdar, Sawaqed, 2003).

These programs provide instruction to build and broaden worker skills in hazard recognition and problem-solving skills much like that noted above. Emphasis, however, is on worker activism with the goal of ensuring their rights to an illness-and injury-free workplace (Wallerstein, Baker, 1994). Hence, the program aims at enabling workers to effect necessary control measures through educating co-workers and supervisors, and through use of committee processes or in health/safety contract negotiations. This approach is in accord with the current "Total Quality Management" philosophy having rank-and-file workers along with their supervisors share greater roles in and be more accountable for addressing workplace hazard control needs. In the USA, OS&H training as implemented at the workplace rarely has a stand-alone status. For example, OS&H training may be a natural part of job skills training or a simple add on. On-the-job type of training, of necessity, would have to cover both objectives. In some cases, work methods to be learned and safe work practices prescribed by Operation Health and Safety - Atlanta (OSHA) standards are much the same. In occupations such as the telecommunications environment, "poor technique" is widely reported as a cause of injury with inadequate training cited as the underlying problem. This shortcoming refers to a failure to develop (learn) proper work methods and the safety precautions that derive from them hence compromising employee performance (Slappendel, 2010).

In Kenya, 75 institutions offer OSH training for safety and health committee members, and also for awareness creation. This, together with the master's degree and postgraduate diploma courses offered by one local university, is likely to increase awareness levels, and thus impact positively on the national OSH profile. The country has 49 active registered safety advisers, 30 fire safety auditors, 38 designated health practitioners, and many other professionals such as plant examiners involved in the OSH field (ILO, 2013).

2.4 Advanced Technology and Employee Performance

Recent occupational accidents urged enterprises to put more importance on occupational health and safety practices. According to Takala (2005), the director of the ILO's safe work program, one of the suspects of the high rated incidents is stated the lack of training and skills in developing nations. Most people in these economies have never worked in heavy industry and only some of them have little experience on hazards like electricity (Perez-Floriano,

Gonzalez, 2007). Occupational health and safety systems are generally based on directives published by national and international organizations and institutions (such as BS 8800 NZS 4801 / AS, OHSAS 18001 or ILO-ISG-2001). Occupational Health and Safety Assessment Series (OHSAS) 18001 has become an important standard to assess safety management processes at company level (Granerud, Rocha, 2011). Abad et al. (2013) suggested that adoption of OHSAS 18001 was strongly explained by objective safety parameters. This indicated that managers should have used the foregoing framework as a mechanism in order to improve safety conditions in the workplace.

In a conference on OHS held in Edmonton, England, the panelists opinioned that OHS related technology will significantly increase in importance in the occupational health and safety space over the next 10 years; new ways to monitor, measure and control telecommunications' workplace hazards are emerging with the rapid development of consumer-driven technologies, and soon this will result in alternative ways to assess risk and exposure to a wide variety of potentially harmful conditions. Technology megatrends, including the rapid growth of the Internet of Things (IoT), where electronic devices become instantly addressable online and can "integrate" with other consumer products we use every day, are already starting to have influence on how we can assess the working environment in real time. Katarzyna, an OHS Tech Expert cites the integration of state of the art materials, components and ICT solutions to be used in environmental awareness, monitoring of physiological parameters, reporting, interaction with tools in order to improve employee task performance, traceability of exposure, integrity and maintenance in the telecommunications industry coupled with, development of adaptive materials and systems allowing to adjust the range of protection parameters of the communications devices to the changeable conditions of a workplace in order to optimize the balance between protection and task performance or between protection and comfort of the employee (Katarzyna, 2011).

2.5 Safety Clothing and Equipment and Employee Performance

The right to health and safety at work has been stipulated in the Constitution of WHO and ILO and is supported by a number of other United Nations documents. No country has so far been fully successful in achieving this objective for all workers. Thus occupational health infrastructures and programmes should be further developed in every country (WHO, 1994). Controlling a hazard at its source is the best way to protect employees. Depending on the hazard or workplace conditions, Occupational Safety and Health Administration (OSHA) which is an arm of the U.S Department of Labor, recommends the use of engineering or work

practice controls to manage or eliminate hazards to the greatest extent possible. For example, building a barrier between the hazard and the employees is an engineering control; changing the way in which employees perform their work is a work practice control.

When engineering, work practice and administrative controls are not feasible or do not provide sufficient protection, employers must provide personal protective equipment (PPE) to their employees and ensure its use. Personal protective equipment, commonly referred to as "PPE", is equipment worn to minimize exposure to a variety of hazards. Examples of PPE include such items as gloves, foot and eye protection, protective hearing devices (earplugs, muffs) hard hats, respirators and full body suits (OSHA, 2005).

The South African telecommunications industry is male-dominated and, as such, involves hazardous, labour-intensive work, many aspects of which offer little or no gender-appropriate adaptations for women. Personal protective equipment (PPE) and clothing are examples where designs are exclusively matched to the male physique (Lindwe, 2003). PPE is used as a last resort, when all other engineering control measures have failed, or are not adequate, to prevent exposure to hazards associated with telecom physical activities and conditions; PPE should therefore be carefully selected, based on the nature of the hazard(s), the levels of risks associated with those hazards, and the physical attributes of the individual workers. Section 6(2) of the South African amended Telecommunications Health and Safety Act (THSA) No. 29 of 1996 stipulates that "Every manager must ensure that sufficient quantities of all necessary PPE is available so that every employee who is required to use that equipment is able to do so." The Act also stipulates that workers should use PPE in the required manner and ensure adequate maintenance of the equipment is adhered to (Zungu, 2003).

2.6 OHS Accident Costs and Employee Performance

The Constitution of WHO stipulates the fundamental right of all people to the highest attainable standard of health. In addition, article 2 of Chapter II - of the Constitution specifies prevention of accidental injuries and the pro- motion of improvement of working conditions as functions of WHO. WHO has had a special programme for occupational health since 1950 and close coordination and collaboration has taken place with ILO. The Alma Ata Declaration emphasized the need to organize primary health care services (both preventive and curative) "as close as possible to where people live and work" (WHO, 1994). The Declaration emphasized that in the organization of such services, high priority should be given to the people most in need, including the working populations at high risk. In 1979 a

new strategy for the further development of occupational health was launched when the World Health Assembly adopted Resolution WHA32.14 on the Comprehensive Workers' Health Programme. In 1980, Resolution WHA33.31 encouraged countries to integrate occupational health and primary health care services to cover underserved populations, particularly in developing countries. In the same resolution a need for further development of occupational health services, training and research was emphasized (ILO Report, 2002).

Post-accident investigations have revealed that the majority of accidents are caused by unsafe practices. Most of these practices are known beforehand to be unsafe and in violation of safety regulations; in addition to their social costs, workplace injuries and illnesses have a major impact on an employer's bottom line. It has been estimated that employers pay almost \$1 billion per week for direct workers' compensation costs alone. The costs of workplace injuries and illnesses include direct and indirect costs. Direct costs include workers' compensation payments, medical expenses, and costs for legal services (OHSA, 2004). Examples of indirect costs include training replacement employees, accident investigation and implementation of corrective measures, lost productivity, repairs of damaged equipment and property, and costs associated with lower employee morale and absenteeism.

In Kenya, the Work Injury Benefit Act, 2007 (Acts :No. 13 of 2007), states that The Workers Injury Benefit Act (WIBA), 2007 is an Act of Parliament to provide for compensation to employees for work related injuries and occupational diseases contracted in the course of their employment. It repealed the workmen's compensation Act cap 236.

The Act came into operation as from 2nd June 2008 and has the following procedure in the event of an accident; The injured employee reports the accident to the employer, The employer reports the accident to the Directorate of Occupational Safety and Health Services using the official prescribed forms (DOSH 1); The employer refers the employee to the doctor who treated him or her so that the doctor can assess the degree of disablement; In case of fatal accident, the employer returns the forms to the Directorate accompanied by the death certificate; The doctor assesses the worker and gives the percentage of incapacity suffered by the employee, completes the relevant forms and then the forms are returned to the Directorate; The Directorate calculates the work injury benefit payable to the employee based on the employees earning and degree of disablement; The Directorate demands payment of the compensation due to the injured employee or to the dependants of a dead employee; The employer or insurer pays to the Directorate the amount due as compensation;

The dependants of a dead employee are officially identified before payment can be done; The Directorate then pays the injured employee or the dependants the work injury benefit money that has been paid by the employer (Directorate of Occupational Safety and Health Services, 2007).

2.7 Theoretical Review

The study was grounded on the following theories that were found to be relevant to the problem being addressed.

2.7.1 Social Exchange Theory

The Social Exchange Theory (SET) is a psychological theory that attempts to explain the social factors that influence how individuals interact within reciprocal relationships; defined as the exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons. Cost was viewed primarily in terms of alternative activities or opportunities foregone by the actors involved (Homans, 1961). Reinforcement principles derived from the kind of behaviorism popular in the early sixties were used by Homans to explain the persistence of exchange relations. Behavior is a function of payoffs, whether the payoffs are provided by the nonhuman environment or by other humans. Emerson (1972a) subsequently developed a psychological basis for exchange based on these same reinforcement principles According to the social exchange theory, workers demonstrate commitment and perform to the extent they believe that they are benefited from organization activities. The perceived OHS organizational structures has been defined as "employees' perception about the degree to which the organization values their contributions and cares about their well-being and employee's feeling that activities influencing the workers' performance have been voluntarily addressed by the organization."

Accordingly, investments made for health practices based on social exchange theory and the principle of reciprocity result in employee health and well-being, which in turn, conclude with employee attraction and commitment to the organization (Mearns, 2010; Huang, 2006). Social Exchange Theory has strong roots in the fields of economics, sociology and psychology. From a historical perspective, early psychologists focused on the principles of reinforcement, functionalism, and utilitarianism. In fact, the famous French anthropologist Claude Lévi-Strauss incorporated the important ethnographic principles of gift exchange and kinship systems into the theory of social exchange. The theory of social exchange views human interactions and exchanges as a kind of results-driven social behavior. The

fundamental concept of the theory of social exchange is cost and rewards. This means that cost and reward comparisons drive human decisions and behavior (Cropanzano, 2005). Costs are the negative consequences of a decision, such as time, money and energy. Rewards are the positive results of social exchanges. Therefore, the generally accepted idea is that people will subtract the costs from the rewards in order to calculate the value.

The theory of social exchange proposes that individuals will make decisions based on certain outcomes. For example, they will expect the most profit, rewards, positive outcomes and long-term benefits. They will also prefer the exchange that results in the most security, social approval and independence. In contrast, they will also choose alternatives that result in the fewest costs, consequences and least social disapproval. Therefore, every social exchange decision can be a complex decision that requires the person to evaluate different costs and rewards. In relation to the current study, employee performance will be perceived to be enhanced or reduced depending on their perception towards the organization's efforts and intentions regarding their health and safety (Mitchell, 2005).

2.7.2 The Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) predicts an individual's intention to engage in a behavior at a specific time and place. It posits that individual behavior is driven by behavior intentions, where behavior intentions are a function of three determinants: an individual's attitude toward behavior, subjective norms, and perceived behavioral control (Ajzen, 1991).

The theory has four structures described as: Behavioral Intention- this is a proxy measure for behavior. It represents a person's motivation in the sense of her or his conscious plan or decision to perform certain behavior (Conner & Armitage, 1998). Generally, the strong the intention is, the more likely the behavior will be performed. Attitude toward Behavior- this refers to the degree to which a person has positive or negative feelings of the behavior of interest. It entails a consideration of the outcomes of performing the behavior. Subjective Norm- this refers to the belief about whether significant others think he or she will perform the behavior. It relates to a person's perception of the social environment surrounding the behavior. Perceived Behavioral Control- this refers to the individual's perception of the sextent to which performance of the behavior is easy or difficult (Ajzen, 1991). It increases when individuals perceive they have more resources and confidence (Ajzen, 1985; Hartwick & Barki, 1994; Lee & Kozar, 2005).

2.8 Conceptual Framework

In this study, employee performance at KDN was viewed as a dependent variable. Safety Training Programs, Advanced Technology, Safety Clothing and OHS Accident Costs constitute the independent variables. These are interrelated as shown in the conceptual framework.

Independent Variable

Dependent Variable



Figure 1: Conceptual Framework

2.9 Summary of Literature Review

This chapter highlighted the review of the previous studies on occupational health and safety programs on employee performance and the related theories which are, Social Exchange Theory and the Theory of Health Belief Model. It further reviewed the conceptual framework with the three variables studied (safety training programs, advanced technology, safety clothing and OHS accidents' related costs) and how they influence employee performance and specifically at Kenya Data Networks, Nairobi County, Kenya

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the methods used to provide answers to the research questions. It provided an outline of how the research was done and hence focuses on the following sections, Research Design, Target Population, Sampling Procedure, Data Collection Methods, Validity and Reliability of Research Instruments and Data Analysis Technique.

3.2 Research Design

A research design is a plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variances. Orodho (2003) defines it as the scheme, outline or plan that is used to generate answers to research problems. The study is to employ a descriptive research design which involves a survey on the influence of occupational safety programs on employee performance in the telecommunications industry, Nairobi County, Kenya

Orodho (2003) defines descriptive design as a method of collecting information by interviewing or administering a questionnaire to a sample of individuals. This research design is appropriate as it describes what happens to enable the research make conclusions based on objective knowledge obtained from the field. According to Mugenda and Mugenda (2003), it collects data from relatively large numbers of cases making it more representative, it is essentially cross sectional and you can use qualitative and quantitative data to address the problem and finally provide facts and suggestions on the relationships between the variables and their apparent causes.

3.3 Target Population

According to Cox (2010) a target population for a survey is the entire set of units for which the survey data are used to make references. Ngechu (2004) states that the population is a well-defined set of people, services, elements or events or a group of things or household being investigated. Target population constitutes the entire or totality of the items under study (Kothari, 2004).

The target population of this study and their numbers included, 240 Field Technicians (cable installers, pole erectors, client support and equipment installations), 90 Plant Engineers (electronic designers, radio frequency operators, equipment assembly) 84 Technical

Supervisors (field and plant), 12 Finance Managers (departmental finance managers) and 4 Human Resource Managers totaling to 430 from the Kenya Data Network Limited in the entire Nairobi County region as tabulated in Table 3.1

Unit of Population	Population
Field Technicians	240
Plant Engineers	90
Technical Supervisors	84
Finance Managers	12
Human Resource Managers	4
 Total	430

Table 3.1 Target Population

3.4 Sample Size

Kothari (2004) defines a sample as a small proportion of an entire population; a selection from the population. The study grouped the population into five strata, based on the targeted respondents who are going to be issued the questionnaires, that is Field Technicians, Plant Engineers, Technical Supervisors, Finance Managers and Human Resource Managers from KDN Limited, Nairobi County. The sample size of this study is derived as shown in Table 3.2

Population Unit	No. of Respondents	Sampling	Sample Size
Field Technicians	240	10%	24
Plant Engineers	90	10%	9
Technical Supervisors	84	10%	8
Finance Managers	12	10%	2
Human Resource Managers	4	10%	1
Total	430	10%	44

Table 3.2 Sample Size

3.5 Sample Procedure

According to Kuul (1984), sampling is the process by which a relatively small number of individuals, objects or events are selected and analyzed in order to find out something about the entire population which was selected. A sample is a small proportion of the target population; sampling is done because it is not possible to obtain information from the whole universe to accurately accomplish study objectives. The determination of sample size is important to the researcher since it may be useful in bringing out credible representation about the population.

According to Mugenda and Mugenda (2003), stratified random sampling which this study has adopted, involves selecting subjects in such a way that the existing sub-groups in a population are more or less reproduced in the sample. The procedure starts with stratification of the sub-groups and the followed by random sampling will be used.

3.6 Research Instruments

Since the study was a survey, questionnaire administration is seen to be the best research instrument for this study. The questionnaire was designed in line with the study objectives, to enhance quality of data obtained; Likert type questions were included where respondents indicate the extent to which the variables were affected in a five part Likert scale (Gamer, 2010). Other type of questions were included both open ended and closed ended questions which were prepared and administered to the respective respondents with the help of research assistants who will have been trained before participating in the study.

The questionnaire comprised two sections, the first part designed to determine the demographic characteristics of the respondents, while the second part focused on the four independent variables to be studied (safety training programs, advanced technology, safety clothing and equipment and OHS accident costs). The respondents were assured of confidentiality and given enough time to answer all the questions and give out their views regarding their understanding of the problem under investigation. This method is considered effective for the study in that it is cheap, and easy to administer.

3.7 Data Collection Procedures

Data collection is the gathering of pieces of information that are necessary for the research process, Polit (2000); in this study both primary and secondary data were utilized. Questionnaires were utilized in collecting the data thus ensuring that all respondents from the sample are covered. Mugenda (2003) describes primary data as firsthand information
collected, compiled and published for some purpose. It presented the actual information obtained for the purpose of the study, it includes raw facts in the form of answered questionnaires, observed facts and recorded interviews. The sources of primary data for this study are to include drawing personal conclusions in regards to the various activities happening in the field and personal interviews whereas the questionnaires will be the main source of the primary data for this study.

The questionnaires were filled by all the respondents that had been identified as samples for this study; they include Field Technicians (cable installers, pole erectors, client support and equipment installations), Plant Engineers (electronic designers, radio frequency operators, equipment assembly) Technical Supervisors (field and plant), Finance Managers (departmental finance managers) and Human Resource Managers from the Kenya Data Network Limited. Interview guides that are viewed to enhance an in-depth gathering of information from individuals considered to have an adverse knowledge on the area of study, are to be used since they are considered appropriate to collect data from the Finance and Human Resource Managers.

3.8 Pilot-testing of the Research Instrument

A pilot study of the questionnaire was carried out days before the main study. Allan and Emma (2011) pointed out that research outcome quality is determined by the instruments' quality. Pilot testing will entail picking a representative number of respondents and administering the questionnaire to them, this process is useful to point out any problems with test instructions, instances where items are not clear and will help the researcher format the questionnaire and remove any noted typographical errors and inconsistencies (Mugenda 2003).

The primary purpose of pilot testing of the research instrument is to construct an initial picture of test validity and reliability, help elicit appropriate responses to the study and determine if questions were relevant and appropriate. Pilot testing also will help to check on the clarity and suitability of the wordings. Corrections and modifications will therefore be undertaken to correct any anomalies noted on the instrument before it is administered.

3.9 Validity of Research Instrument

Validity helps the researcher to be sure that the questionnaire items measure the desired variables. Donald and Delno (2006) define instrument's validity as the appropriateness, meaningfulness and usefulness of inferences a researcher makes based on data collected.

Mugenda and Mugenda (2003) agrees with this assertion that validity has to do with how accurately the data obtained in the study represents the variables. This study is to employ content validity, which according to Borg and Gall (1989) explains that content validity of an instrument is improved through expert judgment. As such, the researcher is to seek the assistance of the assigned supervisor who, as an expert in research, will help improve on the content validity of the instrument and is also consistent with the objectives of this particular study.

3.10 Reliability of Research Instrument

Donald and Deino (2006) define reliability of the researcher instrument as consistence of scores obtained and it has two aspects; stability and equivalence. Reliability is said to be achieved if an instrument gives consistent results with repeated measurements of the same object. Within this study the Test Re-Test method was employed (Coopers and Schindler, 2003). The test re-test criterion was chosen since the respondents in this study were perceived to be literate hence would understand the need for filling the questionnaire for the second time.

3.11 Data Analysis Techniques

According to Baily (1984), data analysis procedure includes the process of packing the collected information, putting it in order and structuring its main components in a way that the findings could be easily and effectively communicated. Data analysis involves examination of what has been collected in a survey or experiment in order to make deductions and inferences.

After the field research was completed and the expected number of questionnaires returned, inspection was done to ensure they have been filled as intended; the data was then analyzed using qualitative and quantitative techniques by use of descriptive tools in order to come up with useful conclusions and recommendations. The data was then presented in frequency and percentage tables. Descriptive statistical analysis was used to enable the study summarize, organize, evaluate and interpret the numeric information.

3.12 Ethical Considerations

This study was based on the following ethical considerations. First, the research participants were allowed to make informed decisions on whether to participate in the research process or not. These implied that the researcher was not to force or coerce the respondents into participating in the research process. Secondly, the responses from the respondents were

considered anonymous; this implies that the respondents will not be required to give their names on the questionnaires to be filled. This prevented victimization considering the fact that the study is on a very sensitive health and safety topic and requires unparalleled level of privacy. Thirdly, the researcher sought permission from all the research stakeholders – the university and the telecommunications organization involved before undertaking the process of data collection. The researcher is to communicate the findings of the study to all interested research stakeholders.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

OF FINDINGS

4.1 Introduction

This chapter discussed the interpretation and presentation of findings. It began with the presentation of demographic information of the respondents followed by presentation of the findings as per the objectives in relation to the topic on influence of implementation of occupational safety programs on employee performance in the telecommunications industry, a case of Kenya Data Networks, Nairobi County.

4.2 Questionnaire Response Rate

The study targeted a sample size of 44 respondents out of which 38 were filled and returned giving a response rate of 86% (Table 4.1). This response rate was good and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of over 70% is excellent.

Response rate	Frequency	Percentage				
Responded	38	86				
Non-response	6	14				
Targeted	44	100				

4.3 Demographic Data Analysis

In this section, the researcher sought to get information on the respondent's gender, age, highest academic qualification, and experience in terms of the years they have spent in the telecommunications industry, that is, in different sectors including field, administration and even inside the plants.

4.3.1 Distribution by Gender

To establish the gender of the respondents, they were asked to indicate them in the brackets. The findings of this were as in Table 4.2

Age Bracket	Frequency	Percentage
Male	25	65.80
Females	13	34.20
Total	38	100

Table 4.2 Gender Distribution

According to the findings in Table 4.2, majority of the respondents at 25(65.80%) were male while 13(34.20%) of them were female. This depicts that men form a larger representation of workers in this particular company. Majority of the women were in administration with a very few working in the field.

4.3.2 Distribution of Respondents by Age

To establish the ages of the respondents, they were asked to indicate their age brackets. The findings of this were as in Table 4.3

Table 4.3 Distribution of Respondents by Age

Age Bracket	Frequency	Percentage
26 – 30 years	13	34.21
31 – 35 years	11	28.95
36 – 40 years	10	26.34
Above 41 years	4	10.50
Total	38	100.00

On the age of the respondents, the study found that the majority of the respondents were between 26-30years 13(34.21%), 11(28.95%) were aged between 31-35years while 10(26.34%) were aged between 36-40years. 4 of the 38 respondents were above the age of 41 years. This shows that majority of the respondents were of an adequate/ informative age and therefore have enough experience on the subject being researched on.

4.3.3 Distribution of Level of Education

The study sought to determine the level of education of the respondents as shown in Table 4.3 below.

Level of Education	Frequency	Percentage
KSCE	11	29
Diploma	10	26
Degree	10	26
Masters	7	19
Total	38	100

 Table 4.4 Level of Education

From the findings, 11(29%) of the respondents had a Secondary School as their highest level of education, 10(26%) of the respondents had a bachelors degree as the highest level of education while another 10(26%) had a Diploma and primary certificate respectively as the highest level of education. 7 of the respondents had a Masters degree. This shows that majority of the respondents were adequately equipped with the required education level and intelligence to understand the intricacies brought about by condom use in marriage.

4.3.4 Experience Level – Years Spent in Telecommunications Industry

The experience level of the respondents, here questioned in terms of years spent in the telecommunications industry including but not limited to KDN Limited, was deemed very important as it would help in factual justification of the responses that the study was seeking to solve its problem. From the respondents experience, 6 (16%) of the respondents had experience of below 5 years; 12 (32%) of the couples had experience of 6 - 10 years whereby 11 (28%) of the respondents an experience of 16 – 20 years. 9 (24%) of the respondents had vast experience of 21 years. From the response statistics, most of the respondents interviewed possessed the necessary knowledge required for the study.

4.4 Occupational Health and Safety Programs and Employee Performance

To find out the factors influencing occupational health and safety programs on employee performance, the study assessed the different perceptions held by the respondents. The study used the statements as indicated on the table below to analyze and draw factual conclusions on these perceptions. Table 4.5 displays the findings

Statements	Stro	ngly	Ag	ree	Neu	tral	Disag	ree	Strong	gly	Tota	l
(%)												
	Agr	ee							Disag	ree		
	F	%	F	%	F	%	F	%	F	%	F	%
Operational Health and Safety Programs determine whether employees will continue working with the company or not	9 er	24	17	45	6	16	6	16			38	100
Lack of or poor OHS programs can be linked to employee absenteeism due to injuries or ill health	10	26	17	45	8	21	3	8			38	100
Un implemented	6	16	15	39	10	26	5	13	2	5	38	100
OHS programs have an effect on individual employee task target levels												
Frequent	10	26	18	47	6	16	4	11			38	100
effective OHS programs boost employee work												

 Table 4.5 Occupational Health and Safety Programs and Employee Performance

productivity												
Lack of OHS	5	13	12	32	5	13	10	26	6	16	38	100
Programs determines employees' approach and attitude towards risky , hazardous duties in the organization												

morale and

Table 4.5 shows that 17(45%) of the respondents interviewed agree that Operational Health and Safety Programs determine whether employees will continue working with the company or not, 6(16%) were undecided whether the programs determine employee turnover or not. Another 6(16%) of the respondents disagreed with the notion. On if lack of or poor OHS programs can be linked to employee absenteeism due to injuries or ill health, 10(26%) of the respondents strongly agreed with the statement with a higher number of 17(45%) also agreeing with the statement. The 8(21%) of the respondents were of a neutral opinion whereas 3(8%) disagreed with that statement. From the responses on whether unimplemented OHS programs have an effect on individual employee task target levels, majority of the respondents at 15(39%) agreed and 6(16%) strongly agreed with the statement; few of the respondents at 5(13%) were of a disagreeing opinion.

The statement on whether frequent effective OHS programs boost employee work morale and productivity, only 6(16%) disagreed with the statement; 18(47%) agreed with the statement which indicated that most employees at KDN Limited prefer consistent and effective OHS programs to improve their work morale and productivity. On the statement on lack of OHS Programs determining employees' approach and attitude towards risky, hazardous duties in the organization, 12(32%) of the respondents agreed with the statement while 10(26%) disagreed; the small percentage in difference was viewed as a difference in job specification as will be explained further in Discussions in the succeeding chapter.

The respondents were also questioned on whether OHS Programs can influence the relationship between employee and employers hence affect their performance; the findings were as displayed in Table 4.6

Response	Frequency	Percentage
Yes	28	74
No	10	26
Total	38	100

Table 4.6 OHS Programs and Employee – Employer Relationship

From the study findings shown on Table 4.6, 28(74%) of the respondents were of the opinion that OHS Programs can influence the relationship between employee and employers. The respondents who agreed with the statement majorly gave a reason that they felt the employers showed concern and responsibility which can better more than just their working relationship. Respondents who disagreed with the statement 10(26%), were of the opinion that it was a policy issue and not a matter of personal prerogative.

The respondents were also questioned on whether lack of implementation of OHS Programs increases occupational safety risks and accidents in the organization; the findings were as displayed in Table 4.7

Response	Frequency	Percentage
Yes	30	79
No	8	21
Total	38	100

Table 4.7 Lack of Implementation of OHS Programs and Safety Risks and Accidents

There was a big difference between the number of respondents who agreed with the statement 30(79%) and those who disagreed 8(21%) as shown on Table 4.4.2. Respondents who agreed cited that one of the reasons is without the training, they feel like they are working blindly without adequate information on what to do and what to do when faced with a hazardous situation. Some of the respondents who disagreed with the statement perceived that prior experiences on the job should be enough to avoid OHS accidents and risks.

4.5 Safety Training Programs and Employee Performance

The study employed key statements to analyze whether the education level of the respondents has an influence on their adoption of condom use of in their marriage relationships. The findings are as shown in Table 4.8

Statements (%)		Strong	ly	А	gree	e	N	leutra	.1	Di	sag	ree	S	tror	ngly]	Fota	al
		Agree											Ι	Disa	gree	e			
	F	%	Ď	F		%		F	%	I	F	%		F		%		F	%
Knowledge 100 of how to safely perform day to day duties can be determined through safety program	9 ns	24		14	2	37		3	8	1	10	26		2		5		38	
Safety Training Programs should be employee oriented and performance based	g 12	32		18	47		5	13		3		8					38		100
Frequency, relevance and contextual Safety Training Programs have more influence on employee performance	6	16	1	12	32	5		13		12	32	2	3		8	3	38		100
Telecom organizations	3	8	6	16	5	10		26	1	2	32	2	7	1	8		38		100

Table 4.8 Education Level and Condom Use in Marriage Relationships

should hold Safety Training											
Programs only when there has											
been an increase in performance concerns											
Telecom 9 organizations should integrate a policy on Safety Training Programs with other organizational policies	24	14	37	8	21	4	11	3	8	38	100
Cost of Safety 3 Training Programs should be a determinant of whet they should be carri out or not	8 her ed	5	13	7	18	11	29	12	32	38	100

Results in Table 4.5 indicate that 9(24%) and 14(37%) of the respondents strongly agree and agree that Knowledge of how to safely perform day to day duties can be determined through safety programs. Safety Training Programs should be employee oriented and performance based, this is as shown by the findings where 12(32%) of the respondents strongly agreed and 18(47%) of the respondents agreed with the statement. On Frequency, relevance and contextual Safety Training Programs having more influence on employee performance, 6(16%) of the respondents agreed with the statement; those who disagreed 12(32%) were mostly the more experienced employees and part of management who didn't see the relationship between the statement and employee performance.

The statement on Telecom organizations holding Safety Training Programs only when there has been an increase in performance concerns met significant objection with 12(32%) disagreeing and 7(18%) strongly disagreeing with the statement. Telecom organizations should integrate a policy on Safety Training Programs with other organizational policies was supported by 14(37%) of the respondents, 8(21%) of the respondents were undecided on the statement since they felt they can not change the organizational policies.

The respondents were asked to indicate whether Safety Training Programs have an influence on their individual job performance in relation to health and safety. The findings are as displayed in Table 4.9

Response	Frequency	Percentage
Yes	32	84
No	6	16
Total	38	100

Table 4.9 Training Programs and Individual Performance

From the findings shown in Table 4.6.1, 6(16%) of the respondents disagreed that Safety Training Programs have an influence on their individual job performance in relation to health and safety; they cited other issues like amount of work as more practical factors. The respondents who agreed with the statement at 32(84%) opinioned that Safety Training Programs have an influence on their individual job performance in relation to health and safety.

4.6 On OHS Advanced Technology and Employee Performance

The information being sought by this question was to gain information on how many respondents use actual technological equipments, machinery or even software in their daily work routines at KDN Limited; and also how other variables related to technology influenced their performance.

The respondents were asked to indicate which their occupation specification at KDN Limited is, the results shown in Table 4.10

Response	Frequency	Percentage
Field Technician	14	37
Plant Engineer	11	29
Technical Supervisor	9	24
Finance Manager	2	5
H.R Manager	2	5
Total	38	100

Table 4.10 Respondents Occupation Specification

From the findings presented by Table 4.6.1, majority 14(37%) of the respondents were Field Technician considering the outdoor work requirements of the industry. 11(29%) of the respondents were Plant Engineers with Technical Supervisor making up 9(24%) of the total number of those questioned. The information from Table 4.6.1 was important as it showed how many respondents dealt with actual technology on a day to day basis so as to better answer the succeeding questions.

On whether OHS Advanced Technology factors have an influence on employee performance, respondents indicated their degree of consent against the statements given; the analysis was as shown in Table 4.11

Statements	Str	ongly	A	gree	Ν	eutral	Dis	sagree	Stro	ongly	Tota	al
(%)												
	Ag	ree							Dis	sagree		
	F	%	F	%	F	%	F	%	F	%	F	%
Modernized technological telecommunicati equipment, softw cables and other are safer and me health friendly	6 ions wares gadg ore	16 , ets	9	24	10	26	10	26	3	8	38	100
Lack of or delayed acquisit of the latest technological apparatus by the organization infl the health and sa of employees	5 ion luence afety	13 es	12	32	7	18	10	26	4	11	38	100
Orientation and training of empl on the latest tele technologies det their occupation	1 oyees com ermin al saf	0 26 nes ety	14	37	8	21	6	16			38	100
Cost of safe advanced telecor technology com their purchase	6 m nprom	16 nises	10	26	10	26	8	21	4	11	38	100

Table 4.11 OHS Advanced Technology Factors and Employee Performance

The findings presented in Table 4.6.2 shows that 9(24%) of the respondents agree that Modernized Technological Telecommunications equipment, softwares, cables and other gadgets are safer and more health friendly. 10(26%) of the respondents were of a neutral opinion on the statement where some of them indicated that the equipments they are currently using are "just as safe". There was a slight difference between respondents who agreed, 12(32%) and those who disagreed at 10(26%) on whether lack of or delayed acquisition of the latest telecom technology influenced health and safety of the employees; those who disagreed opinioned that the current technology being used was not unsafe enough to warrant the acquisition of new ones.

Orientation of new employees was viewed as mandatory by the respondents at 10(26%) who strongly agreed and 14(37%) who agreed with the statement. Of the respondents interviewed, 10(26%) were undecided whether cost of safer advanced telecom technology compromised their purchase, the 8(21%) who disagreed with the statement were of the opinion that the cost should not outweigh the health and safety of the workers.

The respondents were asked to indicate in their opinion, whether advanced telecom technology had a significant influence on their job performance, the responses are as indicated on Table 4.12

Response	Frequency	Percentage
Strongly Influence	12	32
Moderately Influence	18	47
Does Not Influence	7	18
Not Applicable	1	3
Total	38	100

Table 4.12 Advanced Technologies and Job Performance

From the findings of Table 4.6.3, most of the respondents 18(47%) were of the opinion that advanced technology had some influence on their daily job performance. Some of them talked about not indulging so much in some activities since the current technology they are using did not make their work safer compared to the new ones they were in the know of.

The respondents were asked to indicate in their opinion, how safe are the newest telecommunications equipment acquired compared to the old ones in their specific occupation.

Response	Frequency	Percentage
Very Safe	10	26
Safe	15	39
Not Safe	12	32
Not Applicable	1	3
Total	38	100

Table 4.13 Safety of New Telecommunications Equipment

The findings from the table indicate that a good number of the respondents, 12(32%), were of the opinion that new telecoms equipment were not safe; this group of respondents cited concerns like not being very conversant, skilled or knowledgeable of the risks posed by the new equipments made them vulnerable to health and safety issues. The respondents at 15(39%) who gave the safe answer said that the current equipment did not cater for health and safety requirements that come with the ever developing trends in telecommunications technology.

4.7 Safety Clothing and Employee Performance

On whether Safety Clothing has an influence on employee performance, respondents indicated their degree of consent against the statements given. The findings were as shown in Table 4.14

Agree Disagre F % F <	utral Disagree Strongly Total (%)
F % Image: State State	Disagree
Safety 12 32 18 47 5 13 3 8 38 100 Clothing should be available and tailor made according to the hazardous telecommunications occupation being undertaken Safety 6 16 10 26 10 26 8 21 4 11 38 100 Clothing influences employee motivation towards work Telecom 10 26 17 45 8 21 3 8 38 100 occupational health and safety accidents can be directly linked to poor or lack thereof of effective	% F % F % F %
Safety Clothing influences employee motivation towards work161026102682141138100Telecom102617458213838100occupational health and safety accidents can be directly linked to poor or lack thereof of effective16102617458213838100	13 3 8 38 100
Telecom 10 26 17 45 8 21 3 8 38 100 occupational health I	0 26 8 21 4 11 38 100
occupational health and safety accidents can be directly linked to poor or lack thereof of effective	8 21 3 8 38 100
and safety accidents can be directly linked to poor or lack thereof of effective	
can be directly linked to poor or lack thereof of effective	
to poor or lack thereof of effective	
thereof of effective	
safety clothing	
The organization 3 8 9 24 15 39 6 16 5 13 38 100 has a policy on the limit and frequency of the use of safety clothing	39 6 16 5 13 38
Acquisition 5 13 12 32 5 13 10 26 6 16 38 100 and	13 10 26 6 16 38

Table 4.14 Safety Clothing and Employee Performance

replacement of Safety Clothing at KDN Limited is influenced by their costs

The findings on Table 4.8 indicate that Safety Clothing should be available and tailor made according to the hazardous telecommunications occupation being undertaken as strongly agreed at 12(32%) and agreed at 18(47%) by the respondents at KDN Limited. 10 (26%) of the respondents agreed with the statement that Safety Clothing influenced their motivation, another 10(26%) were neutral on the same statement citing that motivation towards work was influenced by a lot of other factors like remuneration, benefits and not Safety Clothing alone. On there being a direct link between poor or lack of Safety Clothing and accidents, 10(26%) of the respondents strongly agreed, the 17(45%) who agreed with the statement mentioned that accidents like burns, piercings, head injuries could be directly linked to improper dressing.

Table 4.8 also found out that 15(39%) were neutral on the statement that KDN Limited has a policy on the limit and frequency of the use of Safety Clothing, most of these respondents were not aware of the policies related to OHS in the organization. The 6(16%) and 5(13%) who disagreed and strongly disagreed respectively believed that such a policy did not exist and the statement depended on individual actions. Acquisition and replacement of Safety Clothing depends largely on their costs as agreed by majority of the respondents at 12(32%).

Table 4.15 below was to get results on the perception the respondents had on How safe and effective their safety clothing is in relation to their specific telecommunications occupation at KDN Limited

Response	Frequency	Percentage
Very Safe and Effective	6	16
Moderately Safe and Effective	20	53
Not Safe and Effective	10	26
Not Applicable	2	5
Total	38	100

Table 4.15 Safety Clothing's Effectiveness

From the findings on Table 4.8.1, majority of the respondents at 20(53%) indicated that their Safety Clothing made them feel moderately safe. 10(26%) of the respondents did not perceive that their safety clothing were safe and effective; both sets of respondents opinioned that safety clothing can only be as effective as the intensity or capacity of a specific accident.

The respondents were asked to indicate to what extent they perceive the organization to be proactive in relation to safety clothing and accidents in their specific area of occupation. Their responses findings are as indicated in Table 4.16

Response	Frequency	Percentage
No Extent	3	8
Small Extent	10	26
To Some Extent	18	47
High Extent	7	18
Total	38	100

Table 4.1	6 Orgai	nization	's Pro	-activeness	and S	Safety	Clothing
						•	

From the table above, most of the respondents at 18(18%) were of the opinion that the organization is to some extent proactive in relation to safety clothing and accidents in their specific area of occupation; the group of respondents who indicated high extent 7(18%) were

mainly the plant engineers whose occupation was deemed to be very sensitive and risky and proper safety clothing was regarded as top priority.

4.8 Occupational Health and Safety Accident Costs and Employee Performance

On whether OHS Accident Costs has an influence on employee performance, respondents indicated their degree of consent against the statements given. The findings were as shown in Table 4.17

Statements	S	Strongly	I A	Agree	Neu	ıtral	Disag	ree	Stron	ngly	Tota	(%)
	1	Agree							Disa	gree		
	F	%	F	· %	F	%	F	%	F	%	F	%
Duration of compensation costs in the occurrence of a OHS related accidents influ employee perfe	2 an ence orma	5 s nce	5	13	12	32	10	26	9	24	38	100
Legal Services Costs in the occurrence of a OHS related accident are to shielded by the employee hence influences perf	an be ce forma	32 ance	12	32	5	13	6	16	3	8	38	100
Insurance Costs and cover by th organization of the employees effective and occupation	7 he on is	18 cific	9	24	10	26	8	21	4	11	38	100

Table 4.17	OHS A	ccident (Costs and	Employee	e Performance
				L V	

The results shown on Table 4.9 indicate that most of the respondents at 12(32%) are undecided on whether the duration of compensation costs in the occurrence of OHS related accidents influences employee performance. In disagreement were 10(26%) of the

respondents who cited that the statement was a policy issue with set durations of compensation. Overwhelmingly, 12(32%) of the respondents both strongly agreed and agreed that Legal Service Costs in the occurrence of an OHS related accident was shielded by the employee involved.

On whether Insurance Costs and Cover by the organization on the employees being effective and occupation specific, 9(24%) of the respondents agreed with the statement. The statement was strongly objected by 4(11%) of the respondents who talked about having experiences which revealed that KDN Limited does not effectively cover the employees neither are the covers occupation specific. The results acquired by the study from the respondents as analyzed in this chapter, interpreted and presented will be discussed in depth in the succeeding chapter.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presented a summary of data findings, discussions, conclusions drawn from the findings highlighted and recommendations made there-to. The conclusions and recommendations drawn were focused on addressing the objectives of the study.

5.2 Summary of Findings

This study was undertaken to assess the factors influencing implementation of occupational safety programs on employee performance in the telecommunications industry in Kenya. The study initially sought to inquire information on the respondents' gender; according to findings, majority of the respondents at 65.80% were male while 34.20% of them were female. This depicts that men form a larger representation of workers in this particular company considering the nature of the industry. On the respondents' age demographic, majority of the respondents were of an adequate/ informative age between 26-30years (34.21%), 28.95% were aged between 31-35years while 26.34% were aged between 36-40years and therefore have enough experience on the subject being researched on. From the respondents experience, 12 (32%) of the couples had experience of 6 - 10 years whereby 11 (28%) of the respondents an experience of 16 - 20 years. The following are more of the summary of the findings themed as per the objectives

5.2.1 Occupational Health and Safety Programs and Employee Performance

An analysis of how Occupational Health and Safety Programs influence Employee Performance was done and the findings revealed that majority 17(45%) of the respondents interviewed agree that the programs determine whether employees will continue working with the company or not. On if lack of or poor OHS programs can be linked to employee absenteeism due to injuries or ill health, 26% of the respondents strongly agreed with the statement with a higher number of 45% also agreeing with the statement. Majority of the respondents at 39% agreed and 16 % strongly agreed that unimplemented OHS programs have an effect on performance of individual employee task target levels.

The findings on whether frequent effective OHS programs boost employee work morale and productivity revealed that only 16% disagreed with that statement. From the study findings, 74% of the respondents were of the opinion that OHS Programs can influence the relationship

between employee and employers; respondents who disagreed with the statement (26%), were of the opinion that it was a policy issue and not a matter of personal prerogative.

5.2.2 Safety Training Programs and Employee Performance

The findings of the study indicate that 24% and 37% of the respondents strongly agree and agree that Knowledge of how to safely perform day to day duties can be determined through safety programs. The findings revealed that 32% of the respondents strongly agreed and 47% of the respondents agreed that Safety Training Programs should be employee oriented and performance based. On Frequency, relevance and contextual Safety Training Programs having more influence on employee performance, 32% who disagreed were mostly the more experienced employees and part of management who didn't see the relationship between the statement and employee performance.

There were significant objection levels with 32% disagreeing and 18% strongly disagreeing with the notion that Telecom organizations holding Safety Training Programs only when there has been an increase in performance concerns. On Safety Training Programs having an influence on individual job performance in relation to health and safety, the respondents overwhelmingly agreed with the statement at 84%.

5.2.3 OHS Advanced Technology and Employee Performance

The information being sought revealed that 24% of the respondents agree that Modernized Technological Telecommunications equipment, softwares, cables and other gadgets are safer and more health friendly; it further revealed that 32% of the respondents agreed and 26% disagreed on whether lack of or delayed acquisition of the latest telecom technology influenced health and safety of the employees. Orientation of new employees was viewed as mandatory by the respondents at 26% who strongly agreed and 37% who agreed with the statement. The findings indicated that most of the respondents 18(47%) were of the opinion that advanced technology had some influence on their daily job performance, 32%, were of the opinion that new telecoms equipment were not safe; this group of respondents cited concerns like not being very conversant, skilled or knowledgeable of the risks posed by the new equipments made them vulnerable to health and safety issues.

5.2.4 Safety Clothing and Employee Performance

The findings indicate that Safety Clothing should be available and tailor made according to the hazardous telecommunications occupation being undertaken as strongly agreed at 32% and agreed at 47% by the respondents at KDN Limited. Of the respondents interviewed, 10

(26%) agreed with the statement that Safety Clothing influenced their motivation, another 10(26%) were neutral on the same statement. Most of the respondents at 18(18%) were of the opinion that the organization is to some extent proactive in relation to safety clothing and accidents in their specific area of occupation.

On there being a direct link between poor or lack of Safety Clothing and accidents, 10(26%) of the respondents strongly agreed, while 17(45%) disagreed with that opinion. It was found out that 15(39%) were neutral on the statement that KDN Limited has a policy on the limit and frequency of the use of Safety Clothing, most of these respondents were not aware of the policies related to OHS in the organization. Majority of the respondents at 53% indicated that their Safety Clothing made them feel moderately safe. 26% of the respondents did not perceive that their safety clothing were safe and effective; both sets of respondents opinioned that safety clothing can only be as effective as the intensity or capacity of a specific accident.

5.2.5 Occupational Health and Safety Accident Costs and Employee Performance

The findings indicate that that most of the respondents at 32% are undecided on whether the duration of compensation costs in the occurrence of OHS related accidents influences employee performance. Overwhelmingly, 32% of of the respondents both strongly agreed and agreed that Legal Service Costs in the occurrence of an OHS related accident was shielded by the employee involved. On whether Insurance Costs and Cover by the organization on the employees being effective and occupation specific, 24% of the respondents agreed with the statement. The statement was strongly objected by 11% of the respondents.

5.3 Discussions

This section discusses the findings in more details and is themed as per the objectives of the study.

5.3.1 Safety Training Programs and Employee Performance

Majority of the respondents were of the opinion that knowledge of how to safely perform day to day duties can be determined through safety programs; they indicated that the trainings gives them confidence and assurance on how to expect and prepare for any possible situations that may arise when performing their duties. Frequency, relevance and contextual safety should be one of the main pillars of the OHS Training Programs; though there was a balance between respondents who agreed with this statement and those who disagreed, the respondents objecting to this statement fell under the more experienced group in the industry (company) coupled with respondents whose job routine was mainly in the offices and non-technical.

Performance concerns in this situation relating to health and safety occurrences that interfere with the performance of an employee, were viewed to be weighty enough to warrant training programs regardless of how frequent they occur. It is prudent that telecommunication organizations incorporate comprehensive and practical policies on OHS Programs when formulating other organizational policies. This will significantly improve employee performance in terms of facilitating training programs that ensure improved health and safety work ethics among the employees and the employers. It was noted from the study that some of the respondents do not perceive that implementation of training programs do not affect their individual work performance; this group of employees were of the opinion that it will take more than training to guarantee their health and safety; they cited issues like amount of work causing fatigue, working conditions (weather, volatile regions) and even riskiness of job specification as things that OHS Training Programs have no control of.

5.3.2 OHS Advanced Technology and Employee Performance

Most of the respondents agreed that Modernized Technological Telecommunications equipment, softwares, cables and other gadgets are safer and more health friendly; they opinioned that the new technology comes with more advanced safety features that improve their (employees) health and safety significantly. There was a slight difference between respondents who agreed, and those who disagreed on whether lack of or delayed acquisition of the latest telecom technology influenced health and safety of the employees; those who disagreed opinioned that the current technology being used was not unsafe enough to warrant the acquisition of new ones. Acquisition of necessary new technology should be pegged on other factors like speed of transmission, ease of use and other competitive factors but not entirely because of employees' health and safety reasons.

It is mandatory that proper, detailed and consistent orientation in terms of OHS Training Programs should be done on new employees regardless of their experiences in the industry. This was mostly supported by the technical supervisors, finance managers and the HR Management as it would directly influence their job performance if an eventuality would occur due to lack of proper orientation. From the findings, most of the respondents were of the opinion that advanced technology had some influence on their daily job performance. Some of them talked about not indulging so much in some activities since the current technology they are using did not make their work safer compared to the new ones they were in the know of. In the telecoms industry, especially in the physically technical jobs, being conversant with the equipments, the environment, procedures and even risk evasive processes was viewed by many of the respondents as being "life saving". Most of the respondents opinioned that new technological equipments and machinery were not safe since they were yet to know how to properly use them, mistakes in handling such electricity related machinery and equipment can lead to health and safety issues.

5.3.3 On Safety Clothing and Employee Performance

Safety Clothing should be available and tailor made according to the hazardous telecommunications occupation being undertaken as strongly agreed by the respondents at KDN Limited. Most of the respondents claimed that when properly and safely dressed for their duties, it gives them some level of assurance and peace of mind that makes them perform their duties with a positive attitude and enthusiasm compared to when they are not. Quite a number of the respondents disagreed that Safety Clothing was a major determinant of their motivation towards performing their daily routines at work, they indicated that even when dressed in the most effectively safe clothing, without proper remuneration, fatigue, poor employee management and unconducive working environment would still dampen your motivation towards work.

A good of the respondents were neutral on the statement that KDN Limited has a policy on the limit and frequency of the use of Safety Clothing, most of these respondents were not aware of the policies related to OHS in the organization; the setting and implementation of most of the policies were being done at the administrative levels without consultation with the employees. The respondents who disagreed believed that such a policy did not exist and the statement depended on individual actions. Acquisition and replacement of Safety Clothing depends largely on their costs as agreed by majority of the respondents at KDN Limited, most of these respondents who consented with the statement indicated that there are departments that have safety clothing like helmets, industrial boots, gloves and even face masks that are not suitable for the particular work they do; this significantly affects their performance at work as they feel they are not protected enough.

Majority of the respondents indicated that their Safety Clothing made them feel moderately safe in the course of performing their duties, a number did not perceive that their safety clothing were safe and effective; both sets of respondents opinioned that safety clothing can only be as effective as the intensity or capacity of a specific accident. The type and intensity of an accident that a particular task is prone to should determine the Safety Clothing an employee requires in order to perform their duties effectively and safely. Most of the respondents at were of the opinion that the organization is to some extent proactive in relation to safety clothing and accidents in their specific area of occupation; the study found out that this was an unfortunate level considering the riskiness of the industry in terms of health and safety accidents. The group of respondents who indicated high extent were mainly the plant engineers whose occupation was deemed to be very sensitive and risky and proper safety clothing was regarded as top priority; the administration of this particular company should prioritize safety clothing to a high extent across the board and not be biased or selective.

5.3.4 Occupational Health and Safety Accident Costs and Employee Performance

The study found out that most of the respondents interviewed at are undecided on whether the duration of compensation costs in the occurrence of OHS related accidents influences employee performance; the study noted that this group of respondents were yet to experience or know another employee who has suffered an OHS related accident that had to go through an insurance process to get compensation. In disagreement were a good number of the respondents who cited that the statement was a policy issue with set durations of compensation, the study noted that this group of respondents was administrative and were in the know of the procedure that an employee goes through in order to be compensated.

Overwhelmingly, majority of the respondents agreed that Legal Service Costs in the occurrence of an OHS related accident was shielded by the employee involved. This finding was collaborated by narration of employees who have been affected by OHS related accidents and have gone through a legal process in order to be compensated; they said that they had to source for lawyers themselves who they paid after compensation. On whether Insurance Costs and Cover by the organization on the employees being effective and occupation specific, most of the respondents agreed with the statement. The statement was strongly objected by quite a number of the respondents who talked about having experiences which revealed that KDN Limited does not effectively cover the employees and neither are the insurance covers occupation specific.

5.4 Conclusions

According to demographic characteristics of the respondents, the study found out that those that were involved in the study mostly male; majority of the respondents were aged between

26 to 35 years, a good age for adequate experience to respond to the questions that were asked. Furthermore, most of the respondents had acquired Diploma and Degree level education hence able to understand and comprehend the questionnaire content; the experience levels of the respondents was favorable to the study and it yielded informative data to conclude the study.

The study concluded that knowledge of how to safely perform day to day duties can be determined through safety programs; these training programs should be frequent, relevant and contextual – this means that every department or sector should have OHS Training Programs specifically modified to each and not a general umbrella training that risks overlooking department specific employee performance risks in relation to health and safety. The study also concluded that KDN Limited should have sound and practical policies on OHS Training Programs and this should be made known to every employee in the organization. Apart from OHS Training Programs, other factors that might influence the health and safety of employees in performing their duties like fatigue, work environment, duration of work in between rest should be considered in order to enhance their performance.

Modernized Technological Telecommunications equipment, soft wares, cables and other gadgets are safer and more health friendly the study concluded, this is because they come with enhanced safety features an improvement to current ones. Delayed acquisition of these modernized technological telecom equipment and machinery did not have a significant influence on employee performance since the use of the current ones were deemed to be just as safe. The study concluded that proper, detailed and consistent orientation in terms of OHS Training Programs should be done on new employees regardless of their experiences in the industry, this should not be done only to their specific job routines but should cover other sections of the organization as well in relation to health and safety. From the findings, the study concluded that advanced technology had some influence job performance and that in the telecoms industry, especially in the physically technical jobs, being conversant with the equipments, the environment, procedures and even risk evasive processes was a major determinant on individual employee performance.

The study settled that Safety Clothing should be available and tailor made according to the hazardous telecommunications occupation, equipment and machinery being operated, environment of the work area and to a great extent the gender of the individual employee. From the findings, the study concluded that worn out, torn, loose, cracked, burnt, porous

Safety Clothing should be replaced immediately without considering how frequent they have been in use, furthermore this should be put in a policy for ease of enforcement. In regards to employees feeling safe in the course of performing their duties, the study concluded that Safety Clothing should be made part and parcel of work routines without fail and that the type and intensity of an accident that a particular task is prone to should determine the Safety Clothing an employee requires in order to perform their duties effectively and safely.

The study finalized that the undecided respondents on whether the duration of compensation costs in the occurrence of OHS related accidents influences employee performance should be oriented on the same so that they can have that information on their finger tips and should not wait to experience so as to know. The study concluded that most of the employees should be made aware of the policies concerned with OHS accidents, insurance covers, compensation durations and cost of the legal processes since it was clear that most of the employees are working "blindly" in relation to insurance covers offered by the company. The study also concluded that KDN Limited should find a way of assisting the employees in meeting the legal fees they incur when seeking legal representation about the compensation claims.

5.5 Recommendations

The following were the recommendations of the study based on the findings

- i. Operation Health and Safety Training programs should be incorporated in the company's policies, made frequent and department specific. The company especially the administration should consult even the employees when formulating OHS related policies and also when coming up with the training program agendas.
- ii. Since Modernized Technological Telecommunications equipments, machinery and Safety Clothing are deemed to have more enhanced safety features, the company should endeavor to acquire them regardless of their value and any other related costs attached to them. Orientation should NOT only be done to new employees but also to older ones since the industry is a fluid one and keeps on changing in relation to employees health and safety.
- iii. Finally, it will be invaluable to KDN Limited if it purposed to shield some of the costs the employees incur during compensation legal redress, the study recommends that the company during orientation of new employees, clearly address the insurance

covers availed by the company, the procedures and processes involved including duration of being compensated when and if an employee has had an OHS accident while performing their duties.

5.6 Suggestions for Further Studies

- i. The study was limited to KDN Limited in Nairobi County; however the researcher observed that with the increasing number of telecommunications companies in the country, there is need to conduct a study on influence of implementation of occupational safety programs on employee performance in the telecommunications industry in other companies.
- ii. Most of the employees were not aware of the insurance covers availed by KDN Limited in relation to Operation Health and Safety and the legal implications attached to compensation claims, the researcher suggests that a study on the influence of Operation Health and Safety insurance on employee performance be done on the telecommunications industry.

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APPENDIX I: LETTER OF TRANSMITAL OF DATA COLLECTION

LILIAN BOYANI RIGORO

University of Nairobi P.O BOX 30197, 00100 Nairobi 25th April, 2019 Dear Respondent,

RE: REQUEST FOR COLLECTION OF DATA

This is to inform you that I am undertaking a research study leading to the award of Masters Degree in Project Planning and Management of the University of Nairobi.

The study is focusing on "Influence Of Implementation Of Occupational Safety Programs On Employee Performance In The Telecommunications Industry: A Case Of Kenya Data Networks (KDN), Nairobi County." You have been selected to be part of this study. Kindly assist by filling in the attached questionnaire. The identity of you as the respondents will be treated in strict confidentiality; do not indicate your name or details on the questionnaire.

Your assistance and cooperation will be highly appreciated.

Yours Sincerely,

.....

LILIAN BOYANI RIGORO

Student Number: L50/76339/2014

APPENDIX II: QUESTIONNAIRE

I am a student at the University of Nairobi undertaking a Master of Arts Degree in Project Planning and Management. It is a requirement for the course to undertake a research project in order to qualify for graduation.

The title of my research is "INFLUENCE OF IMPLEMENTATION OF OCCUPATIONAL SAFETY PROGRAMS ON EMPLOYEE PERFORMANCE IN THE TELECOMMUNICATIONS INDUSTRY: A CASE OF KENYA DATA NETWORKS (KDN), NAIROBI COUNTY." I am humbly requesting for your assistance in answering the questionnaire, all information will be treated with strict confidence.

SECTION A: GENERAL INFORMATION

1. Gender

Male

Female

2. Indicate your age bracket

- a) 26 30 years
- b) 31 35 years
- c) 36 40 years
- d) Above 41 years

3. Highest Academic Qualifications

KCPE	
KCSE	
DIPLOMA	
DEGREE	
MASTERS	

4. Years Spent In Telecommunications Industry

Please check in the box that best displays how many years you have been actively engaged in the telecommunications industry.

Below 5 years	
6 – 10 years	
11 – 15 years	
16 – 20 years	
21 years and above	

SECTION B

Occupational Health and Safety Programs and Employee Performance

5. Below are statements on perception of employee performance in relation to OHS

Programs at KDN Limited. Please indicate the degree to which you agree using the given scale:

Strongly Agree (1); Agree (2); Neutral (3); Disagree (4); Strongly Disagree (5)

Statements	1	2	3	4	5
OHS Programs determine whether employees will					
continue working with the company or not					
Lack of or poor OHS programs can be linked to					
employee absenteeism due to injuries or ill health					
Un implemented OHS programs have an effect on					
individual employee bottom line levels					
Frequent effective OHS programs boost employee					
work morale and productivity					
Lack of OHS Programs determines employees'					
approach and attitude towards risky, hazardous					
duties in the organization					

6. Do you perceive that OHS Programs makes employer – employee relationship better hence improve performance?

Yes	
No	
7. Can lack of implementation of OHS Programs increase occupational safety risks and accidents in the organization?

No	
If Yes, why	

SECTION C

Safety Training Programs and Employee Performance

8. The following are key statements on Safety Training Programs in relation to

Employee Performance. Please indicate the degree of your consent using the scale provided

Strongly Agree (1); Agree (2); Neutral (3); Disagree (4); Strongly Disagree (5)

Statements	1	2	3	4	5
Knowledge of how to safely perform day to day					
duties can be determined through safety programs					
Safety Training Programs should be employee					
oriented and performance based					
Frequency, relevance and contextual Safety Training					
Programs have more influence on employee					
performance					
Telecom organizations should hold Safety Training					
Programs only when there has been an increase in					
performance concerns					
Telecom organizations should integrate a policy on					
Safety Training Programs with other organizational					
policies					
Cost of Safety Training Programs should be a					
determinant of whether they should be carried out or					
not					

9. Do Safety Training Programs have an influence on your job performance in relation to health and safety?

Yes

No
If No, why?
••••••

SECTION D

OHS Advanced Technology and Employee Performance

10. Which is your occupation specification at KDN Limited?

Field Technician	
Plant Engineer	
Technical Supervisor	
Finance Manager	
H. R Manager	

Others

On whether OHS Advanced Technology factors have an influence on employee performance, please indicate the degree of your consent against the statements given Strongly Agree (1); Agree (2); Neutral (3); Disagree (4); Strongly Disagree (5)

Statements	1	2	3	4	5
Modernized technological telecommunications					
equipment, softwares, cables and other gadgets are					
safer and more health friendly					
Lack of or delayed acquisition of the latest					
technological apparatus by the organization influences					
the health and safety of employees posed by outdated,					
worn out ones					
Orientation and training of employees on the latest					
telecom technologies acquired by the organization					
determines their (employees and employers)					
occupational safety					
Cost of safe advanced telecom technology					
compromises their purchase					
Advanced telecom technology are more safe and health					
friendly than former or current ones					

12. Based on your area of technicality in the telecommunications organization, how does advanced technology influence your job performance in relation to their safety?

i.	Strongly Influence	
ii.	Moderately Influence	
iii.	Does Not Influence	
iv.	Not Applicable	
13. In your opinion, how	safe are the newest telecommunications equipment acq	luired
compared to the old	ones in your occupation?	

i. Very Safe ii. Safe iii. Not Safe Not Applicable iv.

SECTION E

Safety Clothing and Employee Performance

14. On whether Safety Clothing has an influence on employee performance, please indicate the degree of your consent against the statements given.

Strongly Agree (1); Agree (2); Neutral (3); Disagree (4); Strongly Disagree (5)

Statements	1	2	3	4	5
Safety Clothing should be available and tailor made					
according to the hazardous telecommunications					
occupation being undertaken					
Safety Clothing influences employee motivation					
towards work hence their performance at KDN					
Limited					
Telecommunications occupational health and safety					
accidents can be directly linked to poor or lack					
thereof of affactive safety clothing					
thereof of effective safety clothing					
The organization has a policy on the limit and					
frequency of the use of safety clothing					

Acquisition and replacement of Safety Clothing at			
KDN Limited is influenced by their costs			

15. How safe and effective are your safety clothing in relation to your telecommunications occupation at KDN Limited?

- i. Very Safe and Effective
- ii. Moderately Safe and Effective
- iii. Not Safe and Effective
- iv. Not Applicable
- 16. To what extent do you perceive the organization to be proactive in relation to safety clothing and accidents in your area of occupation?

No Extent	
Small Extent	
To Some Extent	
High Extent	

SECTION D

OHS Accident Costs and Employee Performance

17. On whether OHS Accident Costs has an influence on employee performance, please indicate the degree of your consent against the statements given.

Strongly Agree (1); Agree (2); Neutral (3); Disagree (4); Strongly Disagree (5)

Statements	1	2	3	4	5
Duration of compensation costs in the occurrence of an					
OHS related accidents influences employee performance					
Legal Services Costs in the occurrence of an OHS related					
accident are to be shielded by the employee hence					
influences performance					
Repairs and Replacements done after accidents are usually					
safer and are done in time by the organization					

Insurance Costs and cover by the organization on the			
employees is comprehensive and occupation specific			

Thank Very Much You for Your Participation And

Cooperation