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**ANALYSING OCCUPATIONAL HEALTH AND SAFETY ON HUMAN RE-  
SOURCE TRAINING IN DEVELOPING COUNTRIES**

Case Study: VRA Ghana

Master`s Thesis in  
Industrial Management

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**ABBREVIATIONS**

OHS	Occupational Health and Safety
HR	Human Resource
VRA	Volta River Authority
ILO	International Labor Organization
SMEs	Small and Medium-sized businesses
HRM	Human Resource management
HR	Human Resource
HRD	Human Resource Department
POS	Perceived Organizational Support
DFI	Department of Factories Inspectorate
ILO	International Labor Organization
WHO	World Health Organization

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**ABSTRACT:**

The purpose of this study is to investigate the current trend in occupational health and safety and its effect on human resource training and to propose a recommendation for future reforms. The practice of occupational health and safety policies in organizations in developing countries is not effective leading to high risks at the workplaces. Some of these ineffective practices are caused as a result of imperfect knowledge of workers on OHS, inadequate training, and poor policy implementation and monitoring. To address these issues, the responsibility of the employer and the employees, as well OHS policy have to be understood.

The study uses a qualitative method to gather the view of workers on occupational health and safety and HR training and its effect on employee performance. The researcher collected and presented the data through the use of questionnaire and interview in ascertaining the facts in support of the problem statement. The presentation and analysis were analytical with some tables support. The study revealed some factors that are supposed to be of grave concern on occupational health and safety and HR training; inadequate HR training, little or no knowledge of OHS at work, unclear definition of employer and employees responsibilities, poor OHS policy implementation and monitoring are the few problems discovered.

The study recommends that government must set up an institution solely responsible for occupational health and safety that will ensure implementation and monitoring of policy. The workers should be made aware of OHS at all times, and proper training is given.

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**KEY WORDS:** Health and Safety, Human Resource, Training,



## 1. INTRODUCTION

Occupational health and safety is an essential part of an organizational strategy aside factors like productivity, profitability, and quality. In reducing the level of hazards and risk in any organizational setup, it is important to understand safety as the first step and initiate good occupational health and safety training for employees. Different mechanisms are used to check safety in organizations and workplaces. For instance safety instrumented system (SIS) as well as basic process control system (BPCS), which are designed to safeguard the organization from unfavorable events, where there are other instruments that are used to reduce the seriousness of risks problems among which SIS is one of the best (Ouache, Kabir, and Adham, 2015). One of the most unsafe and hazardous industries for people to work is the energy sector, which consists of the hydroelectricity, oil and gas, solar energy, etc., so therefore there is the need for effective, resourceful, professional, and efficient occupational health and safety management to protect workers and the organization. According to Burke et al. (2006), many researchers from different fields, like psychology, engineering, business, and public health have for a long time appreciated the necessity to efficiently and effectively assess the occupational safety and training to tackle the industrial sector concerns on safety issues.

The research explains that all players in industrial workplaces must have an in-depth understanding of occupational safety and health training in a broader context since dozens of reported cases on injuries and related matters are received especially in industrial workplaces every year. Given occupational health and safety (OHS) training is acknowledged worldwide as a way of minimizing the cost that comes with occupational injuries and illnesses.

Due to tendencies in the global economy, international organizations have set up standards in the international conventions to regulate safety in the workplace as well as causing improvement in the conditions at the workplace and services provided (Zwetsloot, 2003). This has made health and safety as a subject an essential part of the organizational strategic development plan. Occupational health and safety are one of the most critical factors that are of workers concern; therefore it should be inculcated into the HR

training of organizations when recruiting. Workers in developing countries like any other human working elsewhere in the world also put trust in their organizations and expect them to provide all the necessary measures that will ensure their safety before, during and after work.

Even though organizations are putting drastic measures in place to ensure human safety at work, but occupational related injuries and deaths persist at a higher rate (Annan, 2010). Research shows that numerous work-related accidents occur every year globally and ILO Annual report (2011), states that workers who fall sick as a result of workplace hazards annually are over 160 million, while estimated occupational accidents and related diseases that cause the death of workers to be over 1.2 million workers.

### 1.1. Background and significance of the study

Humans consider health and safety as an urgent issue in daily life, particularly at the workplaces where workers are exposed to various risks. Occupational health and safety are significant for every organization in the world. In developing countries, more workers are exposed to injuries and deaths due to little or no HR training in OSH issues related to their works and the environment in which they operate (Piavi et al., 2008). Because of these, proper occupational safety and HR training are essential to the growth of any organization since humans are the drivers of the organizations.

Persons leave for work and are expected to return home in good health. It is therefore vital to establish a robust occupational safety and HR training at work to create a healthy and responsive environment for workers. The loss of human lives and pains as a result of an injury at work is immeasurable. Families of occupational injured persons could be burden with financial expenses as a result of occupational injuries, deaths, and illness. It is crucial workers should be protected from occupational injuries, illnesses, and fatalities, any physical or chemical hazards during different stages of work.

In the service industries, numerous experienced professionals deliver their services with little occupational injuries, but the conditions of those employees that are bent to offer

direct assistance in field operations (i.e., plant installation activities) can pose extreme challenges for safety. Some of these employees are assigned to heavy-duty tasks that carry them from job to job without spending much time with their relatives back home. Some of the functions are gridline operations, technical services like electrical plant installations and power productions. Depending upon the type of job specification, the employees can spend several days in the field of operation, and fatigue can easily be a cause for injury. Such employees encounter safety challenges in everyday working life and struggle to train and develop employees to comprehend safety performance, and the benefits will be a great achievement.

This study can be advantageous in many ways as it could provide the foundation for making occupational health and safety policies for effective and efficient running of an organization. Employers and employees will be able to identify what their respective responsibilities are concerning occupational health and safety at the workplace. Many organizations will use this as a reference in the formulation of their health and safety policies.

## 1.2. Research question and objectives

The target of the study is to explain current trend in occupational health and safety on human resource training. Furthermore, this thesis describes the importance of such practices in the cultural context of developing countries and to ascertain how it is being implemented. Finally, the thesis will identify the fundamental problems and recommend improvement for such areas. This study will answer the questions in respect to occupational health and safety and human resource training in developing countries.

Hence the research question: *How to analyze and improve occupational safety and human resource training in developing countries and its application for VRA, Ghana?*

The research question serves as the main focal point of any study undertaken by researchers and is the pillar of the whole project collectively (Wilson, 2013). The study will be done with the objective of analyzing the current issues on occupational health

and safety and human resource training in developing countries. It is also to ascertain the problems related to occupational health and safety and human resource training and to find the cause of the issues and recommend possible solutions.

However, the objectives of the study are:

- To determine the effect of occupational health and safety policy in the organization.
- To find out the responsibilities of employers and employees concerning health and safety in an organization.
- To find out if there are adequate education and training to workers that relate to occupational health and safety.
- To identify the main problems and recommend areas for improvement.

### 1.3. Research design

The research design defines the parameters that connect the components of the methodology adopted for the research that relates the study strategy to the methods and the paradigm to the study strategy (Denzin & Lincoln 2011). The research design also involves adopting active processes for getting themes of the research. This outlines the procedures for directing and analyzing and collection of data. The purpose of the research design is to provide an idea where substantial justification can be made within the least expenditure of time. Different research methods could be used when conducting research. The quantitative approach, qualitative approach, and a mixture of both quantitative and qualitative methods. The researcher employed the qualitative method of analysis for this study. The research adopted case study research with the researcher concentrating on the predetermined area for the study to increase the data accuracy. The researcher can then generalize the findings from a sample of responses to a population with the help of data collection. The qualitative method gives a more holistic and better meaning and understanding of some of the familiarities of the respondents.

#### 1.4. Scope and limitations of the study

This study was carried out by basing most of the findings on a particular organization in Ghana in the field of energy production. A lot of workers are exposed to possible injuries and deaths at work due to lack of proper occupational health and safety training focusing on this sector. Consequently, the structure of the study is from the perception of the employees presently working in the organization. A case company is applied to this study to find justification for the research questions that presented in the study. Some possible situations that can occur in the line of occupational health and safety are discussed: occupational health and safety meaning, HR training and time allocated for training.

It has been established that the energy industry exposes workers to hazardous conditions that can cause injuries and most times deaths (EU-OSHA, 2013). Neal and Griffin, 2002: have elaborated that in other industries the role of safety climate and the diverse backgrounds example, communication among organizational levels, safety actions, safety policies, and safety procedures that are having effects on safety outcomes and results. Nevertheless, many studies have been carried out and more under different ongoing researches in safety performance and safety results in the energy industry (Haukelid, 2008; Gadd & Collins, 2002; Skeepers & Mbohwa, 2015).

#### Limitations

As all scientific and social researchers, this study has a limitation. First and foremost, as the researcher is not a professional in the field of occupational safety and HR management, it could influence the interpretations of the findings. Most of the analysis of the results was based on the knowledge acquired from the literature since it would be challenging to know if the information received from respondents is of expert views. Nonetheless, it is perceived that participants will be selected without much consideration to their knowledge of good occupational safety practices and human resource training. Some participants will not be able to explain better their positions in occupational health and safety and human resource training due to limited time to answer the questionnaire

and their limitations on information to divulge outside of the organization. The primary research method used is qualitative.

### 1.5. Structure of the study

The research follows a method of a scientific model, starting with the introduction to the study, the background of the case country and overview of occupational health and safety and HR, occupational health and safety and HR, research methodology, Findings and analysis of the results, as well as conclusion and recommendation. The chapter one, the introduction part, introduces the topic for research, explains the background to occupational safety and HR training in developing countries, research purpose and objectives, the research design, limitations and the structure of the studies. Chapter two describes the case study country and organization and the relevant policies of OHS. Chapter three assesses the occupational health and safety and HR training. Chapter four expatiates on the research methodology, the process used in collecting data, and the reliability and validity of the study process. Section five provides the research results, presentation and discussions. Chapter six is the conclusion, which presents a combination of the study outcome, recommendations for the study, analyses of the study limitations and proposes possible future studies in occupational health and safety, and HR training.

## **2. BACKGROUND OF THE CASE COUNTRY AND OVERVIEW OF OHS AND HR TRAINING**

The case study organization is VRA in Ghana. Ghana is a country situated in West Africa and is bordered to the east by the Republic of Togo, to the west by Cote d'Ivoire, to the north by Burkina Faso and the south by the Gulf of Guinea or the Atlantic Ocean.

Under the Volta River Development Act, Act 46 of the Republic of Ghana, the VRA was established in 1961 with authority to generate, distribute and transmit electricity in Ghana. But in 2005, the Ghana government made significant changes in the Act that set up the VRA and has limited its function to the generation of electricity. The amendment to the Act has a substantial role in creating a compelling atmosphere that can create room for other power producers in the Ghanaian energy market. The power transmission function was alienated into different bodies after the amendment Act in 2005, with the GRIDCo taking over the transmission of power (VRA, 2016). The VRA is the sole producer of hydroelectric power in Ghana.

The energy sector for that matter the hydroelectric power plays a vital role in the Ghanaian economy; therefore occupational injuries constitute a significant worry for employees and the environment. The VRA is the body that generates electricity in Ghana and also has some other organizations or subsidiaries that help transmit and distribute power. Therefore it is essential to carry out the analysis of occupational safety and the HR training that goes into play.



Land area: 238,533 sq km

Population: 24,658,823 (2010 Population census)

Capital city: Accra

Currency: Ghana Cedis

Figure 1. Map of Ghana

(<https://www.worldatlas.com/webimage/countrys/africa/ghana/ghlandst.htm>)

## 2.1. State of Occupational health and safety, and HR in Ghana

Ghana as a developing country is experiencing rapid growth in industrialization and commercial activities. These have also created the awareness of a surge in occupational accidents, ill health, disasters, deaths, and all occupational related hazards that the workforces in Ghana are exposed. Ghana has not seen any significant changes in occupational safety and health irrespective of the robust effort by the government and other institutions to solve the problems of occupational health and safety over the years. This shows



that the country has not got any structure in place that could foresee, assess, regulate and avert the dangers employees are exposed to at work.

The safety of employees is critical for the smooth running of every organization in the world. When occupational safety issues are not taken seriously, it can cause a whole lot of damage to an organization regarding a halt in production activities. This issue could affect the profitability of employers and also the income of workers, which could go a long way to affect the economy of a country. For example, products would be scarce, the tax base of the government could reduce, etc. For these reasons that it is vital to develop efficient and effective safety laws and guidelines that can ensure a safe and healthy working environment for all workers and stakeholders in the industry. These should be a concern to all players in the industrial sector for achievable occupational safety.

In Ghana, employers are required by law to make sure their employees are free from exposure that could lead to occupational injuries, illnesses, and deaths. The Ghana Labor Act 2003 spells this out, Act 651 required all employers to ensure the safety of their employees. The employer must in some terms inculcate into the working conditions some safety requirements standard, and employees have to hold the responsibilities of being precautionous in working per the employers' standard to make occupational safety achievable. Many institutions are working in different jurisdictions in Ghana with the aim of overseeing occupational and employee safety for various industries. Nevertheless, Ghana does not have a sole body charged with the responsibility of monitoring occupational safety and health. The institutions working in different jurisdictions with the aim of monitoring and guiding occupational safety policies are of low standard and have limited responsibilities. The Minerals Commission has some standard rules in Occupational Safety and Health, but it is meant for the Mining sector contained in the Mining regulations 1970. The Road Safety Commission is also in existence with the responsibility of impacting on the safety of pedestrians and transport but has a little standard and guidelines to improve safety. The governments over the years have not put in much effort, commitment, and support towards occupational safety and its health-related policies in Ghana. The government drafted an occupational service policy, which was de-

veloped by some of the ministries in the year 2000 but it is yet to be implemented. The country has been attracting many investments associated with occupational safety, but there is no national document on occupational safety (Tawiah & Baah 2011).

From what I realize about occupational safety and health problems in Ghana, NGO`s, academic researchers, and all stakeholders have put in much effort to make occupational safety, and health policy makers facilitate a better effective and efficient safety and training policies in the workplace. There is an increase in workplace risks exposing a sizeable number of Ghanaian workers to different kind of threats. The different types of industries ranging from the agriculture sector, transport, manufacturing, etc. have come with various workplace risks. The current discovery of oil and gas in Ghana has added to a large number of workplace risks as a result of an increase in industrialization in different fields. Ghana currently has two main edicts, which have provided guidelines on occupational safety, and health processes but these edicts are limited in scope. These edicts are the Factories, Offices and Shops Act 1970 Act 328 and the Mining Regulations 1970 LI 665. The different level of industrialization in the country, there should be a policy or Acts that would guide occupational safety and health in all work sectors. The two edicts have guided occupational safety and health but have only been functional in the labor sectors and the mining industry. The Workmen`s Compensation Law 1987 (PNDC L 187), the Environmental Protection Agency, the Labor Act, Act 651 (2003) and the Radiation Protection Convention are some of the safety laws in an industry that implicitly provide occupational safety and health in Ghana.

However, HR training and knowledge creation of employees in compliance with occupational safety regulations and regular monitoring by employers and the enforcement of such rules could help develop and implement better safety policies. Industrialization has taken over the work sector and as such comes with occupational hazards and accidents. Employees are entirely part of the HR of every organization and should be protected from occupational hazards and disasters. Workers are the backbone of every organization and must be treated as human beings as they are, from an occupational hazard and accidents in the workplace. It is vital that employers implement effective and efficient HR policies to enable proper evaluation of employee performance in the workplace.

This could guarantee appropriate training of HR and development. Training and development constitute an essential part of HRM and more focus would be on performance appraisal, employee relationship, and safety, etc.

## 2.2. The Factories, Offices and Shops Act, Act 328 (1970)

Parliament enacted this Act in 1970 with the aim of providing notification for every worker at his or her respective roles. The Factories, Offices and Shops Act (1970) was passed with the necessary provisions to meet international standards of providing safety and health for workers employed in factories, shops, offices, ports and in most cases construction works. The Act is to give guidance to workers and stakeholders to use the safety standard spelled out in the Act to control the danger that may occur at the workplace. The provisions in the Act spells out what is supposed to be done in the case of any occupational injury at work and the possible penalty the employer is to incur as a result of an accident, should that happen. When the standards set out in the Act are applied carefully, workplace accidents, injuries, and deaths will reduce if not eliminated. This would create a responsive environment at work, and workplace would become safe and peaceful for all persons. Nonetheless, this reason makes it vital to comply with and enforce safety laws in the industry for all persons involved to enjoy safe work environment.

Nevertheless, the Factories, Offices and Shops Act (1970) is limited in scope, as it does not cover numerous industries under the provisions in the Act. Agriculture is a significant sector in Ghana, but there is no provision in the Act covering agriculture and so many industries under the informal sector do not have laws that safeguard workers in their respective roles. The Act does not have provision for assessing risk and prevention of hazards. These are some factors that were not covered by the Act. There is the Department of Factories Inspectorate (DFI), which is a mandatory body under the Factories, Offices and Shops Act (1970) charged with the responsibility of administering safety regulations in Ghana Industries. Under this department, there are safety inspectors who are required by law to ensure the safety of workers at the work places under

the Act. Workplace accidents are still on the rise despite the roles played by the DFI (Appiah 2013).

### 2.3. The Mining Regulations 1970 (LI 665)

The Mining Regulations 1970 (LI 665) was passed by an Act of parliament in 1970 to safeguard the safety of workers and stakeholders in the mining industry. Also in the Act are specific laws that state how the safety of inhabitants residing very near to mining areas should be protected. The mining law under the Mining Regulations Act has been walking activities in the mining industry since it made ready. For instance, there are provisions in the Act regarding benefits that should be allocated to land and other property owners during and after the mining activities.

According to Annan (2010), in his article on ghanaweb.com, a Technical committee made up of delegates from each mining company in Ghana whose responsibility is to assess, evaluate and make recommendations for appropriate occupational safety practices in the mining industry. This Technical committee is an alliance between the Inspectorate Division of the Minerals Commission and the Ghana Chamber of Mines. It is an initiative in the right direction in occupational safety and health, but due to lack of resources, there is no enforcement of the policies of the committee.

However, the Technical Committee has to ensure that the health and safety of workers are protected. This can be possible if the various hazards related to mining activities are prevented. If the established standards stipulated in the Mining Regulations are to be achieved, the mining companies have the responsibility to put in suitable and efficient measures that will support workers in occupational safety issues.

The Mining Regulations 1970 (LI665) has been guiding occupational safety and health matters in the mining industry for so long. The Minerals Commission's Inspectorate Division has been using this Act as a reference point to implement its policies regarding safety and health in Ghana mines. The review policies make amendments and propose the best practices for occupational safety and health in the mining sector in Ghana.

#### 2.4. The Workmen`s Compensation Law 1987 (PNDC L 187)

The Ghana Labor Commission is the body responsible for the management of the Workmen`s Compensation Law 1987 (PNDC L 187). In this law is the provision for monetary compensation to employees or their dependents in the case of on the job injury resulting from accidents or deaths (Annan, Addai & Tulashie 2015). This compensation is usually payable through a court settlement. Given these, it can be stated that the Workmen`s Compensation Law 1987 has some influence in checking the occupational safety of workers at their workplaces. The provisions for the payments of compensation has limited information in regards to the mode of assessing and how it is implemented in different industries depending on the risks involved in their operations. Against this that the employees or their dependents are denied any compensation in case the employee had the accident or died on the job at work under the influence of alcohol or drugs. Again, lack of resources and information access has made the Act less functional. Many companies or industries are of the opinion that the use of protective equipment is enough to prevent any worker from occupational injury and death at work.

#### 2.5. The Ghana health service and hospitals Act, Act 526, 1999 and The Ghana National Health Policy (2007).

The Ghana health service and hospitals Act was enacted in 1999 to provide legal policies in health. Nevertheless, the provisions in this Act have so many challenges that need to be tackled. The many difficulties in OHS in Ghana include proper monitoring and assessments, inadequately trained personnel, lack of adequate information on OHS, funding, and lack of proper infrastructure. These are some of the major factors hindering the implementation of better OHS policies in Ghana (Annan et al., 2015).

The government of Ghana in collaboration with the Ghana Health Service wrote the Ghana National health policy in 2007 with the primary aim of increasing worker productivity to attain middle-income status. This has not been so effective due to challenges of OHS in the country. Health is a success point of many countries. The worker

must be healthy to be more productive in the nation. Therefore this policy was written to guide the health of Ghanaians irrespective of being a worker or not.

Few occupational health services in Ghana have proper facilities; meanwhile, they limited in the services they provide concerning those that are recommended by the ILO 161 on occupational health services (Amponsah & Dartey, 2015).

## 2.6. Conclusion

The current state of OHS in Ghana needs serious attention since there is no law or statute solely guiding occupational safety in Ghana. This has led to many accidents and losses in the various industries causing a loss in productivity cost to employers. Many of the laws and policies guiding occupational safety are limited to some particular industries and sectors making these policies not effective and efficient in the country. Some of the laws that indirectly govern occupational safety in Ghana include the Environmental Protection Agency, Ghana National Health Policy (2007), the National Road Safety Commission, etc. Lack of resources to enforce the laws and policies also hinders the effectiveness of the laws. Nevertheless, due to increase in global industrialization, which Ghana is also experiencing, some reformations are needed to make these policies meet international standards.

### **3. OCCUPATIONAL HEALTH AND SAFETY AND HR**

This chapter assesses and reviews the theories and literature about occupational health and safety and HRM. To conclude the study, it is essential to consider the concept of occupational safety regarding human resource management. This chapter will include the review of different works of literature that are related to the study.

#### **3.1. The concept of Occupational health and safety**

As a great established concept, OHS summarizes the worker's emotional, physical, and mental well being concerning the conduct of his work. OHS covers a wide range of disciplines such as economics, technology, law, medicine and psychology (Leka, 2003). The OHS wide range of coverage makes it an essential subject contributing towards the success of any organization. Nevertheless, it has been treated practically as a forgotten discipline in medicine, law, technology, etc. For instance, these disciplines only refer OHS when in need: it is only used as a reference in law when employers fail to pay compensations to employees for health and safety failures (Amponsah & Dartey, 2015).

Incorporating safety and health function of an organization together with other management activities could improve the total organizational performance. Incorporation of these management functions enhances management efficiency and effectiveness (Kheni, 2008). Safety is employee welfare that has been a significant concern for stakeholders. It is seen way afar wearing protective clothing and helmets. Safety is an attitude towards identifying and elimination of workplace hazards such as bruises, loss of hearing, or any other body parts, electrocution, etc.

Health hazards are those things part of the work environment that collectively causes harm or deterioration to human health gradually. These can be chemical poisoning, respiratory illnesses, and cancer, which could be as a result of poisonous gasses, and working under stressful conditions. These health hazards usually cause permanent damages

to employees' health, which often cannot be cured. It should also include safety culture that can go a long way in changing the behavior of employees in an organization.

### 3.2. Evolution of Occupational safety

Employers back in the 19th and 20th century were not concern about the safety of their employees. They ran their organizations based on how they could make profit irrespective of employees health and safety at work. There were no laws guiding employees' safety at work. Employees who get injured at work in the United States had to litigate to get compensated for their injuries. Under common law then, if the employee is aware of the risks the job entailed and get injured the employer is not liable. The same is as a result of a co-worker causing injury to another (Cudjoe, 2011). The ILO conventions on OSH and Occupational Health Services, plus the constitution of the WHO and the WHO global strategy on health for all specified for each employee the maximum standard of health that should be attained. Employees have the right to know possible health risks and hazards that they would encounter at work and should partake in decision making relating to health and safety and other issues relating to their work through the appropriate means (Government of the Republic of Trinidad and Tobago Ministry of Health, 2012).

There were significant disasters at workplaces in the U.S., which led to the proposal of safety players and engineers asked for the establishment of the national safety council in 1913. Considerably, the international labour organization in 1959 specified that occupational health and safety centres be set up in or near employment places to cater for the employee welfare (International Labour Organisation, 1959). This per the establishment was to provide for first aid in case of an injury to an employee or any hazard. The employee would be educated on workplace safety as well as working safely.

### 3.3. Health and safety management systems

Organizations that run health and safety practices do so by organizing programs that



aim at reducing or eradicating risks of hazards at work. A lot of organizations are growing and as such the human resource is on the rise as well. These have created the need to take occupational health and safety seriously. Most organizations have bent to adopt health and safety management systems, which was derived in Deming's Plan-Do-Check-Act model of continuous quality improvement (Hamid et al. 2004). This eventually, shows that health and safety management system has four main elements.

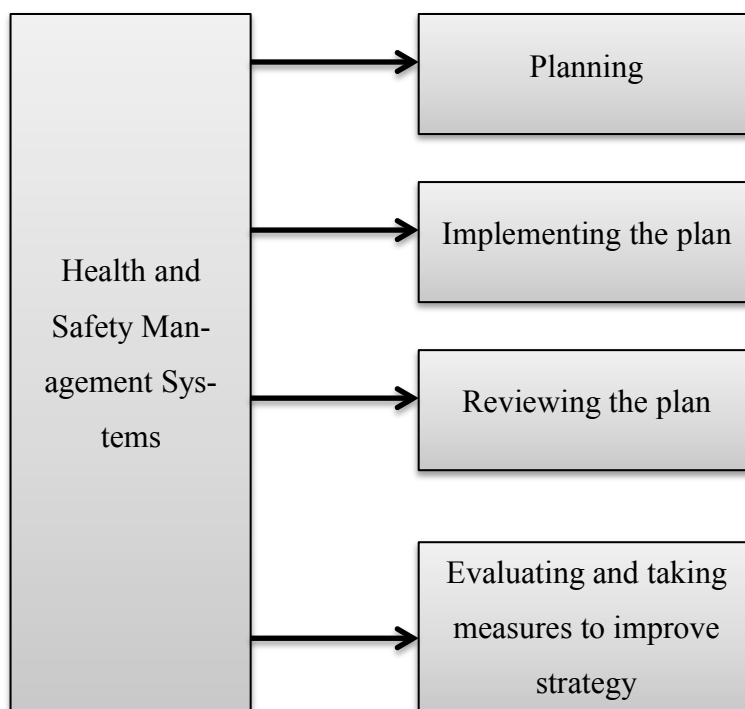


Figure 2. Health and safety management system

It has been identified that a complete health and safety management system is a hard task for SMEs (Dawson et al. 1988, Eakin et al. 2000, Mayhew 2000). Lack of adequate resources, the fact that they function under somewhat informal management methods, and lack of sufficient resources are some of the reasons why SMEs find it hard to adopt health and safety management systems (Banfield et al. 1996, Mayhew 1997, Vassie et al. 2000). At best, the efficiency health and safety management systems have not been

assessed and therefore making it difficult for organizations to adopt a complete health and safety management systems.

### 3.4. Behavioral approaches and attitude to health and safety management

Unsafe behavior causes about 70% to 90% of significant accidents at work. Many researchers have linked most disasters to the failure of people in the accident chain to avoid the cause (Adams 1976, Bird 1974, Haslam et al. 2003, Suraji et al. 2001). These have made it possible for organizations to come out with logical approaches to health and safety to break the series of events leading to most accidents.

All workers must ensure they behave at work in a manner that they will not be exposed to hazard. Even if there are safety measures in place at work workers need to take care of their health and safety. Specifically, workers need to abstain from drugs that would expose them to hazards, report unsafe incidents to management, and follow health and safety regulations at work and the use of provided PPE.

It was stated that workers commitments to their groups and organization are the interfering variables in the application of behavioral methods. This came out after Lingard and Rowlinson (1994) studied the efficiency and usefulness of the goal setting and feedback approach in Hong Kong.

Organizational culture plays a vital role in the acceptability of health and safety practices and as such current practices may not be acceptable in the future methods (Pidgeon, 1991, 1997). For good and effective organizational practices, behavioral approaches should not be limited to employees on the field alone but also to the management.

### 3.5. Safety Culture

Safety culture usually portrays employees' beliefs, thoughts, behaviors, and values that they share about safety and often is a reflection of the way safety is managed in the workplace (Cox & Cox 1991). The world is full of dangerous technologies. These cre-

ate an opportunity for scholars who specialized in safety-related issues and also pose a challenge to them. A comprehensive theory needs to be developed to create a fundamental background for further efficient safety culture practices.

A lot of researchers have come out with good results about the importance of organizational culture affecting safety outcome. Few scholars in the energy industry have also concluded that external pressures like national cultures also affect safety culture. Mearns et al. (2004) uncovered that some particular installation, for instance, a leader was very much significant than the national culture in forecasting safety outcomes. This came out after studying the differences between the safety outcomes of Norwegian and British oil and offshore gas installations (Caravello, 2011).

Organizational culture performs a significant role in shaping the mindset and attitude of employees. Therefore if there is safety in an organization with corporate culture, then there is safety culture. Organizational commitment to safety should include all members of the organization to improve and instill safety culture thoroughly. Management should show this commitment in all their actions for it to become a part of the organization.

### 3.6. Organizational health

Organizational health refers to the state of a complete and unimpeded operation of all formal, informal, main and auxiliary regulatory processes (Xenidis & Theocharous, 2014)

Employee well-being and organizational performance are two aspects of corporate health even though they are dependents on their own. The two elements gain and have an impact on each other and as results affect the ability of an organization to reach its objectives by interacting between the two variables. For organizational health to be stable, it is crucial to examine and find the origin of possible malfunctioning's weaknesses that exist between the organization's functions.

### 3.6.1. Organizational performance

Organizational performance involves the evaluation of an organization's performance about its goals and objectives. Organizations performance depends mainly on the employees' attitude toward work and systems thinking. The systems thinking according to Jackson (2003) involves applying simple solutions to complex problems. Systems thinking can provide creative solutions to problems by considering the whole interaction between parts. Alman (2010) also explains organizational performance as using the approach of systems thinking to the activities and processes involved in an organization. An organization can perform better with the numerous creative ideas. It is always good to have several options to select the best suitable solution to a particular solution; there is not any singular right solution. The strength of organizations depends on the performance.

The health of an organization depends on the organization's performance (Alman, 2010). This is shown in the illustration below

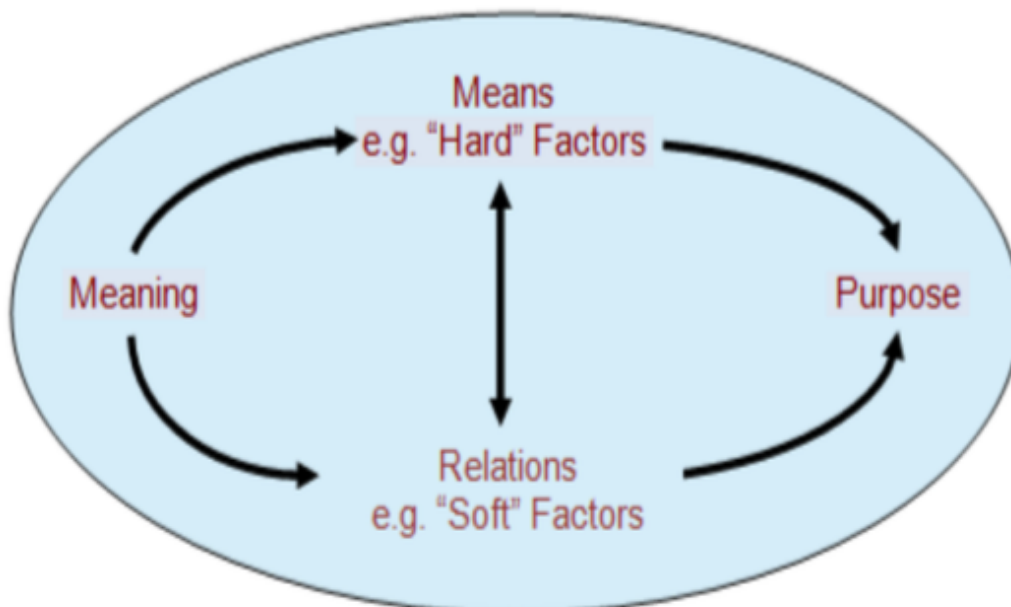


Figure 3. Model of Organizational performance

In the model, the “means” component denotes the “hard” factors in an organization. These “hard” factors in an organization include reporting structure, coordination and control, and accountability. Aspects like aims, goals, outcomes, and results in an organization are referred to as the “purpose” in the model. The “relation” component refers to the “soft” factors in an organization. These soft factors include capability, direction and cultural values in an organization. The last component “meaning” represents the attitudes, norms, and assumptions that are principal to organizational culture. The system explains how an organization’s health depends on organization’s performance. The thinking system and the management system are two kinds of systems that determine organizations health based on the emphasis laid by the “meaning” system. The thinking system concentrates on developing relations affecting employee well-being, and performance. The management system, on the other hand, emphasizes proposed processes on which organizations meet its goals.

### 3.6.2. Organizational Safety Performance and Trust

Conchie and Donald (2006) researched trust and safety performance in an offshore energy industry by applying implicit and explicit means of trust to know the level of trust relevant in achieving suitable safety performance. The primary determinant of a good performance at work at an industrial level was trust in management, but a co-worker and contractor trust were the main predictors of good performance at a facility level. Burns, Mearns, and McGeorge (2006) examined trust using implicit and explicit means and concluded that employees showed implicit trust to colleagues or co-workers, but generally, they had explicit trust for supervisors, managers, and co-workers. This studies, Burns, Mearns, and McGeorge, carried out on trust in a gas plant.

Currently, the efforts put in promoting trust focus on open communication as stated by Conchie & Burns (2008) and safety leadership behaviors (Conchie & Donald, 2009). These researchers concluded that improving employee safety participation and creating trust depends on open communication and safety leadership behaviors. There should be frequent interactions and delivery of information to maintain trust in any organization.

The manner in which employers and employees speak openly about problems, appropriately giving positive and negative feedback, initiating and accepting changes in decision-making can ensure trust is adequately built in an organization. Conchie & Burns (2008), assessed that even when there is an open interaction in an organization, trust is not easy to establish, but can easily be destroyed.

### 3.6.3. Employee well-being

This explains the policies that an organization has put in place to ensure the welfare of an employee is taken care of and improved upon on issues relating health and job satisfaction.

Over the years employers and stakeholders concerned about occupational health have developed the subject with the objective of helping employees in healthcare (Khadka, 2015). The researcher expatiated that occupational healthcare has been given backing mostly in prominent organizations and they tend to care only when employees are sick or when trying to prevent accidents at work. Keyes's (2005) stated that employee well-being is a complete approach on its own and therefore needs mental, psychological, physical and emotional balance. On the part of Keye, well-being is not only about the absence of illness. She stated the following as the four aspects of well-being:

- Positive affect: this refers to employee satisfaction at work, feeling full of life, calm and peaceful. It also indicates the quiet and peacefulness that employee feels, feeling cheerful and in good spirit.
- Life satisfaction: the organization becomes a motivator for an employee to pursue goals and move away from feeling a threat.
- Psychological well-being: this refers to autonomy, getting used to the work environment, setting purpose in life, personal growth, self-acceptance, and the creation of positive relations with others.

Social well-being: this means social contribution by a person, social integration, social-actualization, social acceptance, and input.

### 3.7. The roles of health and safety committee or representatives

Health and safety committees and representatives play an essential role in an organization's health and safety policies. The committee and the representatives are core to the internal responsibility system of an organization, and ensure measures for preventing diseases and work-related injuries. The internal responsibility system that based on collaboration among the employers and the employees enables the progress of a total understanding of occupational health and safety matters in an organization (Government of Canada Labor Program, 2014).

Cole, (1997) stated that the primary objective of a safety committee is to facilitate collaboration between the employer and the employees in examining, improving and working out means to ensure at the workplace the health and safety of employees. The participation of a worker in the safety committee is anticipated to be a consultative agreement between management and the employees. Queensland Government (2014) also stated extensively that OHS committees and representatives present ways involvement and representation of workers in occupational health and safety issues at the workplace. A worker representative in the safety committee accelerates consultations and enables workers to have a voice on matters of health and safety.

The Canada Labor Program (2014) identifies health and safety representative's duties to include:

- To consider and speedily deal with occupational health and safety complaints
- To ensure that enough records of work accidents, health risks, and OHS complaints are appropriately saved and frequently monitoring the data.
- To engage the employer on matters of health and safety when necessary.
- To partake in all studies, contributions, inquiries, and investigations relating to employees health and safety.
- To oblige with OHS experts;
- To be involved in the enactment and planning of any change in occupational health and safety in the workplace, and if there is no safety committee, partake in the formulating the plan that initiates changes.

- To check the whole or a part of the workplace monthly, for at least each part been regularly inspected.

### 3.8. Employer and the employee commitment to occupational health and safety

Employers are vital in reducing occupational accidents at work since they have an impact on the attitudes and behaviors of the employees (Fernández-Muñiz et al., 2007). Employers can impact the employees by taking the necessary steps to ensure the employees' work in a safe and healthy environment, by ensuring their health and safety are a priority. They can do so by:

- Having a formal and informal communication with the employees
- Providing for the necessary health and safety equipment
- Frequent visits to the workplace to assess the conditions.
- Providing education and training on health and safety precautionary measures.

Organizing and contributing to health and safety meetings, Mearns and Reader (2008) stated that safety performance was improved when employees feel they got organizational support and cared about their well-being by employers and their colleagues. Such feelings led to an improvement in safety outcome of an organization. Nevertheless, employees have the responsibility to make sure they take care of their health and safety and that of their colleagues by ensuring:

- They follow the health and safety precautions provided
- Wearing protective clothing and equipment, and
- Reporting foreseen hazards to employers

Perceived organizational support (POS) is a concept developed by Eisenberger et al. (1986). This has been identified as the commitment an employee renders to an organization as reciprocate which, replicates an employee commitment, organizational support and care towards them as stated by Eisenberger et al., (1990). Rhoades and Eisenberger (2002) by examining the antecedent effects of perceived organizational supports, found out three main categories of antecedents that help to improve perceived organizational



support:

- Fairness in the way resources are distributed among employees and the quality of interpersonal treatment in resource allocation
- The degree to which supervisors value employee contributions and care about employee well-being, and
- The organizational reward and recognition of employee efforts alongside general work conditions provided by the organization, like job security and training” (Mearns & Reader, 2008)

Employees respond to POS by given full commitment to the organization and increase their job performance on usual jobs activities. Eisenberger et al., (1986) suggests that employees who feel organizational support feel owing an obligation to the organization by believing their excellent work and high performances will be rewarded. When employees perceive organizational support and have the feeling the organization care for their well-being, they tend to increase their effort and uses that to determine the readiness of the organization to reward performance.

### 3.9. Provision of enough Personal Protective Equipment (PPE) for workers

Personal Protective Equipment is equipment being worn or held by workers to protect them from hazardous exposure at work. PPE protects the user and should be in used when it is clear that measures in controlling exposure are inadequate. Types of PPE that are in use are protective clothing, protective footwear, ear protection, protective gloves, eye protection and respirators (Government of the Republic of Trinidad and Tobago Ministry of Health, 2012).

Alli (2008) proposed that employers should provide, pay and replace a suitable PPE clothing and equipment to employees in consultation with the employees or their representatives taking into consideration the nature of their work and the risks involved. Besides, it is indispensable for employees to keep and use PPE when other procedures to control exposure to hazard are inadequate. These employers should ensure PPE's are

provided with the appropriate means without any cost to the employees, and to assist the workers in using the proper PPE. The employer has to ensure the appropriate use of the PPE by workers. The employees on their part have the duty to use the provided PPE appropriately and to take good care of them.

### 3.10. The Rights and Responsibilities of Employers and Employees in Occupational Health and Safety Program.

According to Dessler (2005), employers and employees have rights and responsibilities towards occupational health and safety laws. Employers have the rights and responsibility of providing a safe workplace that is free from hazards and getting familiar with the situations at the workplace to ensure it meets safety standards. Employees, on the other hand, have rights and responsibilities to follow all health and safety regulations stipulated in the health and safety documents for the organization. They need to comply with all health and safety standards.

Employers according to Gany, Desler et al. (1942), are responsible for taking the necessary steps to safeguard the OHS of their employees. This according to the researchers is termed the “due diligence” requirement. Under the due diligence, the employer has the duty to;

- Filing government accident reports
- Maintaining records
- Posting safety notices and legislative information
- Education and training on health and safety precautionary measures

All workers have to take care of their health and safety and that of their colleagues that might be affected by their actions and inactions at work. Everyone needs to have adequate knowledge of health and safety to ensure they work safely. Gany, Desler et al. (1942), stated that not only employers have rights and responsibilities towards health

and safety but also employees. The employees have rights and responsibilities to take care of their health and safety and that of their colleagues. The specific requirements for the employee include;

- Wearing protective clothing and equipment
- Reporting any contravention of the law of reputation.

Downey, D. M. et al. (1995) found out that under the joint responsibility model, employees have fundamental rights. These rights are:

- The right to partake in occupational health and safety processes
- The right to be aware of safety hazards at the workplace
- The right not to accept hazardous work if they feel the work is dangerous.

However, employers must have a periodic occupational health and safety meetings and be training to update employees on the current health and safety practices. The employees always need to have the knowledge of health and safety and take care of their safety and other colleagues. The employers have the right to make sure that workers are working in a safe and healthy environment and so must protect and prevent workers from all forms of job-related risks. When the employees feel that the work environment is not safe to operate due to unresolved hazards issues, they have the right to refuse work.

### 3.11. Employee safety motivation and knowledge

Safety motivation and knowledge as an influence over employees' safety have been proofed to achieve good results over the years (Neal & Griffin, 2006). According to Mearns and Reader (2008), safety outcomes was not motivating; when employee performance was better and nothing like accidents occurred, but when feedbacks are not in use employees found it difficult to operate in safe behavior. Therefore, management driving motivation was not stressing on achieving safety outcome goals, but the improved and frequently progressive feedback was better for employees to engage in entrenched attitudes when performance was improved. Consequently, Alper & Karsh (2009) stated that when there is motivation without the employee having any

knowledge, the results on performance is unfortunate, however unsafe behaviors reduce when the employee knowledge improved.

### 3.12. Occupational Accidents

Occupational accidents can have tremendous effects on victims and other witnesses to the accident. Topmost among the effect is the mental health of the victims and others who witnessed the incident. The health and safety of employees at the workplace are expensive to the individuals and the organizations in which the work, as well as the country as a whole. The success of every policy in an organization needs the active cooperation and commitment among the employees, management and other stakeholders: health and safety management requires a strong commitment and collaboration to succeed. The organizational structures need to incorporate the health and safety matters to ensure robust health and safety of employees (Asumeng et al. 2015).

In the following charts are the statistics of the accidents VRA recorded as eligible under occupational circumstances from January to December 2016. These include vehicular and on the job accidents or occupational accidents.

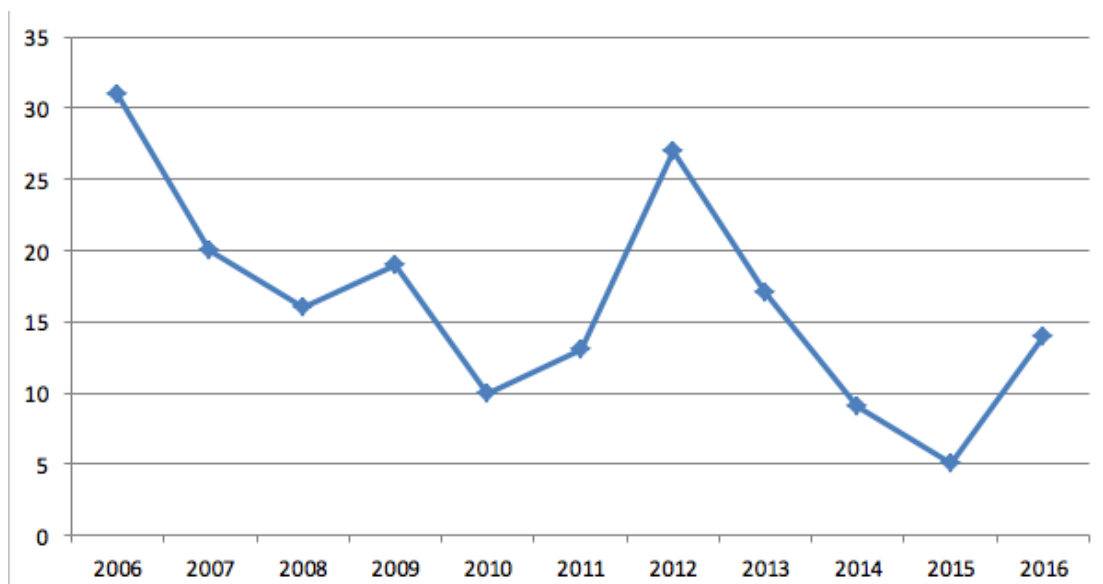


Figure 4. Statistics of vehicular accidents of VRA (Annual safety report 2016)

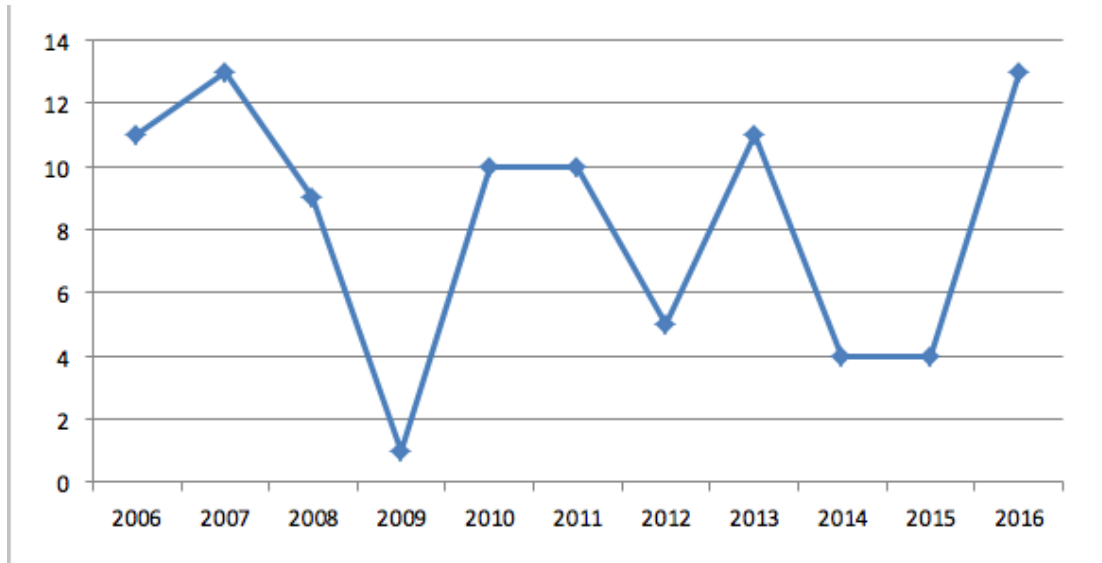


Figure 5: Statistics of occupational accidents of VRA (Annual safety report 2016)

The organization recorded a total of 27 occupational accidents in the year 2016. This figure was the total recorded as the victims and others reported it. This was higher than the total number of reported incidents in 2015. In 2015 a total of 9 occupational accidents were recorded. These accidents include vehicular and occupational accidents, representing an increase of 67% over 2015 (VRA, 2016).

As explained by Asumeng, et al. (2015), Ghana currently does not have a national policy on OHS management that meet the international standard; thus the country does not have the policy as required by ILO convention 155 (1981). As discussed earlier in the study, Ghana has different edicts that have stipulated guidance on OHS. For this reason, no single institution compiles the total number of occupational accidents in the country. For instance, the construction industry documented 902 cases of accidents in the year 2002 (Danso, 2005). The National Disaster Management Organization in their report (2013) estimated about 11,000 people in Ghana were disturbed by explosions and fire of which 7million dollars was the estimated cost of damage. Agbenorku et al. (2010) also stated that OHS accidents are fatal in the mining industries, therefore, exposing workers to high risks and injuries.

### **World estimated reports on occupational accidents**

People are getting acquainted with what job-related stress is and how to put it under control in developed or industrialized countries (WHO, 2006). But the case is different in developing countries where there has been a study that reveals that work-related accidents and illnesses that take over two million lives happen to be rising due to the increase in industrialization in many developing countries (ILO, 2005).

Comparing Ghana to the world, occupational accidents recorded was an estimated 2.33 million in 2011 as compared to 2.78 million estimated in 2015. Nevertheless, 2015 marked an estimate of 2.4 million deaths a surge of 0.4 million compared to 2011. This increase in the figure was due to fatal work-related accidents and diseases. Over 7,500 people die every day as estimated: those who die from work-related diseases are 6,500, and 1,000 people die from occupational accidents. The surge in figures is as a result of incorporating a lot of unreported cases of accidents (Hämäläinen et al. 2017).

#### 3.13. Occupational Health and Safety to management and workers.

Beach (1985) stated that the chances of having a considerably higher number of work injuries depend on the category of workers involved. For example, untrained workers, new workers, and young workers are likely to be among the higher number of injuries at work than the more experienced and trained workers. Therefore, the researcher was of the view that education, training, and the immediate job knowledge are essential for a successful health and safety program. Management at all levels needs some knowledge of safety to ensure the effective implementation and success of risk prevention program. Supervisors should understand the need for health and safety training, and if necessary provide the needed safety training for theirs.

Dessler (2005) observed that health and safety training is the proper way to reduce risks and hazards for employees' especially inexperienced and new employees. New employees should be warned and guided on safe practices and measures, for them to know the potential risks involved in working and be conscious of the work environment. Educa-

tion and training are not enough according to Dessler, but a demonstration of the training for best practices and to achieve good safety result. The best time to start safety training and education is at the hiring stage if indeed safety is the main goal of an organization as explained by Flippo (1984). He stated that part of the initiation process for new workers should be devoted to safety laws and practices and the organizational rules. All procedures should include warnings relating to unsafe places of operations. Nevertheless, for occupational health and safety to be a success, the management in charge of the education and training should be trained in the areas of the organization that is of relevance.

#### 3.14. Building and maintaining a healthy work environment for workers.

Ramlan, (2018) identified that the most significant thing that stimulates employee enthusiasm, drive, happiness, and motivation relies on the working environment. The working environment determines how efficient and effective an employee can be. A healthy work environment could lead to an improvement in workers` efficiency and higher organizational productivity. When the employers create and maintain a healthy work environment, corporate costs as a result of employee turnover, compensations to workers, employee absenteeism and medical claims will reduce.

Palmer (1989) proposes ways of maintaining workplace healthy. These involve:

- Employers ensuring that workers get fresh air. The cost for providing this is less compared to the cost to be required when trouble arises.
- Preventing suspicious building materials and furnishes. It is believed that when it smells, it will emanate an odor.
- Before occupancy, new building materials should be tested for toxins. Deviation from testing may cause possible health problems.
- Keeping an environment free of smoke. If smoking cannot be banned entirely then a smoking area with proper ventilation should be provided.
- Providing a clean and dry air duct. Water can cause fungi to grow in the air duct; therefore regular servicing will eradicate fungi.

- To listening to workers complaints. An employee can be appointed to take note of dates and particulars because employees are closer to the problems and can be the better source of information

Making and sustaining a healthy work environment is not only about giving medical attention to employees but also constitute the surroundings and the outlook of the workplace. Ramlan, (2018) stated that there are four aspects to consider when creating a healthy workplace environment:

- Workplace culture
- Physical environment and occupational health & safety
- Health and lifestyle practice
- Positive workplace environment

### 3.15. Human Resource Management

HRM involves the activities of managing personnel that are responsible for the goals of an organization. There are specialists for HRM whose responsibilities are to establish and implement strategies for the HR of an organization and its staff. The specialist staff has the responsibilities of assisting and guiding management and employees of an organization. The HRD gives training, retain and develop the HR of an organization. The HR takes into consideration the interest of the whole organization, its management, and employees (Joshi, 2013). Concerning this study, HRM functions such as training and development, motivation, performance appraisal are the focus.

#### 3.15.1. HRM Policies

Overall planning of successful organization depends mostly on effective and efficient HRM policymaking. To achieve the goals of an organization, the HR, other management staff and employees in modern organizations should work hand in hand with other trade unions and policy-making organizations. This could be achieved by operating in



line with the policy framework by the policy-making bodies. For instance, in Ghana, the Workmen's Compensation Act may include how employees should be insured and abide by safety regulations at work. Frequent inspection by governmental bodies and unions to ensure that working environments are safe for workers could also be a suitable control, for example concerning the health of employees and occupational safety. HR managers and other management in organizations should gear policies towards managing employee relationship with the organization. Therefore, HR policies must be precise, comprehensive, and clearly and understood by all workers. In the long run, the effect of the policies is standardized on all workers.

### 3.15.2. Employee Training and Development

Training and development refer to the situation where an enabling environment is created to stimulate employees for self-improvement. Training and development have become essential in the world, preparing workers towards new tasks. Though it is an integral part of HRD function, which has been argued to be a necessary function of HRM (Nassazi, 2013). It is important to ensure that training and development of employees take place by creating room for essential policies that will ensure employee performance is evaluated; employees will be strengthened, gain more knowledge and improve in their daily operations. Training and development is usually part of organizational settings that are supposed to help employees enhance their work performances and enable them to have self-development.

Zivic, M. (2009) explains training of employees as a way to develop employee's performance at their workplaces. It signifies changes in the particular knowledge, skills, abilities, and behaviors. Training that is effective and well organized has to be balanced with some needs that can be a learning ground and turning point for pieces of training. It further explains that training can be:

- On the job training
- On-site but not on the job training
- Off the job training

Training and development have become a central part of major organizations because the effectiveness of an organization relies on the development of the personnel (Joshi, 2013).

### 3.15.3. Employee welfare

Employee welfare is important in contemporary HR management, of which management must have the desire to make flexible packages and facilities available to employees for better comfort to work. Having employees firmly in mind by management and making cognitive benefits and conducive environment for work is tantamount to taking care of their welfare. These might include life assurance schemes, refresher programs, effective health and safety policies, payment during sicknesses, performance rewards and conferences.

### 3.15.4. Employee Performance Appraisal and feedback

This is one of the HR practices, normally used formally as a foundation for making decisions about employees; e.g., salaries and making promotion decisions which might probably aid in improved employee performance and increase the efficiency of an organization (DeNisi & Sonesh, 2010). Nevertheless, the effectiveness of performance appraisal depends on how feedback of an employee is delivered (Hattie & Timperley, 2007). The feedback that provides accurate and dependable information can enhance the performance appraisal to achieve its goals. However, Nicol and Macfarlane-Dick (2006) also suggested that there should be a fruitful dialogue between the giver and receiver of the feedback by so doing could create room for improving performance in an organization. When all the processes involved in determining performance are explained well to the employee, it enhances their effort in receiving feedback more favorably.

If feedback is timely and effective and is given to employees on their goals development, employee performance will enhance. For fruitful performance management to

progress, delivering timely and useful feedback is a significant factor. Management can use feedback to connect with the employee in setting the organizational goals. Management and other employees need to be aware of setbacks and progress in the organization. Nevertheless, feedback is to help in setting organizational goals to build strengths and rectify weaknesses (Butler & Winne, 1995), which will eventually ensure self-improvement and successfully achieving goals (Schunk, 2001).

#### 3.15.5. Employee motivation, incentives and reward

Many organizations have given employees incentives to motivate them to work safely. Incentives have been offered in different ways to employees as motivation towards working safely and achieving organizational goals; e.g., vacation trips, watches, clocks and jewelry (Michael, 2006). Motivation and incentives could be in different forms not necessarily financial (Armstrong 2006). Employees need to be motivated to improve performance. Nevertheless, what motivates Mr. A might not motivate Mr. B. It is therefore of utmost importance for management to understand and know every single employee so that the organization can identify what reward to give out to improve employee performance to achieve the set goals. Organizations should adopt rewards as a way of motivation in line with their sector of operations. Management has a prominent role to play in improving a good working environment for all employees.

## 4. RESEARCH METHODOLOGY

This chapter describes the methods, techniques, and processes that the researcher employed in the study. It also presents procedures for data collection, processing analysis the study area of the research and how the study was entirely conducted. The methodology goes on to analyze why the various approaches adopted by the researcher is vital to the study and how they will achieve the research objectives.

### 4.1. The qualitative method

The qualitative research method was adopted for this study. Cooper & schindler (2011) quoted by bedzo (2013) defines qualitative research as *“array of interpretative techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency of certain more or less naturally occurring phenomena in the social world.”* this research method is flexible because it enables the researcher to identify the missing ideas that are partly known and unknown and also to get the understandings about the facts about the research subject in question (ghauri & grönhaug 2005).

Qualitative research is commonly used during the data collection stage and also at the analysis stage. Structured and semi-structured questionnaires and interviews were used for qualitative kind of research method. Nevertheless, when the study problem is ambiguous, there is a high chance of the researcher getting confused by the data as a result of needless data collection. This ghauri & grönhaug stated that it could make the analysis of the research more problematic. Bedzo (2013) identified that the focus of the research differentiates between qualitative research methodologies and quantitative research methodologies. Qualitative research method can also be used alone to analyze organizational problems or can collaborate with some quantitative research methodologies. Qualitative research is an informative study that informs the researcher why and how things occur as they do them. Nonetheless, often qualitative research is challenging in meaning based on the fact that the significance, helpfulness, value, effectiveness,

acceptance, and recognition deliberated on certain evidence depends on people's concern (Weinberg 2002).

A case study approach was adopted for this research. Yin (2003) defines the case study approach as a comprehensive study or research of a contemporary occurrence with the help of different sources of evidence in a real-life situation. The case study research is predominantly used when the area of research is broad and complicated. It is most valuable to employ qualitative method when collecting data mainly when case study adopted in the reviews.

#### 4.2. The area of the study

The VRA was the area of study for the research. The staff strength of VRA according to the 2015 annual report as at December was 3084. The VRA is the principal and the most significant generator of electricity in Ghana. It generates power to the entire Ghanaian population and some parts of Ghana's neighboring countries. The 2010 population and housing census estimated the whole population of Ghana to be 24,658,823 of which the VRA solely generates electricity. The VRA was established on 26 April 1961 with the sole authority to produce, distribute and transmit power under the VRA Act, Act 46. But the mandate was reviewed in 2005, and the VRA has been restricted to generation of electricity. The VRA has a lot of services to a broad population; therefore, there are high chances of increasing risks and hazards due to the nature of the work performed there. However, VRA is a large organization that caters to the electricity generation services for a large population, so that made the organization have a large number of workers. Various departments are ranging from administration, engineering, finance, health, etc. Because of these, the organizational health and safety risks increases so the researcher considered some information could be collected from there.

### 4.3. The Research procedure

The study was undertaken with analysis of some relevant pieces of literature. The means for collecting data for the research is the research procedure and the data collection process. The researcher used two sources of data for the research work; thus the primary and the secondary sources. The primary sources of data used in the research are questionnaire and interview. A structured questionnaire was administered to participants working in the organization. The questions in the survey were made simple and clear to ensure that the participants spent less time in answering.

The secondary source of data was made use of significantly. Most of chapter one, two, and three were from secondary data. The secondary data is an accessible source and quick source to gather data. With the secondary information, the research made use of the Internet, articles, magazines, books, journals, and websites.

Proper permission was requested from the various participants that partook in the questionnaire, and the aim of the study was clarified.

### 4.4. Research method and Technique

The Faculty part specifies the sources of the data collection method and techniques in the study. The target population size of this study was 140 employees of the area of research under study. The qualitative research method was employed for the study with the objective of justifying the research. Questionnaires and interviews were designed to assess the occupational health and safety issues. The method focused on the employees of the departments and units of the organization. The main players in OHS in the organization were made to comprehend the aim of the study and to appreciate OHS issues in the organization. The study is a case study type and permits the researcher to concentrate on a specific situation. The participants were employees of the organization and sampling was purposive based on who could give information.

#### 4.5. Research Validity and Reliability

The absolute quality and legitimacy of the research depend on the reliability and validity of the outcomes. The primary step to take after selecting a subject for study is to determine validity and reliability. This can be achieved by making references to the literature of similar studies that have been done previously. If the research instrument used by the researcher is useful in producing the anticipated outcome, then the work-study can continue (Mautin, 2013).

Reliability represents the design and procedure of how the research was conducted should be in a manner that the details can be used by other researchers to continue on similar studies. This will help to verify the reliability of the research work (Saunders et al. 2012). The sources used were cautiously referenced to avoid inappropriate sources. The questionnaire designed for respondents were made taking into consideration goals and principles of the topic, and hence it is considered that the outcomes from the responses are reliable for the study.

The validity of the research indicates the authenticity of the outcomes of the study. The validity of the research can be internal or external. Internal validity means the analysis of the precision of the research outcomes achieved whereas external validity means analysis of the results in relation to a relevant situation whether the results can be generalized (Ghauri & Grønhaug 2005). The validity of the research deals with the researcher reducing or evading possible errors leading to attainment of the results. Validity was taken into account in this study, and the researcher took into account theoretical, descriptive, and explanatory validity by reviewing comprehensively related works of literature in the study area. The researcher took into consideration the advantages and the needs of the study relative to the topic before constructing the questionnaire. This helped the researcher identified the questions for the questionnaire for the study.

#### 4.6. Risks and Ethical Concerns

Ethical concerns exist in several research studies. The process involves in the research

usually creates pressure between the objectives of the research to generalize the outcomes to suit the betterment of others and to maintain the confidentiality of the participants involved. Ethics in research relates to doing good for participants and others and avoiding risks. Risks in research can be prevented or minimized by adhering to the appropriate ethical values. Keeping the confidentiality of the participants associated with research is essential (Orb et al. 2000). Ethics in qualitative study concentrate on investigating, describing, and surveying the surroundings and the people. Qualitative research has the concepts of power and the relationship between the researchers and their associated participants. So the participation in research is voluntary depending on the participants' willingness to share their information (Ramos, 1989).

The researcher conducted the study in line with the University of Vaasa's policies and guidelines on research ethics. Ethical values are respected and as such considered in researching if it might cause any risks to anybody involved in the study. In the researcher's observation, no risks were encountered in the studies. It is therefore essential for the researcher as a student of the University of Vaasa to follow the ethical procedures and the primary criteria in this study. The confidential issues of the research have been omitted from this study to keep to the ethical clause for the study. No personal details of persons associated with this study were disclosed to abide by the University of Vaasa ethical guidelines and organizations policies. The responses to the questionnaire by the respondents were voluntary, and the researcher observed and respected the confidentiality of the respondents. The study meets expectation, and the researcher can confirm the transparency and fairness of the research.

#### 4.7. Data analysis

The data gathered from the primary source was analyzed at the completion stage of data collection. The responses were condensed based on the information provided by the respondents. The analysis has been completed using qualitative method. The qualitative approach was applied by making use of descriptions and analysis of the respondents' feedback from the questionnaire and interviews.



## 5. PRESENTATION AND DISCUSSION OF FINDINGS

This chapter concentrates on the presentation and analysis of the data gathered from the respondents. The researcher designed questions in the form of a questionnaire for respondents to answer, which were relevant to the study objectives. The researcher targeted 140 workers to participate in the questionnaire. But 50 questionnaires were administered to respondents, only 34 questionnaires were completed. However, the presentation, discussion, and conclusion were made from the 34 completed questionnaires. The outcomes of the study have been analyzed in descriptive form. Information collected through interviews was analyzed in addition to the questionnaire. The outcomes of the study have been analyzed in descriptive form. The results of the questionnaire were received through Google docs, so some of the automatically formed charts from the respondents have been shown.

### 5.1. Gender composition of respondents

The researcher targeted 140 respondents for the questionnaire, but 50 were sent. Out of the 50 respondents, 34 returned completed results, but this made it enough for the data analysis. On the part of the interview, 10 people were aimed for, but only 5 respondents were interviewed. Nevertheless, the researcher made proper data analysis despite the number of respondents to the interview. Some employees did not find it necessary to participate in the study as they saw it to interfere with their work and instead would use their time to work instead of filling in the questionnaire.

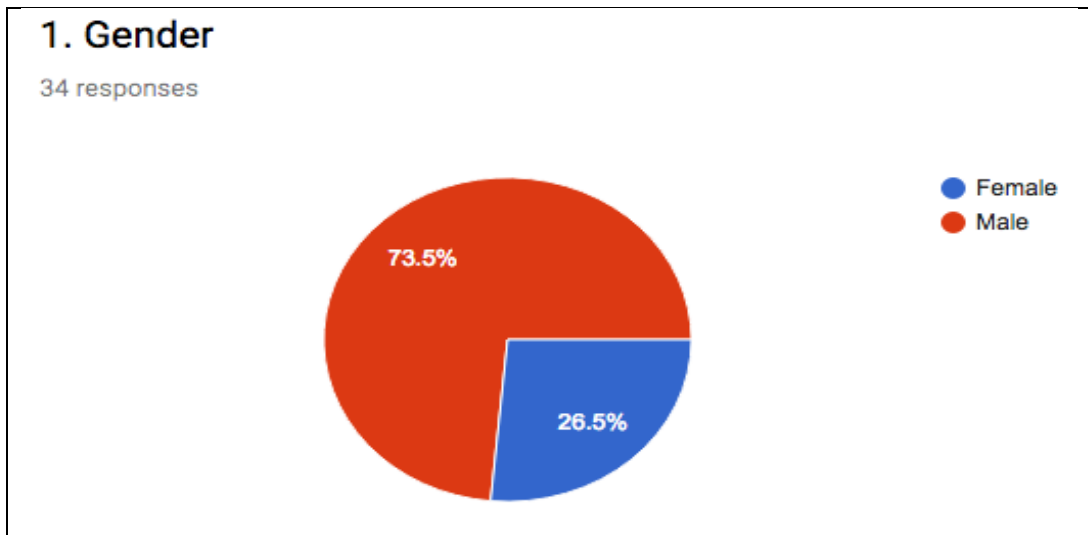
Table 1. Gender composition of respondents

Gender	Number of respondents	Percentage (%)
Male	25	73.5
Female	9	26.5
<b>Total</b>	34	100

Source: Field survey 2018.

From table 5.1 above the males were leading with a response rate of 73.5 percent as compared to females with 26.5 percent. The males segment of the questionnaire according to Alfors (2010), shows how males dominate the formal sectors of work in Ghana. Alfors revealed that per about 9 percent of the labor force in the formal sector of employment in Ghana, the males occupied about 62 percent while the female cover about 38 percent. The figure below shows the response rate of the study.

Figure 6: A pie chart on the gender composition of respondents



Source: Field survey 2018.

## 5.2. Duration of service

As illustrated in table 5.2 below, most of the respondents worked in the case organization for over 5 years. However, it is an indication that retention system in the organization is very good and employees have experience on occupational health and safety issues and how things are handled. However, the outcome can also be concluded that newly employed workers or employees who have worked for less than 5 years can tap into the knowledge and experience of the more experienced employees. The results also indicate that the employees need frequent human resource development and training to keep them updated on knowledge and skills of OHS developments in the organization.

Table 2. Duration of work of respondents

Duration of service (Years)	Number of respondents	Percentage (%)
Under 5years	5	14.7
5 – 15 years	21	61.8
16-25 years	6	17.6
26-35 years	1	2.9
36 years and above	1	2.9
Total	34	100

Source: Field survey 2018

### 5.3. Occupational health and safety

The objective is to find out the effect of occupational health and safety on human resource, and also to find out if respondents understand occupational health and safety. A question was developed in this regard to ascertain the level of the respondents understanding of occupational health and safety practices in the organization. The table below shows the knowledge of respondents in OHS.

Table 3. Respondents understanding of Occupational health and safety

Option	Number of respondents	Percentage (%)
The welfare of workers	14	41.18
The welfare of management	3	8.82
The welfare of workers and management	5	14.71
The welfare of the workplace	2	5.88
The welfare of the workers, management and third workplace	10	29.41
TOTAL	34	100

Source: Field survey 2018

From the table, 3 of the respondents that represent 8.82% implied that occupational health and safety is the welfare of management, 10 of the respondents representing 29.41% showed that occupational health and safety is the welfare of the workers, management and the workplace. Also indicated are 5 respondents representing 14.71% who implied occupational health and safety as the welfare of workers and the management, and 2 respondents that represent 5.88% indicated that occupational health and safety is the welfare of the workplace. However, 10 respondents representing 29.41% denoted that occupational health and safety is the welfare of workers, management, and the workplace. The results show that workers do not fully understand the occupational health and safety issues in the organization.

Also, Some workers were asked the same question in the interview and they narrated

that per their understanding.

*“ Occupational health and safety is the well-being of the workers and the prevention of one`s self from work risks. But I think it is the responsibility of every worker to make sure they are in good health and good state of mind before coming to work. Some people have issues at home then they come to work thinking about the problem. That can possibly make them lose concentration and cause accident”* (Person “A”)

*“We all have a share responsibility to make sure the place of work is safe for the next user. The responsibility we have to ensure that the workplace is risks free and our own health before attending to any work in my opinion is occupational health and safety. But this issue of occupational health and safety is complicated because different researchers have given different meaning to it based on which sector the research is based”* (Person B).

The OHS should involve not only the welfare of workers and management but should include the work environment and anything involved. According to WHO (1994), some of the aims of occupational health and safety are workers protection in their employment from occupational hazards that may result from elements unfavorable to health, and placing and maintaining workers in a work environment that workers are physically and psychologically use to. At the heart of every organization, there is a human whose effort is partly reliant on his health, so it is essential for management to step up effort in making every worker appreciate the concept of OHS.

#### 5.4. Effect of occupational health and safety policy on job performance

A question meant to ascertain if the respondents believe that occupational health and safety have any effect on job performance. All the respondents answered yes that they believe occupational health and safety affect job performance. However, the same question was asked in an interview with some employees, and this is what they have to say.

*“ For me I believe occupational health and safety have effect on workers job performance. I know about occupational health and safety policy but sincerely speaking I*

*don't know the details of what the policy entails. I am aware of what to do and what not to do on a specific task in order to avoid accident. I have been doing similar tasks for sometime now so I am use to what I do. Provided I am in a good state of mind, I do the work with less chances of any risk. “ (Person B)*

*“ I know about occupational health and safety and I also know about its associated policy. But practically some of us know about work related risks and how to secure our area of a work at a particular point in time. We attend some lectures sometimes for demonstrations on occupational health and safety matters. But we are not involved that much especially in decisions pertaining to our work safety. Accidents do happen often, some people get incapacitated, some get major injuries that can make them incapable for a long time and others get minor injuries”.* (Person D)

*“ We work on power generation in various departments. Some people especially those in the engineering sides are highly likely to be involved in work related accidents in various ways. This safety matter can have a big effect on job performance. The policies are there but in my opinion not every body knows the details of those policies. In most cases referrals are made when there is a trouble. But with all these management is compelled to be committed and ensure that the necessary project arrangements on occupational health and safety on site are in place when a new project commences”* (Person A)

From the responses given, it seems some respondents do not have much knowledge about the effect of OHS on job performance. According to Kritner (2007), workplace safety positions as an essential element in job satisfaction. This in the literature: Justifies that employers over the years are concerned about employees occupational health and safety only when they are sick or trying to avoid accidents at work (Khadka, 2015). Efforts should be made to improve employee safety and participation, and this depends on management zeal to promote trust and open communication (Conchie & Donald, 2009). In an attempt to ensure every employee knows the current occupational health and safety issues, management can include into their safety policy securing the safety of workers under a conducive environment capable of taking care of their work situations. Management must be committed to occupational health and safety programs and to show some level of leadership towards its success. To accomplish this program, man-

agement should put into writing the organization's expectation in the health and safety policy. For an effective health and safety, management should display their support for health and safety by involving in regular health and safety facility inspections and leadership training meetings (Dessler, 1997).

### 5.5. Satisfaction with Occupational Health and Safety

Safety matters are significant in every organization. To standardize safety issues, appropriate actions have to be taken to ensure that the workplace is safe for workers and third parties. The participants were asked about their level of satisfaction with occupational health and safety. This question was to find out if management is putting in enough effort to create and maintain a safe working environment for all. The table 5.5 below shows the responses of the respondents.

Table 4. Satisfaction with occupational health and safety

Option	Number of respondents	Percentage (%)
Satisfied	22	64.71
Dissatisfied	12	35.29
Total	34	100

Source: Field survey 2018

From table 5.5 above, 22 respondents representing 64.71% were satisfied with management efforts towards occupational health and safety in the organization, while 12 respondents representing 35.29% were not satisfied with the procedures taken by management to ensure the safety of workers. From the results, it is clear that most of the workers are satisfied with measures being taken by management to ensure a safe working environment. Still, some workers are not satisfied with measures taken by management in ensuring a safe working environment. Some respondents shared their views in an interview:

*“I must say there is more to do concerning health and safety not only in our organization but the country as a whole. It is unfortunate that the work fields that are associated with some risks have occasional visits to monitor the compliance of health and safety laws.” (Person B)*

*“I work in the engineering department, and I hope you know what it entails to work in such a department? It involves taking risks. All the same, we are provided with protective clothing and equipment when working. But at times most colleagues including myself work in casual attire with the protective helmet. I feel not satisfied because no one seems to enforce the safety laws or to make sure all workers follow the safety procedures accordingly. The safety laws are applied only when there is an accident, or someone falls ill as a result of workplace hazards.” (Person A)*

*“In the finance department, we were taken through health and safety practices upon initiation. We were given a brief lecture on occupational health and safety at work. We have a hospital that we visit when we are sick. But I think much attention on occupational health and safety is being given to the technical units more than the other units and departments”. (Person D)*

The management and employers have to ensure that all workers have the adequate information on occupational health and safety and making sure that there is a safe working environment for all. Irrespective of the department one belongs to, sufficient information should be provided theoretically and practically. As indicated by ILO and WHO, “Occupational health should aim at the promotion and maintenance of the highest degree of the physical, mental and social well-being of workers in all occupations” European Commission (2010). This is to guide organizations in putting in the appropriate measures on matters of occupational health and safety that ensure workers operate in a safe environment free from risks and hazards.

## 5.6. Occupational health and safety measures

Appropriate occupational health and safety measures should be taken to ensure matters concerning safety are under proper control. In line with the research, the researcher



aimed to find from the respondents whether management has put measures in place to warrant the safety of the workers. 20 respondents that represent 58.82% stated that they are satisfied with occupational health and safety measures by management, while 14 of the respondents representing 41.18% indicated that they are dissatisfied with health and safety measures by management. Grounded on the answers provided by the respondents, most of the workers were satisfied with measures that management is taking in ensuring a safe working environment for workers. Nevertheless, some workers were not satisfied with management effort in putting proper measures. Given the results, the researcher can state that so many measures are not taking to occupational health and safety. Also, respondents were asked to indicate some of the OHS measures in place at their workplace. The following were indicated as some measures:

- Occasional occupational health and safety standards monitoring and workers compliance.
- Provision of protective clothing
- Occasional safety training

A worker interviewed was of the opinion that:

*“It is stated that the organization will make sure all workers are protected against risks and hazards. But I believe that management does not put in much effort. It is only a formality from my point of view because it is a part of the recruitment procedure to train workers on occupational health and safety. Some of us if not all do not have full information on health and safety at the workplace”.* (Person C)

This responds show that the organization is not putting drastic measures in place to guarantee health and safety at work. This goes contrary to what Zwetsloot (2003), stated that because of the global economy tendencies, organizations had set standards in the international conventions to control safety in the workplace and causing progress in the conditions of services provided and the workplace. Regular inspections and employee involvement can help develop health and safety initiatives and strategies geared towards health and safety needs.

However, respondents were asked to suggest some measures that should be taken to enhance occupational health and safety. Some of the measures indicated are:

- Proper consultation or employing health and safety professionals.
- Regular supervision and monitoring of health and safety issues.
- Frequent review of health and safety policies and activities.
- Involving employees in safety decisions

Nevertheless, if the roles of the employer and the employee are well defined concerning contributions in decision-making concerning occupational health and safety, problems can be addressed. Health and safety issues can be identified, and improvement can be made to suit the workers working environment. This could lead to employees having confidence in measures adopted by management to deal with health and safety.

#### 5.7. Written document on occupational health and safety policy

The researcher posed a question to find out if respondents do have a written document on occupational health and safety policy in their various departments. The question was aimed to ascertain if the organization observes the obligation of making sure that occupational health and safety policies are all over the place to remind every employee of how to be safe at work and the responsibility each one has to ensure a safe working environment. Below is the response of respondents on whether the organization has a written document on occupational health and safety policy.

Table 5. Written document on occupational health and safety policy

Option	Number of respondents	Percentage (%)
Yes	31	91.18
No	3	8.82
Total	34	100

Source: Field survey 2018

In table 5.5, 31 respondents (91.18%) said the organization has a written occupational health and safety policy in their units, while 3 respondents (8.82%) replied that they do

not have written document on occupational health and safety in their units. The results show that majority of the workers are aware of occupational health and safety policy.

Furthermore, respondents were asked to indicate the written document of occupational health and safety policy that the organization has. This is what they stated:

- The Factories, Offices and Shops Act, Act 328 (1970)
- The Workmen's Compensation Law 1987 (PNDC L 187)
- The National Labor Law

The indicated Acts confirms that there is no law or statute exclusively guiding occupational health and safety in Ghana. However, two respondents stated that they have the VRA safety handbook and one person said the VRA safety rulebook. This demonstrates that the workers are not aware of the organization's policy on OHS and so they do not have an idea of their roles and responsibilities on health and safety. This poses more risks in their working environment. Many of the laws indirectly guide occupational safety and health but are limited to some particular working sectors making those policies ineffective. During the interview, some respondents shared their opinion:

*“Customize occupational safety, and work rulebooks should be developed for VRA staff. Occupational safety rules should incorporate safety rules on all sections or work units in the company and not mainly on technical and commercial units”.* (Person C)

*“I know about the workmen's compensation law and a small safety handbook. But I think the policies and regulations on occupational health and safety should be upgraded to meet modern international standards”.* (Person A)

The general response shows that the organization did not have a clear policy on OHS since the majority of the workers have no idea about the safety handbook that the few workers know. This also indicates that workers have little knowledge about the content of occupational health and safety policies guiding their sector and various departments. The content of the policies available lacks detailed provisions for managing health and safety issues in the power generation sector. Employee job performance is paramount in any organization. Nevertheless, it seems job performance has not improved because

management or supervisors do not delegate their duties and leadership to other workers for them to have the ability to manage and mentor other people they might train.

#### 5.8. Rights and responsibilities of employer and employee

Employers and employees by law have rights and responsibilities under occupational health and safety. In an organization, health and safety cover the employers equally as it includes the employees. This question was to find out whether employers and employees know that they have rights and responsibilities on OHS for the efficient working environment. The following was the response;

Table 6. Rights and responsibilities of employer and the employee

Option	Number of respondents	Percentage (%)
Yes	34	100
No	0	0
Total	34	100

Source: Field survey 2018

Table 5.8 above illustrates that all the 34 respondents representing 100% agree the employer and the employee both have the rights and responsibilities achieve a better OHS. This results shows that respondents are aware the employer and the employee have rights and duties on OHS matters. The awareness could turn into achieving a safe working environment if each party recognizes their responsibilities in ensuring that all safety policies are followed.

The Ghana labor Act 651 (2003) states the basis of rights and responsibilities concerning occupational health and safety. It provides that it is the responsibility of the employer to provide a safe and healthy working environment for all workers in line with the national law on occupational health and safety to ensure risks are minimized or eliminated.

However, the respondents were asked to indicate as stated in the literature review what they think the rights and responsibilities of the employer are. They stated the following:

- Filling government accident reports
- Posting health and safety notices and statutory information
- Training and education on health and safety preventive measures
- Keeping records of health and safety

They also showed these as some of the rights and responsibilities of the employees:

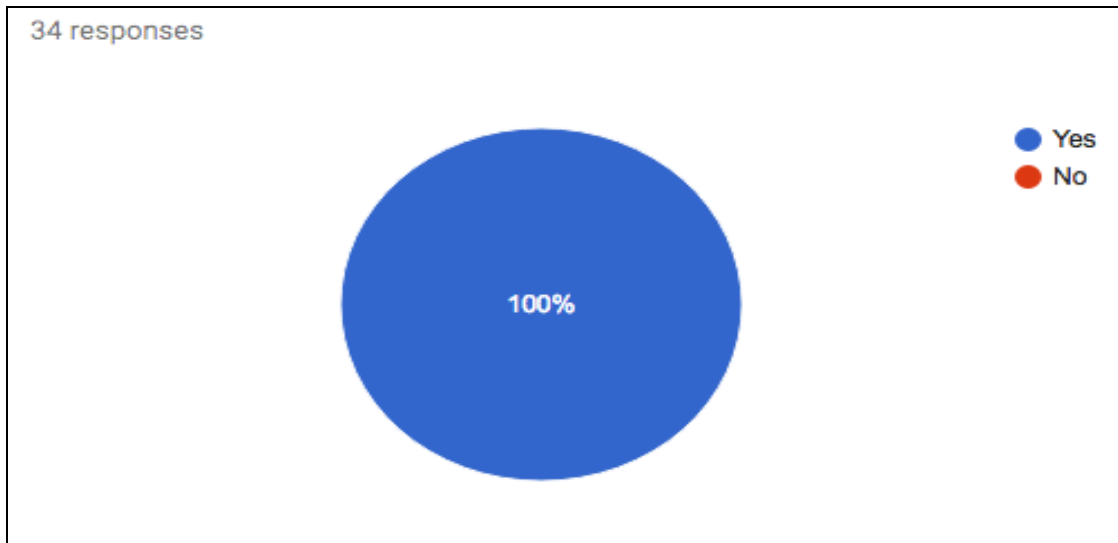
- Wearing protective clothing and equipment
- Reporting any violation of the law by management
- The right to a refusal of unsafe work

The responses show that respondents know they have responsibilities under OHS so do their employers.

### 5.9. Responsibility of occupational health and safety

Everyone has rights and responsibilities in relation to health and safety at work. Irrespective of one's role at work the law has the rights and duties of employers and the employees in regards to occupational health and safety at work. In the table below, respondents were asked to indicate whether they are aware of who was responsible for their safety at work during the performance of their duties. The respondents answered as follows;

Figure 7: A pie chart on responsibility of occupational health and safety



Source: Field survey 2018

Table 7. Responsibilities of occupational health and safety

Option	Number of respondents	Percentage (%)
Your supervisor	4	11.8
Yourself	6	17.6
OHS manager	24	70.6
Not known	0	0
Total	34	100

Source: Field survey 2018

Table 5.9 above illustrates how the respondents reacted to whom they think is responsible for OHS in their job performance. 4 respondents (11.8) stated that their supervisors were responsible for ensuring that workers are safe in their job performance, 6 respond-

ents (17.6%) indicated that they were responsible for their safety at work, while 24 respondents (70.6%) think that OHS manager is responsible for making sure that workers were safe in their working environment. Although employers and managers have the legal responsibilities to make sure that the workplace is safe and healthy. However, as an employee or a worker, you have the rights and duty of your wellbeing and safety and that of your co-workers (Alberta Government 2015).

In an interview some respondents were asked who was responsible for workers health and safety in their work duties:

*“Even though there are policies that state the rights and responsibilities of workers on occupational health and safety, workers are empowered adequately or should I say we do not know much of our rights, we rely mostly on the authorities in charge to take responsibility of safe working environment.”* (Person C)

*“I believe as a worker I take responsibility for my safety when performing my duties. When I am on the job, I do the actions, and no one monitors my work throughout my shift. Therefore whatever happens around at work me I should be able to deal with it before reporting to the supervisor. Even though the supervisors and managers are to ensure that all workers are in a safe working environment, the workers responsible for their safety.”* (Person B)

There should be a commitment from the employers and the employees on health and safety at work. Each side should observe the safety rules and play their parts to ensure a safe work environment for every worker.

*“The employers and our managers lack the moral commitment to make sure the workplace is safe and healthy. Usually, we see more commitments upon sensing risks. These attitudes are not good in achieving a safe work environment. The problem we have as a country is that we do not set good examples. For example, I go to work and put on my safety clothing to make sure I work to improve safety. But the authorities in charge of ensuring a safe working environment are not committed to improving workplace health and safety.”* (Person D)

Analyzing the above responses, the researcher can observe that majority of the workers

do not recognize the fact that their health and safety as individuals are in their hands. The duty is on the individual worker to ensure that they follow safety rules during work. The researcher noted that employers and managers lack sufficient skills to make sure that health and safety are provided adequately at work. The lack of national health and safety policy could be the contributing factor to employers insufficient skills.

#### 5.10. Occupational health and safety training and education

Throughout the stay of every worker in an institution, it is essential to give training to both the old and the new workers. Training and education are needed for every worker from the employer down to the employee to acquire new skills and competencies that will enable them function in their present job. The clue is to ascertain whether there are any training and education for employees on health and safety in their work. The respondents gave the following responses;

Table 8. Occupational health and safety training

Option	Number of respondents	Percentage (%)
Yes	30	88.24
No	4	11.76
Total	34	100

Source: Field survey 2018

Table 5.10 illustrates respondents' responses to whether they have been receiving OHS training. 30 respondents (88.24%) indicated that the organization does provide training and education on health and safety to workers, while 4 respondents (11.76) replied that they do not provide training on issues of health and safety. The results show that majority of the workers received training and education on health and safety.

Employers should put in measures to remind workers of the importance of working in a



safe working environment and the ways to keep the work environment safe. Because of that, the respondents were asked to indicate how often training and education on health and safety are provided for at work. The following table shows the responses;

Table 9. Training schedule on occupational health and safety

Option	Number of respondents	Percentage (%)
Weekly	14	41.18
Monthly	1	2.94
Quarterly	0	0
Annually	0	0
No specific time	19	55.88
Total	34	100

Source: Field survey 2018

The schedule of employee training as shown in the table above shows that 14 of the respondents (41.18%) indicated that workers undergo training weekly, 1 respondent (2.94%) replied that workers undergo monthly training on occupational health and safety. However, the majority of the respondents 5 representing 55.88% said they have no specific schedule for occupational health and safety training.

In an interview with respondents he narrated that:

*“We have training every day. What I mean by this is that we gain from safety training indirectly when performing our duties. From my perspective doing a couple of things for a period will automatically enable you to identify the hazards and risks involve thereby helping you to know how to work safely.” (Person A)*

*“We don’t have any specific time for occupational health and safety training. But education and training are given upon employment but from what I can remember health and safety was a part of the pieces of training received but the training scheduled was*

*not purposely dedicated to health and safety.” (Person C)*

As the results show, it can be deduced from the responses that there is no regularized training schedule for occupational health and safety training. This can cause harm to the workers making them vulnerable to exposure to risk when attending to their work duties. Some respondents seem not to know about the existence of OHS training in their departments. It is also essential for workers to be aware of training schedules and have full participation.

However respondents were asked to indicate how the training they attended was facilitated, they stated practical demonstrations and presentations. These responses show that the case company stress on practical demonstration and presentation. This could be due to the technical nature of the organization.

The researcher during the interview noticed that most of the workers went through education and training process under the principle of employees taking training by joining the organization. Some of the employees were selected for specialized training based on the departments in which they work. This shows that employees are given education and training based on their departments, their line of operations and the risks involved in their working environment. Some respondents argued that the training and education are not organized explicitly on occupational health and safety even though it was held upon joining the organization. This implies that employers and management do not put much concentration on OHS issues and this signifies that the training approach employed leave most of the employees unaware of the whole training process. The HRM should put a lot of resources into training that will enhance and add value to employees work. According to Wright and Geroy (2001), training influences the performance of employees partially by strengthening their skills that result in making them gain knowledge and perform better at their jobs.

*“The human resource department partly organizes health and safety training. Proper methods of working and the appropriate OHS policies and regulations are not well explained to workers. I feel the training providers are not skillful enough to provide the training.” (Person B)*

Again, the majority of the respondents indicated that the HR department organized most of the education and training, and the representatives of OHS took care of health and safety parts. A few respondents reported that their supervisors organized the HR and other training that they received. Nevertheless, the response from the respondents shows that there is uncertainty in the professionalism and skills of the OHS training providers. This the researcher states that there should be regular training so that every worker from the employer to the employee would keep up to date on present work situations.

## 6. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The chapter provides the summary of the findings, conclusions and recommendations based on the outcome of the study. In addition the chapter provides limitations of the study and direction for future study on OHS. The conclusions are drawn from the objectives of the research.

### 6.1. Summary of findings

Most major economies have put much effort into finding solutions to the adverse effects that health and safety pose on workers capabilities on the job. Different researchers have made attempts to put an end to the negative impacts that OHS causes, the menace still exists. Some of the consequences that these negative effects possess include deaths, disabilities, low productivity and costs. For organizations to have a complete OHS, the understanding must go beyond the well-being of employers and employees to other stakeholders. For this reason that occupational health and safety laws require organizations and their managers to ensure a safe working environment and also state clearly the rules and guidelines that everyone in the organization must follow.

The study found out that there is no single law on occupational health and safety in Ghana, therefore, the negative impacts of OHS. The research shows that though most workers appreciate and recognize the effort by VRA in taken measures to make sure that workers have a safe working environment and their health conditions are better, but the much attempt have not been made to ensure the safety of the workers and the work environment is not sufficient. The findings also show that employees do not correctly understand the issue of occupational health and safety and the associated implications. Management act with negligence on matters concerning OHS. Management gives attention to safety issues when a problem calls.

All the respondents agreed that effective OHS has an impact on employee job performance. The well-being of workers should be equated as the task to be performed. The effectiveness of occupational health and safety should depend on the management commitment and support for OHS program. Management can achieve this by inspecting

facilities frequently, investigating any threat incident and participating in health and safety leadership training and education (Dessler, 1997).

The findings also indicate that the workers are aware of some kind of occupational health and safety document, but those are not policies on occupational health and safety. They are documents with policy limitation on a specific matter. This shows that there is no policy on occupational health and safety in the organization. This attests to the lack of policy on OHS in Ghana. This puts workers at risks of incurring health problems and accidents at work.

Also, few workers indicated that VRA has a safety handbook, but responses show that most of the workers are not aware of this written piece of a document on safety. This again indicates that the management requires a commitment to occupational health and safety. There should be an allocation of sufficient resources and the motivation of workers to participate fully in safety matters. This can be achieved when management develop a proper health and safety policy in the form of a clear and comprehensive written document (Dessler, 1997).

Motivating employees to work safely is different from having the knowledge to operate safely. Workers responses indicated that they know the rights and responsibilities of the employer and employee on OHS. The researcher differs from the majority of the workers who think that the ultimate responsibility for their safety and health at work is in the hands of their OHS manager. But observation and interview revealed that workers have little knowledge of occupational health and safety at work. There is no appropriate information stating clearly what the rights and responsibilities of both the employee and employer are in regards to OHS matters. This lack of proper knowledge of OHS can be attributed to the absence of occupational health and safety policy in Ghana. As the country lacks a single document of OHS so does it affect other organizations and bodies who do not have a separate policy to guide their workers.

It was revealed that education and training has a definite link with job performance; therefore, VRA should be committed to health and safety training. This can be inculcated into the duties of the HR departments to train management and other workers so that the standard of health and safety can be improved. Some workers revealed that they had

training in occupational health and safety when they were employed, but the training was general job training. OHS was a subject discussed during the training, so they rely on the knowledge they acquired from the training. Some had safety training because of their field of operation and stated that they go for training but under no specific schedule. Health and safety training and education is supreme in skills and knowledge acquisition, and workers change of attitudes, ways of working in a safe environment, and reasons for accidents in the workplace are emphasized (Armstrong, 2006). The observation by the researcher shows that there was no proper schedule for health and safety training as well as inadequate training. Management and other workers should take health and safety training seriously, and this can be accomplished when training and education is a serious concern.

## 6.2. Conclusions

According to WHO (1994) the highest risks industries like the forestry, agriculture, energy, and construction employ about 80% of the working force in developing countries and these industries are often at unreasonable risk that leads to about one-third of the workers suffering various occupational health diseases and injury annually; in some cases leading to deaths and disabilities. Ghana has some pieces of OHS law requirements under the authorities of different agencies nonetheless no organization and law supervises and ensures that the legal requirements are applied (Annan et al. 2015). Most of the OHS hazards continues because of the poor coverage of policies implemented by the governments of developing countries including Ghana, weak institutions and infrastructure for supervising, and generally not enough experts and institutions for OHS services (Amponsah & Dartey, 2015).

The research can conclude that occupational health and safety to a large extent defines workers performance at work, but the organization has put a small effort into improving health and safety. Any employee who suffers from occupational health and safety cannot perform adequately. A complete commitment and support from management in making health and safety a priority is vital for a safe working environment. Workers will see OHS programs worthy when they see a real commitment and support from

management. From the findings, the management attitude towards OHS is poor as little attention is given to education and training. The study found that OHS practices can bring about tangible signs of progress in health and safety at workplaces and create measures that can prevent associated health risks can be of importance to human resource development. The study recommends that effective policy and human resource training programs among HR managers and other managers, supervisors and other workers are essential for OHS improvement at the workplace.

### 6.3. Recommendations

The recommendations were made based on the findings and conclusions drawn. The work environments must be created to be safe and healthy for workers and third party. There should be measures to promote and improve occupational health and safety in VRA permanently. The government of Ghana must set up a body solely responsible for the implementation and formulation of occupational health and safety policy so that other governmental and non-governmental institutions can emulate such into their organizational policy. This is essential to ensure that occupational health diseases and deaths are prevented and also to make sure that occupational health and safety standards are adopted and complied.

Management of VRA should continuously improve the health and safety of the working environment to prevent occupational accidents and other related health issues. The management should make sure that all new employees understood the health and safety policy available to the organization and ensured it applies to their working environments. Collecting and dissemination of information on various components of OHS ensure that information gets to every worker in different ways. Information is very vital for the avoidance and implementation of successful OHS policies and to make sure of the policy enforcement.

The management and other employees should be made aware of the importance of creating a safe working environment and the procedures to achieve that. For this reason that training and education are essential mechanisms for a healthy and safe working en-

vironment. Every worker must be made to comprehend that occupational health and safety are the responsibility of both management and workers which collectively will help to create and maintain a safe and healthy work environment. There should be a regular arrangement of health and safety training, seminars, and workshops to make workers conscious of their working environments. These arrangements can go a long way to enhance the knowledge of workers on OHS and would help improve their working performance.

There should be an appropriate health and safety policy designed by management that clearly states the rights and responsibilities of the employer and the employee at VRA. This policy can help address some particular health and safety concerns. For example, the policy should state clearly what exactly needs to be done by employer, management and the employees to ensure that every worker works in a safe working environment. The policy documents should be made available to all departments so that all workers will be aware of the policy. Employees should be conscientised about health and safety so that they will know that the responsibility of taking care of their health and safety at work lies in their hands. Workers should not compromise their health and safety in the discharge of their duties.

The government in collaboration with stakeholders in OHS should set up a body task with the sole responsibility of implementing occupational health and safety policy and also monitor related activities in the country. The body can do the monitoring by instituting monitoring teams in institutions and other organizations that will check workers go by the policy guiding the OHS. Aside from the monitoring, the body can train trainers in capacities of particular relevance to departments and organizations. This will help address particular OHS matters in every department and institution.

The government must make sure that health and safety committees and representatives are formed in every organization and must also involve employees. These committees and representatives must be committed to occupational health and safety in making sure that all employees are safe and healthy in their work environments. Through these, the government can show dedication to health and safety matters.



#### 6.4. Future research

Policy makers in OHS need to continually research on ways to enhance occupational health and safety in every workplace. Firstly, further studies should be carried out on defining the exact role of government in the implementation of OHS programs in the country. Secondly, the researcher suggests a new study should be carried out on human resource practices, which can have a positive impact on OHS. Thirdly, the researcher proposes further research into OHS to be extended to every sector of the economy and to investigate the level of compliance with OHS whether the policy meets international standards.

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## APPENDIX 1. Questionnaire

## 1. Gender

- a) Female [ ]
- b) Male [ ]

## 2. Age

- a) 18 – 25 [ ]
- b) 26 – 35 [ ]
- c) 36- 45 [ ]
- d) 46-55 [ ]
- e) 56 and above [ ]

## 3. Department .....

## 4. How long have you been working in the organization?

Under 5 years

- a) 5 – 15 [ ]
- b) 16 – 25 [ ]
- c) 26 – 35 [ ]
- d) 36 and above [ ]
- e) Other: .....

## 5. What in your understanding is occupational health and safety?

- a) The welfare of workers [ ]
- b) The welfare of Management [ ]
- c) The welfare of workers and management [ ]
- d) The welfare of the workplace [ ]
- e) The welfare of workers, management & third party [ ]

## 6. What are some of the safety measures that are put in place in this organization?

- a) Effective monitoring of safety standards and workers compliance [ ]
- b) Provision of protective clothing and equipment [ ]

c) Regular safety training

d) Other:.....

7. What are the relevant occupational health and safety documents that you are acquainted with?

a) The Factories, Offices and Shops Act

b) The mining regulations

c) The Workmen's Compensation Law 1987 (PNDC L 187)

d) The National Labour Law

e) Other:.....

8. What measures must be taken to enhance occupational health and safety?

a) Consulting or employing of safety professional

b) Regular supervision and safety management

c) Frequent reviewing of Safety activities

d) Involving employees in safety decisions

e) Other:.....

9. How satisfied are you with management effort on occupational safety?

a) Very Satisfied

b) Satisfied

c) Not Satisfied

d) Very Dissatisfied

10. What in your opinion do you think management and stakeholders should do to improve on occupational safety?

a) Regular training on occupational safety

b) Frequent supervision of occupational safety standards and training

c) Provision of protective clothing

d) Other:.....

11. Do you believe occupational health and safety have any effect on performance at work?

- a) Yes
- b) No
- c) Not sure

12. Does the organization have a written document of occupational health and safety policies?

- a) Yes
- b) No

(If “Yes”, answer the next question or else skip)

13. What written document on occupational safety policies does your organization have?

- a) The Factories, Offices and Shops Act, Act 328 (1970)
- b) The Mining Regulations 1970 (LI 665)
- c) The Workmen’s Compensation Law 1987 (PNDC L 187)
- d) The National Labour Law
- e) Other:.....

14. Did you receive any safety training since joining the organization?

- a) Yes
- b) No

(If you “Yes” answer the following questions)

15. How often is occupational health and safety training organized for staff of the organization?

- a) Weekly
- b) Monthly
- c) Quarterly
- d) Annually
- e) No specific fixed time for training
- f) Other:.....

16. Who is responsible for occupational health and safety training?

- a) Departmental supervisors
- b) Occupational health and safety representatives
- c) Other:.....

17. Indicate some of the things discussed during your occupational safety training (if any).

- a) Health and Safety issues of the previous periods
- b) Workers suggestions on occupational health and safety, and HR training
- c) Upgrading of occupational safety policies
- d) Other:.....

18. How do you rate the occupational health and safety training you have participated?

- a) Excellent
- b) Very good
- c) Good
- e) Poor
- f) Other:.....

19. How do the organizers of the training you have attended facilitate the training?

- a) Practical demonstration
- b) Deliberations
- c) Lectures
- d) Presentations
- e) Other:.....

20. Were the pieces of training you received relevant to the work?

- a) Very relevant
- b) Relevant
- c) Not Relevant
- d) Other:.....



21. Does the organization state precisely the rights and responsibilities of the employer and employees for effective occupational health and safety?

- a) Yes
- b) No
- c) Other:.....

22. If yes, what are the rights and responsibilities of the employers?

- a) Filling government accident reports
- b) Posting health and safety notices and statutory information
- c) Training and education on health and safety preventive measures
- d) Keeping records of health and safety
- e) Other:.....

23. What are some of the rights and responsibilities of employees, if yes?

- a) Wearing protective clothing and equipment
- b) Reporting any violation of the law by management
- c) Right to a refusal of unsafe work
- d) Other:

24. Who is responsible for the occupational health and safety in your job performance?

- a) Your supervisor
- b) Yourself
- c) Occupational health and safety manager
- d) Not known
- e) Other:.....

25. Has occupational safety training helped improve your job performance?

- a) Yes
- b) No
- c) Not certain
- d) Other:.....

26. What benefits can be derived from proper occupational safety and training?

- a) Employee turnover is reduced [ ]
- b) It enhances the organization`s corporate image [ ]
- c) Prevents death of employees [ ]
- d) It decreases the cost of compensation to workers [ ]
- e) Other:.....