

**LABOUR STANDARDS AND OCCUPATIONAL SAFETY AND HEALTH POLICIES
AMONG SELECTED MANUFACTURING INDUSTRIES IN LAGOS STATE.**

**A STUDY OF CWAY WATER COMPANY NIGERIA LIMITED AND SARA FOAM
NIGERIA LIMITED.**

BY

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CERTIFICATION

This is to certify that Anyanwu Chinedu Patrick has complete this project in partial fulfillment of the award of Bachelor of Science degree of Industrial Relations and Personnel Management, Faculty of Management Science, Mountain Top University, Ogun State.

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DEDICATION

This Research work is dedicated to God Almighty, My parents and Siblings.

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I am most grateful to GOD Almighty for his blessings in my life, my profound gratitude goes to my parents, Pastor & Mrs. Anyanwu and my siblings for their care and financial support, I am forever grateful.

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ABSTRACT

Labour is an important factor of production and that is why employers must take cognisance of the health, safety and well-being of employees for the avoidance of work hazards, ill-health accidents and untimely death that often reduce productivity. It is on this basis the study examined Labour Standards and Occupational Safety and Health Policies among selected manufacturing companies in Lagos State.

The research employed the accidental causation theory divided into Heinrich's Domino theory, Farell's Theory, Petersen's Accident/Incident Model, System Models. The age respondents were a total of one hundred and twenty respondents which include 53.2% male and 43.5% female. The sample size determination formula used was the Taro Yamane formula. The sample size was 142. Multi stage sampling technique was adopted with questionnaire as the data collection instrument. For data analysis, chi-square, Percentages and frequencies were used through SPSS. The result of the findings showed that: there was no significant relationship between organisational health and safety and ILO standards.

From the forgoing, it was recommended that government should make up mandatory for all employers of labour especially those dealing with production of consumable items to always train their workers to develop their skills to reduce the rate of injury in organisations. It also recommends that more regulatory agencies of occupational health and safety must be created with powers to prosecute the defaulting work organisation.

Key Words: Labour standards, Occupational Safety, Occupational Health.

CHAPTER ONE

1.0

INTRODUCTION

1.1 Background of the Study

Health and safety policies in organisations are interested in protecting workers and other people affected by what the company produces and does against the hazards arising from their employment or their links with the company. Safety in an organisation deals with the prevention of accidents and minimizing the resulting loss and damage to people and property. They relate more to systems of work than the working environment, but both health and safety are concerned with protection against hazards. Occupational health deals with the prevention of ill-health arising from working conditions in the organisation. (Armstrong, 2000).

Safety and health principles are universal, but how much action is needed will depend on the size of the organisation, the hazards presented by its activities, the physical characteristics of the organisation, products or services, and the adequacy of its existing arrangements. Infact, labour standards which imply standard conventions relative to workers' rights, working conditions, job security and wages are meant to improve labor safety and employment globally. Such labor standards as manifested in ILO convention 161 of 1985 occupational health services and convention 155 of 1981 on occupational safety and health are designed to protect workers from sickness, diseases and injury arising from workers' employment.

The employee at the workplace has a duty to ensure his own safety and health and the essence of occupational health and safety is to ensure good but favorable employment conditions of workers. Safe and healthy workers' in conducive working environment are bound to contribute maximally to organisational productivity. However, failure to meet labour standards as specified by ILO on health and safety of safety of worker's has become prevalent among many manufacturing companies especially among the factory workers' who are frequently exposed to work hazards.

The contravention of the provisions thus constitutes an offense. The Act provides for the appointment of a director and occupational safety and health officers to oversee the

implementation of the provisions, but this notwithstanding, accidents continue to happen in construction sites some with fatal implications. (Occupational Health and Safety Act, 2007).

We are all aware of the several benefits of Occupational Health & Safety which are; increased productivity, higher quality of work, increased workforce morale and reduced employee turnover, just to mention a few. According to “Maslow's hierarchy of needs”, that human beings first look to satisfy their physiological and safety needs before aiming for social, esteem and growth needs.

Of the world's 2.7 billion workers' about 2 million deaths are attributable to occupational diseases and injuries.

As it were, there are many companies especially on the manufacturing sector that pay little or no attention to occupational health and safety of their workers and products thereby leading to sickness, accidents and untimely death of some of their workers and consumers that used their products contrary to ILO position on labor standards. In some cases, government agencies responsible to implement safety and health policies are ineffective in terms of regular inspection of those companies to ascertain compliance level and enforcement of safety and health rules. It is against this background that the study examines labour standards and occupational health and safety policies in Cway water Nig. Ltd and Sara Foam.

1.2 STATEMENT OF THE PROBLEM

The Occupational Safety and Health Act (2007) came into being after several revisions to the Factories Act (1951), amending and extending its scope of application to places of work other than factories. It applies to all workplaces where any person is at work, whether temporarily or permanently. The Act seeks to secure the safety, health, and welfare of persons at work and protect persons other than persons at work against risks to safety and health arising out of, or in connection with, the activities of the persons at work. Under the Act the employer has a duty to comply with any safety and health rules, regulations instructions and procedures in the act by taking all necessary precautions to ensure his own safety and health and that of any persons in his workplace and at all times use appropriate safe systems of work, preventive and control measures.

About 4% of the GDP is lost due to occupational diseases and injuries. (ILO report 2013) Health and Safety are enablers for economic development. All the three aspects of a business are measured by their negative impact on people, assets, and the environment. The damage is acute in the area of safety, chronic in the area of occupational health and persistent in the case of the environment.(Johnson, 2014).

Occupational safety, health, and environment policies are useful for the employers and employees even the consumers in society. The policies constantly receive the attention of work organisations that wants to remain relevant in the production and distribution of goods and services. However, while some organisations comply with the policies, some do not which to them are not necessary. Some of those who lost their lives families with nobody to take care of them. The questions that require urgent answers are: what are the specific occupational health and safety policies the government has put in place in Lagos state? How are those policies embraced by various work organisations in Lagos state? How are these policies embraced by various work organisations in Lagos state? How does the government ensure strict monitoring of these policies to enhance full compliance? What are the sanctioned imposed on defaulting organisations? How are the victims of occupational hazards treated in any affected organisations?

While the impact of safety is felt immediately, the effects of Occupational health related diseases are felt over generations. Occupational health cannot be addressed in isolation but rather has an important relationship with Safety.

The fact that many employers attach less importance to occupational health and safety of workers has made labour standards to be downplayed. What compounded the matter is the ineffective monitoring and penalties to defaulting organisations by the government agencies saddled with the responsibility of ensuring implementation of occupational safety and health in Nigeria and Lagos state in particular. Through this, many workers had lost their lives through job hazards. Some had been rendered handicapped by occupational accidents. Consequently, means of livelihood becomes difficult for the families of the victims. Some turn to begging or armed robbery when their erstwhile companies fail to pay the requisite compensation.

The fatality rate in Sub-Saharan African countries is 21/100, 000 workers and the accident rate is 16,000/100,000 workers (Takala, 1999). In Sub-Saharan African countries

about 54,000 fatal and approximately 42 million occupational accidents happen annually that results at least 3days absence from work of every worker. In Ethiopia, the fatal occupational accidents rate is 5,596 per year with a fatality rate of 21.5/100,000 workers and an accident rate of 16,426/100,000 workers (Takala, 1999) regardless of its poor reporting culture and availability of data accuracy. Accordingly, if people are not safety conscious, then no amount of gadgetry, fail safe devices and back up alarms can ensure their safety (Kharbanda and Stallworthy, 1998). Hence, majority of African countries have poor health and safety culture (RCAR, 2004).

The study conducted in Tago (Nigeria) found that the nature of work environment and the experience about work environment has a great share on low productivity and in developing countries safety management and measurement is at its infancy (Alkilani et al., 2013; Goldstein et al., 2001). Although the positive impact of healthy workplaces on growth is well known, some companies, small enterprises and organisations are still facing challenges in adopting preventive measures of the working place hazards. Most of African countries are noted for poor occupational health and safety practices (Gyekye 2010).

Past studies on occupational health and safety had focused on effects of occupational safety, health management and risk control technology in coal mines (Lu-Jie Zhou, Quig-gui Cao, Kai Yu and Hia-Bin Wang., 2013); impact of occupational safety and health agency inspections and penalties and their effect on workplace injuries (Haviland et al, 2011); interaction between social systems, technical systems and cognitions as possible causes for accidents and injuries or the prevention of them (Brown et al, 2000); effect of sequential inspections on compliance with occupational and safety agency standards (Gray and Jones, 1991); preventive effects of inspections are not necessarily limited to those hazards addressed by occupational safety and health agency standards (Bartel, Thomas and Haviland et al, 2008). As impressive as these works are, little or nothing has been done on occupational safety and health relative to labour standards as advocated by ILO. It is this identified gap that the study intends to fill. The study examines the link between labour standards and occupational health and safety in Cway Nigeria Ltd, Lagos State and Sara Foam, Lagos State

1.3 RESEARCH QUESTIONS

In order to address the problems in the study and to achieve its objectives, the following questions were raised:

1. Are the key policies and culture on safety and health, in line with ILO convention on workers' health and safety in the selected work organisations?
2. What are the mechanism put in place in the selected work organisation to implement workers' health and safety?
3. How are the employees who are victims of occupational hazards compensated/treated by the management of selected organisation?
4. What are the penalties imposed by government agencies for failing to comply with the policies on health and safety in the selected organisations?

1.4 OBJECTIVES OF STUDY

The general objective of the study is to examine the relationship between Labour Standards and Occupational Safety and Health in Selected Manufacturing Companies in Lagos State.

The specific objectives are:

1. To examine some major policies and culture of safety and health in line with ILO standards on workers' health in selected work organisations.
2. To assess the mechanisms put in place and their effectiveness in order to implement good safety and health among selected organisations.
3. To examine the relationship between working environment/equipment and employees' health and safety.
4. To verify the penalties given by government agencies to organisations that fail to comply with occupational, health and safety policies in Lagos state.

1.6 HYPOTHESIS

HYPOTHESIS 1:

H₀: There is no significant relationship between organisational health and safety policy and ILO standards

H₁: there is significant relationship between organisational health and safety policy and ILO standards

HYPOTHESIS 2:

H₀: There is no significant relationship between safety /health mechanism and ILO standards

H₁: There is significant relationship between safety/health mechanism and ILO standards.

HYPOTHESIS 3:

H₀: There is no significant relationship between work environment and employees health and safety.

H₁: There is significant relationship between work environment and employees health and safety.

1.5 SIGNIFICANCE OF STUDY

The study is significant considering the fact that it will reveal the degree of compliance with occupational health, safety policies in line with ILO labour standards among work organisations in Lagos state, Since Nigeria is a party to ILO convention, then work organisations in Nigeria must operate in line with labour standards. Labour must be treated with dignity and care. It is one thing to formulate policies by the government, it is another thing for people to observe these policies. Hence, the study will reveal the level of respect given to labour at work by employers. The study will reveal the type of hazards that the workers' are prone to and the corresponding solution to put in place to ensure workers' confidence in respect of their health and safety at work. The study also reveals how to prevent diverse diseases that can consume human lives in the workplace and how to ensure safe and healthy products for consumers.

Theoretically, the study is significant with the aid of the accident theory which ensures that the emotional state of the mind of an individual is well rested to reduce any form of injury which may occur in the organisation.

1.6 SCOPE OF STUDY

This study is concentrated mainly in manufacturing organisation due to the production activities which has a very high possibility of accidents/ injury due to the large sets of machinery which

can be found in such companies. Also, in this study, we are going to see how organisational accidents can be prevented and ensure that the employees' environment is in good working conditions and the two organisations are using which are Cway water Nigeria limited and Sara Foam Nigeria limited.

1.7 LIMITATION OF STUDY

Time: Time constraint was the most important problem encountered. There were difficulties therefore in striking a balance between time for this study and the demand for other courses that are of comparable relevance.

Finance: Lack of necessary fund for exhaustive research on the topic also constitutes a limitation.

Material constraint: Inadequate availability of materials for the research also constitute to the limitation of this research work.

1.8 DEFINITION OF TERMS

In this study, the terms defined are those that have more than one meaning and those words or terms that are ambiguous in nature which needs explanation.

HAZARD: an unavoidable danger or risk, even though often foreseeable

SAFETY: the condition of being safe from undergoing or causing hurt, injury, or loss.

HEALTH: the condition of being sound in body, mind, or spirit

POLICY: a high-level overall plan embracing the general goals and acceptable procedures especially of a governmental body.

ACCIDENT: is an unexpected, unwanted occurrence which interrupts or interferes with the orderly progress of work in an establishment by causing bodily injury to a person making him unfit to resume duty due to partial or total disablement or even death.

WELFARE: is the provision of facilities to maintain the health and well-being of individuals at the workplace.

LABOUR STANDARDS: this refers to the standard conventions with respect to workers, in matter of basic worker rights, working conditions and also the job security.

OCCUPATION: this refers to the work a person does, regardless of his or her occupational status (wages and salary).

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

In this chapter the aim is to emphasize the labour standards, safety and health policies/culture measures in the manufacturing company in Lagos state. The literature review attempts to highlight the common risks and hazards that workers' encounter in their day to day job activities in the manufacturing company. It also focuses on the need to understand the factors affecting effective implementation of health and safety measures and procedures so that appropriate actions may be instituted to make improvements in this area and safeguard the welfare of workers.

The purpose of the study is to identify existing gaps on workplace safety and health management relative to labour standards and propose future research areas.

International Labor Organisation (ILO) and WHO reports indicated that in manufacturing industries many employees suffer from workplace injuries and property damage resulted in economic crisis (ILO, 2010; WHO, 2010). Every 15 seconds, a worker dies from a work-related accident or disease. Every 15 seconds, 153 workers' have a work-related accident. Every day, 6,300 people die as a result of occupational accidents or work-related diseases, more than 2.3 million deaths per year. Annually, 317 million accidents occur on the job; many of these resulting in extended absences from work (Bureau of Labour statistics, 2013). As a result of the ever growing pace of worldwide liberalization of trade and economies, as well technological progress, the problem of occupational accidents and diseases are becoming more and more global concern, particularly in developing countries (Soehod and Laxman, 2007). In recent years, occupational health and safety of the workers has improved and is relatively satisfactory in developed countries, whereas in developing countries, occupational health receives little

attention and comes at low level in the list of national priorities (Perrow, 1984). Studies showed that there are baskets of measures providing information on a range of health and safety performances (HSE 2001; Yessuf et al., 2014). It is stated that some organisations don't pay attention to their employees by providing them with the required safety gadget necessary to eradicate such high risk of hazard. Some organisation are ignorant of the ILO policies which helps in ensuring good safety conditions.

Most business sectors prefer a single occupational safety and health performance measurement. It would be optimal if such a measure were to be found, but in occupational health and safety no such single measure can be completely adequate to measure occupational health and safety (Gallagher et al., 2001a) in solving the challenges. Many studies indicated that where there are people and complex technologies, there are always safety problem and accidents where these systems are operating (Perrow, 1984).

However, it is difficult to minimize occupational safety and health, its practices focus is less than 1% of organisational and national researches issues (Barling et al., 2002). Promoting occupational health and safety practices such as occupational safety and health promotion, occupational safety and health awareness, occupational safety and health research and occupational safety and health education requires a broader platform (Alkilani et al., 2013; Goldstein et al., 2001; Gyekye, 2010). Although in a survey among International Commission on Occupational Health members from 47 industrialized and industrializing countries, 70% reported OSH being in place and 80% noted the existence of a national institute for OSH, the estimated coverage of workers with OSH services was only 18% (Hamalainen et al., 2006; Rantanen, 2013). WHO and ILO have elaborated programs to foster the development of international occupational health, but the real effect of this effort is still not optimal likely due to insufficient funding (LaDou, 2003). This lack of funding is not alone the reason but also globalization and industrialization has a strong impact in development of occupational health and safety hazards development. Minimizing risk and hazard shouldn't just be from the employer view alone, the employee should also ensure that he/ she takes the required preventive measures to eradicate such hazard. A demotivated employer may wish to sustain an injury due to the employer not

motivating him/her. An employer who is not meticulously trained may have a very high risk of sustaining injury in the workplace.

Developed countries like North American, European, and Australia are planning and budgeting for workplace safety and health prevention better than the rest of the world. In total, nearly 1million workers' will suffer a workplace accident and every year a total of 2.4 million people die as a result of unsafe or unhealthy workplace conditions. Worldwide, this situation causes an economic loss of 4% of global GDP (ILO, 2010; ILO, 2014). Rarely mentioned is the presence in developed countries of a political mechanism that mediates the translation of scientific findings into policies and regulations that are enforced by specialized agencies. In developing countries including Ethiopia, the risk of having work-related injury is 10 to 20 times higher than that of developed counties. This is because in developing countries, majority of the workforce is employed in small and medium scale industries that do not meet the minimum standards and guidelines set by the WHO and the ILO for occupational health, safety and social protection (Tadesse and Kumie, 2007).

Occupational health and safety laws cover only about 10% of the population in developing countries, omitting many major hazardous industries and occupations (LaDou, 2003). Occupational health remains neglected in most developing countries under the pressure of devastating social, economic, and political challenges (Ahasan and Partanen, 2001; O'Neill, 2000; Christiani et al., 1990). A striking characteristic of occupational health in the industrialized world, and a message frequently disseminated in developing countries, is the contribution of science to progress in occupational health through data collection, ongoing assessment of problems, and innovative technological solutions (Ashford and Caldart, 1996). The traditional workplace-oriented occupational health has proven to be insufficient in the developing world, and tangible progress in occupational health can be achieved only by linking occupational health to the broader context of social justice and national development (Swuste and Eijkemans, 2002; Joubert, 2002; Michaels et al., 1985; Mendes, 1985).

Occupational safety and health for development has been stated that it is heart of health and development. While it had long been recognized that lack of development was responsible for poor health outcomes in low-income countries, it was not until 1990s or so that the reverse

process the impact of health on development became a key topic for research and policy (ILO, 2012). Developing countries have few assets, little access to credit, and their current income puts them uncomfortably close to the poverty line (ILO, 2012). When there is high accidents, there is high disease and require more economic currency. When a country pays more money to health caring, the country's economy leads to poverty (ILO, 2012).

2.1.1 The Concept of Safety and Health

Safety and health are influenced by variety of factors, internal and external to organisations, including economic costs, government, trade unions, and public opinions. The economic cost of occupational safety and health to organisations is double-edged. On the one hand, safety and health measure which protects the employees from hazards/threats of the workplace can conflict with management's objective of containing production costs. Effective health and safety policies can improve the performance of employees in the organisation, by reducing costs associated with disabilities, absenteeism, accidents or illness. The health and safety Act. (Hasawa,1974), for instance, requires employers to ensure the safety, health and welfare at work of all employees. Organisations have had to become more sensitive to workers' health and general environmental concerns. Safety and health is a discipline and specialty that studies and implements practical aspects of health protection and safety at work. In simple terms it is what organisations must do to make sure their activities do not cause harm to anybody. Safety and health refers to department within the organisation that is accountable for the observance and protection of occupational health and safety rules and regulations along with environmental protection.

Occupational health deals with the aspects of health and safety in the workplace and has a strong focus on primary prevention of hazards. For example, with the promotion of health and safety at work, it would help reduce any form of incidental hazards arising in the workplace. The International Labor Organisation (ILO) and the world health organisation (WHO) have shared a mutual definition of occupational health. It was embraced by the joint ILO/WHO committee on occupational health at its first session in 1950 and revised at its twelfth session in 1995. The definition reads:

- i. The maintenance and promotion of workers' health and working capacity
- ii. The improvement of working environment and work to become conducive to safety and health.
- iii. Development of work organisations and working cultures in a direction which supports health and safety at work and in doing so also promote a positive social climate and smooth operations and also enhances productivity of the undertakings.

In the workplace, health and safety regulations are vital to the well-being of the employees and employer. Many hazards are present in today's work environments, and it's the employer's job to keep their employees safe from hazards. It's the job that is so important that there are occupational safety standards and regulations set by the US occupational safety and health administration (James, 2002).

Environmental Health and Safety Responsibilities According to brown et al., (2015)

Environmental Health and Safety is responsible for:

- i. Providing guidance and technical assistance to supervisors and managers in the schools, departments and other work units in identifying, evaluating and correcting health and safety hazards.
- ii. Developing institutional safety and compliance programs and assisting schools, department, faculty and managers with implementations.
- iii. Reviewing legislation, recommending policies, and monitoring compliance with environmental and health and safety statutes and regulations and safety policies and programs.
- iv. Developing programs for the safe use of hazardous radiological, biological and chemical substances.
- v. Providing training materials, assistance and programs in safe work practices.
- vi. Providing fire prevention, inspections and systems maintenance services.
- vii. Hazardous waste management and disposal services.

2.1.2 Most Effective Hazard Controls

The best way to protect workers is to eliminate the hazard from the workplace using the following hazard control methods according to (Peterson et al, 2012).

i. Substitution:

Substitute dangerous chemicals, equipment with safer and less hazardous ones to eliminate the hazard altogether. The manual skinner exposes workers to the hazards of amputations and skinning of the forearms, while the automatic skinner feeds the meat on a conveyor belt to an enclosed blade.

ii. Engineering controls:

Engineering controls are used to make changes to the work environment, equipment, often reducing the hazard at the source also by tagging a machine that is not functioning well in order to control and reduce hazard.

. Example: Exhaust ventilation can be used to remove a harmful substance such as carbon dioxide (dry ice) from the air.

iii. Work practice and administrative controls:

work practice change the way workers do jobs to reduce exposure to hazards. Administrative controls states how the work is structured, such as work pace and breaks. Example: rotating employees to reduce the amount of time they are exposed to the hazard and provide training for the development of the workers.

iv. Personal protective equipment (PPE): PPE is the least effective way to protect workers from workplace hazards because if the equipment fails, workers are exposed to hazard. PPE includes respirators, face protection, hearing protection, protective cloths, gloves, safety boots e.t.c.

PPE, work practice controls and administrative controls are considered the least effective hazard controls. These methods don't get rid of hazard. Rather, they provide production and reduce exposure, but the hazardous condition still remains. Example: Metal mesh gloves are often the only way to protect workers from knife cuts, but the hazard of exposure to sharp knives is still present.

2.1.3 Importance of Safety and Health

As a matter of fact, Laxman (2012) identified the following relevance of occupational safety and health such as;

- i. **Prevent Illness and Injury:** Health and safety procedures in the workplace reduce the employee illnesses and injuries greatly. These procedures can help you and your employees understand the potential hazards in your work environment.
- ii. **Reduces Health and Safety Hazards:** Hazards are rampant in almost every workplace environment. Chemicals, equipment, certain behaviors and activities can potentially cause injury or harm to workers. Health hazards can range from contamination of food due to unsafe handling or preparation practices to an infectious disease outbreak caused by improper hygiene and personal care.
- iii. **Avoid serious consequences:** occupational safety health is in charge of enforcing health and safety laws, which means the guidelines when creating health and safety procedures must be adhered to. If work environment isn't safe for employees, then the organisation would receive fine or permanently shut down, depending on the magnitude of the violation.

2.1.4 Safety and Health Measures

(Booth et al, 2011; perrow, 2000; Bankole, 2016; Liu Xang, 2017; O'Connor, 2017) suggested the following safety and health measures in workplace;

1. **Be Aware about the surroundings:** There are many employees who doesn't bother about their surrounding hazards. But, it is important to observe your co-employees working circumstances. Once you get to know about the particular hazards that occur at your workplace, then it will help you in reducing the risk and allow you to take the precautionary steps.

2. **Reduce workplace stress:** Most of the employees are not fit and healthy because of their busy schedule, which includes long working hours, work-pressure and conflicts occur with co-workers or with the boss of the organisation. And, all these can lead to some illness or depression to the employees. Also, this not only affects their professional life but also creates the nuisance in their personal lives too. So, instead of waiting to get unfit, it is

better that you start take care of your health, by taking regular breaks, sit in an appropriate posture with appropriate diet. It will be better for you to schedule your work accordingly and manage the things to reduce your workplace stress.

3. Use tools appropriately: Take appropriate precautions while using machinery or any other tool, instead of taking any shortcuts. Taking shortcuts is one of the biggest reason behind workplace loss. It's a biggest safety risk to use scaffolding as a ladder or one tool instead of another for a particular job. So, it is always recommended to use the correct tools and reduce the opportunity of workplace injury.

4. Keep crisis exits which are easily accessible: In case there is an emergency, you will need quick access to the exits. It is also advised to keep clear usage of equipment shutoffs which might stop you from performing at emergency.

5. Update Your Supervisor about the unsafe conditions: It is important that you keep updating your supervisor about the hazards or risks occur at workplace. They should be legally obligated to ensure that their employees are working a safe environment or not. And, in case, if the employees are not working in safe conditions, then it is the responsibility of the supervisor to listen and understand their condition and create safe working environment for employees.

6. Use mechanical assistance: Whenever, you want to carry or lift up some heavy equipment's then you should use a conveyor belt, crank or forklift. There are lot of risks involved, if you try to lift something which is heavier, it can affect your weighing capability and can lead to some muscle displacement. So, make sure that use the appropriate tools for not harming yourself.

7. Stay Alert: There are many employees who usually compromise or ignore the alerts of advance warning and due to this, a number of workplace injuries or fatalities occur.

8. Reduce Workplace Environment Stress: Stress to any employee or to any co-worker, can lead into depression and into concentration problems. And the main reason includes, extended working hours, excess of work, insecurity of job and issues which occur at co-workers or professionals. So, instead of taking stress on your shoulders, you should discuss it with your supervisor and ask him/her to look after your problems which you are facing in the organisation.

9. Wear the right safety equipment's: It is essential that you wear the right protection equipment tools during your work. And, the equipment's can be in any form like, earplugs, earmuffs, hard hats, gloves, full-face masks, safety gloves and any other equipment which is required to wear while working. These tools will prevent the workers from the incidents that occur at workplace.

10. Sit in a proper posture: If have a sitting job, then it is essential than keep your posture correct, while working on a desk. You need to keep your shoulders in line and straight back to avoid any spine problem. Try to ignore stooping and twisting regularly and if possible, then try to use the comfort designed furniture and the safety equipment's, so that the desired things will be in your reach.

2.1.5 Safety Policy

A safety policy is the management's expression of the direction to be followed in the organisation. According to Peterson (1989), a safety policy should commit the management at all levels and it should indicate which tasks, responsibilities and decisions are left to lower-level management. Booth and lee (1995) have started that a safety policy should also include safety goals as well as quantified objectives and priorities.

2.1.6 Goal of the policy

- i. The Policy shall enable improvement of occupational safety and health performance by providing the framework for participative occupational safety and

- health protection of workers including the most susceptible groups in all sectors of economic activities.
- ii. The Policy shall ensure harmonization of workers' rights protection with regional and international standards in a private sector-led economic growth thus, focusing the role of the competent authority in facilitating an enabling environment and regulating various provisions for securing safety, health and welfare of workers in Nigerian workplaces.

2.1.7 Objectives of Safety Policy

The objectives of Safety policy are:

- i. To create a general framework for the improvement of working conditions and the working environment.
- ii. To prevent accidents and departures from health arising out of or in the course of work.
- iii. To ensure the provision of occupational safety and health services to workers in all sectors of economic activity.

Joubert (1996) suggests that in the safety policy, management should show commitments to the following subjects:

- i. Health and safety are recognized as an integral part of business performance.
- ii. A high level of health and safety performance is a goal which is achieved by using the legal requirements as the minimum and where the continual cost effective improvement of performance is the way to do things.
- iii. The health and safety objectives are set and published at least by internal notification.
- iv. The management of health and safety is a prime responsibility of the management from the most senior executive to the supervisory level.
- v. Adequate and appropriate resources are provided to implement the policy.

- vi. The policy is understood, implemented and maintained to all levels in the organisation.
- vii. It is ensured that employees receive appropriate training and competent to carry out their duties and responsibilities.
- viii. Employees are involved and consulted in order to gain commitment to the policy and its implementation.
- ix. The policy and the management system are reviewed periodically and the compliance of the policy and its implementation.

Some companies have developed so-called “safety principles” which cover the crucial areas of the company’s safety policy. These principles are utilized as safety guidelines that are easy to remember, and which are often placed on wall-boards and other public areas in the company. As an example, the Dupont company’s safety principles are the following (Scott 1993):

- i. All injuries and occupational illness can be prevented.
- ii. Management is responsible for safety.
- iii. Safety is an individual’s responsibility and a condition of employment.
- iv. Training is an essential element for safe workplaces.
- v. Audits must be conducted.
- vi. All deficiencies must be corrected promptly.
- vii. It is essential to investigate all injuries and incidents with injury potential.
- viii. Off-the job safety is an important part of the safety effort.
- ix. It is good business to prevent injuries and illnesses.
- x. People are the most important element of the safety and occupational health program.

2.1.8 Occupational Hazards

Hazard is a condition, object, activity or event with the potential of causing injuries to people, damage to equipments or structures, loss of material or reduction of ability to perform

a prescribed function. According to (Ilias, Stephen, Dave, Carmela, Micheal and Clement, 2009) defined hazard as the presence of materials or conditions that have the potential of causing loss or harm or a combination of severity of consequences and likelihood of occurrence of undesired outcomes.

Ford and Tetrick (2011) described Occupational hazards as ‘aspects of one’s occupation-specific context that increase the risk of injury’. Occupational hazards are those potential risks to the health and safety of those in a work condition. Health hazards refers to potential risks to the workers’ health caused by environmental activities which are capable of exposing workers to several diseases.

2.1.9 Potential Health Hazards

According to WHO (2014) there are various types of occupational hazard such as; Physical hazards, Chemical hazards, Biological hazards, Psychosocial hazards.

a. Physical hazards:

A physical hazard arises when there is excess noise, vibration, illumination and temperature. These are hazards that can occur with the use of physical instruments which can affect the workers’ in the organisation. When an instrument or organisational tools are faulty it may cause injury to the workers’ in an organisation and this may result to physical hazard in that organisation. A physical hazard arises when use of chemical is potentially dangerous due, for example, to the possibility of fire, explosion or violent reaction with water. Peroxides, sulfuric acid, diethyl ether and phosphorous pentachloride are examples of chemical materials that present physical hazards. A physical hazard is an agent, factor or circumstance that can cause harm with or without contact. Physical hazards include ergonomic hazards, radiation, heat and cold stress, vibration hazards and noise hazards.

- i. Noise: hearing loss is the most common occupational illness in the manufacturing sector. Workers in certain fields such as mine workers, musicians e.t.c are exposed to high levels of noise and therefore are at a higher risk of developing hearing loss
- ii. Ergonomic hazards: these are physical conditions that may pose risk of injury to the muscles or ligaments of the lower back, tendons or nerves of the hands/wrists or bones surrounding the knees. Ergonomic hazards include awkward postures, static posture.

b. Chemical Hazards:

These involves those chemical activities that take place in a workplace. Exposures to chemicals in the workplace cause acute or long-term detrimental health effects. There are many classifications of hazardous chemicals, including neurotoxins, immune agents, dermatologic agents etc. Neurotoxins are toxins that are destructive to nerve tissues.

c. Biological hazards:

Biological hazards also known as biohazards refer to biological substances that pose a threat to health of living organisms, mainly that of humans. Many biological agents such as bacteria, parasites, viruses, fungi and organic dusts have been found to occur in occupational exposures. Exposure to biological hazards in workplace results in a significant amount of occupational related diseases. Biological hazards can be transmitted to a person through: inhalation, ingestion, contact with the skin, injection e.t.c

d. Psychosocial hazards:

Psychological stress caused by time pressure, hectic work and risk of unemployment has become more rampant during the past decade. Other factors that may have adverse psychological effects include jobs with heavy responsibility for human or economic concerns, work that requires constant concentration e.t.c. Psychological stress have been associated with sleep disturbances, stress, nervousness, depression and burn-out syndromes (joseph et al., 2009).

2.1.10 OCCUPATIONAL SAFETY AND HEALTH

Occupational health and safety in every organisation uses a variety of tools to achieve institutional goals including business plans, strategic plans e.t.c.

These tools consist of all the preventive protective tools necessary to avoid hazards in the workplace or organisation.

The employer has a duty to maintain a healthy and safe workplace. The health and safety

function is related to the elements of the HRM cycle: selection, appraisal, rewards and training. The maintenance of a healthy and safe workplace can be facilitated in the selection process by selecting applicants with personality traits that decrease the likelihood of an accident.

The world health organisation defines 'health' as a state of complete physical, mental and social well-being, not merely an absence of disease and infirmity. According to this definition, managers are immersed in one of society's greatest challenge: the design and maintenance of a work organisation that is both effective in meeting business objectives and healthy and safe to its employees. It is unfortunately true that, until relatively recently, the attitude of managers and employees towards accident and safety did not promote a healthy or safe workplace.

The traditional approach to safety in workplace used the 'careless worker' model. It was assumed by most employers, the courts and accident prevention bodies that most of the accidents were due to an employee's failure to take safety seriously or to protect himself/herself. The implication of this is that work can be made safe simply by changing the behavior of employees by poster campaigns and accident prevention training.

In the 1960's, a thousand employee were killed at their workplace in UK. Every year of that decade about 500,000 employees suffered injuries in varying degrees of severity, and 23 million working days were lost annually on account of industrial injury and disease (Bureau of Labour statistics, 2014). Such statistics led to investigators to argue that for both humanitarian and economic reasons, no society can accept with complacency that such level of death, injury, disease and waste must be regarded as the inevitable price of meeting its needs for goods and services(Robens,2015).

Most of the company's focus is on the external customer satisfaction with their product or service disregarding workers' satisfaction and working environment comfort in economic lagging countries. Because of workplace safety and health improvement, it increases the health of the employees and satisfaction of the employees (WHO, 2007). Many researchers said that wealth means health. The problems emanate from different angles of the workplace environment in industrial sectors. (Alli, 2008) and (WHO, 2008) listed out some of several problems of occupational safety and health problems as psychological stress of employees, physical body damages, socio economic dissatisfaction, property damage, family disorder, and sever accidents. Occupational health research in the developing world focus on the internal of the organisation

than on the social and political issues and then move inward to address the particularities of the workplace.

Occupational health and safety for development has been stated that it is heart of health and development. While it had long been recognized that lack of development was responsible for poor health outcomes in low-income countries, it was not until 1990s or so that the reverse process the impact of health on development became a key topic for research and policy (ILO, 2012). Developing countries have few assets, little access to credit, and their current income puts them uncomfortably close to the poverty line (ILO, 2012). When there is high accidents, there is high disease and require more economic currency. When a country pays more money to health caring, the country's economy leads to poverty (ILO, 2012).

2.1.11 SAFETY CULTURE AND CLIMATE

The terms 'safety culture' and 'safety climate' are often used interchangeably to refer to similar concepts (Bentley and Tappin, 2010). Safety climate is essentially a snapshot of the safety culture, which, unlike safety culture, is relatively unstable and subject to change (Wiegmann et al., 2004; cited in Bentley and Tappin, 2010). Safety climate described as a superficial construct, comprising the attitudes and beliefs of workers, which guide their subsequent behavior (Bentley and Tappin, 2010). Every organisation has some common internal, characteristics called as culture. Culture is defined as the ways of thinking, behaving and believing that members of a social unit have in common (Rousseau, 1988; O'Connor et al., 2011; Glendon and Litherland, 2001; Cooper, 2000; Olsen, 2010). Culture can be static (unchanging value held by organisation) and dynamic (how the organisation operates, type of work process it feels comfortable with). Social and cultural differences between countries in working conditions and employment structure can also affect workers exposure to risk as well as health outcomes.

2.1.11.1 Definition of safety culture:

Safety Culture have been defined by different scholars such as;

Safety culture is the sub-facet of organisational safety culture that is thought to affect member's attitudes and behavior in relation to an organisation's ongoing health and safety performance (cooper, 2000).

Safety culture is the system of shared values and beliefs about health and safety which creates behavioral norms which guide health and safety activities in the enterprise (Kaluza et al., 2012).

Safety culture can be viewed as an enduring characteristic of an organisation (analogous to trait or personality) that is reflected in its ongoing safety activity and priorities (Wiegmann et al., 2004).

An organisation's culture can have as big an influence on safety outcomes as the safety management system. Safety culture is a subset of the overall organisational or company culture. Many companies talk about safety culture when referring to the inclination of their employees to comply with rules or act safety or unsafely (HSE, 2015).

Safety indicators consists of five global components which are; organisational commitment, management involvement, employee empowerment, reward systems and reporting systems (Wiegmann et al., 2004).

2.1.11.2 Safety climate:

Safety climates have been defined by different scholars such as;

According to Zohar (2008), organisational safety climate as the shared perceptions among members of an organisation with regard to safety policies, procedures and practices.

According to Wiegmann et al (2004) he defined safety climate as the temporary state of an organisation that is changeable, depending on the prevailing organisational and environmental conditions.

A safety climate survey provides a snapshot of the organisation's culture in relation to safety (HSE, 2015; Huang et al., 2012).

According to Huang et al (2006) he defined safety climate as the sum of employee's shared perceptions of the policies, procedures and practices relating to safety in their work environment.

According to Zohar (1980) he defined safety climate as the construct most commonly measured in studies of organisations, with psychometric survey items usually related to perceptions of a range of organisational indicators of safety culture such as; management commitment, communication between management and employees and environmental conditions.

In order to contribute to the overall reduction of workplace accidents, workplace safety has been studied from divergent points of view (Rousseau, 1988). This differentiation helps to minimize ambiguity among users in organisations and highlight further research areas. Although the constructs used to assess safety climate have varied from study to study, measured domains generally include management commitment, supervisor support, safety awareness, safety training, safety policy, safety knowledge, safety communication, and co-worker support (but not limited).

Safety culture has its own characteristics and indicators. This characteristics and indicators are the elements for workplace safety and health improvements. The researchers identified this safety culture characteristics and indicators as key issues of successful workplace hazards management tools. When researchers come to safety culture, they agree that there is an evolving change in different eras of safety culture development. The evolution of safety culture recognized as no interest (Pathological), reactive, calculative, preventive (proactive) and generative phase. The author introduced predictive method on the evolutionary safety culture model developed by Hudson (2001). Nowadays, the evolution is considered to be at the stage of human behavior as safety characteristic is dynamic and it varies from time to time depending on the developmental stages of the economy.

According to Joseph (2016), the elements of safety culture include the following;

- i. Commitment: there must be commitment which is the state or quality of being dedicated to a job given to you and the indicators of commitment are; Management concerns, perception of importance of safety, prioritization of safety, Safety procedures and requirements and personal involvement and responsibility of safety.
- ii. Behaviour: this is the way in which an employee acts or conducts him/herself in the workplace and the way they react towards other people in the workplace. Its

- indicators consist of employee behavior with respect to safety, mutual expectations and encouragement, job satisfaction and adequate equipment.
- iii. Awareness: this is the knowledge or perception of a situation towards safety. The indicators of awareness are; Attitude towards unreported hazards, awareness of job induced risk and concern for safety
 - iv. Information: this are facts provided or learned about the hazard which may occur in the workplace or anything that is involved with safety in the workplace and its indicators are; Availability of information, communication of work related information, training, safety issues reporting system, willingness to use the reporting system, consequences of safety reports, communication of safety related reports, communication of safety related information and information exchange about safety issues
 - v. Justness: this is the quality or state of being unbiased, fair-mindedness towards the employee in the workplace. The indicators are; Evaluation of safety related behaviours, perception of evaluation and passing of responsibility.

2.1.13 HEALTH AND SAFETY MANAGEMENT SYSTEMS

Manufacturing organisations like any other business success requires effective health and safety management to provide a sound basis for good performance. A good and effective health and safety management system will be guided by the following principles, according to Hughes & Ferret, (2008).

Developing a health and safety policy. This involves developing monitoring and reviewing standards needed to address and reduce the risks to health and safety produced by the organisation. The policy should state the intentions of the organisation in terms of clear aims, objectives and targets. There should be a health and safety policy statement of intent communicated in simple language so that it is understandable to all and posted on a prominent notice board throughout the workplace which should be dated and signed by senior officials to demonstrate management commitment to health and safety at the same time giving authority to the policy. The policy statement will indicate duties and responsibilities of the management and

employees in health and safety matters. A good health and safety management system will require a well-defined management structure. It must be supported from the top with staff involvement and participation and financial resources made available. Every individual must be clear about his responsibilities and limits. Directors will set policy objectives and targets, supervisors to check day to day compliance, safety advisors to lead accident investigations and compliance, safety representatives to represent employees in consultations, employees to observe health and

safety of self and others, while first aiders help the injured. An affective health and safety management system will involve planning and implementation of performance standards, targets and procedures. The plan should be based on risk assessment methods to decide on priorities and set objectives for effective control and elimination of hazards and the reduction of risks. To gauge the effectiveness of the health and safety management system, achievements are measured against practice plans and performance targets. According to Drucker (2003), you cannot manage what you cannot measure. Hence the main purpose of measuring performance is to provide information on the progress and the current status in terms of health and safety strategies, processes and controls. Active monitoring looks at the premises, plant, the people, procedures and systems, while reactive monitoring investigates accidents and incidents and why controls failed. It is important that the organisation is measured against its long term goals and objectives. Accidents should be properly investigated, recorded and reported since most accidents involve multiple, interrelated causal factors occurring whenever significant deficiencies, oversights, errors, omissions, or unexpected changes occur. This will help prevent more serious events and enable appropriate actions to prevent recurrence.

In recent times, according to (Mayowa, 2015) Nigeria employees across all the sectors of the economy have been subjected to accident which range from minor to fatal, as some have lost their lives right in the line of duty, while some have lost vital organs, there rendered permanently disabled. The issue of safety and health at workplace which once immersed a major place in the programs and plans of the employers are now treated with levity. Such case was the fire incident that razed a plastic factory in Ikorodu, Lagos State in 2002 where many workers met their death at night because of negligence of the Chinese owners of the company who locked the workers in the factory without provision of emergency exit. Nigeria joined the rest of the world on April 28th, 2010 to mark World day for safety and health at work which is

an international annual campaign, collectively agreed by the international labor organisation, ILO, and social partners to promote safety, healthy and decent work annually on the exact date.

Ahiuma-Young (2012) commenting on safety and health development in Nigeria revealed that the global estimate of 2.3 million occupational fatalities occur annually while nothing less than 100 occupational fatalities and some billions of capital losses have been recorded in Nigeria between April 28, 2009 and April, 2010. Employees work and earn wages and salary, hence the event is part of the global strategy and health directed at awareness, creation and boosting of political policies for safety and health at work.

In manufacturing industries, the frequency of fatal industrial accidents is very alarming. Many times, the management negotiate with some union officials to conceal cases of industrial accidents and secretly negotiate compensation. Thereby, paying out paltry sums as compensation to the families of victims in both deaths and permanent disabilities. The workman compensation Act that is supposed to address issues of industrial accidents/hazards is incompatible and lack implementation. Ahiuma- Young (2012) noted that the federal government has failed in enforcing industrial safety policies at the workplace and some of the trade unions pay less attention to the safety of their members.

2.2 Theoretical Framework

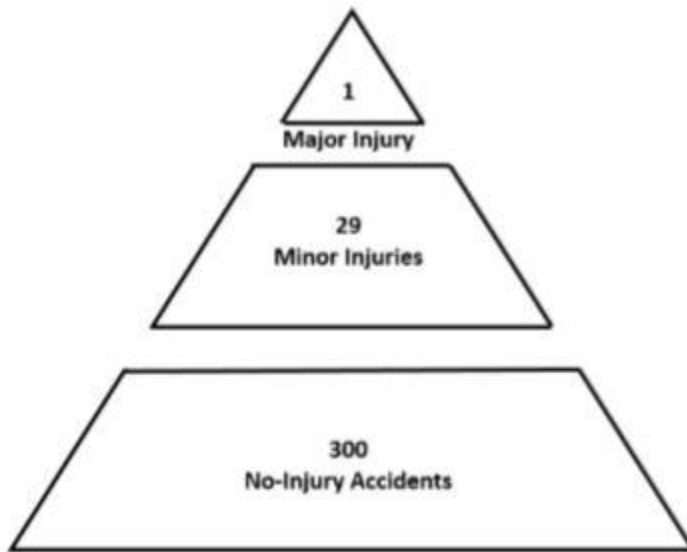
2.2.1 The Theory of Accident Causation

Accidents occur every day, and one way or the other may affect almost everyone. During the year 2012, there were more than 2.8 million on-the-job nonfatal injuries in the United States (Bureau of Labour Statistics, 2013). That same year, there were also 4,628 on-the-job fatalities (Bureau of Labour statistics, 2014). It should be noted that other incidents, such as organisational workplace violence, added to the data as well, though a vast majority are related to accidents. Furthermore highlighting the impact of accidents is the costs absorbed by organisations. Cost considerations include workers' compensation case management, the use of paid-time-off/sick time, short- and/ or long-term disability, worker replacement costs (i.e. training of an employee to replace the injured worker), and time and money spent investigating the accident with follow up corrective actions which can include policy and/or equipment change or upgrades.

Even further expanding upon the impact of accidents is the great number of accidents that do not result in injuries. In an early study of accidents, H. W. Heinrich (1950) found that for every serious injury, there were 29 minor injuries and 300 accidents resulting in close calls. At that rate, even supposing that all injuries (major or otherwise) are included in the official statistics, there would be an additional 42 million accidents that go unreported. Figure 1

demonstrates Heinrich's (1950) "Foundation of a Major Injury," sometimes also referred to as "Injury Pyramid".

Fig. 1: Foundation of a Major Injury



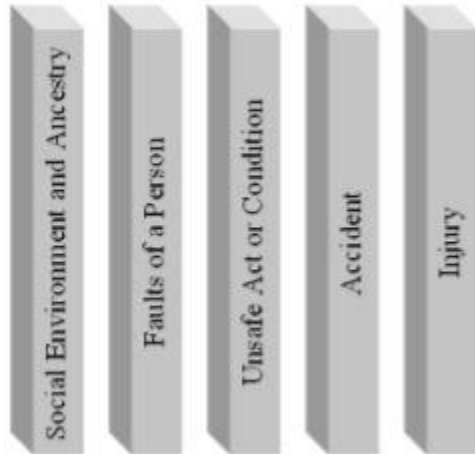
It's important to note that OSHA uses the term "incident" to refer to these events, while The National Safety Council – and typically the general public on the whole – uses the term "accident." These terms are essentially interchangeable, but for the purposes of this text, we will use "accident" as defined by The National Safety Council: An accident is an undesired event that results in personal injury or property damage. This definition implies two vital points. First, accidents are inevitable; the chance of one occurring will virtually always be present. Second, the chance of an accident happening is a variable that can be changed. While it is impossible to prevent all accidents, it is possible to decrease their rate of happening. Understanding the cause of such occurrence is key to decreasing the rate at which accidents occur. Determining the true root cause of each accident is the only way to articulate effective prevention strategies. Presented below are a few of the most common theories used to explain accidents.

2.2.1.1 Heinrich's Domino Theory

Heinrich's (1950) theory explains accidents using the analogy of dominos falling over one another and creating a chain of events. While this theory is not the most advanced or complex theory, it is especially noteworthy as one of the first scientific theories used to explain accidents. It is often still referenced today, seven decades later.

When dominos fall over, each tips the next enough to push it over and continue the process until all the connected dominos have fallen. However, if just a single domino is removed, the entire process ceases. Heinrich explains accident causation in the same way.

Fig 2: Heinrich's Domino Theory



As you can see from the figure, Heinrich identified five stages of accident causation.

First stage: The Social Environment and Ancestry, this encompasses anything that may lead to producing undesirable traits in people. A modernized version of this theory would likely use the term “inherited behavior.”

Second stage: Faults of a Person, this refers to personal characteristics that are conducive to accidents. For example, having a bad temper may lead to spontaneous outbursts and no regard for safety. Ignorance of not knowing the safety regulations or standard operating procedures is also an example of this stage.

Third stage: Unsafe Act or Conditions, this is the beginning of a specific incident. Unlike the first two stages, which affect probability of accidents occurring, this stage is closer to the accident in terms of temporal proximity. This can include a specific act that is unsafe, such as starting a machine without proper warning or failing to perform suitable preventive actions, such as using the rightful safety measures. This stage entails acts that occasionally cause accidents.

Fourth stage: Accident, this is when something occurs that is undesirable and not intended.

Fifth stage: Injury, this is the unfortunate outcome of some accidents. An injury occurs during an accident, and accident occurring is not a sufficient cause for an injury, but it is a necessary one. Similarly, the adverse characteristics in stage two do not always occur in poor environment.

Given this necessary causality, the most important policy insinuation is to remove at least one of the dominos, which can in turn lead to a healthy subculture through positive accident prevention training/exercise and seminars. An organisation may not be able to clear out all of the people with undesirable characteristics, but it can have a procedure in place for dealing with accidents to minimize injury and loss. When workers are being trained it would increase the

employee performance and it would also increase high productivity for the organisation and not just reducing or minimizing accidents it would also enhance the skills of the employees.

2.2.1.2 Ferrell's Human Factor Model

Unlike Heinrich, who explained accidents with a single chain reaction in elusive terms, Ferrell's model incorporates multiple causes and is very specific about these causes (Heinrich, Petersen, & Roos, 1980). Additionally, Ferrell defines accidents in terms of being the result of an error by an individual. As such, he explains his theory using the assumption that accidents are caused by one person.

Ferrell identifies three general causes of accidents: overload, incompatibility and improper activities. Each of these are actually broad categories that contain several more specific causes. Improper activities: this is perhaps the simplest of the concepts, as it encompasses two straightforward sources of accidents. First, it is possible that the responsible person simply didn't know any better. Alternatively, he or she may have known that an accident may result from an action, but deliberately chose to take that risk. The incompatibility cause is slightly more complex than improper activities. It encompasses both an incorrect response to a situation by an individual, as well as subtle environmental characteristics, such as a work station that is incorrectly sized.

Overload: this is the most complex of Ferrell's causes. It can further be fragmented into three subcategories. First, the emotional state of the individual accounts for part of an overload. These states include conditions such as unmotivated and agitated workers. Second, the capacity refers to the individual's physical and educational background. This include; physical fitness, training and even genetics play a part of this. Situational factors such as exposure to drugs and pollutants as well as job related stressors also affects one's capacity. Thirdly, the load of an individual can also contribute to an overload. This include the difficulty of the task, positive or negative effects of the environment (distractions, noise, Air pollutions, e.t.c).

2.2.1.3 Petersen's Accident/Incident Model

Petersen's model is largely an expansion upon Ferrell's Human Factor Model (Heinrich, Petersen, & Roos, 1980). The notion of an overload, caused by capacity, state, or load, is very similar to Ferrell's work. However, a few changes and improvements do exist. First, Petersen conceptualized the environmental aspect of incompatibility (work station design and displays/controls) as a different part of the model, calling them ergonomic traps. Furthermore, Petersen also separated a decision to err from the overload cause. Furthermore, Petersen also specified separate reasons to choose to err. These reasons include: a logical decision due to the situation (primarily for financial cost and temporal deadlines), an insentient desire to err (psychological failings), and perceived low probability of an accident occurring. The latter of

those reasons, the perception of low accident probability can include both actual instances of an accident being extremely unlikely, as well as the natural inclination of a human to disregard his or her own mortality.

Another notable contribution is Petersen's recognition that human error is only part of a larger model. A system failure, the inability of the organisation to correct errors, was added as a possible mediator between errors and accidents. These failures have a variety of possible occurrences. The failure of management to detect mistakes and a lack of training are examples of systems failures. Even poor policy itself can lead to a system failure that does not prevent an accident from occurring following a human error.

These model talks about how human beings are bound to make errors without the rightful training necessary, also when an organisation don't implement safety policies there would be system failure.

2.2.1.4 System Models

Most of the theories so far discussed focus on human errors and environmental flaws. A systems model theory approaches the relationship between persons and their environments differently. Rather than the environment being full of hazards and a person being error prone, a system model view sees a harmony between man, machine, and environment. Under normal circumstances, the chances of an accident are very low. Once someone or something disrupts this harmony by changing one of the components or the relationships between the three, the probability of an accident occurring increases substantially.

Another aspect of the systems model is what is referred to as risk-taking. Whenever someone chooses to do something, there is an associated risk (Firenze, 1978). Smaller tasks and risks are often calculated on an insentient level. For example, when one chooses to drive to work each morning, that person weighs the risks (slender chance of being in a car accident) and the benefits (making a living) and decides the benefits outweigh the risks.

In organisation, system models are being used because the organisation itself is a system with different caliber of people. The system in an organisation might be between the employer, supervisor and employee. If the supervisor is not there to monitor the employee there might be mistakes and it may lead to accident, for example a manufacturing company which produces bottle water with the supervisor in charge of monitoring and making sure the required safety equipment's are being distributed to the employee, but due to some certain conditions the supervisor is not around, there would be a very high rate of accident because the supervisor is not there to give them the necessary safety tool/equipment's to carry out that given task.

2.2.2 The Integration of Theories and General Safety Program Implications

It is important to understand that each theory of accident causation does not explain every accident that occurs. Each theory explains only a portion of accidents, and all these theories are incomplete as evidenced by the number of published works countering each theory. It is therefore important to recognize that through accident prevention the reduction of the probability

of an accident can only occur when all possible causes are addressed. Focusing on only one or two theories is simply not enough. There are numerous theories not even briefly discussed in this chapter. Safety specialists and individuals with related duties highly encouraged to consult additional information about accident causation.

There are various program implications that can be derived even from the few theories discussed in this chapter. Many of these are common sense, as they are often used practices.

First, most theories and models agree that human error is constantly a possible cause of accidents. An effective strategy is to train employees carefully and persistently. Better safety training and increased knowledge and awareness of possible threats can only decrease the chance of an accident occurring.

Secondly, socialization and subculture are also a common thread in accident causation. This further highlights the need for regular training and safety programs. An unsafe employee not only increases the risk of causing an accident, he or she can also corrupt future staff and make the problem grow extremely. Safety awareness program is a good example of how to approach this problem. Regular meetings and positive safety posters are some of the strategies an awareness program can utilize. Keeping employees motivated to stay safe is another contributing factor to an effective safety program. The two-factor theory of motivation, also called the Motivator-Hygiene theory (Herzberg, Mausner & Snyderman, 1959), suggests that employees should be exposed to motivators (positive rewards) and hygiene factors (routine parts of a job, such as a good working environment, that prevent displeasure). Management should understand the importance of maintaining a positive subculture and be trained with intervention approaches for problem employees. Management buy-in into the safety program is also extremely important.

Thirdly, the physical environment is also an essential aspect of accident causation that must be addressed. In addition to obvious implications (guard rails, safety warnings, e.t.c.), the delicate relationships between man and the environment must also be considered. Ergonomic designs, often used to increase productivity, can also increase a workers' comfort. stress and dullness can play a role in human error, so keeping agitators to a minimum through ergonomic designs may also be helpful.

The main goal of any good safety program is to meet legal necessities and prevent accidents, but since accidents can never be completely prevented, a secondary goal is to be prepared for the inevitable. In the aftermath of the terrorist attacks of September 11, 2002, interest in emergency management has heightened. However, such interest has largely overlooked individual accidents, especially on the small scale, in favor of Terrorism and other acts of malicious or intentional harm (Haddow & Bullock, 2006).

Despite the lack of attention by the public and the media, accident prevention continues to be an important topic. Fiems and Hertig (2001) noted that fines by the Occupational Safety and Health Administration (OSHA) have been increased and more being imposed more liberally than in years past for violations of unsafe working conditions. Furthermore, more states are

legislating safety standards and security organisations are placing more emphasis on providing both security and safety.

Since Heinrich's Domino theory in 1936, knowledge about accident causation and its counterpart, accident prevention, has grown remarkably. It was once the only theory explaining accidents but now, it has served as the foundation of a discipline home of many theories, implications and perspectives.

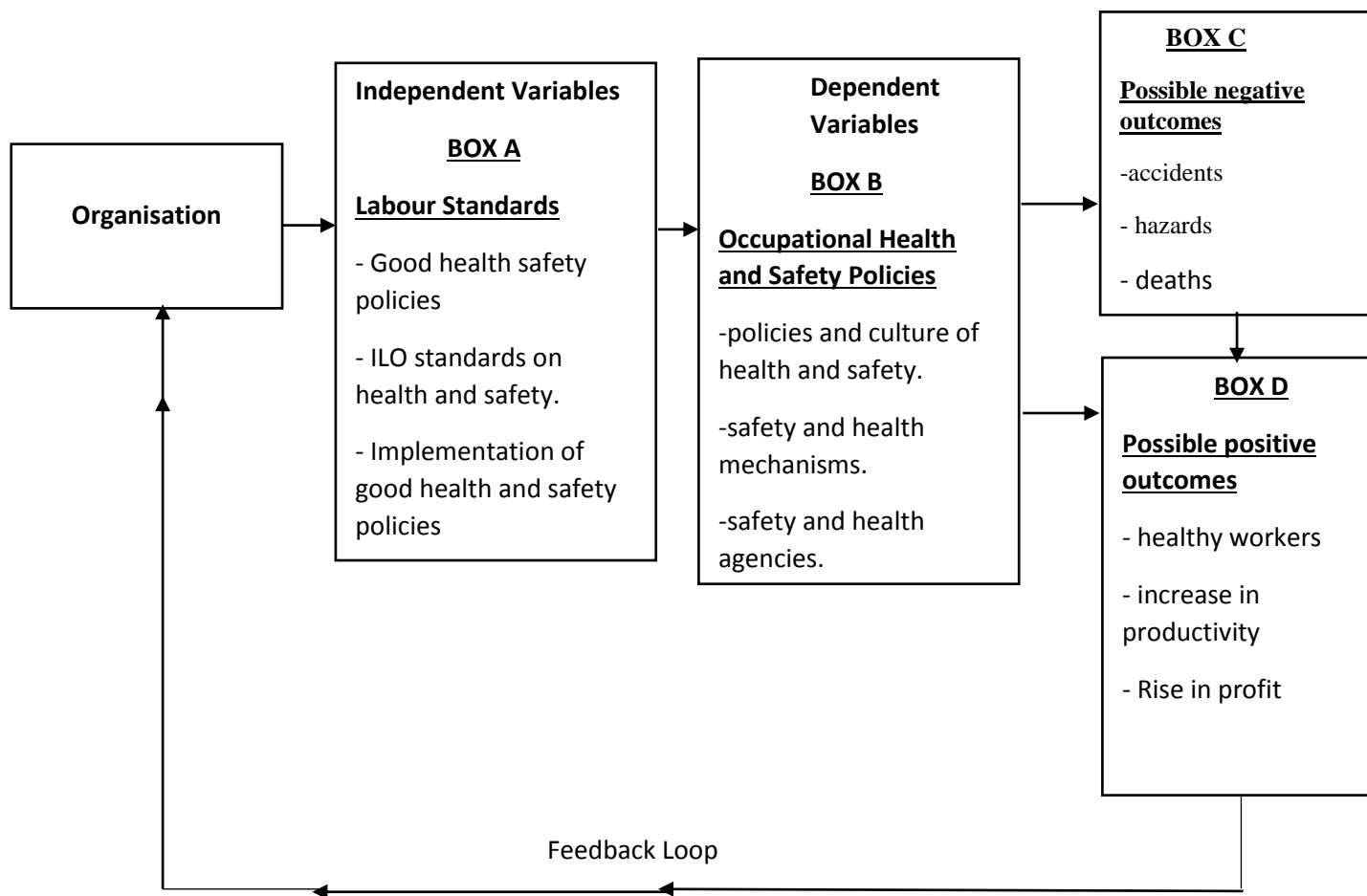
2.3 Empirical Framework

A study conducted by Haviland et al. looked at the impact of occupational safety and health agency inspections and penalties and their effect on workplace injuries (2008). In addition to supporting the idea that an inspection, citation and penalty lead to an overall improvement in the safety culture of the organisation, they also found that the organisation cited focused on the specific hazard.

A study conducted by Bartel, Thomas and Haviland et al. looked at the preventive effects of inspections are not necessarily limited to those hazards addressed by the occupational safety and health agency standard (2008).

A study conducted by Brown et al., (2000), looked at the interaction between social systems, technical systems and cognitions as possible causes for accidents and injuries or the prevention of them. In their studies, they looked at three general themes that are related to causes of accidents. These themes include "causes involving the person, causes involving the system and causes involving system- person sequential interrelationships" (Brown et al., 2000). A study conducted by Gray and Jones (1991), looked at the effect of sequential inspections on compliance with occupational and safety agency standards. Using data from OSHA integrated management and information system (IMIS), the inspection history of specific companies and locations were tracked to determine the number of citations received by companies from 1972-1983. The result of the analysis showed that the initial inspection at the facility produced the most citations and subsequent inspections resulted in a 50% decline in the number of citations received. In addition, the author theorized that eventually there would be equilibrium between penalties of noncompliance and compliance costs (1991). This would indicate that for some organisations the agency becomes just another cost of doing business with little impact on safety.

2.4 CONCEPTUAL FRAMEWORK



The conceptual framework above represents the relationship between independent and dependent variables, the independent variables are in Box A represented by Labour Standards which may be in form of Good Health, safety policy, ILO standards on health and safety and safety, implementation of good health and safety policies. Box B represent the independent variable which is occupational health and safety Policies and this may be in form of policies and culture of health mechanisms, Safety and health agencies. Box C represents the possible negative outcomes in form of accidents, hazards and deaths if occupational safety and health policies are not treated seriously in the work organisation. Box D represents the possible positive outcomes of proper handling of occupational health and safety policies in the work organisation and this may be in form of healthy workers, Increase in productivity, Rise in profit. This positive effects will affect the organisation through feedback Loop.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

Research methodology deals with the structure of investigation aimed at identifying variables and their relationships to one another. This chapter explains the procedures employed in carrying out the study, which include; the research design, the target population, the sample size and the sampling procedure, research instruments and their validity and reliability, data collection techniques, ethical considerations and the operational definition of the variables.

3.1 Research Design

The research design to be adopted was descriptive survey study in an attempt to explain the labour standards and occupational safety and health policies among selected manufacturing industries in Lagos state. It measured two variables, independent and dependent variables. The independent variable was the labour standards while the dependent variable was occupational safety and health policies among selected manufacturing industries in Lagos state. Descriptive survey study was used because it was best suited to answer the 'what' and 'how' research questions in the study.

3.2 Population of study

The target population for this research work was limited to staff members of Cway water Nigeria Limited and Sara foam company in Lagos state. The population of study for Cway water company was 120 people, while the population of Sara Foam was 100 people. Altogether the target population from the both organisation was 220.

3.3 Sample Size

The sample size for the research is 142 respondents from the two organisations using Taro Yamane formula.

$$n = \frac{N}{1 + n(e)^2}$$

N= Number of sample size

n = population

I = constant

e = Level of significance of error assumed 0.05

N= 220

n=?

$$\frac{220}{1+220(0.05)^2}$$

$$n = \frac{220}{1+(220 \times 0.0025)}$$

$$n = \frac{220}{1.55}$$

n=141.93

approximately the sample size is 142

3.4 Sampling techniques

Multi stage sampling technique was used in this research work on order to get appropriate sample that would serve as a true representative of the total population of study.

Stage 1 Purposive sampling method: Cway water Nigeria Limited and Sara foam was purposively selected for this research work due to the following reasons;

- a. Cway water being a multinational company would enhance my insight on safety and health.
- b. Sara-foam is a company that deal with foam, I would love to see how their safety policies help them to reduce hazard such as fire outbreak which is a very common hazard among foam companies.
- c. Am using the both companies because they are closer to my house and it would help reduce the stress of submitting my questionnaires.

Stage 2 stratified sampling: this consisted of the factory workers and the non-factory workers.

Stage 3 Systematic sampling method: this involved getting the total population of the workers in the company (N) and a sample size (n). The total population was divided by sample size (N/n) and the answer given was used as fixed interval to select the sample. The same method would be used for factory and non-factory workers if the sampling techniques are for two companies or more.

3.5 Sources of Data

The primary source of data will be employed in this study. The data will be derived with the aid of questionnaires. The questionnaires were distributed to the target population.

3.6 Validity and Reliability of Data Collection Instruments

Validity and reliability of data collection instruments is essentially to minimize bias in the study findings.

Validity is the ability of research instrument to measure what it is supposed to measure

- a. **Content validity:** this states if the research instruments covers all the dimensions of the topic
- b. **Construct validity:** how a research instrument measures all the dimension of the concepts
- c. **Reliability:** this is the consistency in the result given by the same research instrument.

3.7 Ethical Consideration

The basic ethical ideologies of research involving human subjects are: respect of persons, respect of beneficence and respect for justice. These principles were diligently followed in this study.

Respect for Person: the researcher gave total respect to the respondents because they were given the choice to participate or not to participate in the exercise. In view of this, no respondent was forced to participate. Moreover, the researcher took knowledge of the diminished capacity of respondents to exercise their autonomy. The diminished capacities taken into consideration were: low economic ability, age, low education and any other physical disability of respondents.

Respects for Beneficence: in order to ensure respect for beneficence, the researcher made use of voluntary informed consent based on the full information about the research, full name and address of the researcher, participants' benefits from the research etc. To promote respect for beneficence, voluntary informed consent form was given to each of the respondents interviewed to fill without any menace or prejudice.

Respect for Justice: there was fairness to all respondents. Justice and lack of discrimination reigned supreme in the conduct of the exercise. There was no bias against respondent on the bases of sex, age, ethnic group, job, position, education etc. Anonymity and confidentiality were maintained in order to ensure maximum co-operation from respondents. No respondent was held responsible for opinion given. Respondent who felt his or her interest was at risk and wanted to back out from the interview process was given the opportunity to do so.

3.8 Data Collection Method

Only quantitative method was used to collect data. Questionnaire was the data collection instrument for quantitative data.

3.9 Methods of Data Analysis

The study made use chi-square analysis to test the three hypotheses which address the specific objectives of the study. Chi-square test determines whether there is dependency between variables or not.

Chi-square test (χ^2) is really a goodness of fit test in so far as we are interested in ascertaining the extent of fit of theoretical, hypothetical or expected distribution with observed distribution. The χ^2 one-sample test is carried out using the formula below:

$$\chi^2 = \sum \left[\frac{(O - E)^2}{E} \right]$$

Where

O – represents the observed frequency

E- represents the expected frequency

Since the study involved the use of contingency, table, the expected frequency is obtained using:

$$E = \frac{\text{Row Total} \times \text{Column Total}}{\text{Grand Total}}$$

To obtain the chi-square tabulated, the following information were used:

1. The degree of freedom (v) = $(c - 1) (R - 1)$
2. The level of significance = 5%

Decision Criteria

X^{2cal} is greater than X^{2tab} , reject H_0 and accept H_1

X^{2tab} is greater than X^{2cal} , reject H_0 and accept H_1

3.10 The numbers and distribution of research instrument

Research Instruments	Number of Respondents	Analysis
Questionnaire	142	10 not returned 12 not properly administered 120 duly completed and used for the data analysis.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter presents the data and interpretation of results of the research carried out in Mountain Top University. The data collected were analyzed based on the hypothesis stated.

The research questionnaires were administered to one hundred and forty-two employees of two manufacturing companies (Cway water Nigeria Limited and Sara foam Nigeria Limited) in Lagos Industrial district. Sixty questionnaires were administered in Sara foam and Eighty-two in Cway water Nigeria Limited, after collecting the questionnaires from the respondents, Twenty two questionnaires were not attended to therefore, the number of responded questionnaires I received were one hundred and twenty. This analysis was carried out using (SPSS) Statistical Package for Social Sciences. Descriptive statistics of frequency count, percentages and chi-square were used to analyse the data to verify the hypothesis.

4.1 SECTION A: SOCIAL DEMOGRAPHIC CHARACTERISTICS OF RESPONDENT

Table 4.1

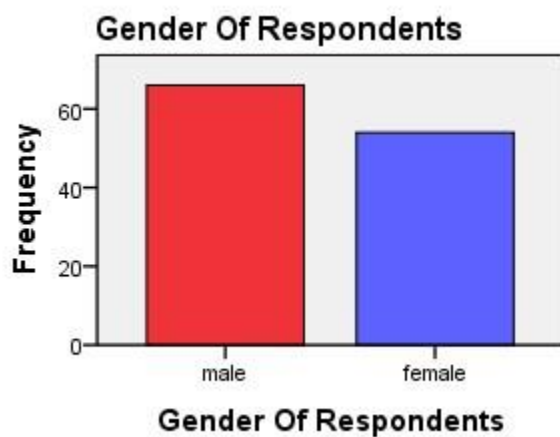
Options	Frequency	Percent	Cumulative percent
Male	66	53.2	55.0
Female	54	43.5	100.0
Total	120	100	

Source: field survey 2019

4.1.1 GENDER OF RESPONDENTS

From the table 4.1 above, a total of one hundred and twenty respondents were sampled with male of the respondents constituting the highest percentage of 66% while female was 34%. This is a fair gender balance and the bar charts below in table4.1a summarizes it all.

Table 4.1a



4.1.2 AGE OF RESPONDENTS

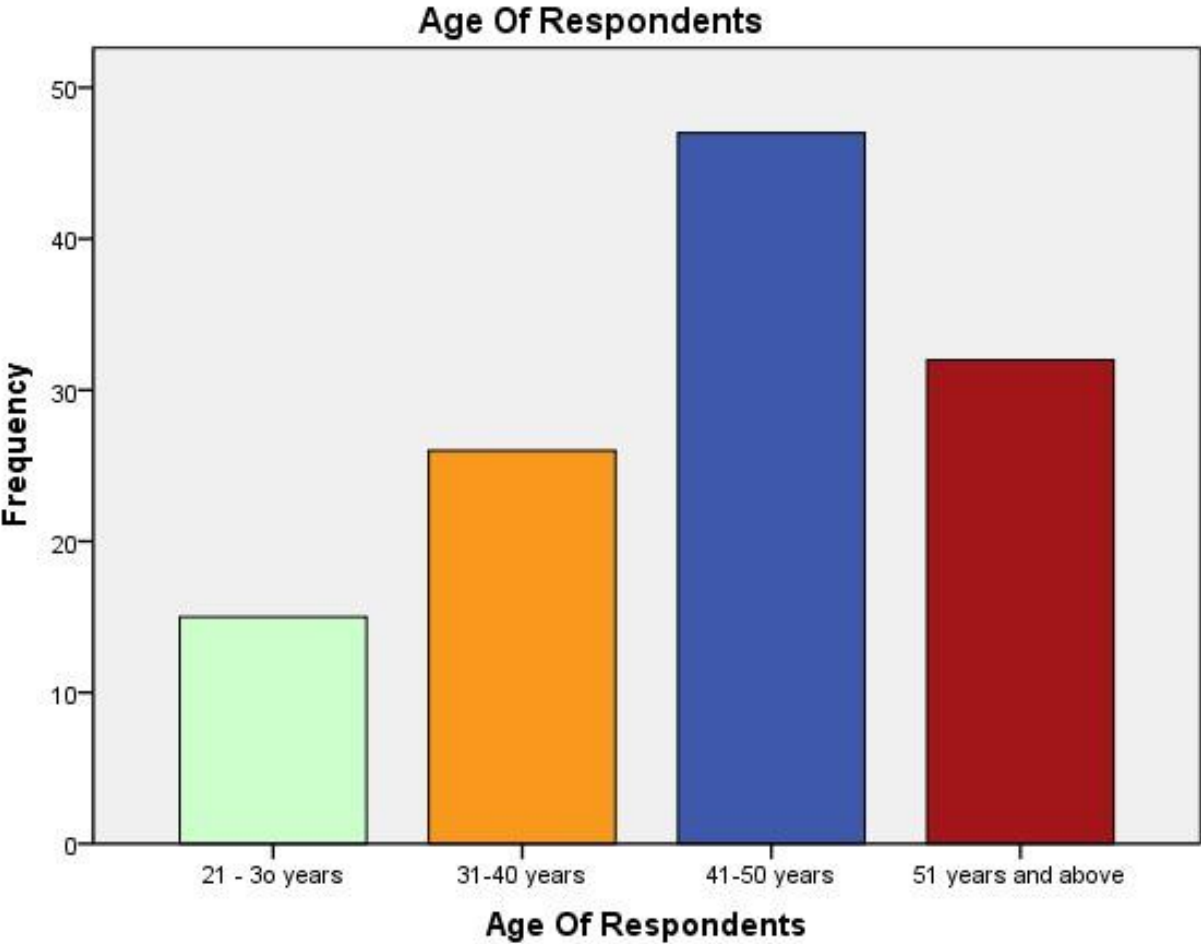
Table 4.2

Options	Frequency	Percent	Cumulative percent
21-30 years	15	12.1	12.5
31-40 years	26	21.0	34.2
41-50 years	47	37.9	73.3
51 years and above	32	25.8	100
Total	120	100	

Source: field survey 2019

From the table 4.2 above we can see that 37.9% respondent which is the highest is from the age range of 41-50 years. While 12.1% is the lowest response and it's from the age range of 21-30. This table shows that 41-50years responded well.

Table 4.2a



4.1.3 Educational Qualification Of Respondents

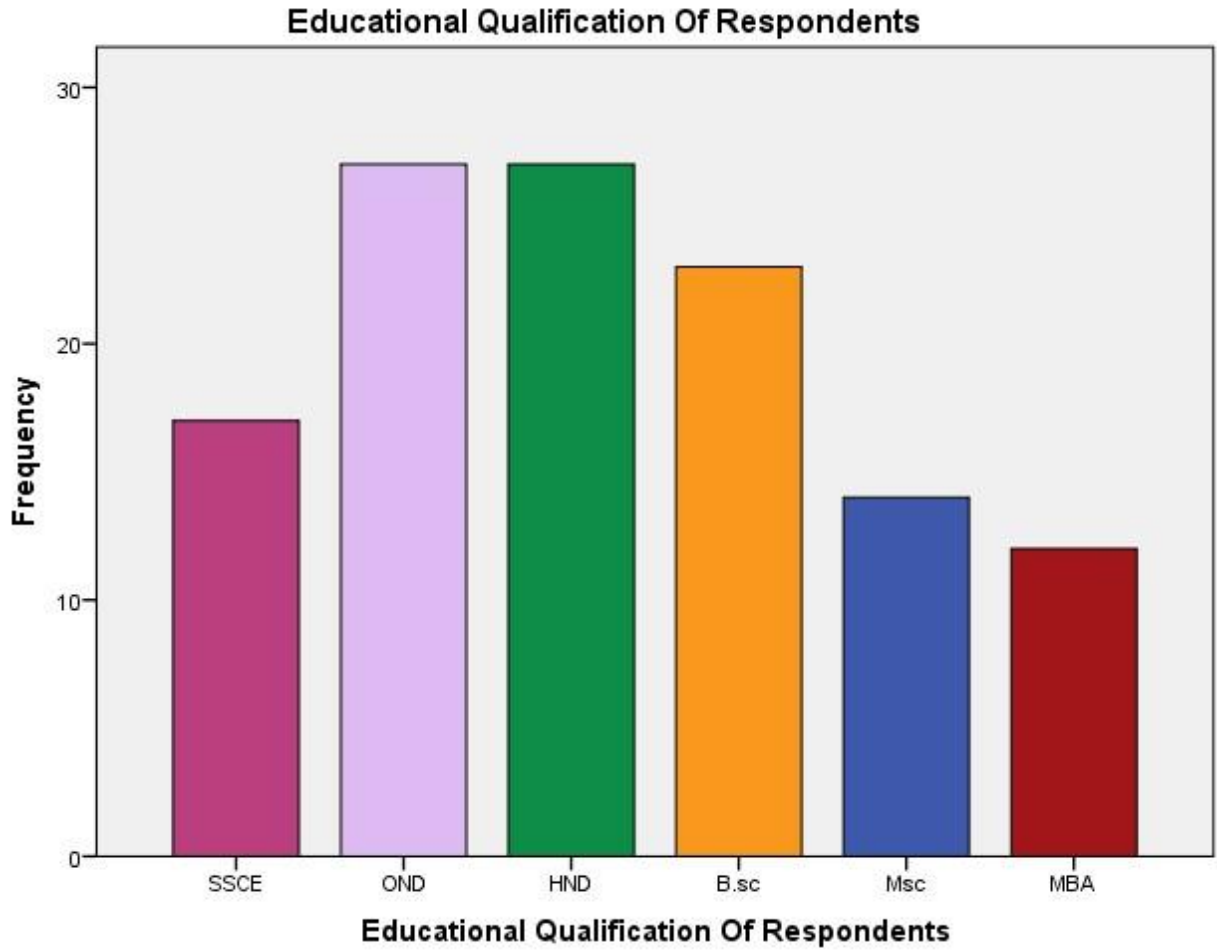
Table 4.3

Options	Frequency	Percent	Cumulative Percent
SSCE	17	13.7	14.2
OND	27	21.8	36.7
HND	27	21.8	59.2
B.sc	23	18.5	78.3
Msc	14	11.3	90.0
MBA	12	9.7	100.0
Total	120	100	

Source: field survey 2019

From the table 4.3 above we can see that 17 respondents (13.7%) have SSCE. 27 respondents (21.8%) have OND, 27 respondents (21.8) have HND. 23 respondents (18.5) have B.Sc. 14 respondents (11.3) have M.Sc. 12 respondents (9.7) have MBA.

However, from the analysis above, we have more of OND and HND workers in the organisations.



4.1.4 Work Experience Of Respondents

Table 4.4

Options	Frequency	Percent	Cumulative Percent
5 years	51	41.1	42.5
6-10 years	37	29.8	73.3
11 years and above	32	25.8	100.0
Total	120	96.8	

Source: field survey 2019

From the table 4.4 above we can see that 51 respondents (41.1%) have 5years, 37 respondents (29.8%) have 6-10 years, 32 respondents (25.8) have 11years and above. the analysis however shows that 51 people have worked for 5years which was a reflection of the highest population of respondents with 5years experience which is due to the commitment of work.

4.1.5 Marital Status of Respondents

Table 4.5

Responses	Frequency	Percent	Cumulative Percent
married	91	73.4	75.8
single	29	23.4	100.0
Total	120	100	

Source: field survey 2019

The table 4.5 above shows that there are more married people in the organisations with 73.4% of population than the 23.4% of single people in the organisations.

4.1.6 Position of Respondents

Table 4.6

Options	Frequency	Percent	Cumulative Percent
Senior Staff	42	33.9	35.0
Junior Staff	78	62.9	100.0
Total	120	100	

Source: field survey 2019

The table 4.6 above shows that there are more Junior staffs in the organisations with 62.9% of population than the 33.9% of Senior staffs in the organisations.

4.1.7 Employment Status of Respondents

Table 4.7

Options	Frequency	Percent	Valid Percent	Cumulative Percent
permanent	79	63.7	65.8	65.8
casual	41	33.1	34.2	100.0
Total S	120	100	100.0	

Source: field survey 2019

The table 4.7 above shows that there are more Permanent staffs in the organisations with 63.7% of population than the 33.1% of Casual staffs in the organisations.

4.1.8 Policies on Occupational health and safety

Table 4.8

Options	Cway water	Sara Foam	Frequency	Percent	Cumulative Percent
YES	50	44	94	75.8	78
NO	16	10	26	21.0	100
TOTAL	66	54	120	100	

Source: field survey 2019

The table 4.8 above shows the policies on occupational health and safety in the two organisations. While, 50% of respondents from Cway water and 44% of respondents from Sara Foam agreed with the existence of this policies, 16% of respondents from Cway water and 10% of respondents from Sara foam said No to this idea. This implies that as long as 75.8% of the total respondents agreed with this view, it was said that the two organisations had good policies on occupational health and safety.

4.1.9 Assessment of the effectiveness of the policy in line with ILO standards

Table 4.9

Options	Cway water	Sara Foam	Frequency	Percent	Cumulative Percent
Highly Effective	25	15	40	32.3	33.3
Moderately Effective	28	14	42	33.9	68.3
Effectively Low	19	10	29	23.4	92.5
Not Effective	6	3	9	7.3	100
Total	78	42	120	100	

Source: field survey 2019

The table 4.9 above shows that 25% of the respondents from Cway water and 15% respondents from Sara Foam claimed that policies on occupational safety and health were highly effective in line with ILO standards, while 28% from Cway water Nigeria Limited and 14% from Sara Foam claimed that policies on occupational safety and health were moderately effective, 19% from Cway water Nigeria Limited and 10% from Sara Foam claimed it was effectively low, while 6% from Cway water Nigeria Limited and 3% from Sara Foam claimed it was not effective. This implies that as long as 33.9% of the total respondents agreed with this view, it was said that the two organisations had a moderately effectiveness of the policy in line with ILO standards.

4.1.10 Assessment of the management attitudes towards health and safety of workers in organisation

Table 4.10

Statements	Cway water	Sara Foam	Frequency	Percent	Cumulative Percent
Positive attitudes	20	13	33	26.6	27.5
Management ensures workers operate in safe environment	30	25	55	44.4	73.3
Management is indifferent to workers safety	10	7	17	13.7	87.5
Victims of occupational accident are treated well by management	11	4	15	12.1	100
Total	71	49	120	100	

Source: field survey 2019

The table 4.10 above shows that 30% of the respondents from Cway water and 13% respondents from Sara Foam claimed that the management towards health and safety of workers in organisations reacts with positive attitudes, while 30% from Cway water Nigeria Limited and 25% from Sara Foam claimed that management ensures workers operate in safe environment, 10% from Cway water Nigeria Limited and 7% from Sara Foam claimed that management is indifferent to workers safety, while 11% from Cway water Nigeria Limited and 4% from Sara Foam claimed that victims of occupational accident are treated well by management. This implies that as long as 44.4% of the total respondents agreed with this view, it was said that the two organisations ensure that management operate in safe environment.

4.1.11 Mechanisms to ensure employees health and safety

Table 4.11

Options	Cway water	Sara Foam	Frequency	Percent	Valid Percent	Cumulative Percent
YES	50	30	80	64.5	66.7	66.7
NO	25	15	40	32.3	33.3	100.0
Total	70	50	120	96.8	100.0	

Source: field survey 2019

The table 4.11 above shows the mechanism/ plan to ensure employees health and safety in the two organisations. 50% of respondents from Cway and 30% of respondents from Sara Foam agreed with the mechanism/ plans to ensure employees health and safety, 25% of respondents from Cway and 15% of respondents from Sara foam said No to this idea. This implies that as long as 64.5% of the total respondents agreed with this view, it was said that the two organisations had Plans to ensure employees health and safety in the organisation.

4.1.12 Health care mechanism or plan put in place to take care of workers

Table 4.12

Statements	Cway water	Sara Foam	Frequency	Percent	Cumulative Percent
Establishment of Company Clinic	29	20	49	39.5	40.8
Availability of safety equipment in factory	12	10	22	17.7	59.2
Regular check of workers	15	9	24	19.4	79.2
Health status others	13	12	25	20.2	100
Total	69	51	120	100	

Source: field survey 2019

The table 4.12 above shows that 29% of the respondents from Cway water and 20% respondents from Sara Foam claimed that there should be establishment of company Clinic, while 12% from Cway water and 10% from Sara Foam claimed that there should be availability of safety equipment in factory, 15% from Cway water Nigeria Limited and 9% from Sara Foam claimed that there was regular check of workers, while 13% from Cway water and 12% from Sara Foam claimed that there were others.

4.1.13 Effectiveness is the mechanism put in place in your workplace to ensure occupational safety and health of workers

Table 4.13

Options	Cway water	Sara Foam	Frequency	percent	Valid percent	Cumulative percent
Highly effective	20	16	36	29.0	30.0	30.0
Moderately effective	20	8	28	22.6	23.3	53.3
Effectively low	14	20	34	27.4	28.3	81.7
Not effective	12	10	22	17.7	18.3	100
Total	66	54	120	100	100.0	

Source: field survey 2019

The table 4.13 above shows that 20% of the respondents from Cway water and 16% respondents from Sara Foam pointed out that the mechanism put in place in the workplace to ensure occupational safety and health of workers was highly effective, while 16% from Cway water and 12% from Sara Foam pointed out that the mechanism put in place in the workplace to ensure occupational safety and health of workers was moderately effective, 24% from Cway water and 10% from Sara Foam claimed it was effectively low, while 13% from Cway water and 9% from Sara Foam claimed it was not effective. This implies that as long as 29.0% of the total respondents agreed with this view, it was said that the two organisations had a highly effectiveness to ensure the mechanism put in place in organisation.

4.1.14 Employees health depends largely on work environment

Table 4.14

Options	Cway water	Sara Foam	Frequency	Percent	Cumulative percent
YES	55	30	85	68.5	70.8
NO	15	20	35	28.2	100
Total	70	50	120	100	

Source: field survey 2019

The table 4.14 above shows that 55% of respondents from Cway water and 30% of respondents from Sara Foam agreed that employees' health depends largely on work environment, 15% of respondents from Cway water and 20% of respondents from Sara foam said No to this idea. This implies that as long as 68.5% of the total respondents agreed with this view, it was said that the two organisations health depends largely on work environment.

RELATIONSHIP BETWEEN INDEPENDENT AND DEPENDENT VARIABLES

4.2 SECTION B: HYPOTHESES TESTING

4.2.1 HYPOTHESIS 1: H_0 : There is no significant relationship between organisational health and safety policy and ILO standards

H_1 : There is significant relationship between organisational health and safety policy and ILO standards

Table 4.15

My work environment is safe, secure, and conducive according to best practices * my company operates by the best ILO practices

Cross tabulation

			My company operates by the best ILO practices		Total
			yes	no	
My work environment is safe, secure, and conducive according to best practices	yes	Count	51	20	71
		Expected Count	50.3	20.7	71.0
	no	Count	34	15	49
		Expected Count	34.7	14.3	49.0
Total	Count	85	35	120	
	Expected Count	85.0	35.0	120.0	

Chi-Square Tests

	Value	df	Asymp. Sig. (2sided)	Exact Sig. (2sided)	Exact Sig. (1sided)
Pearson Chi-Square	.084	1	.772	.839	.464
Continuity Correction ^b		1	.932		
Likelihood Ratio	.007	1	.773		
Fisher's Exact Test	.084				
Linear-by-Linear Association	.083	1	.773		
N of Valid Cases	120				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 14.29.

b. Computed only for a 2x2 table

Table 4.15 above shows that X^{2cal} (0.84) is less than X^{2tab}

(7.88) at 5% level of significance ($X^{2tab} = 7.88, v = , \alpha =$

0.05). Hence, the alternate hypothesis is rejected while the null hypothesis is accepted. That is, there is no relationship between organisational health and safety and

ILO standards

4.2.2 HYPOTHESIS 2:

H_0 : There is no significant relationship between safety /health mechanism and ILO standards

H_1 : There is significant relationship between safety/health mechanism and ILO standards.

Table 4.16

Does your company have any mechanism/ plan to ensure employees health and safety
 ILO standards helps my company to keep best health and safety practices

Crosstabulation

			ILO standards helps my company to keep best health and safety practices		Total
			yes	no	
Does your company have any mechanism/ plan to ensure employees health and safety	yes	Count	47	33	80
		Expected Count	47.3	32.7	80.0
	no	Count	24	16	40
		Expected Count	23.7	16.3	40.0
Total	Count	71	49	120	
	Expected Count	71.0	49.0	120.0	

Source: field survey 2019

Chi-Square Tests

	Value	df	Asymp. Sig. (2sided)	Exact Sig. (2sided)	Exact Sig. (1sided)
Pearson Chi-Square		1	.896		
Continuity Correction ^b	.017	1	1.000		
Likelihood Ratio	.000	1	.895	1.000	
Fisher's Exact Test	.017				
Linear-by-Linear Association	.017	1	.896		.528
N of Valid Cases	120				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 16.33.

b. Computed only for a 2x2 table

Table 4.16 above shows that X^{2cal} (0.17) is less than X^{2tab} (7.88) at 5% level of significance ($X^{2tab} = 7.88, v = 1, \alpha =$

0.05). Hence, the alternate hypothesis is rejected while the null hypothesis is accepted. That is, there is no relationship between employees health and safety mechanism and ILO standards in the companies researched in this study

4.2.3 HYPOTHESIS 3:

H_0 : There is no significant relationship between work environment and employees' health and safety.

H₁: There is significant relationship between work environment and employees' health and safety.

Table 4.17

My work environment is safe, secure, and conducive according to best practices *
Workers health and safety is of a very high priority to management Cross tabulation

			Workers health and safety is of a very high priority to management		Total
			yes	no	
My work environment is safe, secure, and conducive according to best practices	yes	Count	55	16	71
		Expected Count	48.5	22.5	71.0
	no	Count	27	22	49
		Expected Count	33.5	15.5	49.0
Total	Count	82	38	120	
	Expected Count	82.0	38.0	120.0	

Source: field survey 2019

Chi-Square Tests

	Value	df	Asymp. Sig. (2sided)	Exact Sig. (2sided)	Exact Sig. (1sided)
Pearson Chi-Square	6.700 ^a	1	.010		
Continuity Correction ^b	5.707	1	.017		
Likelihood Ratio	6.651	1	.010		
Fisher's Exact Test				.016	.009
Linear-by-Linear Association	6.644	1	.010		
N of Valid Cases	120				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 15.52. b. Computed only for a 2x2 table

Table 4.17 above shows that X^{2cal} (6.700) is less than X^{2tab} (7.88) at 5% level of significance ($X^{2tab} = 7.88, v = 1, \alpha = 0.05$). Hence, the alternate hypothesis is rejected while the null hypothesis is accepted. That is, there is no relationship between employees work environment and the health and safety of workers in the two Companies studied.

CHAPTER 5

SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 Introduction

This chapter presents an overview of the study, summary of the major findings, conclusion, recommendations and suggestions for further study.

5.1 Summary of Study

This study observed the labour standards and occupational safety and health policies among selected manufacturing companies in Lagos State. The literature review was concentrated on the common risks and hazards that workers encounter in their day to day job activities in the manufacturing company. It also focuses on the need to understand the factors affecting effective implementation of health and safety measures and procedures so that appropriate actions may be instituted to make improvement in this area and lastly it was to identify existing gaps on workplace safety and health management relative to labour standards and propose future research areas. Chapter three explains the procedures employed in carrying out the study, such as the research design, target population, the sample size and sampling techniques. My findings on the first objective which is to examine the major policies and culture on safety and health, from my findings I got 75.8% from both Cway water and Sara foam, this implies that there are policies on occupational health and safety which is 33.9% from my findings. In my second objective my findings for the assessment of mechanism put in place to ensure employees health and safety was positive, this is to say that management provides necessary protective tools to ensure health and safety for employees and it was highly effective because of the 30% I got from my findings.

My third objective was to examine the relationship between working environment/equipment and employees' health and I got a positive reply of 68.9%, this implies that employees health depends largely on work environment.

The result of my hypothesis one is that there is no relationship between organisational health and safety and ILO standards.

The result of my hypothesis two is that there is no relationship between employees' health and safety mechanism and ILO standard in the companies researched in the study.

The result of my hypothesis three is that there is no relationship between work environment and the health and safety of work in the two companies studied.

5.2 Conclusion

Workers constitute a critical factor in the production of goods and services in work organisations, hence, their health and safety of work must be handed by every employer with utmost seriousness. This presupposes that every employer of labour be of in public or private sector must design major policies or culture on safety and health of workers in line with ILO standards. A healthy worker is the only one that can contribute maximally towards the development and high productivity of the work organisation, besides, there must be relevant mechanisms to make policies on health and safety very effective. This will prevent work hazards and accidents or sicknesses that can culminate in the loss of lives of workers. Many lives have been lost among workers in private and public sectors owing to poor working environment and hazards caused by the jobs and little compensation accompanied such at the end. Government must make enabling laws to enhance the effective implementation of occupational health and safety policies by all employers of labour in private and public sectors. The agencies responsible for ensuring strict compliance with occupational health and safety matters must be up and doing by arresting and prosecuting all defaulting employers of labour on occupational health and safety matters. We cannot continue to fold our arms and allow millions of people to lose their lives in the work place due to health and safety matters. All employers must take it as a duty to ensure that health and safety matters are addressed with utmost seriousness this may extend to creating resources to train workers on health and safety matters on their different places of work, because the loss of lives of workers is a direct labour reduction in production process that can lead to how output and profit at any point in time.

5.3 Policy Recommendations

1. Government must make enabling laws and regulations must be made binding on all workers and employers in order to reduce the incidents of untimely death occasioned by work hazards, accidents and sicknesses.
2. More regulatory agencies of occupational health and safety must be created with powers to prosecute the defaulting work organisation or on occupational health and safety, such defaulting employer of labour can be made to pay heavy penalties or having his/her work organisations sealed up permanently.
3. Government should make up mandatory for all employers of labour especially those dealing with production of consumable items to always train their workers in the methods of handling work equipment. Proper training in the ways to handle powerful and dangerous machines, chemicals and other equipment. How to make use of safety materials must be conveyed to employees coupled with regular maintenance of safety culture.
4. There must be frequent seminars, conferences and workshops to be organised at the state and federal levels in cooperation with Manufacturers Association of Nigeria. Labour organisations must also take active part in all these seminars and conferences in order to sensitize both employers and employees on health and safety matters. The need to ensure hygienic working environment must strongly be emphasized.
5. Each work organisation especially anyone that deals with manufacturing of products or drilling or dealing with exploitation of mineral resources must be compelled by government to always observe health and safety day. Infact, the effort made by lagos State government that every Thursday environmental sanitation should be observed by traders and manufacturers between eight and ten o'clock in the morning must be extended to other parts of the federation. Health and safety committee must be set up by each work organisation to oversee health and safety matters and neat work environment. Such committee work receives the support of the management with proper finding and good reporting system. All these will reduce incidents of untimely deaths, accidents, sicknesses, hazards and disease that are prevalent in Nigerian working environment.

6. Government should compel all employers of labour especially those in manufacturing sector to embark on insurance policies of their factory workers against any untimely death or accident occasioned by occupational hazards and diseases or sicknesses. This will enable the families of the victims to be well compensated after the death of their bread winner. This will reduce the agony, pain and trauma the children and wives of the victims of occupational accidents or sickness/diseases/death may likely face in life

5.4 Suggestions for further research:

Further research need to be undertaken on the issue of Manufacturing organisational accident investigations, reporting and records so as to advice the government on policy formulation and implementation on issues of health and safety in Manufacturing Organisations.

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APPENDIX I

LETTER OF TRANSMITTAL

**LABOUR STANDARDS AND OCCUPATIONAL HEALTH AND SAFETY POLICIES AMONG
SELECTED MANUFACTURING COMPANIES IN LAGOS STATE.**

DEPARTMENT: INDUSTRIAL RELATIONS AND PERSONNEL MANAGEMENT

MOUNTAIN TOP UNIVERSITY

Dear Respondent,

This study intends to investigate Labour Standards and Occupational Safety and Health policies among selected manufacturing companies in Lagos State. Your organisation is chosen as one of the case studies. The research is in partial fulfilment for the award of B.Sc degree in Industrial Relations and Personnel Management. Therefore, you are required to supply responses or give opinion to the questions below to the best of your ability, you are rest assured that any information supplied which is purely for academic purpose will be treated with strict confidence.

Thanks in anticipation of your co-operation.

Yours faithfully,

Anyanwu Patrick Chinedu

APPENDIX II
QUESTIONNAIRE

SECTION A

Please answer the following questions by ticking (✓) the appropriate box.

1. Gender: Male Female

2. Age: 21-30years 31-40years 41-50years 51years & above

3. Educational Qualification: SSCE OND HND B.Sc.
MBA M.Sc.

4. Working Experience in this Organisation: 5years 6 – 10years 11years and above

5. Marital Status: Single Married Divorced

6. Staff category: senior Staff Junior Staff

7. Employment Status: Permanent Casual

8. Department where you work in this Organisation: HR Acct Sales Production
 Others (specify).

SECTION B

SOME POLICIES AND CULTURE OF SAFETY AND HEALTH VIS-À-VIS ILO STANDARDS

9. Would you say your company has policy(ies) on occupational health and safety?
a. Yes b. No

10. If yes in question number 9 above, can you specify it(them)

11. How would you rate the effectiveness of the policy(ies) in line with ILO standards?

- a. Highly effective
- b. Moderately effective
- c. Effectively low
- d. Not effective

12. If No in question number 9 above, why do you think it is so?

13. Do you see any step to correct the lapses in question number 9 above?

- a. yes b. No

14. If yes in question number 9, explain the concrete steps.

15. What is your assessment of the management towards health and safety of workers in your Organisation?

- a. Management has shown positive attitude by forcing employees to check their health status at the clinic regularly
- b. Management ensures workers operate in safe work environment
- c. Management is indifferent to the health and safety of employees
- d. Victims of occupational accidents/hazards are treated properly by the management.

SECTION C

ASSESSMENT OF MECHANISMS PUT IN PLACE FOR GOOD SAFETY AND HEALTH STANDARDS

16. Does your company have any mechanism in place to guarantee employees safety and good health?

a. Yes

b. No

17. If yes in number 16 above, can you identify the mechanisms put in place in your Organisation to ensure health and safety standards?

- a. Establishment of company's clinic
- b. Availability of safety equipments in the factory
- c. Regular check of health status of workers
- d. Others (specify).

18. I want you to evaluate the effectiveness of the mechanism(s) put in place for occupational safety and health in your workplace

- a. Highly effective
- b. Moderately effective
- c. Effectively low
- d. Not effective.

19. Suppose your answer is d (Not effective) in question 16 above, why do you think it is so?

20. Can you suggest the way(s) to make it effective?

SECTION D

RELATIONSHIP BETWEEN WORK ENVIRONMENT/EQUIPMENT AND EMPLOYEE'S HEALTH AND SAFETY

21. Which one of these explains your work environment?

- a. It is good enough for workers' safety and health
- b. It is not up to the required standard to enhance safety and health
- c. It is not conducive at all for human habitation and safety
- d. Others (specify)

22. Do you work with appropriate equipment?

- a. Yes
- b. No

23. If No in question 22 above, is there any way your work equipment has posed hazards to you?

- a. Yes
- b. No

24. If Yes in 22 above, please specify?

25. Identify the measures put in place to facilitates good work environment

- a. Well-furnished offices
- b. Provision of modern safety equipment in the premises.
- c. Creation of health and safety department to ensure effective implementation of health and safety policy
- d. Others (specify)

SECTION E

PENALTIES BY GOVERNMENT AGENCIES FOR NON-COMPLIANCE WITH LAID DOWN RULES AND REGULATIONS ON HEALTH AND SAFETY POLICIES BY THE GOVERNMENT

26. Are there rules and regulations by the government followed by your Organisation on health and safety of workers?

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a. Yes

b. No

27. How would you explain the response of the management of your Organisation to those rules and regulations on health and safety?

- a. Full compliance with the rules and regulations on health and safety.
- b. Regular monitoring of workplace to ensure tidy environment and safety at all times.
- c. Regular environmental regulations of factory premises
- d. D. others (specify)

28. Has your company been caught by government agencies for violating safety and health rules in the work place?

a. Yes

b. No

29. If yes in number 26 above, why?

30. If yes in number 26 above, what kind of penalty(ies) that was (were) awarded?

31. If No in 26 above, what do you suggest as the best punishment for Organisation that flouts laws on safety and health of workers?

Thank you

