IMPLEMENTATION OF HEALTH AND SAFETY MANAGEMENT STRATEGY AT TANZANIA CIGARATTE COMPANY
IMPLEMENTATION OF HEALTH AND SAFETY MANAGEMENT STRATEGY AT TANZANIA CIGARETTE COMPANY

By

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A Thesis Submitted to SOPAM in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Science in Human Resources Management (MSc HRM) of Mzumbe University

2016
CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled: *Implementation of health and safety management strategy at TCC* as partial fulfillment of requirements for the award of the Degree of Master of Science in Human Resources Management of Mzumbe University.

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DECLARATION

I, Gideon D. Massao declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other Degree award.

Signature ______________________

Date __________________________

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DEDICATION

I dedicate this research work to my Dear wife Joyce Julius Massao and my Dear Dougher Gianna Gideon Massao for their love, care and comfort which enabled me to highly concentrate on my studies and reach this stage which I am today.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>EHS</td>
<td>Environmental Health and Safety</td>
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<tr>
<td>EB</td>
<td>Encyclopedia Britannica</td>
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<td>ELRA</td>
<td>Employment and Labor Relations Act.</td>
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<td>IFAP</td>
<td>Industrial Foundation for Accident Prevention</td>
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<td>ILO</td>
<td>International Labor Organisation.</td>
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<tr>
<td>MSc HRM</td>
<td>Master of Science in Human Resource Management.</td>
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<td>MU</td>
<td>Mzumbe University.</td>
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<td>NSC</td>
<td>National Safety Council</td>
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<td>OHS</td>
<td>Occupational Health and Safety</td>
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<tr>
<td>PPE</td>
<td>Personal Protective Equipment</td>
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<td>SoPAM</td>
<td>School of Public Administration and Management.</td>
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<td>SOSHA</td>
<td>South Africa Occupational Health and safety Act.</td>
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<tr>
<td>TCC</td>
<td>Tanzania Cigarette Company.</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>WHO</td>
<td>World Health Organisation</td>
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ABSTRACT

The study explored the extent to which the TCC strategy for managing health and safety has been successful in reducing accidents in Tanzania Cigarette Company. In achieving the same, the study was guided by three objectives which were; to find out whether the availability of PPE are adequate at Tanzania Cigarette Company, to determine the extent to which the provision of Personal Protective Equipment have managed to reduce accidents at TCC and to identify the challenges facing the provision and uses of Personal Protective Equipment in TCC.

The study employed a case study design. The respondents of the study were choosen purposively and randomly. Data were collected from both primary and secondary sources. The data collection methods used to collect primary data were; questionnaire, interviews and observation. The secondary data were collected through documentary review. The quantitative data were analysed by using SPSS while qualitative data were analysed using thematic analysis.

The study found that personal protective equipment are adequately provided at TCC. Although the wearing of PPEs is determined by age, gender, occupation and work experience. More to that, it was found that to a large extents, the provision and use of PPEs have managed to reduce accident from year 2011 to 2015. Although some challenges were also detected such as low quality PPEs provided by the company, scarcity of equipment and bureaucracy in the provision of personal protective equipment to workers.

The study recommended that there should be effective inspection to the TCC. This should be done by the government via its agency (OSHA). Secondly there should be adequate PPE. Thirdly, employees who do not wear PPE for their own ignorance should be penalised. Fourthly, the company not adhering to safety regulations should be penalised. Fifthly, training to the employees should continue to be provided.
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CHAPTER ONE

INTRODUCTION AND PROBLEM SETTING

1.0 Introduction

This chapter covers background of the problem, statement of the problem, objectives of the study (general and specific objectives), research questions and significance of the study, delimitation of the study and limitation of the study.

1.1 Background of the Study

Employers have major duty to provide safe working conditions for their employees and they are liable at a common law for any accidents caused in the cause of an employment (Cole, 2005). Recently, accidents and diseases that occur in occupational places has been found that they have bigger impact on the reputation, productivity and competitiveness of personal enterprisses (Phoya, 2012). On the other hand, these accidents have impact on the individuals’ livelihoods and also on the family. Additionally, these accidents as well as health problems caused by these accidents cause these adults to depend totally on others. The impact of it nationally is that the economic burden will be carried by only a few people in the society as a result the economy of the country will deteriorate (ILO, 2014).

The origin and development of occupational safety and health management can be traced back to the period of industrial revolution in late 18th to 19th century (Thompson, 1991). This period was marked by innovations like cotton spinning and textiles, steam engines, iron founding etc. Although the industrial revolution contributed to economic development, it had negative repercussions on the safety and health of employees working in those industries and factories (Thompson, 1991). Men and women in industries were overworked and exposed to horrible situations. As a result most of the workers died while others become crippled. This period saw the emergence of workers movements which were well organised in trade unionism.
Trade unionists, among other factors, advocated for enhancement of workers health as well as conditions at work places (EB, 1974). The working class struggle necessitated the government to enact safety laws that would bring up a healthy and safety working environment for workers. Different acts were enacted For example, Factories act of 1961, office, shops and railway premises act of 1963, Health and safety at work Act of 1974 were introduced (Cole, 2005).

According to the statistics by HAS (2006) it is anticipated that about 2.3 million workers are dying each year as a result of accidents and related diseases from working areas. On the other had there millions suffering from non-fatal illnesses and injuries. These figures tie with the UN reports of 1997 on health and safety in workplaces. In their studies which were conducted by WHO and ILO, spoke very bitterly on the suffering of workers due to health and safety hazards at work. The report pointed out that at least 200,000 workers are killed in workplaces while more that 120 million are injured (WHO, 1997). These figures seem to exceed the injuries and losses that occur in the battlefield.

These injuries not only affects the society, they also result in the economic burden in different enterprises, communities as well as countries. On the other hand, a lot of problems especially financial and human of families and workers themselves arise. More money is spent in hospitals in the treatments of these accidents; the amount of money spent in hospitals could have been used in doing other economic and social activities such as sending children to schools. So in a nutshell the injuries and their related diseases affect a lot the progress of both the individual but also the nation (Cole, 2005).

In Africa, many countries have ratified and enacted a number of conventions and law regarding healthy and safety conditions in occupational areas. Despite these efforts there is higher rate of fatal accidents in African countries (cf. ILO and WHO, 1997). The report found situation in Europe much more different if compared to its counterpart Africa. This is primarily due to the fact that European nations are more
advanced in the sense that to them issues of safety and health are practiced using better programmes.

Also, to them first aid provided is more improved than African first aid, the facilities on medics are more improved as well as vigorous workers’ participation in the decision-making processes on safety and health affairs (WHO and ILO, 1997).

In Tanzania context the situation is not different from the other African countries. For instance, the National Audit report of 2015 has showed that the highest fatality rate of 23.7% in on building and construction industry. This is followed by 20.6% in transport industry and 20.5% in mining/quarrying industry. The transport industry also is causing a lot of accidents which cause deaths as well, the buses and motorcycles accidents are killing a large number of people. Sometimes the number of people getting accidents in these sectors could be larger than the published ones simply because most of that information is neither valid nor reliable in Tanzania. No proper coordination of information received from various places regarding the accidents that occur (NAO, 2013; ILO, 2015).

For many years, the provision of occupational health and safety standards in Tanzania was through the factories Ordinance Cap. 297of 1950 and all the moment in time the prominence on occupational health and safety was centered on factories only. These measures were adopted in order to reduce accidents, injuries and death in working places. However, there were no policy and appropriate programme to enhance promotion of occupational health and safety at other workplaces (URT, 2003). Even the introduction of privatization policy in 1990s witnessed the privatization of the most factories. But the management which took over did not consider occupational health and safety matters as important as other production goals, particularly financing of accident prevention. Indeed, the privatization process introduced new and diverse technologies which added more challenges in the field of occupational health and safety while standards remained the same.
On the view of this shortcoming, the government of Tanzania in the course of Public Service Reform Programme (PSRP) initiated Occupational Safety and Health Authority (OSHA) under the Executive Agency Act No. 30 of 1997. OSHA was officially launched on the 31st August, 2001. The aim of the Agency is to improve the health and safety of employees in work places by enforcement and promotion of occupational health and safety practices. The Tanzania OSHA Act of 2003 maintains that in any factory or work place in connections with any process carried the employer must keep into consideration more practical measures are to be adopted to shield employee or workers. One of the measures to protect workers is through providing protective equipment. The statute states that the protective equipment must be provided, maintained and kept readily available for use to affect a rescue or operations safe.

The above measure keeps into consideration that the assessment on risk, control and communication is the cornerstone of health and safety legislation in many countries (ILO, 2005).

All these measures were deliberately designed for the purpose of protecting personal health and safety of the workers and was made possible in order to compel with ILO Convention no 155 of year 1981, which demands every employer to provide suitable personal protective equipment to his or her employees who may be exposed to a risk to their health or safety while at work except where and to the extent that such risk has been adequately controlled by other means which are equally or more effective.

In response, the TCC is responsible to the Director of manufacturing for all matters regarding health, safety as well as the welfare of workers and those who are affected by the operations of the company. It is the responsibility of the manager concerned with health, safety and environmental issues as well as the employees that all these strategies are implemented. Some of the accomplishments include; first, making sure that implications and duties are understood by putting in place new Parliamentary Acts, health, safety and environmental guidance notes, statutory instruments as well as the codes of practice are properly supervised by the Director for manufacturing.
Second, to convey company linked environment, health and safety issues to the awareness of the environmental management committee through the committee meetings and normal business communication tools.

Third, to guarantee sufficient means of distributing and communicating health, safety and environmental information attained from OSHA, NEMC, Corporate EHS etc. concerning new techniques of preventing accidents, new legislation requirements as well as codes of practice etc.

Fourth, to make sure that an adequate programme of training for environment, health and safety is customary and that the environmental protection and safety culture is optimistic amongst workers. Lastly, to provide the Personal Protective Equipments to the workers. Looking at the aspects highlighted in the strategy are very promising and if are to be implemented well accidents will be minimized. In this sense, the researcher thought it is critical to conduct a study examining the extent to which the implementation of health and safety strategy has succeeded in reducing accidents in TCC. Basically by looking at the aspect of Personal Protective Equipments

1.2 Statement of the Problem

Many workers in construction/building and tobacco industries are very much at risk to health and safety problems like lung problems and tuberculosis (URT, 2004). In response to this appalling situation, TCC in 2010 came up with the strategy to guarantee health and safety of workers in working areas. This strategy aimed at managing risks and making most of the environmental and health safety opportunities such as waste minimisation and energy efficiency (TCC, 2010). In this regard, study was conducted to explore the extent to which the TCC strategy for managing health and safety has been successful in reducing accidents.
1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study was to explore the extent to which the TCC strategy for managing health and safety has been successful in reducing accidents in Tanzania Cigarette Company.

1.3.2 Specific Objectives

i. To find out whether the availability of PPE was adequate at Tanzania Cigarette Company.

ii. To determine the extent to which the provision of Personal Protective Equipment have managed to reduce accidents at TCC.

iii. To identify the challenges facing the provision and uses of Personal Protective Equipment in TCC.

1.4 Research Questions

i. To what extent are the Personal Protective Equipment available in TCC?

ii. To what extent have the Personal Protective Equipment managed to reduce accidents at TCC?

iii. What are the challenges facing the provision and uses of Personal Protective Equipment in TCC?

1.5 Significance of the Study

The study expected to benefit the academicians, practitioners and policy makers as it was intended to explore the extent to which the TCC strategy for managing health and safety has been successful in reducing accidents in Tanzania Cigarette Company in Tanzania. Academicians may use the findings of the study for reference and further research; policy makers may use the findings to change existing policies on industrial management and administration. Practitioners may use the result of this study to change the way they are behaving in doing their job.
1.6 Limitations and Delimitations of the Study

1.6.1 Limitation

The study encountered several limitations including budget constraints, scarcity of data from office, poor responses. The researcher overcame the limitation first by conducting the data only to the headquarter of TCC. Secondly, by making sure that questionnaires are filled by respondents and that the interviews are properly conducted. Lastly, by assuring employees and employers that the data which was being collected was confidential and for research purposes only.

1.6.2 Delimitation

This study was on the implementation of health and safety management strategy in basically by looking at the extent to which the strategy imposed by TCC has been successful in reducing accidents. This research confined itself to only three aspects. Those aspects include the availability of personal protective equipment, the extent to which Personal Protective Equipment have managed to reduce accidents to employees and the challenges facing the provision and uses of Personal Protective Equipment.

1.7 Definition of Terms

1.7.1 Health

According to the medical dictionary by Dorland (1988), health is defined as the situation of optimal physical, mental and social welfare. According to this definition, health is not simply the nonexistence of disease as well as frailty. According to ILO (1990) health is defined as a state of absolute physical, mental and social well-being and not only the absence of disease or illness.

1.7.2 Job safety

According to the occupational health and safety encyclopaedia (1998), job safety refers to the relationship between people and job, tools, materials, machines, environment as well as economic considerations such as output.
1.7.3 Workplace

According to OHSAS (2007) work places refers to the physical location in which different activities are performed under the control of the business.

1.7.4 Occupation

Occupation is the main job or career someone is involved in for the aim of getting his/her daily living. (OALD, 1995).

1.7.5 Occupational safety and health

According to WHO (1995) occupational safety and health refers to the multidisciplinary activity with the aim of protecting as well as promoting health of employees by getting rid of occupational factors and conditions dangerous to health and safety at work places. Also, it aims at enhancing of physical, mental and social well-being of employees and prop up for the progress and maintenance of their working capability, as well as professional and social advance at work (WHO, 1995).

1.7.6 Accident

According to WHO (1989) the definitions of both accidents and injury are always given in the agreement with those by the world conference on accident and injury prevention. On that regard, Anderson (1999) defined accident as involuntary event which results or could bring about the occurrence of an injury, while the collective term for health outcomes from traumatic events is referred to as the injury. Accidents is also a sudden, unforeseen and unintentional “event, which may result in physical harm to a person and/or damage to a property (Rejda, 1992).

1.7.7 Safety

According to the Oxford Dictionary (2008), safety is the state of being secure/harmless; being free from the episode of risk or injury, danger or loss. Business dictionary defines safety as a virtual autonomy from danger, risk, or threat of harm,
injury, or loss of workforce and/or possessions, whether caused consciously or by accident.

1.7.8 Employee

KGSA (2007) defines an employee as a person who works under a indenture of employment. Another definition attempts to describe an employee as an individual who has entered into a contract of employment or has entered into any other indenture beneath which the individual undertakes to work individually for the other party to the indenture (ELRA, 2004).

1.7.9 Work place

Work place is any premises or place where a person performs work in the course of his/her employment (OSHA Act 2003).

1.7.10 Compliance License

Is an Occupational Safety and Health Compliance license issued under Section 17 (3) of the Tanzanian occupational Health and Safety Act 2003 (URT, 2007).

1.7.11 Exposure

Refers to the quantity of a workplace agent that has reached an individual worker (external dose) or has been absorbed into the individual worker (GKGS 2007).

1.7.12 Organisation of the Dissertation.

This Dissertation consists of six chapters. Chapter one is about introduces important aspects of the study such background, Statement of the problem, objectives of the study, research questions, significance of the study, limitation, delimitation, conceptual framework as well as definitions of the key terms. Chapter presents literature review which consist theoretical framework, literature review from earlier studies and the Synthesis. Chapter three talks about research methodology, research design, research area, population of the study, sample and sampling procedures, sample size and data collection methods.
Chapter four gives the presentation of the findings of the study. The findings as presented and analysed in this chapter are grouped in to two groups. Chapter five discusses the findings presented in chapter four. In so doing it explains why the findings appear the way they are. Chapter six gives the summary form before coming to the conclusion, and recommendations and it also calls for further study, lastly, there are bibliography and appendices.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter consists of three sections; theoretical literature review, empirical literature review and synthesis.

2.1 Theoretical Literature review

Theories of occupational health and safety are discussed in this section; these theories are; Domino theory and Human Factor theory.

2.2 Domino theory

The theory was developed in the late 1920s by Heinrich after a review of 75000 industrial accident reports. Heinrich posited that 88 percent of industrial accidents are caused by unsafe acts committed by fellow workers while 10% are caused by unsafe conditions and the third factor as the 2 percent of industrial accidents which are unavoidable accidents. Generally, Heinrich in his theory advocates that to every accident with an exception of unavoidable accidents, there must be a connective/causative factor (NSC, 2008). According to this theory the working conditions becomes unsafe when it happens that there is no provision of the equipment to protect workers from accidents.

According to Domino theory some accidents are prompted by unsafe acts committed by others. Such acts include failure of the management to train, to provide and to emphasise on the use of PPE leads to accidents and injuries in working places which could be avoided if the equipment had been in place. To a great extent, Domino theory brings a true philosophy that lives even today.

Although there are many theories which have tried to account for the accident causation such as human factor theory and combination theory Domino theory has been chosen in favor of the following advantages:
First, the theory provides the researcher with a plausible explanation on what are the causal of accidents in the working places. As such the theory gives a comprehensive explanation on the justification and the causes of the accidents. Second, the theory has been applied in many research works such as Sabet et al. (2013), Jamshidi et al. (2012) and Manu et al. (2010) where it has yielded good results.

Also, the theory has managed to account for a number of various factors that can lead to the accidents. Such factors ranged from the personal level to the management level.

### 2.3 Importance of Health and Safety of Employees at Workplace

With regard to the significance of healthy and safety of employee Torrington (1987) states that the employees whose health, safety and welfare need are well protected by the employer they are very productive and loyal. Thus, in that way very fewer fewer industrial chaos may occur.

Also, in the same line Bratton (1999) argues that a good healthy and safe environment can improve productivity by reducing time loss due to the work related accidents. In addition to that, it precludes the work costs which are related to accidents and illness. Moreover, Bratton adds that it helps facilitate employees to achieve quality and improve industrial relation.

Arguing on the same idea, Beer (1984) comments that a good attention to health and safety can have strong positive effects on employee commitment. Beer’s concern is that when employees work in a healthy and safe environment they are highly motivated and as a resulted in high performance and loyalty.

On his hand, Collard (1989) said that, it is important for a company to have a strong safety and health work environment. Because a good working settings will enable an employee work comfortably and enhance the company realizes its objective as well personal objectives. Collard went further mentioning importance of health and safety as; it enables to facilitates positive effect on employee’s commitment, it improve industrial relations, it improve productivity and quality also it facilitates higher levels of motivation, performance and loyalty.
On the other hand, Schuler *et al.* (1986) concur with the idea that safety has an advantage to any organisation. Schuler *et al.* in defending this argument come up with following points as their argument. One, it helps in the reduction of medical and insurance cost. Second, it enables more productivity by cutting a few lost work days and this increases more effectiveness and efficiency to the workers because they will be more involved in their jobs. Thirdly, it increases the feelings of ownership as well as participation due to a greater flexibility and adaptability of the work team. Fourth, it reduces accidents, occupational diseases as well as death. Finally, it reduces workers compensation rates as well as directs payments because of fewer claims.

2.4 Equipment for Health and Safety of Employee

Employees have rights to know, to refuse, to demand good working environment, to reject to work under dangerous situation as well as a right to demand personal protective equipment. On the other hand, the employer has a duty to ensure that employees are well protected from any unhealthy and unsafe condition at their place of work. In order to avoid unhealthy and unsafe working environment there is a necessity for the provision of the protective equipment such as safety shoes, safety training, face and head protector, working gloves, overall, mouth protector signs and smoking ban, fire extinguisher, safety shoes, ears protector and first aid to mention just a few of them (ILO 2015).

Also, according to ILO (2015) the employees ought to be protected from unsafe and unhealthy condition at their place of work in order to prevent them from any harm. These safety gears are head protection, safety eyewear, safety mask, safety vest, as well as working glove and clothes.

In that respect, Armstrong (1990) explains various factors that can cause accident at the workplace. According to Armstrong such factors may include occupational hazards arise from toxic substances, noise from machines, stress imposed upon body and mind at the job, lack of PPE, inadequate light, unsafe designed machines, sharp objects, wires, conveyor belts and piping, cracked containers, slippery condition, using PPE
unsafely either deliberately of due to fatigue, operating without enough clearance, operating machines in unsafe speed and improper placing of materials.

2.5 Impacts of Poor Occupational Safety and Health at the Place of Work

Sherman (1984) states that carelessness of employers in dealing with issues relating to workers welfare can affect the environment which workers are working and as a consequence this can lead to occupational hazards and harmful effects to the workers, their families and the organisation at large. This can also resulted in the loose of employee’s commitment and decrease performance, fall of production, the increasing of unnecessary cost to the company and then decreasing of profit. In addition to that Gupta (1990) argues that poor occupational safety and health can cause boredom to workers something which may result in more accidents, injuries, death, absenteeism and labor turnover, poor relation between employee and employer as well as increasing of organisational cost therefore the decrease of profit margin.

According to Torrington (1987) accidents related to work and illness can cost and may have indirect or direct impact on the workers lives and the company. For the employees, direct impact of injury or sickness include loss of income, sufferings and pain of the sickness or injury, loss of a job, medication cost, repair replacement of damaged machinery of equipment and reduction or temporarily discontinue in production. These impact are also to the employer as the injured or sick employee has to be replaced, a new employee need to be trained and be given enough time to cope, it needs time to the new employee to produce to the standard of the original worker and it can lead to poor labour labour relation.

2.6 Necessary conditions to maintain and ensure health and safety at workplace

In addressing the problem of poor health and safety in working places Armstrong (1984) proposed necessary conditions. In his work Armstrong indicated different issues that are supposed to be done in order to maintain and ensure safe and health workplace. Those issues include involvement of workers, make a commitment, identify and control threats, comply with health and safety regulations, train and retrain
employees, cultivate and support a culture of safety and improve system frequently. These factors are explained below;

**Make a commitment;** Employers should commit themselves to health and safety as they put into other parts of business. They have to make sure that they include the issue of health and safety in the business plan and make sure that they intergrate it with the business strategy. They have to prepare a policy which will emphasise the importance of health and safety in the working place. There must be a commitment of resource (such as time, money and personnel) to make sure that employees are protected against any hazard.

**Involve employees;** In order to have a health and safe working place, employees are the main stakeholders in making sure that issues of health and safety programmes are successfully. Employers should strongly encourage workers to participate in health and safety programmes. Employers should play their parts to make sure that every one in the organisation does their part effectively. There must be a person to conduct daily safety inspections and provide report to the high authority. Employees should be given reports about the inspection such injury and illness statistics and other issues related to safety and health.

**Identify and control hazards;** Hazards should be identified and then to be controlled. There must be a review on the records of accidents, illness and trace back on the factors which led to injuries, or illness. There must be a review on the report from inspectors to see why there was injuries or illness to employees.

Then the company needs to prepare a checklist to locate all dangerous conditions and take some measures to make sure that the condition is controlled.

**Comply with regulation;** Industrial owners should identify the occupational health and safety authority regulations that are applied in their place of work and conform with them. There must be safety classes to impart workers with the required skills concerning with safety and health. Safety programmes should be developed and been implemented by employers as well as employees in the working places.
**Training employees:** Human resources should be trained concerning the hazards that they may be exposed in their working places and how to deal with them in order to avoid occupational accidents. New employees and employees starting new jobs should be given training on the company regulations as well as all the procedures concerning emergency. Employees should be given specific training on the hazards depending on their jobs and how to work safely. OSHA insists on training to be conducted as required by the standards, when jobs change as well as when employee return from long absence.

**Support a culture of safety:** Employers ought to establish a two way communication and respond to the concerns and needs of workers accordingly. Management need to make sure that they establish by laws to make sure that they deal with the issue of health and safety effectively and control hazards. Workers should be encouraged to make sure that they go beyond their work to ensure a healthy working environment and minimise occupational injuries as well as illness.

**Constantly improve your system:** There must be a review on the health and safety programmes strength and weaknesses. This should be done precisely with the reflection of how employers need to manage health and safety of workers. There must be a review on annually and as needed, investigate accidents, injuries and illnesses. Employers must select a person to conduct inspections as required by company and Occupational Safety and Health Authority (OSHA).

**2.7 Factors affecting the occupational health and safety behaviours of workers**

Parker (2007); Seixas (2008) and Carpenter (2002) suggested different factors that affect occupational health and safety. These factors include personal factor, demands of the job, influence of the supervisor and working environment as well as the influence of the co-workers and management. These factors are elaborated below as follows:
2.7.1 Personal factors

According to WHO (2009) Personal factors are issues that are related to a particular person. Usually they involve character and appearance. These issues influence behaviours at work in and hence can affect health and safety.

Parker (2007), Seixas (2008) and Carpenter (2002) pointed out various sub factors which are within personal factors. According to them these factors can directly or indirectly affect safety behaviours of workers. These factors include demographic factors, work related stress, knowledge and awareness and work attitude. Before proceeding with this work for the sake of clarity the explanation of these personal factors is given below:

**Demographic factors:**

Demographic factors consider issues like the age of workers, level of education, type of employment, and gender are some of the commonly concerned demographic factors. These factors are very decisive in maintaining occupational health and safety in any organisation (Parker, 2007; Seixas, 2008 & Carpenter, 2002). In addition, Fleming and Lardner (1999) add knowledge and awareness as another factors that affect occupational health and safety. Arguing on this points Fleming and Lardner put clearly that large number of workers lack enough awareness on the proper use of PPE and hence this leads to accidents and injuries. Also, they revealed that, 80 – 90 % of all industrial accidents are contributed by personal factors and the main reason established was incorrect procedures in conducting jobs.

In a research conducted by Muzaffar (2013) it was revealed that the incident of an occupational injury can bring about by fatality and it is associated with factors related to socio demographics (age, sex and occupation), the workplace setting and type of employment. Thus, he came up with a point which calls for the creation of workers protection policies for groups of employees with a higher risk of fatal occupational injuries by reducing the amount of risk to them. Further, findings by Muzaffar (2013) showed that in work places female if compared to men were more in danger.
Not only that but also the study by Merry (2015) came up with other findings which portrays 61.7% of the economically active population (EAP) is men, 13.3% of whom work in the primary sector, 24.4% in the secondary and 60.8% in the tertiary sector. On top of that, only 35.6% have an access to personal protective equipment’ and 28.6% work in the unofficial sector. With respect to fatal injuries, the secretary of labour and social welfare reported that, 1,152 men die due to occupational accidents representing a rate of 0.74 per 10,000 workers at the national level for the year 2012.

**Knowledge and Awareness:** Knowledge is the fact or condition of knowing something with familiarity gained through experience or association. Awareness is the ability to directly know and perceive, to feel, or to be conscious of events, objects, thoughts, emotions, or sensory patterns. HANS (1938). Employees need to have sufficient knowledge on health and safety matters. This can enable them to work under a safe and healthy condition and reduce accidents to greater extent. The claim of this argument are supported by the findings of the research by Tadesse and Israel (2016) who argue that working places lack proper safety awareness programmes, sufficient personal protective equipment and poor working conditions. All these could influence employees’ injuries during their longer stays. Also, Fleming and Lardner (1999) argue that the personal factors contribute to 80 – 90% of all industrial accidents. The main reason found was incorrect procedures in conducting jobs. This is due to lack of proper knowledge and awareness of that job. According to the studies conducted by Parker (2007), Seixas (2008) and Carpenter (2002) it was found that demographic characteristics of respondents such as age of workers, education level, type of employment and gender have some correlation with the extent to which the accidents occur. Further, findings by Parkers (2007) showed that the respondents who were in the age of the youth were more in the danger of getting accidents if compare to those who had older ages because the youth employees are new to work and they have not experienced many accidents as compared to older ones. Unlike Seixas (2008) who found that lower education level such as primary or informal education was positively correlated to the occurrence of accidents in work places. The higher education level led to less number of accidents when compared to the lower education level. The work by
Carpenter (2002) showed that the accidents depended with the type of work which is being performed.

**Stress related to work**: stress is how your body's way of responding to any kind of reaction. It can be produced by both good and bad practices. Hans (1938). Stress is an unavoidable phenomenon because in everyday life human beings encounter not only a lot of challenges but also problems. Stress in the workstation can have many origins or come from one single event. Stress can effect both employees and employers. Thus, it is very important to control stress while at work in order to avoid occupational related accidents. The major causative agent of stress which are related to work places include a fear of job termination, downsizings, work roles, career concerns, management style, interpersonal relationships and working conditions (Koh *et al.*, 2005). In addition to that point, WHO (2007) argues that the most stressful type of work is the one which values too much demands and pressures that are not matched to workers’ knowledge and abilities, where there is little opportunity to exercise any choice or control and where there is little support from others. Therefore, peer support and trainings are crucial in ensuring that workers are well equipped with enough skills to perform their task.

**Worker’s Attitude**: It is crucial for an employee to take his/her work in a positive way in order to do it comfortably something which can help to avoid accidents. Accidents are caused by human element and human error depending employees attitude toward that work while doing it. The two factors can be eliminated by changing workers’ attitude and behaviours while doing job. Along the line of the similar argument, Atherley (2002) added other personal factors such as pay and working condition.

In a study made by Tadesse and Israel (2016) found that 60% less of employees who use personal protective equipment have a chance of injuries compared to those who did not use. In developing countries where conventional occupational safety control measures remain a challenge to implement, the use of PPE is one of the important measures to safeguard workers from exposure to occupational hazards and
accidents. Also, another important finding of this study was that the chances of injuries among employees who served for less or equal to 2 years were 60% less compared to those who served for more than 2 years. The possible explanation for this may be that those employees who served for greater than 2 years could be accustomed to the work environment and developed false consciousness of safety which drive them not to comply with safety precautions including proper use of PPE.

However, Armstrong (1990) proposed that the immediate direct and personal factors causing accidents include using of unsafe equipment as well as deliberately or through fatigue, unsafe loading and placing of materials or parts on machines or transport system, operating without sufficient clearance, operating an unsafe speed and failure to use protective equipment. All these factors may result from personal failures such as carelessness, recklessness, laziness, impatience, inadequate knowledge, training, skills or supervision.

Similarly, WHO Report (1994) spoke of personal factors which affect compliance in occupational health and safety as negligence of required safety procedures, poor knowledge and skills. Socio-economic factors include culture, societal values, social support, poverty and ignorance. Furthermore, structural and political factors such as policies, education system, governance, politics and law enforcement also affect compliance with occupational health and safety requirements.

2.7.2 Influence of the co-workers and top Management

It is argued that employers are accountable for planning and designing a healthy and safe work, workplace, work environment and work organisations, as well as for maintaining and constantly improving employees health and safety (WHO, 1994). This applies to all working places, and hence it is the obligation of every one to ensure compliance with occupational health and safety requirements at workplaces.

It should be known that the implementation of occupational health and safety in operational places is not for compliance purposes only. Provision of health & safety policies and programmes such as the arrangements of workers welfare, clear and
agreeable compensation plans, good working tools, favorable working environment and use of safety gear, have a very positive contribution towards workers safety and health behaviour. These result in the increase in productivity, marketing and sales for the company and hence the increase of profit. Co workers have to remind each other on the significance of wearing of safety gears in order to protect themselves from occupational hazards. The Long-term objective of management team is to establish policies and strategies which are to be adhered by all workers in the organisation in order to avoid accidents. Indicators show that lack of health and safety policies and programmes not only will affect the company dividend but the worker, family and the community at large (Mwombeki, 2005).

Watson (2005) argued that, co-workers’ safety norms have a large influence on the at-risk behaviour of an human being. Shannon et al. (2001) observed that the perception of fellow workers on health and safety affects an individual’s altitude of compliance towards safety and health.

Top management should be personally participate in health and safety activities and giving safety and health matters the first priority in meetings and production scheduling in order to reduce accidents. Giving the company safety officer high priorities and status as well as including safety training to new employees will influence the change of safety and health norms. Safety is an integral part of the system, woven into each management competency and a part of every one’s daily activities. Also, top management should institutionalize managements’ commitment with a safety policy and publicize it and the number of accidents and safety incidents and then set specific achievable safety goals on how to over come the challenge of health and safety in the working place (Dessler, 2008).

Management’s commitment to safety and health matter is an important feature in influencing the workers’ mind-set to follow safety practices for the organisations’, family, dependent relative and nation benefit at large. A study in 42 United States industries shows that workers who perceived their management having a higher commitment to safety had low accident rates (Smith et al. 1978; Yule et al.
Rundmo (1994) as cited by Yule et al. (2007) observed that two significant determinants of workers satisfaction with safety matters as Management commitment to safety of workers, and organisational support shown by the management to the worker.

### 2.7.3 Influence of the Supervisors and Working environment

Supervisor as the immediate hierarchical position for the worker, play a fundamental role in companies’ health and safety practices. Majority of safety procedures, monitoring means which come from the higher management are taken and implemented by supervisors who are closely working with the shop flow workers daily (Cheyne et al., 2002).

The fact that health at work and healthy work environments are among the most valuable assets of any company/organisation is undeniable. Occupational health is an important strategy not only to ensure the health of workers but also contributes positively to productivity, quality of products, work motivation and job satisfaction. In that point of view it is a task of supervisors to make sure that fellow workers are well informed about health and safety matters in order to avoid workers safety behaviour, norms and occupational accidents and injuries at the place of work (WHO, 1995).

Work environment may have a hazardous impact on workers’ health and safety. One-third of adult life is spent at work therefore it is a task of employer to make sure that employees are safe, because dangerous exposures and loads are often several times greater in the workplace than in any other environment with adverse consequences on health. Workers should therefore be empowered to improve working conditions by their own actions, to be provided with information and education in order to improve occupational health and safety compliance (WHO, 1994).

### 2.7.4 Demands of the Job

Certain jobs require long hours due to the shortage of labour and purposeful reducing the number of workers (layoffs) in company. Beginning of fatigue is the consequence of working for long hours without break. As a results this directly affects the safety
behaviour of an employee. There are a number of studies which indicates that health problems occur to workers who works over 63 work hours in a week. This means that if a worker works for more than nine hours daily in week this affects occupational safety and health. Furthermore, Armstrong (1990) argued that it is a system of work to which human beings are exposed can be accounted as a cause of accidental, carelessness, fatigue, lack of knowledge, experience, inadequate training or poor supervision. In different extents can be said to be the immediate factors that affect occupational safety and health.

However, Spurgeon et al. (1997) argued that, many problems associated with stress such as gastrointestinal disorders, and musculoskeletal disorders, can also be connected with long working hours without time to rest.

It is estimated that in both industrialised and developing countries 50-60% of all lost workdays were due to stress and that the related economic cost for 2002 amounted to 20 billion Euros. Changes in work design, organisation, management and the introduction of new technologies or new forms of employment contracts can all result in increased stress levels. In addition, the ramifications of HIV/AIDS, alcohol, drugs and tobacco can initiate or exacerbate a damaging cycle for the individual and the organisation. The conditions generating the most stress include precarious work such as (working in construction industries, agriculture, mining industries and chemical industries), work intensification, violence and harassment.

Together, such factors can all lead to a serious deterioration of mental and physical health and affect both work performance and personal life as well as productivity. High workloads and inflexible working hours also make it more difficult to achieve a decent balance between work and personal life, which can be particularly difficult for women who often have to face domestic duties as well. Taken together these problems represent a major cause of ill health, accidents and absenteeism from work (ILO Report, 2008).

Also, in a report presented by WHO (1994) in Beijing China states that in unfavorable cases the levels and intensities of hazardous exposures may be 10 or even 1000 times
greater at work than elsewhere. Workers in the highest risk industries such as mining, forestry, construction and agriculture are often at an unreasonably high risk and one-fifth to one-third may suffer occupational injury or disease annually, leading in extreme cases to high prevalence of work disability and even to premature death. Less dramatic but well-defined occupational health

2.8 Developed countries vs Developing countries Reflection on Occupational Health and Safety

It is reported by ILO that the human, social and economic costs of occupational accidents, injuries and diseases and major industrial disasters have long been cause for concern at all levels from the individual workplace to the national and international (ILO, 2003b). A number of measures and strategies have so far been designed in order to prevent, control, reduce or eliminate occupational hazards and risks have been developed and applied continuously over the years to keep pace with technological and economic changes. Yet, despite continuous if slow improvements, occupational accidents and diseases are still too frequent and their cost in terms of human suffering and economic burden continues to be significant in developed countries (ILO, 2003).

On the one hand, the incidence of workplace fatalities varies enormously between countries. There appears to be a significant difference between developed and developing countries. According to the World Bank report (1995) a factory worker in Pakistan is eight times more likely to be killed at work than a factory worker in France. Whereas fatalities among transport workers in Kenya are ten times those in Denmark and Construction workers in Guatemala are six times more likely to die at work than their counterparts in Switzerland.

Globally, it is reported that the special position of women workers needs attention. The gender division of labor has an impact on women’s safety and health in the workplace, which goes well beyond reproductive hazards. As one union points out that health and safety is male dominated, 86% of health and safety inspectors are male.
Resources are traditionally invested far more on “male” industries, rather than areas of industry where women work. Safety standards are based on the model of a male worker. Tasks and equipment are designed for male body size and shape. This can lead to discrimination in a number of areas (GMB, 1998).

2.9 Reflection on African Occupational Health and safety

SOUTH AFRICA

The researcher decided to include South Africa in this study as a point of reference because South Africa is among the African countries which has advanced in terms of science and technology. Therefore, the development of science and technology stimulated the inventions of machines whereby these machines were brought about by the opening of industries. The use of machines simplified work and brought about by the increasing in production and replaced human labour. This is why there are fewer reported occupational health and safety cases such as accidents, injuries and death compared to other countries in Africa. Despite all that, the country has a health and safety policy which cut across all sectors. This policy was established in order to make sure that employees are working under a health and safe place. On the one hand, primarily it aims to reduce the number of work related to accidents and diseases in South Africa. This requires the adoption and implementation of a culture of prevention by government, employers and workers. The effective prevention of work-related accidents and ill-health has enormous social and economic advantages.

These include improvements in productivity and competitiveness and the quality of life of the working population. In addition, it has also been started elsewhere, the effective management of many safety hazard improves levels of public safety. The effective control at source in workplaces of hazardous substances improve levels of public health and minimise environmental pollution (ibid).
On the other hand, the secondary objective of the RSA safety policy aims to provide equitable compensation benefits to those who are injured in work-related accidents or who contract occupational diseases. These compensation benefits include medical aid, financial compensation and access to rehabilitation services. Therein, it is clearly indicated that the compensation system, in particular the contributions paid by employers, must be sensitive to an employer’s OHS performance in order to act as an incentive for improved performance (ibid)

The costs of inadequate management of OHS are not confined to the employers and workers. It impacts negatively on public safety, public health and on the environment. The causes of major public disasters, such as rail commuter accidents, have been shown to flow from inadequate safety management systems and unacceptable working conditions. The failure by employers to control at source hazardous substances used in working processes is a significant cause of environmental pollution.

Occupational accidents and disease impose an enormous cost on South Africa. A 1997 study prepared for the Department of Labour estimated the cost of occupational accidents and disease to be (in 1996 terms) R17 billion, equating to 3.5% of the national Gross Domestic Product (GDP). In 2003 terms, this amounts to R30 billion. Costs to employers include property damage, lost production time, lost skills as well as the cost of engaging and retraining replacements (RSA, 1993).

Likewise, Mrema (2015) pointed out that Tanzania’s economy is growing gradually, with growth being driven by manufacturing, communications, transport, financial intermediation, construction, mining and agriculture. Along with this growth, hazards emanating from work in all sectors of the economy have increased and varied.

The workers exposed to these hazards suffer from illness and injuries and yet they are not provided with adequate occupational health and safety services. Health and safety services are scanty and limited to a few enterprises that can afford it. Existing laws and regulations are not comprehensive enough to cover the entire population. Implementation of legislation is weak and does not protect the workers.
2.10 Empirical literature Review

Empirically, literatures on implementation of health and safety management strategy is scant in Tanzania. Those few studies available are too generalised. Thus, this study narrows down the situation to cover relationship and implementation of health and safety management strategy in a specific company which is Tanzania cigarette company found in Dar es salaam region.

CRB (2001) in the work titled “Safety and health conditions in construction sites in Tanzania”. The researcher aimed at assessing health and safety risk management in building construction in Tanzania. The study was conducted on 63 construction sites in Dar es salaam, Mwanza, Arusha and Mbeya in the year 2001. By using methodologies like interview, observations and documentary literature review the study revealed that 98.4% of the visited sites did not notify their operations to the chief inspector of factories upon seven days of commencement of works in accordance with rule 5 of factories (building operations and works of engineering construction rules) of 1985.

Basing on CRB (2001) findings only 15.9% of the visited sites were found to have knowledge of safety requirements on provision of safety and health in the bills of quantities, only 36.4% made provision for safety and health issues during preparation of their bids and the provision of other PPE was seriously lacking. Hence, the industry is responsible for about 10.1% of the total occupational accidents, 9.6% of the fatalities, and 12.2% of the partial disability. Therefore, construction sites in Tanzania is the second from mining, with an injury rate of 17 per 1000 workers.

Again the results of the survey showed that, cuts by sharp edges, nails punctures, hit by hummer, bruises and other small accidents have the highest rate with 22% of all accidents. Fall of objects, tools and pieces of work was 18% of all accidents. Most sites did not have adequate welfare facilities, including sanitary convenience, washing facilities and portable drinking water. Most workers ignore use of safety gears and give flimsy excuses. The total 25.4% of the sites had first aid kits.
Nshunju’s study (2012) assessed “compliance to OHS & PH and associated factors in salons”. This study applied methods such as questionnaire and observation to collect data. According to the findings of the study majority of the salons were found to moderately complying with OHS requirements and none were highly complied. Salons with adequate inspections were significantly associated with high compliance to OHS requirements than those with poor inspection. Moreover, knowledge and skills on OHS requirements significantly were associated with compliance to OHS and PH requirements. Other factors such as availability of policies and regulations, law enforcement, negligence, demographic characteristics and working experience were not statistically significant associated with compliance to OHS requirements. Then the research urged the Occupational Health and Safety Authority (OSHA) to adequately conduct workplace inspections and provide awareness programme in order to improve compliance to OHS requirement in salons.

Kiunsi (2012) in his research titled “The Study of Occupational Health and Safety at the Small Engineering Industries in Mbeya City”. The aim of the study was to determine the strength of evidence on the effectiveness of legislative and regulatory policy levers in creating incentives for organisations to improve occupational health and safety processes and outcomes. By using methods such as observations and documentary literature review the researcher managed to discovered that, there were 6 different types of hazards affecting small engineering industries in Mbeya. The study also shows that the most types of hazards facing workers at industrial places manual handling of materials and tools 23 (28.4%). While discussing with workers on the causes of accidents; research finding indicated to lack of knowledge on how to use handle tools, which were associated with workers ignorance while working in work places. These results are so subjective, in the sense that type of hazard likely to cause accidents is so dependent on the area, knowledge; type of industry etc, thus he suggested that improvement of knowledge in SEIs on Safety measures should be considered.
Also, the result shows that the types of hazards facing worker at industrial place, (36%) of accidents are caused by lack of supervision of workers while at work particularly on industries with machinery/tools. Lack of safety knowledge could have contributed to higher accident rate, because of (51%) were form four leavers which according to their syllabus do not cover industrial safety measurements. it can generally be said that safety rules and policies are well being implemented in the industries in Mbeya but improvement should be done in terms of education.

Sen and Osborne (1997) in their work titled “To assess the knowledge, attitude, practices and health and safety at work”. This study was conducted at North West Health Centre, Liverpool city UK. The study intends to assess the workplace hazards and safety practices in a typical health care facility (HCF) in Nigeria. The researcher applied methods like questionnaire, interview and observations to collect information. It was revealed that there was a lack of knowledge and understanding of health and safety legislation in general practice surgeries. As a result, compliance with such laws was also seriously lacking. However, both knowledge and compliance could be significantly improved through information, guidance and contact with the Health and Safety Executive.

Pringle and Frost (2003) in their work named “The absence of rigor and the failure of implementation: occupational health and safety”. This study intends to examine the rights of worker concerning occupational safety and health in Hong Kong (China). Author of this work used methods such as interview, documentations and observations to gether information concerning the study. It shows that, despite government concern with 10 occupational health and safety (OHS) and the declaration of new laws and regulations in 2002, a lack of rigor and lax implementation are major impediments to improvements in workplace safety. The article highlighted important elements from the new work safety law on the prevention and cures of occupational diseases, and then analysed key issues arising from bureaucratic excesses, the impact of government restructuring, continuing confusions and contradictions in government responsibility for Occupational Health and Safety.
Thus, they suggested for different strategies for preventing occupational diseases and injury at workplaces employs several elements including setting and enforcing standards; technical assistance, research, development and implementation of surveillance system. Also, Safety and Health Acts, and regulations provide for a wide array of basic public health measures to prevent occupational disease and injury at the workplaces if properly enforced.

Neema (2015) in his work named “Compliance of Occupational Health and Safety Policies and Regulations in Public Hospitals in Mwanza Region”. The researcher aimed to analyse to which extent does the SekouToure hospital comply with the requirements stipulated by the regulations and policy on occupational health and safety. Methods like questionnaires, interviews as well as documentary review were used to collect data. The findings gathered from the field revealed that, there is a poor compliance to the occupational health and safety regulations as well as policy at SekouToure Hospital. The employees have less knowledge on issues of OHS, as well as the hospital administration have made fewer efforts on making sure that the issue of OHS is being implemented effectively as required by the law. In order to ensure that workers at the hospital are being protected against all hazards and risks they are facing then, OHS matters have to be taken serious by making sure that laws are well established to ensure that compliance is observed by all organisations. Also, the government should ensure that OHS personnel are recruited as many as possible to cover the needs in the organisations.

De Ridder (2006) in her research tittled “Self Regulation in health and safety behaviour”. The study aimed at finding the workers self by-laws in regulating self behaviours in occupational health and safety. The researcher applied an interview to collect data which can assit him in writing report where he found that, occupational health and safety needs combination of labour and health approaches. The labour approach remains important. The share of work on the burden diseases attribute risk, is estimated that 26.2% of death globally and for some occupational groups, this will higher, however work also contribute to some common diseases such as airway cancer, asthma, deafness, and low back pain.
The health approach includes all aspects of life influencing health such as life style and family. The nature of work is changing with the identification of new risk factors such as psycho-social and muscular skeleton problem.

Mhongole (2007) in his research titled “Effective in implementation of occupational health and safety act of 2003”. The study aimed at assessing the status of protective equipment in reducing accidents to workers who are exposed to hazards. The researcher used questionnaire and interview as sources of data collection. The findings revealed that the status of protective equipment availability to workers exposed to hazard areas was found to satisfy as 98% of the equipment required by the workers had been provided, also the study shows that awareness of occupational health and safety among workers indicate that that 42% of the respondents agreed being aware of the Act, while 58% were not aware.

Also, the study aimed to find out whether workers knew to use protective equipment 60% of the respondents agreed to have knowledge of using protective equipment, while 40% of the respondents had no knowledge of using protective equipment. On the other hand study reveals that the health and safety committee existing in working places, tough some workers were not aware of the committee. Also, the study shows that the company had not provided the required number of first aid kit at working places as indicated by the 26% of the shortage of first aid boxes. The expected performance for effectiveness had to be above 81% of the predetermine goal.

Doris (2009) on her research titled “Accidents in cotton industries”. In order to write this work the researcher used interview to collect data. the aim of the researcher was to measure the causes of accidents in processing industries.

The findings showed that there are three major factors which cause the industrial accidents in the cotton processing industries these are technology, human factor, poor working environment and ignorance of the rules and regulation of the work by the workers. The findings showed that in case of the ignorance of the rules and regulation 67% of the employers know nothing, while 87% of the interviewed employees say that
poor working environment are the causes of the industrial accidents and technological aspects aspect took 80% of the employees.

Ruth (2007) in her research titled “Examination of employers’ role in creating health and safety at work setting”. The objective of the researcher was to measure the contribution of management in preventing occupational accidents. The researcher used questionnaire, interview and observation to collect information. The findings revealed that all management do not have any specific reasons that causes accidents in the organisation. Also, it was found that the organisation did not encounter any problem in endeavor to promote safety. However, in the case of unsafe work condition to the employees and client management who were the target respondents reveal that there is no any reported impact resulting from unsafe working condition. Lastly the researcher discovered that, all employees are compensated, but the compensation rate of 108,000/= amount is likely to be outdated as it was set in 1958, therefore the general findings show that organisation has to improve safe working condition so as to deliver fast and quality services to the customers.

Betson (2012) in his research tittled “Self-reported occupational health problems and factors affecting compliance with occupational health and safety requirements among barbers and hairdressers in Ilala Municipality, Dar es Salaam, Tanzania”. The target of the researcher was to determine the occurrence of self-reported occupational health problems and factors affecting compliance with occupational health and safety requirements among barbers and hairdressers in Ilala Municipality. A total of 378 questionnaires and observation checklists were used to interview workers, whom 205 (54.2%) were females and 173 (45.8%) were males. The age of the participants was 18-51 years.

The researcher also found that, this sector provides employment to majority of people with low education level. The findings revealed that majority of workers had low compliance level with occupational health and safety requirements (81.2%). There was no significant difference in proportion of compliance level by sex. It was revealed that both males and females had an almost similar compliance level.
Workers who did not receive occupational health and safety training were more likely to have a low compliance level compared to those who received training. Also, workers with low education were more likely to have a low compliance level compared to those with high education level. The study identified factors such as inadequate occupational health and safety staff (3.4%), negligence (15.1%), absence of workplace policies (2.1%), poor workers’ knowledge and skills (22.2%), and poor law enforcement (57.1%) as the main contributory factors for low compliance level with occupational health and safety requirements.

About 77% of barbers and hairdressers reported to experience occupational health problems in their working life. Barbers and hairdressers who received training on occupational health and safety reported fewer problems compared to those who did not receive training. Not only that, but also, those who had a higher compliance level with OHS requirements reported fewer problems compared to those with low compliance level. The most self-reported occupational health problems were; back pain (25.7%), hand dermatitis (21.2%), chest pain (16.4%), respiratory problems (8.7%), dermatitis on other parts of the body (5.3%) and other problems such as stress, fungal infections and discomfort (22.8%). Hence, the study recommends an urgent need to establish effective law enforcement systems and training programmes among barbers and hairdressers to increase law enforcement and hence improve occupational health and safety at workplaces.

Idrimanma and Jayawardena (2011) in their work titled “Factors affecting the health and safety behaviours of factory workers”. In collecting information, the researcher used questionnaire, observation and documentation to gather the required data. The desire of the researcher was to identify factors that can cause employees to change safety behaviour. The researchers pointed out that, there was no relationship between the age and contribution to health and safety, respondents in the age group of 35 – 45 years showed a higher contribution to safety.
Casual workers in the age group of 30 – 50 showed that job insecurity was a reason for stress. Safety contribution was poor among those who have been ill or injured due to occupation. Previous incidents and attitude towards health and safety had a negative relationship. Under reporting of workplace incidents was observed. Back pains were the most common health problem, whilst allergies due to safety boot and brine was the next among the respondents. About 70% had cut injuries, notably caused by barrels and plastic crates. Injuries due to fallen objects were also substantial. Workers’ level of stress and their contribution to safety was negatively related. The amount of work load, uncomfortable working environment, and less concern on career improvements were the highest stress causing factors.

Personal attitude towards health and safety significantly related to the safety behaviour. Nearly 50% of the respondents showed a positive attitude and active involvement in enhancing the health and safety. About 60% respondents were not satisfied of the safety trainings. Frequency and the severity of accidents and injuries were said to be decreasing, and employees agreed that the staff (supervisors and executives), were available to discuss workplace problems or even the personal matters. Influence of the staff was a highly significant contributor for workers’ safety behaviour. Nearly 90% of the sample, regardless of their levels of safety contribution believed the supervisors’ influence was high. Relationship and the mutual understanding between workers and their supervisors were very high.

Majority (65%) of workers were employed for 11-12 hours per day. This was extended by 2-3 hours during the high production season. Very few were found working for more than 14 hours during the normal production days. Total working hours had no significant relationship with the workers’ safety behaviour. Continuous working of the same task, including the time for main intervals varied from 3 to 9 hours.

A significant negative relationship was found between working continuous hours and workers’ contribution to safety. Employees had been given the freedom to exchange their work with others.
Those who had practiced a difficult task for many hours could exchange with another person for an easy task without informing the supervisor. When an experienced person was not available the responsible worker had to work the whole day. Exposure to hazards during high production season had a negative significant relationship to safety behaviour. This did not apply to normal production days. Employees getting exposed to high risk level increased at high production periods. Tasks had become more risky with increased work load. Increases in the frequency or length of exposure to hazards could increase the level of risk.

Doris (2009) on her research titled “Accidents in cotton industries”. The findings show that there are three major factors which cause the industrial accidents in the cotton processing industries these are technology, human factor, poor working environment and ignorance of the rules and regulation of the work by the workers. The findings show that in case of the ignorance of the rules and regulation 67% of the employers know nothing, while 87% of the interviewed employees say that poor working environment are the causes of the industrial accidents and technological aspects took 80% of the employees.

Ruth (2007) in her research titled “Examination of employers’ role in creating health and safety at work setting”. The findings show that all management do not have any specific reasons factors that causes accidents in the organisation. The second research question that seek to know the problems that are encountered in promoting safety in the organisation, the findings show that the organisation did not encounter any problem in endeavor to promote safety. However, in the case of unsafe work condition to the employees and client management who were the target respondents reveal that there is no any reported impact resulting from unsafe working condition. The last question which was aiming to know if employees are compensated when they are injured, the results shows that all employees are compensated, but the compensation rate of 108,000/= amount is likely to be outdated as it was set in 1958, therefore the general findings show that organisation has to improve safe working condition so as to deliver fast and quality services to the customers.
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Idrimanma & Jayawardena (2011) in their work titled “Factors affecting the health and safety behaviours of factory workers” they pointed out that, there was no relationship between the age and contribution to health and safety, respondents in the age group of 35 – 45 years showed a higher contribution to safety. Casual workers in the age group of 30 – 50 showed that job insecurity was a reason for stress. Safety contribution was poor among those who have been ill or injured due to occupation. Previous incidents and attitude towards health and safety had a negative relationship. Under reporting of workplace incidents was observed. Back pains were the most common health problem, whilst allergies due to safety boot and brine was the next among the respondents. About 70% had cut injuries, notably caused by barrels and plastic crates. Injuries due to fallen objects were also substantial. Workers’ level of stress and their contribution to safety was negatively related. The amount of work load, uncomfortable working environment, and less concern on career improvements were the highest stress causing factors.

Personal attitude towards health and safety significantly related to the safety behaviour. Nearly 50% of the respondents showed a positive attitude and active involvement in enhancing the health and safety. About 60% respondents were not satisfied of the safety trainings. Frequency and the severity of accidents and injuries were said to be decreasing, and employees agreed that the staff (supervisors and executives), were available to discuss workplace problems or even the personal matters. Influence of the staff was a highly significant contributor for workers’ safety behaviour. Nearly 90% of the sample, regardless of their levels of safety contribution believed the supervisors’ influence was high. Relationship and the mutual understanding between workers and their supervisors were very high.
Majority of (65%) workers were employed for 11-12 hours per day. This was extended by 2-3 hours during the high production season. Very few were found working for more than 14 hours during the normal production days. Total working hours had no significant relationship with the workers’ safety behaviour. Continuous working of the same task, including the time for main intervals varied from 3 to 9 hours. A significant negative relationship was found between working continuous hours and workers’ contribution to safety. Employees had been given the freedom to exchange their work with others. Those who had practiced a difficult task for many hours could exchange with another person for an easy task without informing the supervisor. When an experienced person was not available the responsible worker had to work the whole day. Exposure to hazards during high production season had a negative significant relationship to safety behaviour. This did not apply to normal production days. Employees getting exposed to high risk level increased at high production periods. Tasks had become more risky with increased work load. Increases in the frequency or length of exposure to hazards could increase the level of risk.

2.11 The Synthesis

After reviewing a number of literatures, nothing has been said on the implementation of health and safety strategies and how the strategies enabled workers to work under a safe and health environment. Although some researchers have tried to pinpoint on the challenges of implementing health and safety strategies, very little has been said on the cigarette companies. There is no much effort has been committed toward exploring the implementation of health and safety management strategy. Also, all the previous studies methodologically used either questionnaires or interview only while in this study the researcher used both questionnaires, interviews, Documentary source and observation to make sure that the data collected are reliable and meaningful for the study. Therefore, a gap for scientific study was evident. It is this reason that motivates the researcher to commits his effort towards exploring the implementation of health and safety management strategy in Tanzania Cigarette Company(TCC). The researcher also believes that Cigarette Companies has a great contribution in the county economy through tax although its employees are highly exposed to
occupational diseases than other sectors. Therefore it is from this point of view that the researcher would like to commits his efforts at Tanzania cigarette company.

2.12 Conceptual Framework

This section presents a framework which shows relationships between variables. The relationship of variables is based on the reviewed literatures. In order for the TCC strategy for managing health and safety to be successful provision of sufficient protective equipment, there arose a need for support from the top management, health and safety committee, health and safety auditing, trade union, regulatory compliance as well as the availability of resources. When employees are provided with protective equipment it may reduce risks in employees injuries and occupational illness. These aspects are clarified in Figure 2.1.

**Figure 2.1 Conceptual Framework**

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Top management support</td>
<td>➢ Availability of protective equipment</td>
</tr>
<tr>
<td>• Health and safety committee support</td>
<td>. For example</td>
</tr>
<tr>
<td>• Health and safety auditing</td>
<td>• eye protection- like goggles, glasses</td>
</tr>
<tr>
<td>• Trade union support</td>
<td>and face shields</td>
</tr>
<tr>
<td>• Regulatory compliance</td>
<td>• Foot protection-like safety shoes and</td>
</tr>
<tr>
<td>• Resources</td>
<td>boots</td>
</tr>
<tr>
<td></td>
<td>• Head protection-like hard hats,</td>
</tr>
<tr>
<td></td>
<td>helmets</td>
</tr>
<tr>
<td></td>
<td>• Body protection-like aprons,</td>
</tr>
<tr>
<td></td>
<td>overalls, gloves</td>
</tr>
<tr>
<td></td>
<td>• Fire extinguisher</td>
</tr>
</tbody>
</table>

**Source:** Author

The model above shows the causative relationship between independent and dependent variables as explained below;

Top management should support the implementation of health and safety strategy in making sure that all the necessary personal protective equipment are available and
sufficiently as according to the safety and health regulations. Not only that but also top management ought to make sure that the tools are used accordingly by the employees all the time during working hours. This can help to avoid any accidents, injuries and death that will cost the individual employee as well as well as the company at large.

Health and safety committee should all the time ensure that the company is buying all the necessary personal protective equipment in a needed amount which will be used by the workers. Also, the committee should make sure that the PPE’s are used accordingly by giving training on how to properly use the PPE’s while they are in the working environments. Thus this will avoid accidents, injury and or death.

Health and safety auditing should be done by the H&S auditors as part of their task to make sure that the PPE’s are available sufficiently and they are being used accordingly to protect the employees and they are kept properly after being used. These auditors are supposed to inspect the company eventually to observe if there is any violation done by the company owners against the employees in the availability of PPE’s.

Regulatory compliance is essential in implementing H&S policy as the laws demands. The laws demand every working place to have PPE’s to protect employees from accidents. For example, the health and safety policy of 2003 and that of 2009 all demands the availability of PPE’s to employees as it is mandatory and not discretionary. Thus the industrial owners are obliged to comply with H&S regulations especially in the provision of Personal protective equipment to employees.

Financial Resources. This is very basic instrument which can lead to the availability of protective equipment in working places. Without funds it will be very impossible for the employees to be provided with working tools. Whereby these tools will assist workers to work safely. Health and safety Manager ,health and safety committee, trade union leaders, supervisors as well as top management ought to make sure that these tools are available and been utilised by the workers in order to reduce fatal and work accidents. Hence, the task of management is not only to make sure that these tools are sufficiently available but also to make sure that these tools are being utilised properly.
CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This chapter discusses the research design, the area of the study, population of the study, sample size and sampling procedures. It further discusses data collection instruments as well as data analysis techniques.

3.1 Research design

The study employed case study design. The case study design focused on the particular cases and finally made some generalisations and conclusions. These generalisations and lessons which are to be drawn from the study at TCC can be used for making interpretations of other studies elsewhere in Tanzania. The case study design was considered appropriate for the study because it enabled the researcher to examine contemporary real-life situations and provide the basis for the application of ideas and extension of methods. Through this design, the researcher had detailed investigation of individuals who were included in the study hence sufficient access to potential data. Also, it enabled a researcher to capture the emotional perspectives of the respondents.

This design entailed an in-depth study which was carried out in the selected entity as far as the implementation of health and safety management strategy was concerned. Thus, the information about the implementation of health and safety management strategy was collected.

3.2 Area of the Study

The study was conducted at Tanzania Cigarette Company (Temeke Region), situated at Nyerere Road in Dar-es-salaam Tanzania. This organisation was more preferred for the study because it is the only company which produces and markets cigarette in
Tanzania. Therefore, with regard to the nature of the work done it was assumed that there was a high possibility that employees are exposed to danger or risk.

The map which shows the location of Tanzania Cigarette Company is attached in Appendix III and the organisation structure of TCC as Appendix IV.

3.3 Population of the study

The unity of inquiry for this study embraced workers (nevertheless they were temporary and permanent employees) of TCC, workers’ trade union leaders, health and safety committee and inspectors. This unity of inquiry was asserted to deliver confirmation on the implementatoin of health and safety management strategy within the company. Therefore, the study’s target population comprised 517 people.

Table 3.1: Population of the study

<table>
<thead>
<tr>
<th>UNIT OF INQUIRY</th>
<th>POPULATION</th>
<th>SIZE</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health &amp; Safety manager and operational employee</td>
<td></td>
<td>479</td>
<td>92.65</td>
</tr>
<tr>
<td>Health and safety committee</td>
<td></td>
<td>32</td>
<td>6.19</td>
</tr>
<tr>
<td>Workers’ trade union (leaders)</td>
<td></td>
<td>5</td>
<td>0.97</td>
</tr>
<tr>
<td>Inspector</td>
<td></td>
<td>1</td>
<td>0.19</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>517</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author (2015)

3.4 Sampling procedure

The researcher used probability and Non-probability techniques to attain the required sample. Under probability sampling the study employed simple random sampling and in non probability sampling the study employed purposive sampling technique.

3.4.1 Purposive sampling

This sampling technique was deliberately used to chose a particular units of the universe that constitute a sample. In purposive sampling person’s knowledge and experience concerning the matter under investigation is normally used as a criterion for selection. Therefore, the researcher used purposive sampling technique to select
respondents from workers' trade union leaders, health and safety manager and inspector. This is because these are the people who were considered to have the required information concerning the study.

### 3.4.2 Random Sampling

The researcher applied this technique to select 48 respondents from operational workers and 10 health and safety committee members who were included in the study. In selecting them randomly, the researcher prepared pieces of paper matching the number of employees at the operational level. The researcher wrote the names of each employee on separate pieces of paper and collected them into a container prepared for the task. The researcher, mixed up thoroughly pieces of paper in the container, after mixing up the researcher selected one piece of paper (without looking at the name in it) and continued until the researcher obtained the required number of respondents is obtained. This was also applied to health and safety committee to get the required sample.

The formula below shows how the sample size in management and workers in operation of machines were obtained.

Let \( n_1 \) represent sample size obtained from workers who are concerned with the management and \( n_2 \) be the sample size obtained from workers who are in operation of machines.

Let also \( N_1 \) and \( N_2 \) represents the total number of workers in Management section and operation of machine section respectively. Then,

\[
\begin{align*}
n_1 &= \frac{N_1}{N} \times n \\ 
n_2 &= \frac{N_2}{N} \times n
\end{align*}
\]

Where \( n= \) required sample size from management and workers in operation activities and \( N= \) population size from management and workers in operation activities
\[ n_1 = \frac{10}{479} \times 49 \]
\[ n_1 = 1 \]

\[ n_2 = \frac{466}{479} \times 49 \]
\[ n_2 = 47 \]

Therefore, \( n_1 = 1 \) and \( n_2 = 47 \)

Another portion of the population, which was included in the sample, was chosen through simple random sampling technique. A sample obtained from readily available lists such as workers’ trade union, health and safety committee. Simple random sampling was applied with whereby every individual in that portion of population had a chance of being selected since it was believed that he/she was able to give the required information. The technique also helped in avoiding bias in the sampling process.

3.5 Sample size

The study employed a sample size 61 whereby 48 were operational employees, 2 were worker from the trade union, 10 were from health and safety committee and 01 inspector. Hence, the total number of respondents was 61. This number was selected to retain the sample error at 5%. The sample size and its composition are presented in Table 3.2.

Table 3.2: Composition of sample

<table>
<thead>
<tr>
<th>RESPONDENT GROUP</th>
<th>POPULATION SIZE</th>
<th>SAMPLE SIZE</th>
<th>SAMPLING PROCEDURE USED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and safety manager</td>
<td>1</td>
<td>1</td>
<td>Purposive Sampling</td>
</tr>
<tr>
<td>Operational employees</td>
<td>489</td>
<td>47</td>
<td>Simple Random Sampling</td>
</tr>
<tr>
<td>Health and safety committee</td>
<td>32</td>
<td>10</td>
<td>Simple Random Sampling</td>
</tr>
<tr>
<td>Worker’s trade union(leaders)</td>
<td>05</td>
<td>02</td>
<td>Purposive Sampling</td>
</tr>
<tr>
<td>Inspector</td>
<td>01</td>
<td>01</td>
<td>Purposive Sampling</td>
</tr>
<tr>
<td>TOTAL</td>
<td>517</td>
<td>61</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author (2015)
The sample size was determined by applying the formula given by Kothari, 2004

\[
n = \frac{Z^2 \cdot N \cdot \delta p^2}{(N-1)\epsilon + Z^2 \delta p^2}
\]

Where;

\[n\] = required sample size of the study questionnaires
\[N\] = a size of universe population of the community
\[\delta p\] = assumed Standard deviation (ranges from 1-5)
\[\epsilon\] = acceptance error for the whole population
\[Z\] = table value of for a given confidence level of 99% = 1.96

Data given;

\[N= 517\]
\[Z = 1.96\]
\[\epsilon = 0.5\]
\[\delta p = 3\]
\[n = ?\]

Solution;

\[
n = \frac{(1.96)^2 \cdot (3)^2 \cdot 517}{(517 - 1)0.5 + (1.96)^2 \cdot (3)^2}
\]

\[n = 61\]

Therefore, the needed sample size of the study population was 61 respondents
3.6 Types of Data

Both primary and secondary data were used as sources of information during data collection process.

3.6.1 Primary Data

In order to obtain necessary information which assisted the researcher to write a report, the researcher had to use primary data collection method. This type of data were collected through questionnaires, interviews, and observation from TCC. The researcher collected data from different respondents such as worker’s trade union leaders, operational employees, health and safety committee members, health and safety manager, and inspector.

3.6.2 Secondary Data

These are data from already written sources. The researcher obtained these data from other researchers’ works such as journals and books related to the study. However, other data was obtained from TCC files. The information obtained was such as health and safety management strategies to be implemented by both employer and employees in order to minimise accidents and injuries in TCC.

3.7 Research instruments

The study used four types of data collection instruments which were: questionnaire, interview, observation, and documentary sources.

3.7.1 Questionnaire

Questionnaires were prepared in order to collect data from respondents. This type of questionnaires solicited some pieces of information from the operational employees and health and safety committee. This is because they were many in number and so to interview them it could be difficult. Also, it could consume a number of days as well as time. Therefore, giving them the questionnaires was appropriate.
Questionnaires were preferred because they enabled the researcher to reach the targeted group with the minimum cost in terms of time and other resources. Yet again, it is the belief of the researcher that questionnaire enabled the respondents to provide information at their own discretion. Therefore, it helped to avoid any direct influence contrary to other methods like interviews where the researcher may have direct influence in molding respondent’s answer.

3.7.2 Interview

Interview was conducted in order to collect information which the questionnaire could otherwise not be able to collect. An interview guide was prepared in order to have consistency in asking questions. Both individual and group interview was conducted in order to get the full flagged answers from different type of respondents. The group was selected purposefully based on criteria like employee working experience, accident prone sections, and previous incidents met, type of employment, and gender respectively.

3.7.3 Observation

Un-participatory observation was done with the goal of obtaining solid evidence on whether the protective equipment are being provided. At the researcher’s discretion, observation is seen to be very imperative because it brings all these additional behavioural information like happiness, sadness, satisfaction or dissatisfaction.

The rationale behind using this method of collecting primary data was that subjective bias is eliminated, if observation was done accurately. Secondly, the information obtained under this method relates to what was currently happening; it was not complicated by either the past behaviour or future intentions or attitudes. Thirdly, this method was independent of the respondents’ willingness to respond and as such was relatively less demanding of active cooperation on the part of respondents as happens to be the case in the interview or the questionnaire method. Observation was carried by walking around the company while looking workers at work in several departments.
3.7 Data Analysis Technique

In this study both quantitative and qualitative data were collected and then analysed. Statistical Package for Social Science (SPSS) version 20, was used for data coding. The SPSS then enabled the researcher to generate charts, graphs and tables indicating frequencies of study responses from categories of the respondents.

On the other hand, qualitative data from open ended items in the interviews, and personal observations were analysed using thematic analysis. This form of analysis categorises related themes or topics and major concepts are identified. In this form of analysis the researcher viewed the collected data and identifies information that is relevant to the research questions and objectives and developed a summary report identifying major themes and the association between them. The frequency with which an idea or word appeared much was then used to interpret the importance, attention or emphasis (Kothari, 2004).
CHAPTER FOUR

PRESENTATION OF FINDINGS

4.0 Introduction

This chapter presents and analyse the findings obtained from the field. The findings are presented and analysed using qualitative and quantitative methods. The analysis was guided by three specific objectives which were as follows: first, to find out whether the availability of PPE was adequate at TCC. Secondly, to determine the extent to which the provision of Personal Protective Equipment have managed to reduce accidents at TCC. Thirdly, to identify the challenges facing the provision and uses of Personal Protective Equipment at TCC.

4.1 Demographic characteristics of respondents

The demographic characteristics of respondents examined in this study were sex, age, occupation, experience, marital status and education level of respondents. These features are essential because they may suggest the nature of responses or possible reasons for the responses that are provided by respondents.

4.1.1 Distribution of respondents by Sex

The findings on sex of respondents showed that out of 47 respondents 35 (74.5%) respondents were male and 12 (25.5%) respondents were female (see Table 4.1). These findings imply that the majority of respondents were male. The main reason as to why the sample had more male that female respondents was due to the fact that the majority of employees at Tanzania Cigarette Company are male. But another reason was that males normally are more privileged to be educated by their parent compared to females in some societies where females are not given opportunities to go to school (Prasad, 2005).
Additionally, the study found that there is a relationship between gender and wearing of PPE. The findings revealed that males wear PPE more than females. This could be due to the fact that, the tasks performed by women do not require them to wear PPEs as majority are not working in operations.

Table 4.1: Sex of respondents and the wearing of personal protective equipment

<table>
<thead>
<tr>
<th>Count</th>
<th>Wearing of personal protective equipment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Sex of Respondents</td>
<td>Male</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>26</td>
</tr>
</tbody>
</table>

Source: Survey data, 2016

4.1.2 Distribution of respondents by Age

The findings about the age of respondents were as follows; 7 (14.9%) respondents had the age of 18 to 25 years, 20 (42.6%) respondents had the age of 26 to 30 years, 13 (27.7%) respondents had the age of 31 to 40 years, 5 (10.6%) respondents had the age of 41 to 50 years and 2 (4.2%) respondents had the age of 51 to 60 years (see Table 4.2). These findings show that the majority of respondents had the age 26 to 30 years.

The reason why majority of respondents belong to the age of 26 to 30 could be due to the fact that in the country the age range of 26 to 30 years are youth. People of this age are more involved in production activities in various sectors including industries, TCC being one of them. Moreover, the study found that there was a relationship between age and wearing of PPE. This allegation was supported by Packers (2007) who found that workers with younger ages were in more risk of getting accidents compared to workers with older ages.
Table 4.2: Age of Respondents and wearing of personal protective equipment

<table>
<thead>
<tr>
<th>Age of Respondents</th>
<th>Wearing of personal protective equipment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>18 - 25 Years</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>26 - 30 Years</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>31 - 40 Years</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>41 - 50 Years</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>51 - 60 Years</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>22</td>
</tr>
</tbody>
</table>

Source: Survey data, 2016

4.1.3 Distribution of respondents by Occupations

The study categorised the respondents according to occupation. The findings obtained were as follows; 11 (23.4%) respondents were dealing with packaging, 8 (17%) respondents were technicians, 12 (25.5%) respondents were dealing with production, 2 (4.3%) respondents were dealing with logistics and 14 (29.8%) respondents were machine operators (see Table 4.3). These findings have shown that the majority of the respondents were machine operators.

Similarly, the study found the relationship between occupation of respondents and the wearing of PPE. Machine operators wear personal protective equipment more than those dealing with packaging. Although all of them are required to wear personal protective equipment. The findings are similar with the one obtained by Carpenter (2002) who found that, the workers who were operating machines in production were in more danger of getting accidents compared to those were arranging the clothes together. This could be the reason why many machine operators wear personal protective equipment as found by Carpenter (2002).
Table 4.3: Occupation of Respondents and the wearing of personal protective equipment

<table>
<thead>
<tr>
<th>Occupation of Respondents</th>
<th>Wearing of personal protective equipment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Packaging</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Technicians</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Production</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Logistics</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Machine operators</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>22</td>
</tr>
</tbody>
</table>

Source: Survey data, 2016

4.1.4 Distribution of respondents by Education level

According to the data collected in the field, the distribution of respondents on education level showed that; 25 (53.2%) respondents had primary education, 20 (42.6%) respondents had secondary education and 2 (4.2%) respondents were degree holders (those doing logistics) (see Table 4.4). Majority of respondents had primary education. The reason behind was because in industries a large number of activities require low skills.

Moreover, the study found that there was a relationship between education level and wearing of PPE. Majority of employees with primary education were not wearing PPE compared to those with secondary education and higher education level. This could be the reason why Muzaffar (2013) found that workers with low education level were in more risk of getting accidents in working places compared to workers with higher level of education. In this case, the study found that, employees with low education level are in more risk to be exposed to accidents. This is because the higher the education the higher the understanding of someone about different matters.
Also, it could be due to the fact that the instructions are given in PPE is in English language which is not well understood to the primary school leaver employee hence leads to the improper wearing of personal protective equipment.

Table 4.4: Education level of Respondents and the wearing of personal protective equipment

<table>
<thead>
<tr>
<th>Count</th>
<th>Wearing of personal protective equipment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Education level of Respondents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>Secondary</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>University</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: Survey data, 2016

4.1.5 Distributions of respondents by experience

The findings on the experience of respondents were as follows; 4 (8.5%) respondents had less than 1 year working experience, 11 (23.4%) respondents had an experience of 1 year to 5 years, 2 (4.3%) respondents had an experience of 6 years to 10 years, 12 (25.5%) respondents had an experience 11 years to 15 years and lastly 18 (38.3%) respondents had had an experience of 16 years and above (see Table 4.5). Majority of respondents had an experience of 16 years and above.

On the other hand, the findings have shown that there was a relationship between experience and wearing of PPE. The employees with more experience wore PPE more than those with small experience. These findings show that for the employees with less than 1 year working experience, only 1 respondents was wearing PPE while 3 employees were not wearing PPE. On the other hand, respondents who had an experience of 1 to 5 years, 5 respondents agreed on the use of PPE while 6 disagreed. Respondents with experience of 6 to 10 years, only 2 agreed on the use of PPE.
For respondents with experience of 11 to 15 years, 4 respondents agreed on the use of PPE and 8 respondents disagreed. Lastly, for the respondents of 16 years and above, a total of 13 respondents agreed on the use of PPE and 5 disagreed on the use of PPE. The above findings are similar to those by Fleming and Lardner (1999) who found that employees in the textile who stayed there for a period of less than one year were getting more accidents due to misuse and not wearing PPE compared to those who have worked in textile industries for more than one year. The study is on assumption that employees with less than one year experience have no sufficient knowledge on the importance of wearing PPEs that is why majority are not wearing it.

Table 4.5: Work experience and wearing of personal protective equipment

<table>
<thead>
<tr>
<th>Count</th>
<th>Wearing of personal protective equipment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Work experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>1 year up to 5 years</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6 up to 10 years</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>11 up to 15 years</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>16 years and above</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>22</td>
</tr>
</tbody>
</table>

Source: Survey data, 2016

4.2 Adequacy of Personal Protective Equipment at Tanzania Cigarette Company

The first objective was to find out whether the availability of personal protective equipment are adequate at Tanzania Cigarette Company. In order to achieve this objective researcher assessed the following; first researcher wanted to know whether workers are provided by health and safety equipment at TCC. The findings were as follows; 60% of respondents agreed that TCC was providing protective equipment to them and 40% of respondents disagreed (see Table 4.6). On the other hand the interview with the Inspector confirmed that the company was providing personal protective equipment to its workers although it was not sufficient.
Therefore, according to the majority TCC do provide protective equipment to its workers though not adequate.

**Table 4.6 Provision of personal protective equipment**

<table>
<thead>
<tr>
<th>Respondent’s opinion</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>28</td>
<td>60.0</td>
</tr>
<tr>
<td>No</td>
<td>19</td>
<td>40.0</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Field, 2016*

Secondly researcher was interested to know the kinds of personal protective equipment which are provided by TCC. The findings were as follows; 48.9% of the respondents mentioned mouth guards, 6.4% of the respondents mentioned gloves, 4.3% of the respondents mentioned safety shoes, another 4.3% of respondents mentioned helmets and 36.2% of respondents mentioned other equipment apart from those mentioned above (see Table 4.7). The interview with the inspector showed that equipment that are provided to workers include gloves, safety shoes, helmet and mouth guards. Therefore, according to these findings the major personal protective equipment found at TCC are; mouth guards, gloves, safety shoes and helmets.

**Table 4.7 Kinds of personal protective equipment provided to workers at TCC**

<table>
<thead>
<tr>
<th>Respondent’s opinion</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouth guard</td>
<td>23</td>
<td>48.9</td>
</tr>
<tr>
<td>Gloves</td>
<td>03</td>
<td>6.4</td>
</tr>
<tr>
<td>Safety shoes</td>
<td>02</td>
<td>4.3</td>
</tr>
<tr>
<td>Helmet</td>
<td>02</td>
<td>4.3</td>
</tr>
<tr>
<td>Others</td>
<td>17</td>
<td>36.2</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Field, 2016*

Thirdly, the study wanted to know whether personal protective equipment are adequate at Tanzania Cigarette Company. The findings were as follows: 17% of the respondents strongly disagreed on the adequacy of protective equipment, 25.5% of the respondents were not aware on the matter, 14.9% of the respondents strongly agreed
on the matter and 42.6% of the respondents agreed that personal protective equipment are adequate at TCC (see Table 4.8). The interview with health and safety manager showed that personal protective equipment are adequate at TCC. The majority of respondents agreed on the adequacy of personal protective equipment at TCC.

Table 4.8 Adequacy of personal protective equipment at TCC

<table>
<thead>
<tr>
<th>Respondent’s opinion</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagreed</td>
<td>08</td>
<td>17</td>
</tr>
<tr>
<td>Neutral</td>
<td>12</td>
<td>25.5</td>
</tr>
<tr>
<td>Strongly Agreed</td>
<td>07</td>
<td>14.9</td>
</tr>
<tr>
<td>Agreed</td>
<td>20</td>
<td>42.6</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field, 2016

4.3 The extent to which Personal Protective Equipment have managed to reduce accidents to employees in the TCC.

The second objective was to determine the extent to which the provision of personal protective equipment have managed to reduce accidents at TCC. Researcher assessed the following; first researcher wanted to know whether respondents think that use of PPE have managed to reduce the accidents at TCC. The findings from the questionnaire showed that 92% of respondents agreed that PPE has reduced the accidents at TCC (see Table 4.9).

The interview with the leader from workers’ union when responding to the question which wanted to know whether provision of PPE reduced accidents showed that the number of accidents have been reduced through the use of PPE.

Table 4.9 Reduction of accidents due to PPE provision

<table>
<thead>
<tr>
<th>Respondent’s opinion</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>43</td>
<td>92.0</td>
</tr>
<tr>
<td>No</td>
<td>04</td>
<td>8.0</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field, 2016
Secondly, researcher wanted to know the extent at which PPE has managed to reduced accidents. Using the secondary data obtained from the records which were obtained in the company, the findings showed that for a period of five years from the year 2011 to the year 2015 the number of accidents have decreased due to provision of protective equipment.

Table 4.10 Number of PPE provided by TCC and the number of accidents

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of PPE provided</th>
<th>No. of accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>2012</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>2013</td>
<td>58</td>
<td>3</td>
</tr>
<tr>
<td>2014</td>
<td>74</td>
<td>1</td>
</tr>
<tr>
<td>2015</td>
<td>102</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>275</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: Field, 2016

4.4. Challenges facing the provision and uses of personal protective equipment

The third objective was to identify the challenges facing the provision and uses of personal protective equipment at TCC. Researcher assessed the challenges facing provision and use of personal protective equipment. The findings were as follows; 6.4% of the respondents mentioned scarcity of equipment as the challenge facing provision and use of PPE, 29.8% of the respondents mentioned bureaucracy, 19.1% of respondents mentioned carelessness of the company, 21.3% of the respondents mentioned low quality of personal protective equipment provided, 10.6% of the respondents mentioned threat from the management and 12.7% of respondents mentioned other challenges apart from those mentioned above.

Likely, during the interview with the inspector informed that some of the challenges facing TCC in the provision and use of protective equipment include; scarcity of the equipment and low quality of the protective equipment.
Table 4.11 Challenges on provision and use of personal protective equipment

<table>
<thead>
<tr>
<th>Respondent’s opinion</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarcity of equipment</td>
<td>03</td>
<td>6.4</td>
</tr>
<tr>
<td>Bureaucracy</td>
<td>14</td>
<td>29.8</td>
</tr>
<tr>
<td>Carelessness of the company</td>
<td>09</td>
<td>19.1</td>
</tr>
<tr>
<td>Low quality PPE</td>
<td>10</td>
<td>21.3</td>
</tr>
<tr>
<td>Others</td>
<td>06</td>
<td>12.7</td>
</tr>
<tr>
<td>Threat from Mgt</td>
<td>05</td>
<td>10.6</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field, 2016
CHAPTER FIVE

DISCUSSION OF RESEARCH RESULTS

5.0 Introduction

This chapter discusses the findings in chapter four regarding availability and adequacy of personal protective equipment. The extent to which Personal Protective Equipment have managed to reduce accidents to employees in the TCC as well as challenges facing the provision and uses of personal protective equipment.

5.1. Availability and Adequacy of Personal Protective Equipment at TCC

The findings in chapter four were as follows; The adequacy of personal protective equipment at TCC were as follows; to the majority of workers (60%), TCC do provide personal protective equipment and only 40% of the respondents disagreed on the provision of personal protective equipment by TCC (Table 4.7). The findings from the questionnaire showed that TCC do provide personal protective equipment to its workers. On the other hand, during the interview with the health and safety manager he confirmed that personal protective equipment are adequate at TCC. ...actually here at TCC we have adequate personal protective equipment particularly in recent years...

In assessing the kinds of personal protective equipment available at TCC, the findings showed that 48.9% of the respondents mentioned mouth guards as the personal protective equipment, 6.4% of the respondents mentioned gloves, 4.3% of the respondents mentioned safety shoes, another 4.3% of respondents mentioned helmets and 36.2% of respondents mentioned other equipment apart from those mentioned above (see Table 4.7). Similarly, the interview with the inspector confirmed that employees are provided with various PPE as he said that. ...we are supplied with various equipment including gloves, safety shoes, helmet and mouth guards...
These findings show that the major personal protective equipment found at TCC are; mouth guards, gloves, safety shoes and helmet. Even though the employees are given PPE, but the study found out that the wearing of PPE was determined by age, education level, work experience. The study found a relationship between gender and wearing of PPE. The findings revealed that male wear PPE more than female. This could be due to the facts that the tasks performed by women do not require them to wear PPEs as majority are not working in operations. Study also found that age also is a factor to the wearing of PPE. The study found that workers with low ages do not have habit of wearing PPE compared to their counterparts, the elderly. The workers dealing with operations using the machines are using PPE than those in other sectors like packaging.

The findings showed that workers with lower education level for instance those with primary education when compared to those with secondary education; secondary education workers are using PPE than those with primary education. On the other hand, workers with longer experience in the organisation are using PPE more than workers who have been in the organisation for a short time. Likewise, the researcher during data collection processes observed that employees are provided with personal protective equipment sufficiently despite the fact that there was no body to make a check up to see if employees are wearing these PPEs properly during working hours in order to reduce accidents.

Findings on adequacy of equipment were as follows; 17% of the respondents strongly disagreed on the adequacy of protective equipment, 25.5% of the respondents were neutral on the matter, 14.9% of the respondents strongly agreed on the matter and 42.6% of the respondents agreed that personal protective equipment are adequate at TCC (see Table 4.8). According to these findings the majority of respondents agreed on the adequacy of personal protective equipment at TCC. These findings have shown that at TCC there are adequate personal protective equipment.
The findings of Mhongole (2007) contradict with the findings obtained in this study. He found that in most companies the personal protective equipment are not adequate and that the inadequacy is caused by negligence of the managements of companies in making sure that equipment are enough in the company. It could be argued that the availability of PPE was in accordance to the industries perception and priority on the importance health and safety measures. Therefore, the availability or unavailability only depends with the company itself.

5.2 The extent to which Personal Protective Equipment have managed to reduce accidents to employees in the TCC.

The findings on the extent to which personal protective equipment have managed to reduce accidents to employees. It was found that 92% of respondents agreed that PPE has reduced the accidents at TCC and only 8% of the respondents disagreed (see Table 4.9). The findings from the questionnaire has showed that PPE has managed to reduce accidents. Similary during the interview with the health and safety manager confirmed that PPE has managed to reduce accidents, as he said;

...in fact these protective equipment help us a lot in reducing the accidents. In early years the number of accidents was very large when compared to recent years where the number of accidents has reduced so much. In short these equipment are very useful ...

Majority of respondents agreed that PPE has managed to reduce accidents in the company. Nshunju(2012) also found that personal protective equipment are very useful in reducing accidents to employees. Therefore, the importance of personal protective equipment in reducing accidents is of no doubt.

Likewise, the researcher found that for a period of five years from the year 2011 to the year 2015 the number of accidents have decreased due to provision of personal protective equipment. The number of accidents in the year 2011 was 9 and the number of PPE provided was 13, in the year 2012 total number of PPE provided was 28 while the number of accidents was 6.
In the year 2013 the number of PPE’s provided was 58 while the number of accidents reported was 3. In the year 2014 number of PPE’s provided was 74 and the the number of accidents was 1 and lastly in the year 2015 the number of PPE’s provided was 102 and the number of accidents was only 1 (see Table 4.10). Findings in the year 2011 to the year 2015 the number of PPE’s provided has been increasing and the number of accidents have been decreasing. Therefore, the higher the supply of PPE’s the lower the number of accidents.

5.3. Challenges facing the provision and uses of personal protective equipment

Findings on the challenges facing the provision and uses of personal protective equipment were as follows; 6.4% of the respondents mentioned scarcity of equipment as the challenge facing provision and use of PPE, 29.8% of the respondents mentioned bureaucracy, 19.1% of respondents mentioned carelessness of the company, 21.3% of the respondents mentioned low quality of personal protective equipment provided, 10.6% of the respondents mentioned threat from the management and 12.7% of respondents mentioned other challenges apart from those mentioned above (see Table 4.11).

The challenges found at TTC included shortage of PPE, bureaucracy, and also that PPE available were not in good condition. Due to shortage of personal protective equipment causes employees to get into operational activities without wearing PPEs. Provision of those equipment was based on bureaucracy from the leaders to distribute them to workers. The company was not very serious when it comes to the issue of supplying more and more equipment. It takes a long circle to employees to be given safety gears. An employee who was lacking personal protective equipment should communicate with the immediate supervisor in that section. Then supervisor had to take that claim to the health and safety manager, then health and safety manager will now order the storekeeper to give the required PPE.

An employee will get the required PPE in the same cycle. Therefore, it takes seven days for an employee to receive the personal protective equipment something which push them to get into work without wearing PPE. Also, the other challenge was that
the PPE provided was of low quality (they don’t last longer). Despite the fact that majority of employees were wearing personal protective equipment, the researcher during data collection managed to see some of the workers in production unit using PPEs which are not in good conditions something which can endanger their health. Moreover, during the interview with the health safety manager asserted that some of the challenges facing TCC in the provision and use of protective equipment include the following; scarcity of the equipment and low quality of the protective equipment.

...here at TCC the main challenges facing us in the provision and use of personal protective equipment are first the scarcity of the equipment and secondly is that the quality of personal protective equipment which we buy are of low quality...

Surprisingly, Kiunsi (2012) also found challenges in the provision and use of personal protective equipment. The challenges were large number of workers compared to the number of protective equipment available, also the quality of the protective equipment was very low and for that matter they did not last longer. All these findings have revealed that there are challenges in the provision and use of personal protective equipment something which risks the health and safety of workers.

Findings have shown that at TCC, personal protective equipment are adequate although they are endowed with a number of challenges. Some of the challenges facing the provision and uses of personal protective equipment include scarcity of the equipment as well as low quality of the protective equipment. Most of the equipment bought do not last longer, purchasing of the protective gears several times due to inability of the gears to last longer costs the company. It was also found that personal protective equipment has managed to reduce accidents to a great extents.
CHAPTER SIX
SUMMARY, CONCLUSION AND RECOMMENDATION

6.0 Introduction

This chapter presents the research summary, conclusion and recommendations which different actors and research consumers should work on to improve the situation application of health and safety management strategy.

6.1 Summary of the findings

The general objective of this study was to explore the extent to which the TCC strategy for managing health and safety has been successful in reducing accidents. In this dissertation, a number of issues were addressed as related to health and safety measures and reduction of accidents. Specifically, the following were the findings:

6.1.1 Adequacy of PPE at Tanzania Cigarette Company

Adequacy of personal protective equipment at Tanzania cigarette company showed that personal protective equipment are adequate at TCC. Respondents agreed that personal protective equipment were provided to them. Furthermore, it was found that some of the personal protective equipment were provided to the employes include gloves, safety shoes, helmet and mouth guards.

6.1.2 Extent to which the provision of PPE has managed to reduce accidents

The extent to which the provision of PPE has managed to reduce accidents showed that personal protective equipment have managed to reduce accidents to a great extent. Through the use of personal protective equipment, the accidents have been decreasing from the year 2011 to the year 2015.
6.1.3 Challenges facing the provision and uses of personal protective equipment

The challenges facing the provision and uses of personal protective equipment showed that some of the challenges include; low quality of PPE provided by the company, scarcity of personal protective equipment and bureaucracy in the provision of the personal protective equipment to workers.

6.2 Conclusion

The purpose of this study was to explore the extent to which the TCC strategy for managing health and safety has been successful in reducing accidents at TCC. TCC has managed to reduce accidents to a great extent due to provision of personal protective equipment. Although there are challenges like bureaucracy, scarcity and low of quality of protective equipment yet the company has reduced the number of accidents through the use of personal protective equipment.

6.3 Recommendations

The following are the recommendations with regard to the implementation of health and safety management strategy at TCC. There should be effective inspection at the TCC and other industries; this should be done by the government via its agency (OSHA). This will enable authorities concerned to observe the real situation of the industries. The company should make sure that PPE are provided to a large quantity in order to meet the demand of workers. Provision of adequate PPE; still TCC does not provide health and safety equipment on time. The employees who do not wear PPE for their own ignorance should be penalised. This will enable employees to be serious in wearing personal protective equipment in order to reduce the danger of getting an accident and injuries.

The government should always insist on the adherence to principles and regulations of safety and health of workers and in case the company does not adhere to that it should be penalised. This will make the companies afraid and for that matter they will adhere rules rules on safety and health of workers.
Likewise, the company should always make workers and remind workers on the use of personal protective equipment. If workers will be aware of the importance of wearing PPE they will always use them.

### 6.4 Areas for Further Research

As the findings of this research are based on only one company which was TCC, there is a need to conduct more empirical field surveys on the extent to which the TCC strategy for managing health and safety has been successful especially to reduce accidents in the Tanzania Cigarette Company. This study recommends further research to be undertaken in the following areas:

- Awareness of workers on the use of personal protective equipment.
- Provision of sufficient equipment to workers.
- Awareness on the importance of using PPE all the time by workers while at job premises.
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APPENDICES

INTERVIEW GUIDE ON HEALTH AND SAFETY MANAGEMENT

PART I

Interview guide for the Environmental Health and Safety Manager

1. When did you start working with Tanzania Cigarette Company?
2. Does your company perform pre employment and exit medical examination?
3. Does your company perform periodic medical examination?

4. Do you provide enough funds for buying protective equipment to your employee?

5. How many times do you allocate fund to buy protective equipment per year?

6. Is the fund allocated for buying protective equipment sufficient?

7. Do you think that the protective equipment are sufficient to your employees?

8. Do you have some strategies to be use to make sure that the working environment is health and safe to your employees?

9. Do you allocate fund for training your employees on how to wear PPE properly in order to reduce fatal and occupational accident?

10. How many times do you allocate fund for training on the proper wearing of PPE in a year?

11. Are there some challenges that you encounter in provision of protective equipment for the employees to wear?

THANK YOU VERY MUCH FOR YOUR PARTICIPATION.
INTERVIEW GUIDE ON HEALTH AND SAFETY MANAGEMENT

PART I

Interview Guide for Trade Union leaders

1. For how long have you been working with this trade union?

2. How do you make sure that there is sufficient and quality PPE to the employee?

3. For your experience what do you think is the causative agent of accident in this company?

4. Do you think the use of PPE has helped to reduce accidents in this company?

5. Have you ever receive any case of accident which is resulted from not wearing PPEs?

6. What steps do you take after receiving such a case?

7. What challenges are you facing in the cause of making sure that employees are provided with PPE?

8. What challenges do you encounter during the process of campaigning for the availability and the use of PPE?

PART II

Interview guide for H & S Inspector

1. For how long have you been in this Company?

2. How many times do you inspect employees while they are working?

3. Is there sufficiently availability and quality Personal Protective Equipment in this company?

4. In case that the PPEs are not sufficient what do you do?

5. Does the employees properly wear protective equipment during working hours?

6. In case where employees do not wear personal protective equipment, what measures do you take?

8. Do you think the use of PPEs reduces employees accidents and fatal in this company
9. Have you ever witnessed any accidents which are resulted from the employees not wearing PPE?

10. What challenges are you facing in the processes of inspecting employees to make sure that they wear PPE?

11. What do you think it can be done so as to overcome the challenges you encounter during inspection to make sure that employees wear PPE?

**QUESTIONNAIRE ON HEALTH AND SAFETY MANAGEMENT**

I Gideon Dominick, Massaopursuing Master degree in Human Resource Management at the University of Mzumbe. As a part of my degree programme, I am conducting my field study on health and safety Management Practices in Tanzania particularly to explore the extent to which the TCC strategy for ensuring health and safety of workers has been successful, especially in ensuring adequate provision of protective equipment to employees as a means of reducing accidents.

For the successful accomplishment of the study, the researcher needs to gather data relevant to the study. For that purpose, the researcher decides together with other methods to use Questionnaire technique.

i. The following Questionnaire is deliberately designed to secure some information to meet academic purpose of the researcher and not otherwise with the following objectives:-

ii. To find out whether the availability of PPE are adequate at Tanzania Cigarette Company.

iii. To determines the extent to which Personal Protective Equipment have managed to reduce accidents to employees in the TCC.

iv. To identify the challenges facing the provision and uses of Personal Protective Equipment in TCC.

v. To provide some recommendations, this will aid to formulate better strategies
PART I

Personal information

1. Sex ...............................  
2. Age ...............................  
3. Nature of work ...............................  
4. Work experience ...............................  
5. Marital status ...............................  

PART II

To be filled with health and safety committee

1. For how long have you been on the committee?  
   (a) Less than one year  
   (b) One year up to two years  
   (c) Two up to three years  
   (d) Three up to Four years  
   (e) Five years and above  

2. How many times do you meet to discuss about employees’ health and safety issues?  
   (a) After every one month  
   (b) After every three months  
   (c) After every six months  
   (d) After every one year  
   (e) One year and above
3. In your opinion, do you think that the company is complying with employees health and safety regulation?

(a) Yes ( )
(b) No ( )

If No, why ?
___________________________________________________
___________________________________________________
___________________________________________________

If Yes, Please explain
___________________________________________________
___________________________________________________

4. Have you ever meet with any incident where an employee was injured or die as results of not wearing PPE?

(a) Yes ( )
(b) No ( )

If Yes, Please explain?
___________________________________________________
___________________________________________________

5. What steps did you take to make sure that such situation cannot happen again?

(a) Report to the employer ( )
(b) Report to the inspector ( )
(c) I did not do anything ( )
(d) Any other (specify) ( )

___________________________________________________
___________________________________________________
6. Have you ever recommended to the employer about any matter affecting the health of employees?

   (a) Yes
   (b) No

If No, why?

If Yes, please explain

7. Was your recommendation considered?

   (a) Yes
   (b) No

If Yes, to what extent?

If No, why?

8. Do you keep records of the recommendations made to the employer for further reference?

   (a) Yes
   (b) No

If No, why?
9. Have you ever written a report to the inspector about any injury, illness or death of an employee?

(a) Yes ( )

(b) No ( )

If No, why?________________________________________________________

10. What steps did he/she take to handle the matter?

(a) Reporting to the general manager ( )

(b) Demoted him ( )

(c) Called a meeting ( )

(d) Any other (specify) ( )

________________________________________________________

11. In your opinion, do you think that the use of PPE have managed to reduce the accident and fatal in this company?

(a) Yes ( )

(b) No ( )

If Yes, to what extent?________________________________________________

If No, why?________________________________________________

12. Are the Personal Protective Equipment available and are of good Quality?

(a) Yes ( )

(b) No ( )
If No, Why?
___________________________________________________
___________________________________________________
___________________________________________________

13. If they available, are they sufficient?

(a) Yes           (       )

(b) No           (       )

If No, why?
___________________________________________________
___________________________________________________
___________________________________________________

14. Do you think that the use of PPE have managed to reduce accident in this company?

(a) Yes           (       )

(b) No           (       )

If yes, to what extent?
___________________________________________________
___________________________________________________
___________________________________________________

If no, why?
___________________________________________________
___________________________________________________
___________________________________________________

15. Do you encounter any challenges in making sure that employees are accident free?

(a) Yes           (       )

(b) No           (       )

If yes, (Specify)
___________________________________________________
___________________________________________________
___________________________________________________
PART III

To be filled by workers in operation of machines

1. For how long have you been working with this company?
   (a) Less than one year
   (b) One year up to two years
   (c) Two up to three years
   (d) Three up to Four years
   (e) five years and above

2. Does the company ensure safe work materials are given to you?
   (i) Strongly Disagree
   (ii) Disagree
   (iii) Neutral
   (iv) Strongly agree
   (v) Agree

3. Does the company provide sufficient personal protective equipment to wear while at work?
   (i) Yes
   (ii) No

   If No, why?
   ______________________________________________________________
   ______________________________________________________________

4. In your daily operation, do you use personal protective equipment?
   (i) Yes
   (ii) No
If Yes, specify?

___________________________________________________  _________________________
___________________________________________________  _________________________

If No, why?

___________________________________________________
___________________________________________________
___________________________________________________

5. Do you receive adequate training on how to use the personal protective equipment?

(i) Yes  ( )
(ii) No  ( )
(iii) I don’t know  ( )

If Yes, please specify number of training attended

___________________________________________________
___________________________________________________
___________________________________________________

6. To what extent do you have general safety awareness?

(i) Large extent  ( )
(ii) Somehow  ( )
(iii) No idea  ( )

7. Does the company provide the correct type of protective equipment, and are they in good condition?

(i) Yes  ( )
(ii) No  ( )
(iii) I don’t know  ( )

If Yes, please specify kinds of protective equipment provided

___________________________________________________
___________________________________________________
___________________________________________________
8. Does the use of PPEs helps to reduce accidents in this company?

(i) Yes ( )
(ii) No ( )

If no, why? ____________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

9. Does the organisation perform pre-employment examination?

(i) Yes ( )
(ii) No ( )
(iii) I don’t know ( )

If Yes, please specify __________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

10. Does the organisation perform Periodic medical examination?

(i) Yes ( )
(ii) No ( )
(iii) I don’t know ( )

If Yes, please specify __________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

11. Does the organisation perform Exit medical examination?

(i) Yes ( )
(ii) No ( )
(iii) I don’t know ( )

If yes, please specify if any; __________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
12. Are you getting any challenge on how to obtain personal protective equipment?

   (i) Yes                       (   )
   (ii) No                       (   )

If yes, please specify if any;

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

13. What do you think it can be done so as to overcome the challenges on how to obtain PPE?

   i. Buying my own PPE
   ii. Ordering the Health & Safety Manager
   iii. Ordering the General Manager to provide.
   iv. Any other (specify)

________________________________________________________________________

THANK YOU VERY MUCH FOR YOUR PARTICIPATION.
<table>
<thead>
<tr>
<th>Observation checklist</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>There are risk works that expose workers to venerable health and safety problems</td>
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<td>The workers are observed to have good health</td>
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<td>Most of the accidents are due to reckless actions</td>
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<td>There is at least one accident occur due to lack of protective equipment during the year</td>
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<td>There is health and safety seminars or training programme very frequently</td>
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<td>Workers are observed to understand their right to be protected</td>
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<td>Workers are provided with protective equipment</td>
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<td>Workers have proper knowledge on to wear the protective equipment</td>
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<tr>
<td>How many injuries/accidents happen per day caused by proper protective measures</td>
<td>1, 2, 3, 4, 5, 6, 7, 8, 9, 10 more</td>
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<tr>
<td>There are proper measures taken by the management to eradicate the problem of health and safety</td>
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## Documentation Review Checklist

<table>
<thead>
<tr>
<th>Section</th>
<th>Item</th>
<th>Review date</th>
<th>Yes</th>
<th>No</th>
<th>Comment changes</th>
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<tr>
<td><strong>Overview</strong></td>
<td>The title page includes required company information (e.g. Logo, or company name).</td>
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<td><strong>Procedure/body text</strong></td>
<td>All charts, graphs and diagram are labeled accurately and consistently</td>
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<td>Company specific names and industry terminology used consistently throughout the document (e.g. Proper nouns capitalized).</td>
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<td><strong>Standard and style review</strong></td>
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<td>Body text matches standard font, color, size styles.</td>
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QUESTIONNAIRE CODES ADMINISTERED TO EMPLOYEES OF TTC ON THE STUDY OF THE IMPLEMENTATION OF HEALTH AND SAFETY MANAGEMENT STRATEGY.

**Question 1** : Respondents Gender

Code Name: Gender

Male = 1
Female = 2

**Question 2. Code Name: Age of the respondent**

18 – 25 years = 1
2- – 30 years = 2
31 – 40 years = 3
41-50 years = 4
51-60 years = 5
61 and above = 6

**Question 3**

Code Name: Occupation of respondent

Packaging = 1
Technician = 2
Production = 3
Logistic = 4
Machine operators = 5
Others = 6

**Question 4**
Code name: Experience
Less than 1 years = 1
2 up to 5 years = 2
6 years up 10 years = 3
11 yrs up 15 yrs = 4
16 and above = 5

**Question 5**
Code name: Marital status
Single = 1
Married = 2
Divorced = 3
Widows = 4

**Question 6**
Yes = 1
No = 2
**Question 7**

| Yes   | = 1 |
| No    | = 2 |

**Question 08**

| No protective equipment | = 1 |
| Ignore the use of PPE   | = 2 |
| No enough education     | = 3 |
| Others                  | = 4 |

**Question 09**

| Yes   | = 1 |
| No    | = 2 |
| I don’t know | = 3 |

**Question 10**

| Maximum level | = 1 |
| Minimum level | = 2 |
| Not at all    | = 3 |

**Question 11**

| Yes   | = 1 |
| No    | = 2 |
| I don’t know | = 3 |
**Question 12**

Mouth guard = 1  
Gloves = 2  
Safety boot = 3  
Helmet = 4  
Others = 5

**Question 13**

Yes = 1  
No = 2  
I don’t know = 3

**Question 14**

To check health condition of an employee’s = 1  
To get the right person on the right position = 2  
To provide treatment to qualified employees = 3  
Others = 4

**Question 15**

Yes = 1  
No = 2  
I don’t know = 3
Question 16

Chest = 1
Pressure = 2
Eyes = 3
Ears = 4
Others = 5

Question 17

Yes = 1
No = 2
I don’t know = 3

Question 18

Chest = 1
Eyes = 2
Pressure = 3
Skin effection = 4
Ears = 5
Others = 6

Question 19

Yes = 1
No = 2
**Question 20**

Scarcity of equipment = 1

Bureaucracy = 2

Carelessness of the company = 3

Low quality PPE = 4

Others = 5

**Question 21**

Buying protective equipment = 1

To order H and S managers = 2

Good company’s H &S policy = 3

OSHA to inspect companies = 4

To provide education on the wearing of PPE = 5
APPENDIX III: MAP OF STUDY AREA

https://www.google.com/maps/place/Tanzania+Cigarette+Company,+Dar+es+Salaam,+Tanzan...
APPENDIX IV: TCC MANUFACTURING DEPARTMENT STRUCTURE

Manufacturing Director

Production Manager  Finance Controller  Quality Manager  Engineering Manager  EHS Manager  Manufacturing Services Manager