EFFECT OF OCCUPATIONAL HAZARD ON ORGANIZATIONAL PERFORMANCE IN PUBLIC TERTIARY INSTITUTION

(A CASE STUDY OF WORKS DEPARTMENT OF KWARA STATE POLYTECHNIC, ILORIN)

By

AWOSEYIN WURAOLA ABIGAIL

HND/23/BAM/FT/0881

A RESEARCH PROJECT SUBMITTED TO

THE DEPARTMENT OF BUSINESS ADMINISTRATION AND MANAGEMENT, INSTITUTE OF FINANCE AND MANAGEMENT STUDIES, KWARA STATE POLYTECHNIC, ILORIN KWARA STATE.

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF HIGHER NATIONAL DIPLOMA (HND) IN BUSINESS ADMINISTRATION AND MANAGEMENT

JUNE, 2025

CERTIFICATION

This project has been read and approved as meeting the requirements for the award of Higher National Diploma (HND) Business Administration and Management, Institute of Finance and Management Studies, Kwara State Polytechnic Ilorin, Kwara State.

.....	**.....**
MR. ALAKOSO I.	**DATE**
(Project Supervisor)	
.....	**.....**
MR. ALIYU U.B.	**DATE**
(Project Coordinator)	
……	**……**
MR. ALAKOSO, I.K	**DATE**
(Head of Department)	
……..	**……**
EXTERNAL EXAMINER	**DATE**

DEDICATION

This project is dedicated to Almighty God who crown all human I dedicate this project to almighty God, The source of my inspiration, wisdom, knowledge and understanding. He has been the source of my strength throughout this my project. The Creator of Heaven and Earth, The one who know me more than myself. And also to my brothers Mr Awoseyin Babajide and Mr Adegun Abolore and also to my Sisters Awoseyin Oluwakemi and Ojo Oluwapelumi for for their parental role on me, And also for their support and Care, May almighty God continue to bless them (Amen)

ACKNOWLEDGEMENT

I would like to express my gratitude and appreciate to all those who gave me the possibility to complete this project work.

Firstly I stand in the name of almighty God the most beneficent and the merciful. The omnipotent and omnipresence peace and blessing of God and all those who believe in his message till the day of judgment for his care and support for his wisdom, knowledge and understanding throughout my ND days and HND days in the School.

My special thanks to my brother, Mr Awoseyin Babajide and also to my Sisters, Awoseyin Oluwakemi and Ojo Oluwapelumi, May Almighty God bless you Sir/Ma, May you live long to reap the fruit of your Labor (Amen)

My Sincere gratitude also goes to Mr Adegun Abolore, Thank you so much for Everything you have done for me Sir, I really appreciate Sir, Am so grateful Sir, May God Almighty bless you Sir, May you live long to reap the fruit of your Labor (Amen)

I also thanks my Supervisor Mr. Alakoso Ibrahim, Whose help Stimulating suggestions and encouragement helped me in all times in writing the project work, May God be with you Sir (Amen)

A very big thanks goes to all support and advice me in one way or the other, May God bless you all and increase you in all ramification (Amen)

All my appreciation begins and end with the lord, my creator, my Supporter, my backbone, my protector, Thank you for been there for me, May your name be highly glorified (Amen)

TABLE OF CONTENT

Title page		i
Certification		ii
Dedication		iii
Acknowledgment		iv
Table of contents		v
CHAPTER ONE		
1.0	Introduction	1
1.1	Background to the study	1
1.2	Statement of the Study	4
1.3	Research Questions	5
1.4	Objectives of the study	5
1.5	Research Hypothesis	6
1.6	Significance of the study	6
1.7	Scope of the study	7
1.8	Definition of Terms	8
CHAPTER TWO		
2.0	Literature Review	10
2.1	Introduction	10

2.1 Conceptual Review 11

2.2 Theoretical Framework 23

2.3 Empirical Review 26

2.6 Gaps in Literature 28

CHAPTER THREE

Methodology 30

3.0 Introduction 30

3.1 Research Design 30

3.2 Population of the study 30

3.3 Sample Size and Sampling Techniques 31

3.4 Instruments of Data Collection 31

3.5 Methods of the Data Collection 31

3.6 Methods of the Data Analysis 32

CHAPTER FOUR

Data Presentation, Analyses and Interpretation 33

4.0 Introduction 33

4.1 Presentation of data and analyses 33

4.2 Test of Hypotheses 43

4.3 Discussion of Findings 49

CHAPTER FIVE

Summary, Conclusion and Recommendations 53

5.0 Introduction 53

5.1 Summary of findings 53

5.2 Conclusion 54

5.3 Recommendations 55

References 58

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

The history of the industrial revolution is not a very pretty one from the stand point of employee's health and safety. It was not really thought to be an issue to an employer for almost two centuries. The objectives were Profit and employees were seen as an expendable resource. It might have been this disregard for health and safety that had much to do as money with the attraction of safety that had as much to do as money with the attraction of communism. Today, worker's health and safety is more than just the morally right thing, it is the profitable thing, and it is the law.

This research shall examine the impact of occupational hazards on organizational performance in Works Department of Kwara State Polytechnic, Ilorin.

The work environment has been described as the aggregate of all living and working conditions that may influence the life and health of the workers or workmen. It includes: lifestyle, culture, values, beliefs, perception of quality, stake holders, perception of value for money, current situation (history), changes, benefits or risks of those changes and health promotion strategies.

The work environment consists of various factors which introduce new dimensions of health, causing diseases and injuries which includes, work accidents and exposure to hazards. Emcharole & LIwok (1997) asserted that occupational stress result from negative environmental factors associated with job.

Occupational health is defined by the international labor organization (120) and World Health Organization (WHO) as “the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers in their employment from risk resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities; and to summaries, the adaptation of work to man and of each man to his job”. Bokinni (2006), in his own view, described safety as “a control of recognized hazards to attain an acceptable level of risk”.

Safety means freedom from the occurrence or risk of injury or loss (Aswathapa, 2004). He described industrial or employee safety as the protection or workers from the danger of industrial accidents.

Health and safety in manufacturing companies should be a major concern for everybody in the industry but it is unfortunate that in this part of the world, especially in Nigeria, enough attention is not being given to the issue. In the manufacturing companies; operations call for attention from relevant authorities, regulatory bodies, societies, scientists, professionals and businessman to establish safety and health management programs and laws governing the industry and all works activities (Scribd Inc. 2012).

Public awareness and understanding is a must before changes could be made to improve working conditions. That understanding was based on continuing research into occupational health. As record would have it in 1700, Bernadino Ramazzini, an Italian physician known as the “father of occupational medicine”, appeared on the scene. He conducted the earliest systematic study of occupational

disease. His treatise was entitled discourse on the disease of workers. Ramazzini had the foresight, when attempting a diagnosis, to ask about the patient's work and his health condition. Despite his influence, interest in information concerning worker's health evolved slowly (Morris, 1976 as cited by Allender and Sopraldley, 1996)

The history of the industrialized countries shows that social and economic development is closely interdependent. To this day, no nation has achieved sustainable economic development by neglecting social programmes, nor has any achieved social well-being without standing on sound economic ground. The essential link between the social and economic phase is the working population. All wealth is directly or indirectly obtained from the efforts of the working population (Reich and Okubo, 1992).

A healthy employee is the key factor for sustainable social and economic development. They contribute seriously to the wealth of the industries. As workers became the backbone of industrialization, massive and indiscriminate employment of vulnerable groups, childbirth and women became the order. Most of the employees were inexperienced and unskilled on the type of tasks involved in the occupation. Employees then became special risk group. Poor and unsafe working conditions, rapid introduction of new industries, invention and application of new tools for mass production and other processes brought about serious danger not anticipated to the employees (Reich and Okubo, 1990). All these resulted in significant dangers to both employees and their families they became exposed to various occupational diseases and serious accidents aggravated by endemic diseases like malnutrition, worm infestation, malaria and others. Death toll was

much. Hence, became the origin of occupational health as means of protecting the health and welfare of employees.

1.2 Statements of the problem

All lives are often shattered unnecessarily due to poor working condition and inadequate safety systems in most organizations. Mr. Kofi Annan, former Secretary General of the United Nations United Nations Secretary General made a statement "Let me encourage everyone to join the ILO in promoting safety and health at work. It is not only sound economic policy".

The above statement by the United Nations secretary general reflects that compliance with occupational safety and health policy standards is taken for granted, but that is often meant to be the starting point for safety constant monitoring and auditing of the safety conditions of the work place is also essential.

Health and safety has not been given enough attention is most of the manufacturing industries in Nigeria thereby making the workmen on site prone to accident. As a result of this poor attitude, it is found necessary to create a solution to the problem encountered in the provision of health and safety of workers on site (Scribd. Inc. 2012)

Furthermore, the increasing competition related to the globalization era, the predominance of service oriented industries, the rising job insecurity associated with labor market flexibility (e.g. part-time/temporary contracts) and the shifting demographic composition of the workforce (towards more female, racially diverse and elderly employees), pose important challenges for the health and safety of workers in modern economics. Given the rapidly changing economic environment

of recent decades health and safety has therefore gained new impetus, spurred primarily by the non-trivial costs it entails to both individual and national welfare.

1.3 Research Questions

The following are the research questions for this study.

i. To what extent does occupational health hazard affect the performance of employees?

ii. Do industries have adequate occupational hazard safety policies?

iii. Does safety measure/practice have influence on workers performance?

1.4 Research Objectives

The broad objective of the study is aimed at determining the effect of job hazards on worker's productivity with particular reference to Works Department of Kwara State Polytechnic, Ilorin.

The following are the specific objectives of the research:

I. To examine the effect of occupational health hazard on the level of performance of employee.

II. To determine the impacts of occupational health and safety policies have on organization performance

III. To ascertain influence of safety measure and practice on workers performance.

1.5 Research Hypotheses

The following research hypotheses were formulated to guide the conduct of the research.

H_o: There is no significant relationship between occupational hazard and workers' performance.

$H_{1:}$ There is significant relationship between occupational hazard and workers' performance.

H_O: There is no significant influence of the safety programmes on the attainment of organization performance

H_1: There is significant influence of the safety programmes on the attainment of organization's performance

H_0: There is no significant relationship between safety measures put in place and workers performance

H_1: There is significant relationship between safety measures put in place and workers performance.

1.6 Significant of the study

The fact that Nigeria is increasingly becoming industrialized daily, workers are not only exposed to dangerous machines at work, excessive noise, heat, but also exposed to chemical fumes and dust which are hazardous to health.

It is observed that in most industries or factories, most workers do not use any safety device and this makes them directly exposed to all forms of hazard that occurs in their work place. There is an indication that the health bills incurred in these factories are on the high side almost every month because the workers are

always sent to various hospitals to receive medical treatment for illness and injuries sustained in the place of work.

Based on the fact that the occupation of an individual determines the state of health and job hazard exposed to by such individual. As a result of this, the researcher went further to investigate the effect of health hazard on the level of productivity of the workers.

Most workers of the world, Nigeria in particular are bread winners in their homes, thus the Justification for undertaking this study, as it affects the well-being and safety of workers in their work place. Due to the importance Works Department of Kwara State Polytechnic, Ilorin, and the employment of many Nigerians, any injury among the workers will bring hardship to the fellow worker, his immediate family, to the Management and to the country as a whole. It is therefore imperative and necessary to reduce the rate and prevalence of occupational health problems.

A study of occupational health hazard among workers of the Kwara State Polytechnic, Ilorin (Works Department of Kwara State Polytechnic, Ilorin) will be of immense importance for the planning and implementation of safety measures in these companies and also provide data for the assessment of safety in work place. It is hoped that after this research, industries will be sensitized on the peculiar problems of the group of workers involved.

1.7 Scope of the Study

This study is designed to examine the effect of job hazards on organizational performance of works Department of Kwara State Polytechnic, Ilorin, this institution is educational institution with the primary aim of ensuring learning projection in organizations.

The research study would cover an in-depth study of the industries selected output at the preceding period of production for period of five years covering 2013 to 2020, this period has been chosen carefully because it is believed that most industries started becoming more industrialized during this period, therefore workers started getting exposed to more occupational hazards during this period and this helps captures what the research work is all about.

Data would be obtained from the records of the industries under study and also research would be carried out among the top management, middle management and the junior staff of the industry especially the factory workers to identify their views and perception about their occupational health.

1.8 Definition of Terms

Accident: an unfortunate incident that happens unexpectedly and unintentionally, typically resulting in damage or injury.

Hazard: is something that can cause harm if not controlled

Risk: is a combination of the probability that a particular outcome will occur and the security of the harm involved.

Employee: a person who is hired to provide services to a company on a regular basis in exchange for compensation who does not provide these services as part of an independent business

Health: health is the art and science of preventing disease, prolonging life, promoting physical and mental health, sanitation and personal hygiene, control of infections and organization of health services.

Organization: a social unit of people, systematically structural and managed to meet a need or to pursue collective goals on a continuing basis.

Performance: the accomplishment of a given task measured against preset known standards of accuracy, completeness, cost and speed. In a contract, performance is deemed to be the fulfilment of an obligation in a manner that releases the performer from all liabilities under the contract.

Policy: the set up of basic principles and associated guidelines, formulated and enforced by the governing body or an organization to direct and limit its actions in pursuit of long-term goals

Safety: relative freedom from danger, risk or threat of harm, injury or loss to personnel and/or property, whether caused deliberately or by accident.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Health and safety is an inevitable aspect of manufacturing and this is so because the only time an employee will perform his duties is when the employee is in good health and is sure of a staff working condition. This boils to the fact that a worker will perform his duties to the fullest only when he is sure that even when an accident occurs he will be taken good care of. One of the most important things than an employer should provide to his employers is safety even at a low risk site. At sites where heavy machinery is being used; it is certain that the level is higher because of the mechanical movement of parts of such machinery and therefore for the employee that will be monitoring or operating such machinery will be exposed to accidents. In a case like this, it should be known that the level of safety that will be provided will be much more than that of a site where ordinary hand tools are been used. Based on the above, we now understand that the level of safety and health protection will be higher nowadays because of the rapid mechanisation of the manufacturing industry and the accidents that may occur to the valued more than any other ting in an organization, there is an adage that says “health is wealth”. All other factors involved in the running of an organization all depends on man, both money, material and machines are to be spent utilized and controlled by man. It is of great importance to note that the state of health of an employee is directly related to his level of performance. Therefore a healthy worker is a productive worker.

According to Choetzel (1999), improving employees' health and safety practice at work is directly related to their productivity and profitability of organizations.

2.1 Conceptual Review

2.1.1 Concept of occupational hazard

Under the present constitution of the Federal Republic of Nigeria, we have a list of matters placed in the concurrent legislative list contained in part II of the second schedule of the constitution. These are matters with respect to which both the National Assembly of the federation as well as the House of Assembly of each state are empowered to make law relevant portion of item 17 of the concurrent list reads as follows

a. The health, safety and welfare of persons employed to work in factories, offices or other premises or in inter-state transportation and commerce including the training supervision and qualification of such persons

It is only the federal government that has enacted factories Act 1987 No 16. The factories Act: The title of the enactment is such a long one and it reads as follows:

"An act to provide for the registration, etc. of factories to provide for factory workers and a wider spectrum of workers and other professionals exposed to occupational hazards, but for whom no adequate provisions had been formerly made; to adequate provisions regarding the safety of workers to which the Act applies and to impose penalties for any breach of its provisions".

That long title accurately describes the objective of the enactment. It imposes a number of requirements designed to cater for the safety and welfare of all persons who operate in any factory.

Based on the above assertions, it is imperative to define what the act has defined factory to be according to the section 87(1); "factory" means any premises in which or within which, or within the close or cartilage or precincts of which one person is or more persons are employed in any process for or incidental to any of the following purposes, namely:

a. The making of any article or part of any article; or

b. The altering, preparing ornamenting, finishing, clearing, or washing, or breaking-up or demolition of any article; or

c. The adapting for sale of any article, being premises in which, or within the close or curtilage or precincts of which, the work is carried on by way of trade or for purposes of gain and to or over which the employer of the person or persons employed there in has the right of access or control; and the expression "factory" also includes the following premises in which ten or more persons are employed.

The factories decree 1987 was a landmark in legislation in occupational health in Nigeria. A substantial revision of the colonial legislation, factories Act 1958, the 1958, the 1987 decree, changed the definition of a factory from an enterprise with 10 more workers to a premise with one or more workers thereby providing oversight for the numerous small-scale enterprises that engage the majority of the workforce in Nigeria. The current legislation of the factories Act 1990 which in essence is the same as the 1987 legislation

2.1.2 Health and safety policies and program in the work place in Nigeria

The health and safety of every employee in an organization is important if the organization is to continuously operate to meet its stated goals and objectives. A healthy worker is an able worker, and a safe worker is a focused worker. An unhealthy or unsafe environment affects on employee`s ability and motivation to work (Achalu, 2000).

Thus, health and safety policies and programme are directed at protecting employees from health and safety policies and programmes are directed at protecting employees from health and safety hazards that may arise in the course of performing their work (Achalu, 2000).

According to Adeniyi (2001), managing health and safety at work is usually a matter of developing health and safety policies, conducting risk assessment which identifies the hazards and assessing the risks attached to them, carrying out health and safety audits and inspections, implementing occupational health programmes, managing stress, preventing accidents, measuring health and safety performance, communicating the need for good health and safety practices, training in good health and safety practices and organizing health and safety.

Health hazards relate to those aspects of the work environment that slowly and cumulatively often irreversibly lead to degeneration of an employee`s health. Examples are cancer, poison and respiratory diseases as well as depression, loss of temper and other psychological disorders.

Occupational health programmes are this primarily concerned with the prevention of ill-health arising from workplace conditions, while safety programmes deal with the prevention of accidents and with minimizing the resulting loss and damage to lives and properties (Adeniyi, 2001).

Since ill-health and injurious inflicted by the system of work or working conditions jeopardize employee`s ability to effectively discharge their duties, close and continuous attention to qualify health and high standards of safety must be maintained at all times in the work place. This places, a moral as well as economic responsibility on employers to take measure in ensuring the highest standards of health and safety in the workplace.

However, since it is the government that takes the primary responsibility for ensuring the safety of its citizens, government of many nations' safety policies. In the United States of America for example, the law that governs health and safety in the workplace is the occupational safety and health (OSH) (1970).

The Act was designed to remedy safety problems on the job. The law established safety and health standards that organizations are expected to comply with and when these standards are violated, the law prescribed penalties depending on the security of the outcome of the violation. In Britain, the health and safety work Act (1974) and other related Acts provide the legal framework for the code of practice on matters relating to workplace health and safety.

In Nigeria, the government`s attempt to ensure the health and safety of its citizens in the workplace is contained in two acts. These are the factories Act (19870 and the workman`s compensation Act (1987) which has been replaced by the employee compensation Act. The object of the factories Act (1987) was defined as "An act to provide for the registration of factories to provide safety for factor workers and a wider spectrum of workers and other professionals exposed to occupational hazards, but for whom no adequate provisions has been made; to make adequate provision as regarding the safety of workers to which the Act

applies and to impose penalties for any breach of its provisions (laws of the federation of Nigeria, Vol. 6, chapter F1:F1-4)".

Primarily, the factory Act (1987) prescribes the aspect of the workplace for which employers are expected to develop health and safety policies in order to protect their workers. The general provision for health in this act covers areas such as: cleanliness, overcrowding, ventilation, lighting, drainage of floors and sanitary consciences.

The general provisions for safety covers equipment and facilities such as prime movers, transmission machinery, powered machinery, construction and maintenance of facing vessels containing dangerous liquids; hoist and lifts, chains, ropes and lifting tackles; cranes and other lifting machines, self-acting machines etc.

The workman`s compensation Act is an "Act to make provisions for the payment of compensation in workman for injuries suffered in the course of their employment (law of the federation of Nigeria, Vol. 16 Chapter 6-12). This act specifies the liability of the employers to the employee in the event of any personal injury or harm sustained in the course of his work. Section 32 of this Act, which to occupational disease, specifies that compensation is to be made as if any disease so specified was personal injury by accident arising out of and in the course of the employment. Paragraph (a) of this section emphatically states that the disease muct be due to the nature of the employment. Though the factory Act generally covers the hygiene and safety requirement of work environment, it however focuses purely on factory workplace and only by its extension could it be applied to non-factory workplace.

Also, the health issues addressed in the Act are merely factory hygiene issues that do not take cognizance of serious health issues that may arise in the workplace. In the workman compensation Act, where various degree of accidents that could occur in the workplace and the compensation for them were identified, no mention or decryption of such was made concerning occupational diseases except that compensation would be made for them as if they were accident arising from the course of work. However, as stated curlier, the workman compensation Act has been replaced by the employee compensation Act. The new Act deals with every aspect of the contract of employment entered between employees and employers. Issues therein include: wages, working hours and holiday compensation during illness or infirmity and suspensions among others (Kalejaye, 2013).

Occupational health and safety is concerned with the detection, evaluation and control of environmental health and safety hazards associated with working environment (Deubenspeek, 1974). Such hazards include physical, chemical, biological, ergonomic and psychosocial factors that may have adverse IMPACTS on the health and well-being of workers. These hazards are brought about by two broad categories of causes namely “unsafe work conditions” and “unsafe work behaviors” unsafe work conditions focus attention on the various aspects of work environment, physical, chemical, biological, ergonomic and psychological as already indicated (Deubenspeek, 1974).

On the other hand, unsafe work behavior focuses attention on habits, lifestyles compliance with rules and regulation, body types and proneness to accidents (Adenity, 2001). Interactions between these two broad factors are the major cause of hazards resulting in injuries and health problems.

Therefore, occupational health practitioner presumes that each employer of labor has a general concept of hazards. Every employee on the other hand has the "special duty" of complying with standards of safety and health established by the employer. The debilitating and often fatal consequences of dangerous working conditions on man in various occupations have been well documented by several researchers in occupational health (Nwajei, 1993; Nwachukwu, 2000) of the source of industrial health hazards, chief among them are the organic stress vectors.

In an industrial setting health problem could be physical like injuries and other forms of impairment of physiological problems arising from diseases or emotional imbalance. For example, in Nigeria, employees in manufacturing industry encounter operational problems of noise, toxic, materials heat and stress, radiation trauma and other hazards (Nwahei, 1993).

The occupation or the nature of work performed by a person exposes him or her to health hazards associated with that occupation diverse occupations exist and they include: traditional manufacturing industries (automobile, automotive and appliances), services industries (banking, health care and restaurant), education, agriculture, construction, mining and high technology firms, etc. these health hazards interact with numerous nutritional, hygiene, microbial and social factors in the workers environment to aggravate their impact on health.

There is also interaction between work hazards and chronic diseases such as malaria, diabetes, hypertension and cancer. Types of health problems include labour accident, occupational diseases, chemical hazards and many others. The figures are uncertain due to reporting irregularities. The hazards seriously affected the health of the employees and invariably their productivity. Death toll was much and morbidity very serious. The employers paid no or little attention to the

sufferings of the employers. This brought about the provision of occupational health services to alleviate the sufferings of the employees and to provide preventive and management services for the welfare of employee (Falawiyo, 1995).

Productivity

Productivity is the ratio of output to inputs in production; it is an average measure of efficiency of production (Wikipedia, 2014). Efficiency of production means production's capability to create incomes which is measured by ***"Real Output Value minus Real Input Value"***.

The Memorandum of EANPC defines productivity in a broad sense. Productivity contributes to value creation or added value by making continuously better use of resources to contribute to growth, innovation and employment; it is not seen just as a statistical ratio.

Productivity is an expression of how efficiently and effectively goods and services (i.e. goods and services which are demanded by users) are being produced. Thus, its key characteristics are that it is expressed in physical or economic units - in quantities or values (money) - based on measurements which are made at different levels: on the level of the economy overall, that of a sector or branch of the economy, that of the enterprise and its individual plants/units and that of individuals (EANPC, 2005).

Productivity is a crucial factor in production performance of firms and nations. Increasing national productivity can raise living standards because more real income improves people's ability to purchase goods and services, enjoy leisure, improve housing and education and contribute to social and environmental

programmes. Productivity growth also helps businesses to be more profitable. Moreover, productivity is not only measured by quantity and quality, but also by the benefit the customer obtains. This is especially true for the service industry. The concept of productivity is also increasingly linked with quality of output, input and the process itself. An element of key importance is the quality of workforce, its management and its working conditions and it has been generally recognized that improving quality of working life and rising productivity do tend to go hand in hand (Prokopenko, 1987).

Generally speaking, productivity could be considered as a comprehensive measure of how organizations satisfy the following criteria (Prokopenko, 1987):

- **Objectives**: The degree to which they are achieved.

- **Efficiency**: How effectively the resources are used. (Doing things right)

- **Effectiveness**: What is achieved compared with what is possible. (Doing the right things)

- **Comparability**: How productivity performance is recorded over time.

According to Owoeye (1992), productivity is a quantitative or statistically weighted measured of how efficiently a given set of resources is used in achieving a given set of objectives. It therefore connotes efficiency within a defined effectiveness context.

Productivity means balance between all factors of production that will give the greatest output for the smallest effort (Drunker, 1999).The advanced learners' dictionary defined productivity as being productive, the power of being productive

and increased efficiency and the rate at which goods are produced. Productivity management for a rationalized organization with specific product as common in many organizations in Nigeria is the process or technique of achieving the highest level of effective performance with the least expenditure of resources through motivated and committed people (Owoeye, 1992).

2.1.3 Productivity as a Performance Measure

Measuring performance is one of the most important aspects of operation management, and which has received a great deal of attention during the past few years. In order to make any improvements to the functioning of the transformation process, there must be methods for measuring its current effectiveness.

Productivity is the broadest and most common measures of operations management performance and basically assesses how resources are utilized and managed to achieve a set of desired results. Productivity is defined as the ratio of output to input (Hannagan, 1995).

$$\text{Output} = \frac{\text{results achieved}}{\text{resources consumed}}$$

$$\text{Input}$$

An increase in productivity can therefore result from either an increase in output or a decrease in input. However, the problems of measuring output and input in the same units, and the debate about whether the resulting ratio has any meaning have lead to productivity being considered in relative terms i.e. considering changes in ratio, comparing result in one period with those in another.

Productivity has been a popular measure for many years, primarily because is directly linked to profit, and therefore attracted a good deal of senior management attention. There are three levels at which productivity may be measured.

1. National: where the productivity of a nation or group of nations is measured, international comparisons are then made, and the resulting debates often lead to blame being allocated to various groups such as stock holders, operation managers and research managers.

2. Industry: where the productivity of particular sectors within the economy is measured. Most governments issue statistics on the relative performance of both manufacturing and service industries. Often expressed as output per employee per hour. Such statistics are useful for individual firms to compare their performance to the industry average, although, relative change is probably more important than absolute measure.

3. Organization: where the productivity of a particular organization is measured.

Undertaking a quality improvement programme is one way to address the issue of improvement. Often, companies have trouble getting started on productivity improvement because; they do not have measures of productivity, commitment to change or feedback on result received. It should be born in mind that any improvements in productivity should be made within the context of the organization as a whole, and after consideration on how productivity improvement affects other performance objectives, such as increased flexibility and reduced lead-time (Nwaochei, 1997).

Considering the effect of job hazards on productivity, prevention of job hazards need to be adequately put in place by ensuring that workers are in good health at the point of employment and that their health is not in jeopardy by virtue of their jobs (Shilling R.S.F., 2001), Shilling suggested that an enterprises must be re-tooled for higher productivity in order to compete successfully in the nearest future and that there is need to prevent the incidence and prevalence of job hazards to enhance the working ability of the working population.

2.2 Theoretical Review

2.2.1 Maximization Theory

The basic position of enlightened value maximization theory is that an organization cannot maximize its long-term market value if it ignores or mistreats any important constituency.

The theory argues that, organizations can maximize long term value by choosing among the competing demands of stakeholders or by making necessary trade-offs among the demands from stakeholders. Practically, shareholders want low risks and high returns, customers may also want low prices and high quality services.

Employees may also want benefits, safer and healthier working environments, medical benefits and pension. Although it is important that the organisation's purpose of making profit should consider the social welfare of employees and the society as a whole, managements of organizations must focus on issues where there is a direct link to business needs (Grayson and Hodges, 2001).

Therefore, being socially responsible includes making profit. Obviously, healthy employees can make huge profits; that is, by this theory, invest additional money in important constituency and that investment means greater financial returns to the

organisation. Since the theory of enlightened value maximization leaves the decision for the organisations to decide which constituent is relevant and worth investing in, it is worth arguing that the health and safety of employees is paramount.

According to this theory, there is a direct relationship or link between a firm's profitability, survival and growth and the management of its employees' health and safety.

Although there are methodological difficulties of accurately measuring costs and benefits of employee health and safety, few studies have provided some evidences to justify employee health and safety investment. For example, Miller and Haslam (2009) in their study found that most companies consider legal prosecution as the major drive for employee health and safety management. Fernandez-Muniz et al., (2009) argued that the need to gain competitive advantage and increase economic-financial returns must drive business firms to invest in employee health and safety practices.

Ashraf and Naseem (2003) and EEF (2007) also found that poor employee health and safety practices leads to high absenteeism and lost workdays which eventually results in low productivity. Research has also linked high rate of employee turnover to poor employee health and safety practices (Rolfe et al., 2006).

Likewise, business firms that invest in employee health and safety benefits reduced healthcare costs, workman compensation and insurance costs (Attridge, 2005; Loeppke et al., 2007; Wright and Marden, 2002).

There is a positive relationship between total quality management practices and employee health and safety practices. For example, Mossink (2000) found that

quality service provision has a strong connection with healthy employees. Smallman and John (2001) indicated that the fear of losing corporate credibility and reputation underpins corporate action for employee health and safety.

Haefeli et al., (2005) argued that apart from the above benefits, firms maximize long term financial gains and improve their corporate performance when they invest in employee health and safety. CIPD (2007) confirmed the above findings by indicating that firms can effectively create shareholder value when some of the profits are re-invested in employees' health and safety management.

2.2.2 Stimulus-Based Theory

Kahn (1986) defines stimulus-based stress as-external forces or conditions that are hypothesized or demonstrated to have negative (painfully damaging incapacitating) IMPACTS on the organization of interest (p.42). stimulus-based stress theorists believe that the factors in the environment exert on influence on an individual (Derogatis and Coans, 1993; Lazarus and Folkman, 1986b, Meichenbaum, 1986). Essentially, this model proposes that external stressors in the environment result in a stress reaction or stain (Cox, 1978). In addition, different categories of stimulus stressors have been identified in terms of their ability to reduce stress such as; (a) acute, time-limited stressors; (b) chronic stressors intermittent stressors; (c) stressors sequencies; and (d) chronic stressors; (Derogatis and Cons, 1993).

2.2.3 Role Theory

In order to fulfill expected service over the last decades service, agencies, in most western economies have undergone major organizational restructuring and redefinitions of professional rules (Biggs et al; 1995). One of the basic premises of

the role theory is that various occupational roles that individuals engage in may be stressful regardless of their actual occupation, suggesting that stress found in various work roles may be stressful for all workers. Osipow and Spokane (1987), described six work roles that they felt were stressful regarless of an individual actual vocational choice. These six roles are (a) role ambiguity (b) role insufficiency (c) role overload (d) role boundary and (f) physical environment (Osipow and Spokane, 1987; Osipow, 1998).

2.2 Empirical Review

Health and safety hazards experienced by individual workers are part of the understanding of occupational hazards. Research has suggested that health and safety hazards affect workers presenteeism and commitment to work, which directly determines workers performance. Existing studies have really discussed occupational hazards on workers and organizational performance (Becker, Billings, Eveleth & Gilbert, 1996; Ricci & Chee, 2005; Ahmed & Newson-Smith, 2010; Bevan, 2010; Kanten, 2013). But no study exist that deals with the IMPACTS of occupational hazards on workers performance in Lafarge Cement WAPCO Sagamu, Ogun State. Some of the existing studies are presented below:

A lot of studies have established the link between workers commitment and performance. For instance, Brown, McHardy, McNabb and Taylor (2011) concluded that workers commitment has been observed as a central feature in high performance workplace literature. Becker, Billings, Eveleth and Gilbert (1996) found that workers commitment is strongly linked to their performance. Okoye, Odumegwu and Omuku (2012) in their study discovered that most workers in Nigeria were unaware of the hazardous nature of their work environment and the consequences of working in such places without adopting the relevant safety

measures. Ahmed and Newson-Smith (2010) discovered that despite the relatively high knowledge of the cement factory workers about the adverse health IMPACTS of exposure to dust, the use of respiratory protective equipment was poor. A leading factor has been the work environment with emphasis on illumination, temperature, noise, and atmospheric conditions (Asigele, 2012; Akintayo, 2012; Jagero, Komba & Mlingi, 2012), with recent studies pointing at other significant factors such as malfunctioning working tools and absence of health insurance scheme (Yusuff, Adegbite, Awotedu, & Akinosho, 2014;Brown, McHardy, McNabb, & Taylor, 2011; Bhandari & Adhikari, 2014).

Mannan (1996) discovered that a high rate of absenteeism was an important cause of loss in production. In a related study, Onakoya (2006) discovered that workers absenteeism significantly affect workers performance. In different studies, Allen (2008) and Escorpizo (2008) found out that absenteeism is a counterproductive work behaviour which undermines work performance level. Marzec (2013) in his study linked frequent workers absenteeism to occupational risks and hazards at work. Ricci and Chee (2005) found that employees with these kinds of medical conditions like heart disease, hypertension, diabetes and some cancers are likely to have higher absenteeism than healthy employees. Biron and Bamberger (2012) found out in their study that perceived job hazards and exposure to critical incidents are positively related to subsequent absenteeism.

In a related study, Ahmed and Newson-Smith (2010) investigated knowledge and practice related to occupational hazards among cement workers in United Arab Emirates and discovered that majority of the workers knew that exposure to the dust was a serious hazard to their health. Kanten (2013) investigates the relationship among the safety climate, working conditions, safety

behaviour, occupational accidents and injuries. He discovered significant relationships between safety climate and safety behaviours. Aribigbola, Fatusin and Fagbohunka (2012) discovered that poor environment is of serious health concerns to work force and with reference to cement plants, such threat to workers health include sand blasters, stone crushers, those involved in drilling, quarrying and tunnelling. Thus, a satisfactory working environment translates to a healthy workforce (Bjerkan, 2010; Kanten, 2013). An unfriendly work environment as noted by Garcia-Herrero, Mariscal, García-Rodríguez, and Ritzel (2012) is capable of causing occupational hazards. In a related study carried out by Leigh (1991), he found out that workers' engaged in dangerous jobs report more absence in a year than those who work in safe environment.

2.4 Gaps in Literature

Occupational health and safety is the concern of human wellbeing that, this day, industrialization and service giving sectors development is accelerating resulting in workplace health problem booming. Workplace safety and health hazard nowadays considered as a driving force toward finding solutions how to prevent it from the manufacturing industries employee negative consequence. In recent years, the quality, health, knowledge and safety requirements in many countries have been more stringent than was the case previously seen. Some research finding concluded that pressures from communities have led to the enactment of various safety legislations and safety standards in different countries and regions for different industries (Dejoy and Southern, 1993). Ahonen et al. (2002) argue that different international and national safety standards provide guidance to help organizations develop their safety management systems (SMS) with respect to varied business needs and requirements. Despite the fact that people

are working and they spend most of their working hours at the workplace, little attention and resources are accorded to health and safety at work (Michaels et al., 1985).

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the procedures, methods and techniques the researcher adopted in the research work. Research work most often than not is appraised based on the quality and accurateness of the analysis and information it provides at the end. However, this is dependent on the nature of data collected during the research. As a result, this chapter looked at how data were gathered for the research. The methodology enlightened on the tools or techniques for research design, data collection, the population and sampling techniques, data sources, data collection instruments, and data analysis plan.

3.1 Research Design

Survey and descriptive research designs were used in this study not only because of the type of data the study aims to collect but also because it allows for the cross section study of a clearly defined population. This is concerned with the entire research plan that was used in carrying out this study. It represents a comprehensive data plan whose purpose is to answer research question and analyze the outcome not only in statistical way but also in a descriptive way.

3.2 Population of the Study

The target effects that sales promotions have on the organization performance, encouraging purchase of large size unit. Sales promotion consist of diverse collection of incentive tools, mostly, short term designed to stimulate quicker or

greater purchase of products or services by consumers e.g. the use of premiums, product warrants etc stimulate consumer purchases in larger quantities.

population for this research is the staff in the Works departments of Kwara state, Ilorin serves as the sample frame for the study and the total staffs were 50.

3.3 Sample size Sampling Techniques

This study adopts a simple random sampling technique in selecting its sample respondents were selected accidentally because of the tight schedule of all employees; the available respondents were approached at sight. At the second stage thirty respondents were targeted constituting a little above seventy five percent (60%) of the employees working on the plant.

3.4 Instruments of data collection

In order to produce a comprehensive result and to achieve the stated objective on the proposal for this research work, the following line of action have been adopted for the collection of data and other useful information for the study. They are primary and secondary sources of information which knowledge on the project topic as a support.

i. Primary data: collection techniques used was the questionnaire, and observation.

ii. Secondary data: these were collected from textbooks, journal and publication including records of 7up Bottling Company.

3.5 Methods of data collection

Due to the nature of data required for this study, structured questionnaires and in-depth interview was used to elicit information about the IMPACTS of

organizational health and safety policies on employees' performance at Works Department Kwara State Polytechnic, Ilorin. Structured questionnaires was used to collect information from the employees in each of the department on the plant and this represents the quantitative data while in-depth interview was used to collect information from selected employees from various departments and this represents the qualitative data.

3.6 Methods of data analyses

A statistical package for the social sciences (SPSS) was used in coding and entering data from the questionnaire, while data from the in-depth interview was transcribed from field notes. Frequency distribution was used to analyze the quantitative data obtained from the questionnaire, while data obtained from in-depth interview was analyzed qualitatively.

CHAPTER FOUR

4.0 DATA PRESENTATION, ANALYSES AND INTERPRETATION

4.0 Introduction

This chapter covers the presentation of responses, analysis and findings of data collected from the respondents through diverse sources, i.e. questionnaire, interview, personal observation and evidence. The study in an attempt to collect data relevant to the study distributed copies of questionnaire that covers 60% of the total study area for the selected department using simple random sampling technique. With this number the total copies of questionnaire administered were thirty five (35).

However, it is important to state that only thirty (30) copies of questionnaire in all were filled, completed and returned. As a result, presentation, analysis and conclusion of the study were base on the thirty (30) returned copies of questionnaire as shown in the subsequent tables.

4.1 Demographic Characteristics of Responses

Below is the tabular summary of responses to personal information on the questionnaires distributed to respondents.

Table 4.1.1 Demographic Profiles of Respondents

TABLE 1: Distribution of respondents by Gender

Variable	**Frequency**	**Percentage**
Male	**25**	83.4%

Female	5	16.6%
Total	**30**	**100.0%**

Author's Computation, 2025

The responses above are according to the sex of workers in the Department of Works in Kwara State Polytechnic, Ilorin. It shows that out of 30 respondent 83.4% were male while just 16.6% were female respectively. This result indicates that there are more male workers in the Department of Works than the female, and this can be seen in the nature of their job, which involve much fieldwork. Various jobs that involve physical and able body are driving, mechanics and workshop.

TABLE 2: Distribution of Respondents by Age

VARIABLE	**FREQUENCY**	**PERCENTAGE**
30-39 years	5	16.6%
40-49 years	10	33.3%
50 years above	15	50%
TOTAL	**30**	**100%**

Author's Computation, 2025

Table 2 above shows the age distribution of respondents and the distribution shows that the model age's bracket consists of respondents whose age ranges between 30-39 years and they are 5 in the sample. Respondents within 40 – 49 years are 33.3% of the sample while 50% of the respondents have their age bracket

above 50years. Therefore, it could be concluded that the number of respondent with the ages from 50 and above was the largest.

Table 3: Distribution of Respondents by Academic Qualification

VARIABLE	**FREQUENCY**	**PERCENTAGE**
OND/NCE	10	33.3%
HND/BSC	20	66.7%
TOTAL	30	100%

Author's Computation, 2025

Table 3: Distribution of respondents by working experience

VARIABLE	**FREQUENCY**	**PERCENTAGE(%)**
2-5 years	4	13.3%
6-10 years	9	20%
Above 11 years	17	56.7%
Total	**30**	**100%**

Author's Computation, 2025

The table above shows that the distribution of respondents by working experience. Respondents with 11 years working experience constitute the larger number of the respondents while respondents with 2-5 years constitute 13.3% while respondents representing 20% hace 6-10 years of working experience.

Table 4: Distribution of Respondents by Nature of Employment

VARIABLE	FREQUENCY	PERCENTAGE(%)
Casual	10	33.3%
Full time	20	66.7%
TOTAL	**30**	**100.0%**

Author's Computation, 2025

. Table 4.1.1 also reveals that most of the respondents (66.7%) are full time staff, while(33.3%) working for about 7 to 14 hours.

Table 4.1.2: Are you Aware of hazard in your working place

OPTIONS	RESPONDENTS	PERCENTAGE (%)
Yes	**30**	**100**
No	**-**	**-**
Likely	**-**	**-**
Unlikely		
No	**-**	**-**
Total	**30**	**100**

Author's Computation, 2025

Table 4.1.2 reveals that 100% of the respondents were aware of the problems they are likely to face in there department. This result indicates that workers are aware

of hazard in the working place and they are enlightened on how to avoid all these hazards.

Table 4.1.3: provision of protective device

OPTIONS	**RESPONDENTS**	**PERCENTAGE (%)**
School	10	33.3
Personal	5	16.7
Both	15	50
Total	30	100

Author's Computation, 2025

Table 4.1.3 reveals that 33.3% of the respondents were of the opinion that school provides protective devices for them in case of any hazard, 5% indicated that they provided their protective devices by themselves, while 15% indicated that protective devices were provided by themselves and the school. This means that provisions of protective devices are not left to the company alone, the workers also provide protective for themselves if it is not available in the organization.

Table 4.1.4 Are you satisfied with your work?

OPTIONS	**RESPONDENTS**	**PERCENTAGE (%)**
Yes	**25**	**83.3**
No	**5**	**16.3**
Undecided		**-**

Total	**30**	**100**

Author's Computation, 2025

Table 4.1.4 shows that majority of the respondents representing (83.3%) were satisfied with their work, (16.3%) responded negatively and none was undecided. This implies that though many of the respondents were satisfied, some employees are unsatisfied with the level of work done in the organization.

Table 4.1.5: Have you in one way or the other sustained any injury during the process of executing your job?

OPTIONS	RESPONDENTS	PERCENTAGE (%)
Yes	**20**	**66.7**
No	**5**	**16.3**
Undecided	**5**	**-**
Total	**30**	**100**

Author's Computation, 2025

Table 4.1.5 shows that (66.7%) of the respondents had, one way or the other sustained injuries in the process of executing their duty, (16.3%) responded negatively and (16.3%) were undecided. This means that higher than average injuries are found in the workplace and many of the respondents appear to have suffered injury in the workplace.

Table 4.1.6: Level of illumination in the various sections

OPTIONS	RESPONDENTS	PERCENTAGE (%)
Yes	**15**	**50**
No	**10**	**33.3**
Undecided	**5**	**16.7**
Total	**30**	**100**

Author's Computation, 2025

Table 4.1.6 shows that (50%) of the respondents indicated a positive response in terms of level of illumination in the organizations, (33.3%) were unsatisfactory with the level of illumination in the work place, while and (16.7%) were undecided. This implies that occupational hazard like slips and trips, collision, fall from height, struck by objects, etc. will be limited in the organizations.

Table 4.1.7: maintenance of premises (environment)

OPTIONS	**RESPONDENTS**	**PERCENTAGE (%)**
Yes	**15**	**50**
No	**10**	**33.3**
Undecided	**5**	**16.7**
Total	**30**	**100**

Author's Computation, 2025

In recognition of how the premises is well-maintained, table 4.1.7 reveals that majority (50%) of the respondents confirmed that the environment is well maintained. Though (33.3%) were not satisfied with how the environment is maintained and (16.7%) were undecided, the margin in the responses justify how the management of Kwara state Polytechnic, Ilorin should improve on the maintenance of their environment to reduce the level of health hazard.

Table 4.1.8: Protective clothing, rubber, gloves, aprons, boots and face shields or goggles are encouraged to avoid direct contact of skin with harmful chemical compounds

OPTIONS	RESPONDENTS	PERCENTAGE (%)
Yes	**30**	**100**
No	**-**	**-**
Undecided	**-**	**-**
Total	**30**	**100**

Author's Computation, 2025

Table 4.1.8 reveals that 100% of the respondents were of the opinion that protective clothing, rubber, gloves, aprons, boots and face shields or goggles should be encouraged to avoid electrical hazard of any kind in the work field in their department.

Table 4.1.9: Awareness of safety measure to protect workers from occupational health hazard in the organization

OPTIONS	RESPONDENTS	PERCENTAGE (%)
Yes	**25**	**83.3**
No	**5**	**16.7**
Undecided	**-**	**-**
Total	**30**	**100**

Author's Computation, 2025

Table 4.1.9 shows that (83.3%) of the respondents indicated to be aware of safety measures to protect workers from possible occupational health hazard, (16.7%)

indicated negative responses, while none of the respondents was undecided. This implies that proper and effective control measures are in place to reduce the level of occupational hazard, which can lead to bad publicity for the organization and can also dent the school.

Table 4.1.10: Adequate training is given on safety measures

OPTIONS	RESPONDENTS	PERCENTAGE (%)
Yes	**20**	**66.7**
No	**7**	**23.3**
Undecided	**3**	**10**
Total	**30**	**100**

Author's Computation, 2025

Table 4.1.10 shows that (66.7%) of the respondents indicated a positive response, (23.3%) were unsatisfactory with the level of training given in the work place, while (10%) were undecided. This implies that more than average of the respondents confirmed that adequate training are given to them on safety measures. Workers who are informed about hazards to which they may be exposed find it difficult to identify or recognize occupational hazard.

Table 4.1.11: On-the-job training on occupational health hazards and safety measures to protect workers from these hazards

OPTIONS	RESPONDENTS	PERCENTAGE (%)
Yes	**20**	**66.7**
No	**10**	**33.3**
Undecided	**5**	**16.7**
Total	**30**	**100**

Author's Computation, 2025

Table 4.1.11 shows that (66.7%) of the respondents indicated that on-the-job training on occupational health hazards and safety measure to protect worker from these hazards are offered to them, (33.3%) responded negatively and (16.7%) were undecided. This implies that awareness on safety measures are given to workers as part of their pre-employment industrial training and are integrated into the actual situation so as to remind workers of the need for safety measures.

Table 4.1.12: Does your exposure to safety training/instruction encourage your use of safety devices?

OPTIONS	RESPONDENTS	PERCENTAGE (%)
Yes	**27**	**90**
No	**2**	**7**
Undecided	**1**	**3**
Total	**30**	**100**

Author's Computation, 2025

Table 4.1.12 shows that (90%) of the respondents indicated a positive response that exposure to safety training/instruction encourage the use of safety devices, (7%) indicated negative responses, while and (3%) were undecided. This implies that training of employees on safety measures have positive impact on the use of training devices in the organization.

Table 4.1.13: There is first aid for controlling industrial injuries and work related diseases

OPTIONS	RESPONDENTS	PERCENTAGE (%)
No	**15**	**50**
Yes	**10**	**33.3**
Undecided	**5**	**16.7**
Total	**30**	**100**

Author's Computation, 2025

Table 4.1.13 shows that (50%) of the respondents indicated a positive response in term of provision of first aid by the organizations, (33.3%) were unsatisfactory with the level of first aid available in the work place, while and (16.7%) were undecided. This implies that provision of first aid for controlling industrial injuries and work related diseases has positive effect on employee work performance.

Table 4.1.14: There is improvement in effectiveness as a result of safety measures put in place

OPTIONS	RESPONDENTS	PERCENTAGE (%)
Yes	**20**	**66.7**
No	**5**	**16.7**
Undecided	**5**	**16.7**
Total	**30**	**100**

Author's Computation, 2025

Table 4.1.15 shows (66.7%) of the respondents indicated that there is improvement in effectiveness as a result of safety measures in place in the organizations, (16.7%) responded negatively and (16.7) were undecided. This implies that whenever adequate safety measures are in place, productivity tends to improve, and if otherwise, there will little to no effectiveness.

4.3 Test of Hypotheses

4.3.1 Analysis of Research Hypothesis I

H_0: There is no significant relationship between occupational health hazard and effectiveness of workers.

This research hypothesis is analyzed thus:

Table 4.2.1.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.763[a]	.581	.576	.03844

a. Predictors: (Constant), equipment related injuries, electrocution, sound pollution

Author's Computation, 2025

From the regression analysis result shown in table 4.2.1.1, it was found that in the model summary table, the R value is (0.763), R square (0.581) adjusted R square (0.576) and the standard error of estimate is (0. 03844). The large value of R indicates a stronger relationship between the observed and predicted values of the variables. In other words, the R value depicts that occupational health hazard accounted for (76.3%) reduction in workers' effectiveness. This implies that the proportion of variation in the dependent variable is explained by the regression model. Hence, the value of R-square (58.1%) indicated that the model properly fits the data. More so, the value of adjusted R (57.6%) showed that the value of R square closely reflected the goodness of fit of the model in the population.

Table 4.2.1.2: ANOVA[a]

MODEL	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Regression	68.086	3	22.695	118.066	.000[b]
Residual	49.018	255	.192		
Total	117.104	258			

Sources: Author's Computation, 2025

a. Dependent Variable: reduction in workers' productivity

b. Predictors: (Constant), equipment related injuries, electrocution, sound pollution

Furthermore, the analysis of variance table (Anova) showed regression sum of square value of (68.086) which is higher than the residual sum of square value of (49.081). This implies that the model accounted for most of the variations in the dependent variable. More so, the F calculated value of (118.066) is greater than the tabulated value of (3.90) indicating a significant relationship. In addition, the significant value of P (0.000) is smaller than (0.05) which means that the independent variable (occupational health hazard) to a high extent accounted for the variations in the dependent variable (reduction in workers' productivity). Hence, we posited that there is significant relationship between occupational health hazard and productivity of workers.

Table 4.3.1.3: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.233	.066		3.555	.000
	ERI	.585	.020	.597	6.702	.000
	HCC	.421	.075	.447	5.611	.000
	AP	.207	.119	.249	1.746	.082

a. Dependent Variable: reduction in workers' productivity

equipment related injuries, electrocution, sound pollution

Sources: Author's Computation, 2025

Table 4.2.1.3: shows the model coefficients (that is, the intercept and the slope). From the table, the results show that equipment related injuries is significant at the 5% level, harmful chemical compound is significant at the 5% level, air pollution shows positive correlation but not significant at 5% level. This implies that each of the variables has contributed to reduction in workers' productivity. Hence, there is significant relationship between occupational health hazard and effectiveness of workers. Exposing employees to these entire hazards may lead to employee injury and injured employee may not be able to contribute meaningfully to productive effectiveness, thereby leading to time loss, production loss and financial loss, resulting in less profit. Organization must put proper and effective control measures in place to minimize the level of occupational health hazard.

4.3.2 Analysis of Research Hypothesis II

H_0: There is no significant relationship between safety measures and occupational hazards.

This research hypothesis is analyzed thus:

Table 4.3.2.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

1	.974[a]	.949	.948	.01852

a. Predictors: (Constant), awareness, training, first aid

Sources: Author's Computation, 2025

From the regression analysis result shown in table 4.2.2.1, it was found that in the model summary table, the R value is (0.974), R square (0.949) adjusted R square (0.948) and the standard error of estimate is (0.01852). The large value of R indicates a stronger relationship between the observed and predicted values of the variables. In other words, the R value depicts that safety measures accounted for (97.4%) reduction in occupational hazards. This implies that the proportion of variation in the dependent variable is explained by the regression model. Hence, the value of R-square (94.9%) indicated that the model properly fits the data. More so, the value of adjusted R (94.8%) showed that the value of R square closely reflected the goodness of fit of the model in the population.

Table 4.3.2.2: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	118.557	3	39.519	1572.640	.000[b]
	Residual	6.408	255	.025		

Total	124.965	258			

a. Dependent Variable: reduction in occupational hazard

b. Predictors: (Constant), awareness, training, first aid

Sources: Author's Computation, 2025

Furthermore, the analysis of variance table (Anova) showed regression sum of square value of (118.557) which is higher than the residual sum of square value of (6.408). This implies that the model accounted for most of the variations in the dependent variable. More so, the F calculated value of (1572.640) is greater than the tabulated value of (3.90) indicating a significant relationship. In addition, the significant value of P (0.000) is smaller than (0.05) which means that the independent variable (safety measures) to a high extent accounted for the variations in the dependent variable (reduction in occupational hazard). Hence, we posited that there is significant relationship between safety measures and occupational hazard.

Table 4.3.2.3: Coefficients[a]

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.

		B	Std. Error	Beta		
1	(Constant)	.241	.024		2.741	.03
	Awareness	.210	.044	.211	2.221	.025
	Training	.920	.027	.945	33.886	.000
	First Aid	.538	.033	.444	4.891	.004

a. Dependent Variable: reduction in occupational hazards

Sources: Author's Computation, 2025

Table 4.2.2.3: shows the model coefficient (that is, the intercept and the slope). From the table, the results show that creating awareness is significant at the 5% level, giving employees training is significant at 5% level, giving first aid to injured employees is significant at 5% level. This implies that each of the variables has contributed to reduction in occupational hazards. Hence, there is significant relationship between safety measure and occupational hazards; that is, providing health and safety policies and programs, creating awareness of these hazards, training employees on how to safe guard themselves from hazards, providing first aid for injured employees in order to protect their workers. These safety programmes could also cover areas such as: cleanliness, overcrowding, ventilation, lighting, drainage of floors, and sanitary convenience.

4.4 Discussion of Findings

Table 4.1.1 shows that the majority of the respondents were male. The difference in the margin between the two genders may be due to the nature of works and skills as required by the management of Kwara state polytechnic. The results indicates the age brackets of the respondents which 16.6% are between the age bracket of (30-39 years), 33.3% are between the age bracket of (40-49 years) while 50% are 50 years and above. Effectiveness in the department of works in Kwara State Polytechnic may be due to the young and capable workforce under their control. The descriptive analysis further revealed that 33.3% are OND/HND Holders, 66.7% are HND/BSc Holders. This is necessary in order to understand and appreciate basic safety measures which invariably promote core task performance by producing individuals with more declarative and procedural knowledge with which they can complete their tasks successfully (Folawiyo, 1995; Miller, 1996). It was further drawn from the table that most of the respondents 66.7% are full-time staff with no fewer than 33.3% working for about 7 to 14 hours.

Table 4.1.2 revealed that 100% of the respondents were aware of the constant exposure to occupational hazards in their working places. Table 4.1.3 revealed the highest opinion that they were being attacked by electrical appliances while the least claimed 5.0% injured by machine amputation (Bell,2000). The preceded table claimed that 35.5% of the respondents were of the opinion that management provides protective devices for them in case of any hazard, 25.9% indicated that they provided their protective devices by themselves while 38.6% claimed that protective devices provided were both personal and management (Adeniyi, 2001). Table 4.1.5 shows that majority 78.8% of the respondents were satisfied with their

work, 9.7% responded negatively and 11.6% were undecided. This implies that though many of the respondents were satisfied. It was also gathers from table 4.1.6 that 52.1% of the respondents had one way or the other sustained injuries in the process of executing their duty, 29% responded negatively and 18.9% were undecided. In cognizance of how the premises are well maintained, table 4.1.8 reveals that 51% of the respondents confirmed that the environment is well-maintained. Thus, 27.4% were not satisfied and 21.6% undecided. The margin in the responses justifies how the companies should improve on the maintenance of their environment to reduce the level of health hazard like harmful pollutants from exhaust of internal combustion and diesel engine(Parton,2008). More than 55% of the respondents indicated that they were been covered with protective clothing and this seem to have prevented the workers from occupational hazards in form of chemical compounds, no fewer than 68.7% claimed that adequate training is given on safety measures as shown in table 4.1.11.

On the job training on occupational hazards and safety measures to protect workers from these hazards, only 52.1% responded positively, 29% responded negatively and 18.9% were undecided as shown in table 4.1.12. This is in line with the statement made by Asogwa S.E (2000) who wrote that job experience through training can have hazards under control. A fact was drawn that training of employees on safety measures has positive impact on the use of safety devices (Sir Thomas Legg, 1863-1932) while 70.3% of the respondents signified a positive response as shown in table 4.1.13. This among others will check the ugly trend of inefficiency, poor performance, high labour turnover and financial loss to the companies. However the companies were been adequately equipped with the first aid in case of any injuries or works related diseases. This was shown in table 4.1.14 when no fewer than 54.4% of the respondents gave satisfactory remark,

23.9% were unsatisfactory and 21.6% undecided. The fact that the level of consistency in management intervention to employees' health behavior is not impressive although the table 4.1.16 further revealed that 78.8% indicated that there is improvement in productivity as a result of safety measures put in place.

It was obtained from the hypothesis table 4.2.1 that occupational health hazard accounted for 58.1% reduction in workers' productivity. Table 4.2.2 reveals that there is a significant relationship between occupational hazards and productivity of workers. To investigate which of the hazards poses more threats to workers' productivity; table 4.2.3 further revealed that equipment related injuries, harmful chemical compounds, air pollution each contributed to reduction in workers' productivity at 5% level of significance (Parton, 2008; Emeharole and Iwok, 1997). The correlation analysis through test-re-test also revealed that safety measures accounted for 97.4% reduction in occupational hazards. The ANOVA test for significant difference in table 4.2.4, support the idea that the safety measure to a high extent accounted for reduction in occupational hazards. Hence it is posited that there is significant relationship between safety measures and occupational hazards. However, to check which of the safety measures contributed to a reduction in occupational hazards. A regression model is built in table 4.2.5 on three variables namely; awareness, training, first aid and each of the variables show a substantial influence to reduction in occupational hazards at 5% level of significance (Adeniyi, 2001). The Levene's test for least significance difference revealed the notion that there is sufficient evidence to reject the hypothesis that there are no types of hazards that pose more threats to the health of the staffs of Works Department of Kwara State Polytechnic. This findings is in line with the statements drawn from (Fine and Gordon, 2010; Weil, 2009).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The purpose of this chapter is to summarize the findings of this study, stating the broad aim of the study, the method of data collection and analysis. Conclusion based on the study is drawn and some valuable recommendations are made. Therefore, this chapter is divided into three major parts: Summary of findings, Conclusions and Recommendations.

5.1 Summary of Findings

`The health and safety of every employee in an organization is important if the organization is to continuously operate to meet its stated goals and objectives. In Nigeria, industrialization and mechanization are increasing while occupational health problems are becoming prominent. These health problems are caused by exposure to harmful chemicals, biological agents, physical, mechanical and ergonomic hazards. Health problems resulting from such hazards may appear to occur less frequently than other major disabling diseases, due to lack of knowledge and pattern of illness of such hazardous diseases. This study provided evidence through the content analysis of literature reviewed that, the attack from such hazards affect a considerable number of workers in the department in their job performance in Kwara State Polytechnic, Ilorin. It is therefore stamped in the light of this why the project examined the significance relationship between occupational hazards and productivity with special reference to 7up Bottling Company, Ilorin as the selected case study, and determines if the hospital comply and observe the safety rule. From this examination, one remarkable and general

safety and health precaution that has been put in place by the management of the hospital used in this study and which cut across the production departments is the policy that every employee of the companies is to report to the appropriate authority if he/she suspect his/her health has been compromised in any way in the discharge of his/her duties for immediate action to be taken. Even though that it was believed that the occupational health and safety measures put in place at the companies are sufficient. Most of the factory workers (78.8%) were satisfied with the current occupational health and safety measures at both companies. This was confirmed from the analysis in chapter four when the factory workers indicated that there is significant relationship between occupational health hazard and productivity with the F calculated value of (118.066) greater than the tabulated value of (3.90). For example, in most of the departments, more than half of the workers wear protective devices due to adequate provisions by both individual and management. The study therefore concluded that, a healthy worker is a productive worker. It recommended that health educational programmes should be carried out in various industries to create awareness about peculiar hazard. In such industries, safety measures should be provided for workers against health hazard, while injured, sick or diseased workers due to occupational hazards should be duly compensated.

5.2 CONCLUSION

From the study, there exist occupational health problems in University of Ilorin Teaching Hospital. The study focused on the effect of occupational hazard on worker's productivity in health industry in Nigeria. The findings show that increased productivity in the organizations may be due to the young, educated and capable workforce under their control. The predisposing factors associated with

occupational health problems in 7up Bottling Company include low pay, and lack of formal education. However there is increased level of knowledge of occupational hazards among workers. The management of hospital has adequate safety policy as well as safety committee that organizes induction courses for new employees, educates workers on safety and monitors the workers to ensure strict compliance with safety rules. However, there are shortages of safety devices from the management for the protection of the workers and thereby workers had to provide by themselves.

5.3 RECOMMENDATIONS

Based on the findings of this research work, the following recommendations were made for both the management and workers:

The management should;

- Firstly, improve on the adequacy of protective devices otherwise it may affect the effect vines of the workers in the Department of Works in Kwara State Polytechnic.

- Secondly, usage of safety devices while in the industry should be enforced and all the workers should be trained and retrained periodically on how to use the protective devices provided by the management in the language familiar to them; regular supervision and monitoring to ensure compliance to the proper use of the devices; information on safety provisions and their importance should be displayed on the posters and notice boards and the sign posts mounted at strategic position in the company. At times hand bills should be provided for personal keeps for

constant consultation and reminder. Managers should show good example by using the devices always.

- Thirdly, adequate training should be given on safety measures because this will minimize the effect of the hazards on the workers. Safety policies and programmes should be directed to employees on health and safety hazards that may arise in the course of performing their work.

Safety meetings should be held with the workers regularly where new trends in safety measures can be discussed.

- Lastly, improved remunerations, starting with those workers who comply best with safety rules and regulations. This should also serve as incentive for workers to boost performance, productivity and commitment to their job.

The workers should;

- Firstly, learn more about the latest safety trend all the time and there should be effective recording system on health and problems relating to health, safety and other related matters at the work place with a view to minimizing such problems.

- Secondly, follow safety rules displayed on the factory premises and also should take adequate and proper precautions to save themselves against the life threats that are part and parcels of some professions.

- Thirdly, use the safety devices any time they are on duty and also avoid pouring water, oil or other chemicals that can make the work environment slippery to cause accident.

- Finally, discuss with the management freely about safety on the job.

REFERENCES

Achalu, E.I. (2000). *Occupational Health and Safety*, Lagos. *Simarch Nigeria Ltd. Splendid Publishers.*

Adeoti J.A. (2012). *Guidelines on Preparation of Research Proposal and Structure of Thesis*' Ilorin. *Faculty of Business and Social Sciences.*

Aldana, S. (2001), Financial Impact of Health Promotion Programs: *A Comprehensive Review of the Literature, American Journal of Health Promotion.* pp. 296-320.

Ashraf, A. S., & Naseem, M. S. (2003). *Worker productivity and occupational health and safety issues in selected industries. Journal of Computers & Industrial Engineering*, 45, 563–572.

Asogwa S.E. (1978) '*Guides to Occupational Health Practice*'. 1st edition, Enugu. Fourth dimension publishing company, page 20.

Asogwa S.E. (2000). 'The *occupational Health and Safety and Nigeria Industrial Development*'. *Nigeria medical journal, vol.30 (4):* 155-160

Asogwa, S.E. (2007). *A guide to Occupational Health Practice in Developing Countries*. *Enugu. Snaap Press Ltd.S*

Asuzu M. (2002). *Occupational Health, a summary, introduction and outline of Principles*'. *Africa Link Books.*

Attridge, M. (2005). *The Business Cases for the Integration of Employee Assistance, Work – Life and Wellness*

Bell A. (2000). Noise-*An Occupational Hazard and Public Nuisance*'. *Public Health Paper, No.30, WHO, Geneva.*

Boyd, C. (2003). *Human Resource Management and Occupational Health and Safety*'. London routledge.

British Standard, (1996). *Occupational Health and Safety Management System'* Edward *Arnold publishing company.* Bs 880, page 2.

Bruce T.F (1998). *Occupational Health Service' Africa newsletter on occupational health and safety. Vol.8, page 31*.

Burdine J.N, & McLeroy K.R (1992). *Practitioners use of* theory: *Example of safety education. Health Educ. Quart.* 19(3).

APPENDIX

QUESTIONNAIRE

SECTION A

i. Gender: Male ( ) Female ( )

ii. Age: 18-29 years ( ) 30-39 years ( ) 40-49 years ( ) 50 years –above ( )

iii. Marital status: Single ( ) Married ( ) Divorce ( ) Widower ( )

iv. Academic qualification: WASSCE/SSCE/GCE ( ) OND/NCE ( ) HND/BSC ( ) MSC/MBA ( )

v. What is your working experience? Below 1 years ( ), 2-5 years ( ) 6-10 years ( ) above 11 years ( )

vi. What is the nature of employment? Casual ( ) full time ( )

vii. What is your working hour per day? 1-6hrs ( ) 7-14 hrs ( ) 15hrs and above ( )

SECTION B

1. Awareness of hazard in the working place? Yes ( ) No ( )

2. What is the provision of protective device? Company ( ) personal ( ) both ( )

3. Are you satisfied with your work? Yes ( )no ( )

4. Have you in any way or the other sustained any injury during the process of executing your job? Yes ( ) no ( )

5. What is the level of illumination in the various sections? Yes ( ) no ( ) undecided( )

6. Is the premises well maintained? Yes ( ) no ( )

7. Is there first aid for controlling industrial injuries and work related diseases? Yes ( ) no( )

8. Does your exposure of safety training/instruction encourage your use of safety devices? Yes ( ) no ( ) undecided ( )

9. Is there improvement in productivity as a result of safety measures put in place?

10. Yes ( ) no ( ) undecided ( )