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ASSESSMENT OF THE IMPACT OF OCCUPATIONAL HAZARDS ON EMPLOYEE PERFORMANCE IN SLUG CEMENT NIGERIA LIMITED

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Abstract

The rise and occurrence of occupational hazards in the Nigerian manufacturing companies should be a source of concern to all stakeholders in the industry. This study assessed the impact of occupational hazards on employee performance in Slug Cement Nigeria Limited. Primary data was sourced through structured questionnaire. One hundred and twenty respondents were selected using simple random sampling technique, while one hundred questionnaires were properly filled and returned. Pearson Correlation analysis and regression analysis was used to validate the hypothesis. Findings showed that there is a significant relationship between occupational hazards and employee performance as correlation is significant at 1% where $r = 0.348$ implying that as occupational hazard element increases employee performance will be affected by 34.8%. On the second hypotheses the estimation result showed that health safety and environment variables are statistically significant in explaining the impact of occupational hazards at 5% level of significance. With R^2 value of 0.464, it revealed that the explanatory variables account for 46.4% change in occupational hazards. Based on the findings the study concluded that occupational hazards affect employee performance. The study recommended that employers of labour should endeavor to prioritize safety by ensuring continuous orientation and safety awareness to their employees with health compensation plan.

Keywords: Occupational hazard, Occupational Disease, Health Safety and Environment, Health Insurance, Employee Performance

JEL Classification Codes: Q53, H11, L16

1. INTRODUCTION

The level of growth in every organization is measured by the performance of the organization overtime. Employees' performance always translate to organizational performance and the performance becomes a benchmark where it supersedes industry expectation. Ogundare (2017) posit that every employee is always willing to give his best to his organization to justify his pay, but most time performance is always being hampered by occupational hazard. Work place environmental hazards are globally major cause of disability and mortality among working population. The International Labour Organization (ILO) estimates that 160 million people from the world's workforce suffer from work-related diseases such as musculoskeletal diseases and mental health problems, while 270 million fatal and non-fatal work-related accidents results in over 350, 000 casualties and over two million work-related deaths each year which are all attributable to

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occupational hazards (Faremi, et al, 2014). These findings are similar to the report of the World Health Organization (WHO) which estimated occupational diseases worldwide to be 217 million cases. Evidence shows that many of these diseases are preventable but problems like under reporting, poor surveillance, poor factory setting, bad lightening system and several other factors have been known to influence occupational health hazards. The burden caused by work-related accidents and illnesses on workers' health are incalculable. According to International Labour Organization (ILO), 4% of the world's annual Gross Domestic Profit (GDP) is lost as a result of occupational hazards as employers are faced with loss of skilled staff, absenteeism, migration, early retirements and high insurance premiums due to exposure from occupational accidents and diseases.

Although improvement in occupational health have been seen in many developed countries, however, the protection of workers from work-related disorders is not a priority in many developing countries, partly because several other health issues have competed with occupational health. This situation has existed for long owing to various socio-economic, cultural and political challenges which often make occupational health not prioritized. This has made occupational health and safety which is a fundamental right in maintaining workers' wellbeing to remain neglected in developing countries. The challenge is also exacerbated because of the porous health system and the near neglect of our health infrastructures and poor remuneration of our over- burdened health workers (Ogundare, 2017).

Several studies have investigated the burden of occupational injuries among various occupational groups ranging from white collar professionals to blue collar workers (Akinbode et 'al, 2016). Most studies reported higher prevalence of occupational injuries among blue-collar workers in the construction and manufacturing sector in the economy. These blue-collar groups have been described to include labourers, machine operators, drivers, technicians and trade workers.

Occupation hazards in Nigeria is one of the banes of low-manpower utilization in Nigeria as a result of the health damage that work environment, working condition and production processes cause to workers, especially in organization where the health and safety of workers is not of outmost priority (Ogundare, 2017). Occupational hazard, according to Ebeloku et' al (2014) have an enormous negative impact on the health of workers and their performance. According to Okoye, Odumegwu and Omuku (2012), health and safety hazards as components of occupational hazards affect workers well-being and subsequently their level of performance. They further posit that despite the relatively high knowledge of cement factory workers about the adverse health effects of exposure to dust, the use of respiratory protective equipment was poor. Other factors affecting workers well-being and performance in the work environment include illumination, temperature, noise and atmospheric conditions (Akerele, 1991; Asigele, 2012; Akintayo 2012; Jagero, Komba and Mlingi, 2012), with recent studies pointing at other significant factors such as impaired working tools and absence of Health Insurance Scheme (Yusuff, Adegbite, Awotedu and Akinosho, 2014; Brown, Mc Hardy, Mc Nabb and Taylor, 2011; Bhandari and Adhikari, 2014).

Workplace hazards can result in fatal accidents, damage to machines and equipment and loss of productivity. Such industrial accidents with adverse consequences can result in fatalities and disabilities. In the study of Afube et' al (2019) they reported that approximately 3,183 injuries occurred in Nigerian factories between 1987 and 1996, out of which about 2.2% was fatal. The chemical industry was said to account for 9.8% of the death of workers within this period. The

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hazards of high noise levels, explosion and working at heights have been found to be among the major causes of injuries and deaths in chemical industry in Nigeria (Adhikari, 2018; Agba, et'al, 2010; Ahmed et' al, 2010) .

Generally, these occupational hazards destroy the vitality of the body, kills initiative, makes the workers weak, tired and bored about the work, leads to absenteeism, and eventually avoidable death. Furthermore, it engenders low manpower utilization as a result of spending much time in hospitals and other health facilities rather than in the office or factory where productivity and performance will be appreciated and valued. The challenge of occupational hazard and its damning effect in the cement industry in Nigeria necessitate an investigation so that industry players could make informed decision on how best to protect their investment including the employees that work for them, hence the need for a study on occupational health and employee performance. From the problem statements highlighted above, the following hypotheses were formulated to assist the study:

H₀₁ – There is no significant relationship between occupational Hazards and Employee Performance in Slug Cement Nigeria Limited

H₀₂ – Observance of Health Safety and Environment does not reduce the occurrence of Occupational Hazards in Slug Cement Limited

2. LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Concept of Occupational Hazards

Work has its positive health-promoting effects, as the financial dividend provides the worker with the basic necessities of life. The aforementioned translates into healthy well-being, job satisfaction, and ultimately higher productivity. There is, however, a reciprocal and interactive relationship between the workers and the work environment (Abdullahi, 2011). The knowledge of these interactions between work and health is fundamental in understanding and practicing occupational health and safety, but the importance of safety at the workplace is often overlooked for reasons that may not make moral sense (Ajala, 2012). All over the world the challenge occupational hazards are posing to productivity and national life is gaining momentum and labour movements are all doing everything within their power to bring mortality and work-related hazards that arises while carrying out official assignment to a halt. It is a contrast to set out to work to earn a wage and then return with hazards that the wage cannot solve for years to come or forever. It is not surprising then that (Ogundare, 2017) called the challenge of occupational hazards a quick fix for all stakeholders. According to the statistics of the International Labor Organization, in its report of the worldwide day for occupational safety and health, “Approximately 4% of the worldwide Gross National Product (GNP) is lost due to the costs of losses, deaths and illnesses, resulting in work absences, treatments and payments due to disability or death” (ILO, 2018). Buendía (2013) refers to the importance of identifying the causes of the accidents at the manufacturing site, emphasizing that there must be a search for the true origin of all of the causes that set off the incident. Likewise, Véjar (2009) states that risk evaluation before, during and after work process is an important decisions to make as preventive actions that should be taken to minimize occupational risks.

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Hazard is a condition, object, activity or event with the potential of causing injuries to people, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function (Ilias, Stephen, Michel, Dave, Carmela, Michel, & Clément, 2009). Ahmed, Dosoki, & Nasr (2012) also defined hazard as the presence of materials or conditions that have the potential of causing loss or harm or a combination of the severity of consequences and likelihood of occurrence of undesired outcomes. As clarified by Meenesh (2014), hazards in cement production processes can be classified into three (3) categories namely: (a) Routine and general hazards, (b) Special hazards during the cement production and (c) Special hazards as a result of the work environment. Ford and Tetric (2011) described occupational hazards as aspects of one's occupation-specific context that increase the risk of injury.

The International Labour Organization (2018) in World Labour Report defined hazards as a condition with the potential of causing an accident, leading to injury, damage or even both. In any event of occupational hazard, there is the possibility of causing an accident which may directly or indirectly lead to declined productivity and could erode the good-will of the organization, especially when hazard is becoming a daily occurrence. According to Fajana (2010) occupational hazards are potential source of harm to a worker. Hazard is any source of potential damage, harm or adverse health effects on something or someone. Awodele (2014) said that work place hazards include practices or conditions that release uncontrolled energy like:

- An object that could fall from a height (potential or gravitational energy)
- A run-away chemical reaction (chemical energy)
- The release of compressed gas or steam (pressure; high temperature)
- Entanglement of hair or clothing in rotating equipment (kinetic energy), or
- Contact with electrodes of a battery or capacitor (electrical energy)

Ogundare (2020) classified occupational hazards as an unplanned work place occurrence that results in personal injury or property damage. It includes but not limited to:

- **Over-exertion:** We do it all the time: pull a bookcase, carry heavy equipment or lift awkward boxes. Injuries from overexertion, such as sprains and strains, are the leading workplace accident out there.
- **Falling:** Just like in our opening example, falling presents a significant risk in many work environments. It could be as simple as falling down stairs or tumbling off a roof.
- **Slips and trips:** Have you ever seen the image of someone slipping on a banana peel? It is the same idea (probably minus the banana). Slips and trips can be the culprit behind things like muscle strains and other injuries.
- **Falling objects:** Whether it is a heavy box of files or a piece of machinery at a construction site, falling objects present a particular risk of head injuries to workers.
- **Repetitive motion:** It is little less obvious, but repetitive motion injuries have an impact on many types of workers, from frequent computer users who struggle with carpal tunnel syndrome to auto mechanics who develop chronic back pain.

Occupational hazards refer to the potential risks to the health and safety of those who work outside the home. According to Chandrasekhar (2011), unsafe and unhealthy workplace environment, especially in terms of poor ventilation, inappropriate lighting, excessive noise among others, affect workers performance. Generally, the causes of occupational accidents are classified as unsafe conditions and unsafe behaviors (Sadullah & Kanten, 2009). Ogundare (2020) posited that unfavourable working condition whether represented in paper as in form of employment letter; employment structure such as casual and contract employment; work environment with poor ventilation; and factories with no walk ways and safety signs all constitute occupational hazards.

Aribigbola, Fatusin & Fagbohunka (2012) in their discourse on health in the work place amplified the slim difference and connectivity between occupational hazards and occupational diseases posited that occupational hazard is the risk, harm, or danger that an individual is exposed to at the workplace, whereas occupational diseases result from such exposures to the individual. Although these occupational diseases appear to occur less frequently than other major debilitating diseases, there is evidence that they affect a considerable number of people, particularly in rapidly industrializing countries (e.g., Nigeria), hence indirectly impacting on the economy. During work periods, workers are faced with a variety of hazards almost as numerous as the different types of work, including chemicals, biological agents, physical factors, and adverse ergonomic conditions. These are responsible for a variety of health consequences.

Several studies have investigated the burden of occupational injuries among various occupational groups ranging from white collar professionals to blue collar workers. Most studies reported higher prevalence of occupational injuries among blue-collar workers in the construction and industry sectors whose jobs require high level of physical tasks. These blue-collar occupation groups have been described to include laborers, machinery operators and drivers, technicians and trades workers. The job demands of some of the industries have been reported to be hazardous to the health and safety of workers. Although, some industries have evolved high-tech approaches to minimize workers exposure to heavy physical workloads, empirical evidence still shows that cement manufacturing workers in the developing countries still seem to be at high risk of developing occupational hazards (Ofoegbu, et' al, 2013).

According to Ebeloku, et' al (2018) catalogue of hazards and injuries resulting from cement manufacturing process is diverse and includes exposure to noxious or toxic substances, dust, noise pollution, being trapped in or struck by machinery falling from a height, heavy lifting or repetitive movements among others. With an increase in advocacy on the right to health and safety at work as part of basic human rights, education on preventive activities is warranted. Unfortunately, some previous studies among industry workers in Nigeria reported lack of safety education training programs, protective measures or accident prevention for workers.

Occupational accidents can result from immediate or basic causes; the immediate causes directly produce the accident and are composed of unsafe acts such as inappropriate behavior of the workers that could result in a workplace incident and unsafe conditions and factory arrangement such as facilities, equipment, machinery and tools that are faulty and that place the workers at risk of having an accident. But to achieve an effective solution to occupational accidents, it is critical to identify and control the basic causes which result in the immediate causes; they include personal factors like, incorrect work habits, incorrect use of equipment, tools or facilities; physical or mental

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defects, hearing deficiencies, etc. and work factors like deficient supervision and leadership; unsuitable policies, procedures, guides or practices; unsuitable work planning or scheduling (Chinchilla, 2002).

Work may have positive and negative effects on the health and quality of life of workers. Occupational accidents and diseases cause immeasurable human suffering to victims and their families, impact negatively on enterprises' efficiency and productivity, and entail major economic losses for societies as a whole. The incidence of workplace accidents and diseases also a significant impact on the sustainability of social security systems as the cost for disability benefits or pensions paid by health and employee injury insurance schemes is ultimately borne by society as a whole. According to ILO estimates, every year over 2.3 million women and men die from a work related injury or disease. Over 350,000 of these deaths are due to fatal injuries and almost 2 million deaths are due to diseases. In addition, over 313million workers are involved in non-fatal occupational accidents causing serious injuries and absences from work and there are estimated to be each year 160 million cases of non-fatal work-related diseases (Nancy, 2015).

The devastating effects of occupational hazards on workers and their families cannot be fully calculated; however, by far the most salient cost to workers is the loss of quality of life, and even premature death. Pain and suffering are readily acknowledged incalculable costs, but the mental health of a worker can also be seriously affected after an accident. The loss of confidence that a worker may sustain can permanently affect his or her ability to work efficiently. Depression after an accident is common, especially where there are lasting health effects. In some cases, Post-Traumatic Stress Disorder (the term for a severe and on-going emotional reaction to trauma) can be suffered by an injured worker and co-workers who witnessed an accident. Workers suffering long-term disability may also loose important skills and may have difficulty remaining in the work for which they have been trained. A large number of unemployed workers have an impairment of working capacity that is not serious enough to make them eligible for disability pension or to compensation, but which nevertheless seriously compromises their re-employability (Nancy, 2015).

The total costs of an occupational accident or disease are often under estimated because certain costs are external to the enterprise and because some internal costs may be difficult to quantify or recognize; such as, compensated time, lost production, reduced work capacity and lower workforce participation. It has been estimated that the indirect costs of occupational accidents or diseases can be four to ten times greater than the direct costs (Oketunji, 2014; Acharya, 2015).

2.1.2 Concept of Employee Performance

Employee performance has been one of the important variables that has generated substantial empirical studies (Jankingthong & Rurkkhum, 2012). Byars & Rue (2006) define performance as the extent to which an employee accomplishes the tasks that make up his or her job. It is the extent to which worker is able to accomplish the task assigned to him or her. Employee performance can be defined as the measurement of how well or poorly an employee has accomplished a task (George & Jones, 2012). Employee performance is the level of individual workers productivity in relations to job expectations (Babin & Bolos, 1998), such performance could be judged excellent, good, average or poor when expectations are compared with actual output. Performance in this sense relate to task performance which is behavioural oriented depending on the attitude of job holder towards the work

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(Borman & Motowidlo, 1997; Werner, 2000). Employee performance is the degree to which employees accomplish work requirements. Workers effectiveness and efficiency are the two major components that determine level of workers performance. Workers effectiveness is a measure of the degree to which an employee achieves his/her set objectives and goals while worker efficiency has to do with the employee achieving his/her objectives or set goals with proportionally few resources. To achieve optimum performance employees must be committed and loyal, while organization also put all efforts into motivation and reward systems and provide a safe work place for profitable productivity (Ogundare, 2020).

2.1.3 Effect of Occupational Hazards on Employee Performance

According to Ogundare & Shitu (2020) the effects of occupational hazard are very enormous and deadly. Most of the time it debilitates the body, disorganize the system and mutilates the body. The effects of occupational hazards according to Ogundare & Shitu (2020) could be seen from the various divisions of the constituents of occupational hazards:

2.1.3.1 Noise effects

Noise is an unwanted sound that can damage physiological and psychological health. Noise pollution can cause annoyance and aggression, hypertension, high stress levels, tinnitus, hearing loss, sleep disturbances. Tinnitus leads to forgetfulness and loss of memory. Noise from machines in the factory at times could be very unfriendly and destructive.

2.1.3.2 Particulate Matter effects

Particulate air pollution is a complex mixture of small and large particles of varying origin and chemical composition. The constituents in small particulates also tend to be more chemically active and may be acidic as well as damaging especially to the lungs and cause respiratory illness.

2.1.3.3 Heat Stress

Heat stress is the net heat burden on the body from the combination of the body heat generated while working, environmental sources (air temperature, humidity, air movement radiation from the sun or hot surfaces/sources) and clothing requirements (Cincinnati, 2008). In road construction work, cement factory, foundries, steel mills, bakeries, smelters, glass factories and furnaces, extremely hot and molten material is the source of heat. In all instances, the cause of heat stress is a working environment which can potentially overwhelm the body's ability to deal with the heat.

Ogundare (2017) explained further that occupational hazards could cause the following:

- i. Whenever there is accident (industrial), there will be slower production, resulting in loss of production and loss of productive time.
- ii. Exposing employees to hazardous substance can lead to injury and serious scar. The employee with injury may not be able to contribute meaningfully to production effectiveness, thereby leading to financial loss, resulting in less profit, discomfort, pains etc.

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- iii. Occupational hazards can also lead to loss and mutilation of materials and machinery, leading to time loss, and loss of production.
- iv. If occupational hazards are not properly handled, it may lead to loss of trained and skillful employees, either permanently or temporarily.
- v. Occupational hazard can also lead to staff turnover, thereby affecting productive output and the motivation of quality of skilled manpower in the organization.
- vi. If proper and effective control measures are not put in place, occupational hazards can lead to bad publicity for the organization, resulting in degrading the image of the organization.
- vii. Occupational hazards could lead to protest and demonstration by labour leaders and that portrays the management of that organization in bad light.
- viii. Occupational hazards increase the medical expenses of the organization and sick leave granted in a calendar year. This could increase the operating expenses of the organization thereby fail in providing some essential palliatives to the employees where necessary because they are over-stretch.

This position is better illustrated with a conceptual framework that explains the assessment of the impact of Occupational Hazards on Employee Performance in Slug Cement Nigeria Limited.

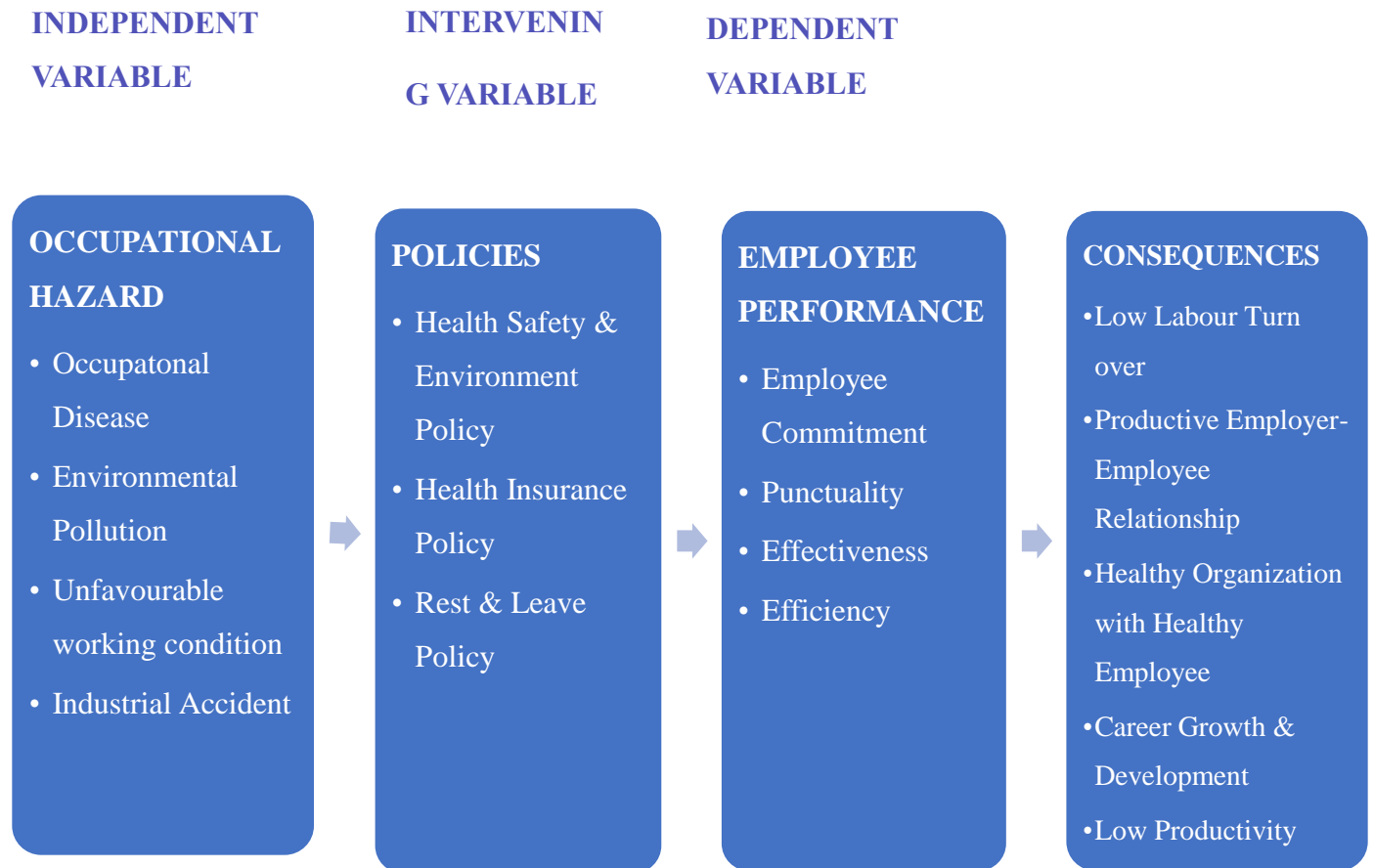


Fig 1: Conceptual framework showing the inter connectivity between Occupational Hazard, Employee Performance and consequences.

Source: Researcher’s Conceptualization (2020)

2.2 Theoretical Review

Cognitive appraisal theory by Richard Lazarus (2000) will be applicable for this study, which emphasizes the appraisal of information from several sources. Appraisal involves cognition, or the processing of information from the environment, the body, and the memory. Such appraisal could be from individual’s interpretation of the events in their lives as harmful, threatening, or challenging and their determination of whether they have the resources to effectively cope with the events. Furthermore, memories of past encounters with similar situations, dispositions to respond in certain ways, and consideration of the consequence of actions that might result from the emotional state are all part of appraisal. In the opinion of Lazarus, such events could be primary or secondary appraisal. In primary appraisal, an individual interprets whether an event involves harm or loss that has already occurred, or the threat of some future dangers, or even a challenge to be overcome. Case of health or safety hazards is a threat. In secondary appraisal, individuals evaluate whatever resources available to

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them and determine how effectively they can be used to cope with the event. The secondary appraisal depends on the degree to which the event from the primary appraisal was appraised as harmful threatening, or challenging. Occupational hazards as a challenge during primary appraisal paves the way for such during secondary appraisal but people sometimes do not have the adequate resources for coping with an event that is seen as challenging. As a result, these individuals then find that they are able to reduce the intensity of the disturbing emotional feelings which result in either absenteeism from work or reduction of work commitment level.

2.3 Empirical Review

Ebeloku, Akinbode & Sokefun (2018) studied the effect of occupational health on workers performance in Nigeria's cement industry. Survey research method was employed in conducting the research: a structured questionnaire was designed and administered to one hundred and eighty-three (183) workers of Lafarge Cement Plant in Sagamu, Ogun State, Nigeria. The study established the relevance of workers wellness and safety to workers commitment to duties as predictors of workers' performance. The study advocated the promotion of global standard occupational health and safety practices in Nigeria's cement industry. Specifically, the study emphasizes the importance of a healthy workforce and work system, and suggestions were presented for improved occupational health and safety systems.

In a related study, Onakoya (2006) discovered that workers absenteeism significantly affects 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.

Funmilola, Adesola & Chidizie (2014) examined occupational hazard awareness and safety practices among saw mill workers in Nigeria. This cross-sectional survey had 94 sawmill workers comprising machine operators, planks pushers/carriers and planks vendors at Ile-Ife, Nigeria as respondents. A structured questionnaire developed from related studies was used as the survey instrument. Data were analyzed using descriptive statistics. More than half of the respondents were aware of occupational hazards. Sawmill dust (95.7%), noise pollution (81.8%) and crush injury from machine (75.5%) were the most implicated risks to health hazards. Occasional hazards were largely difficulty with breathing (56.4%) and hearing (35.1%). Occasional and constant back pain was reported by 45.7% and 38.3% of the respondents respectively. 59.7% of the respondents agreed that safety devices were necessary for safety at workplace. Face masks (78.7%), protective goggle (40.4%) and hand gloves (18.1%) were implicated as necessary devices. Only 34.0% of the respondents use face mask regularly as a safety device. However, 72.3% to 79.8% of the respondents never utilized safety devices. The study concluded that there was high level of awareness but incorrect conceptualizations of occupational hazards among Nigerian sawmill workers.

Ofoegbu, Olawepo & Ibojo (2013) studied the effect of occupational hazards on employee productivity. The researchers adopted the combination of secondary and primary sources of data. The secondary data involves the use of journals, periodicals, internet, and related materials while the
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primary data envelops questionnaires from respondents. Chi-square was used to test the hypothesis, while data collected through questionnaire was analyzed using descriptive (percentages) and inferential statistics (regression analysis and co-efficient of multiple determination). The results indicated that constant exposure of employees to hazardous substances reduces productivity and that training of employee on accident prevention can positively affect productivity. The recommendation is that organizations need to provide safe and conducive environment for the performance of the job and that training and educative programmes be provided in order or minimize occupational hazards and boost productivity.

3. METHODOLOGY

3.1 Research Design

This study used a cross sectional survey research design in order to capture the effect of occupational hazards on employee performance. It is a correlation design that allows the researcher observes all elements of the population and their relationships. The study target different strata of position and designation such as fore-men, supervisor, baggers, and mixers

3.2 Sample size and Research Instrument

A sample size of 100 employees was used in this study. Hundred and thirty questionnaire was administered, one hundred and twenty returned, but twenty out of those returned was not filled properly. In the structured questionnaires, alternative responses are given and respondents have to choose from the available options. The structured questionnaire was on five-point Likert scale. The information gathered were used to compute a descriptive statistic of the data as frequency count and percentages, such as tables and graphs for the presentation while inferential statistics was also used such as Pearson's correlation and Regression analysis to test hypotheses.

4. FINDINGS AND DISCUSSION

| | | Gender of the respondents | | | |
|-------|--------|---------------------------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Male | 77 | 77.0 | 77.0 | 77.0 |
| | Female | 23 | 23.0 | 23.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Source: Field Survey, (2020)

| Table | | Employees category | | | |
|-------|-------------------|--------------------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Supervisors | 12 | 12.0 | 12.0 | 12.0 |
| | Machine Operators | 34 | 34.0 | 34.0 | 46.0 |
| | Fore-men | 40 | 40.0 | 40.0 | 86.0 |
| | Loaders | 9 | 9.0 | 9.0 | 95.0 |
| | Mixers | 5 | 5.0 | 5.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

Source: Field Survey, (2020)

4.1 Hypothesis One

H₀1: There is no significant relationship between occupational hazard and employee performance.

| | | Correlations | |
|----------------------|---------------------|---------------------|----------------------|
| | | Occupational Hazard | Employee Performance |
| Occupational Hazard | Pearson Correlation | 1 | .348** |
| | Sig. (2-tailed) | | .000 |
| | N | 100 | 100 |
| Employee Performance | Pearson Correlation | .348** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 100 | 100 |

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Field Survey, (2020)

The table above shows the result of the Pearson’s’ product Moment Correlation Coefficient (PMCC) carryout for the relationship between Occupational Hazard and Employee Performance. The correlation is significant at the **0.01** level. The (**) highlights that the Probability of this correlation coefficient is not occurring by chance alone and is less than **0.01**; as well as **0.05** (1%; 5%). So, the

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correlation coefficient is therefore statistically significant at 99% confidential level. From the result above it shows that there is correlation between the Occupational Hazard and Employee Performance at $r = (0.348^{**})$. Implies that as occupational hazard elements increase, employee performance will be also affected by 34.8 percent. Hence, the stated hypothesis that says “*there is significant relationship between occupational hazard and employee performance*” was accepted.

4.2 Hypothesis Two

H₀: Observance of Health Safety and Environment policy does not reduce the occurrence of occupational hazards.

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .682 ^a | .464 | .453 | .833 | 1.631 |

a. Predictors: (Constant), Health Safety, Environment Policy

b. Dependent Variable: Occupational Hazards

ANOVA^a

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| | Regression | 58.410 | 2 | 29.205 | 42.061 | .000 ^b |
| | Residual | 67.350 | 97 | .694 | | |
| | Total | 125.760 | 99 | | | |

a. Dependent Variable: Occupational Hazards

Coefficients^a

| Mode | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|----------------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | | | |
| (Constant) | .030 | .439 | | .068 | .946 |
| Health Safety | .250 | .113 | .164 | 2.213 | .029 |
| Environmental Policy | .726 | .081 | .664 | 8.929 | .000 |

Source: Field Survey, (2020)

4.3 Interpretation of the coefficients

The estimation results show that the variables- Health Safety (HS), and Environmental Policy (EP) are statistically significant in explaining the impact on the Occupational Hazards (OH) at the 5% alpha level of significant. Therefore, the estimation shows that the co-efficient of determination R-squared is 0.464. This reveals that the explanatory variables account for 46.4% changes in Occupational Hazards (OH). It tells us the model is of good fit, that the independent variables to a

very large degree explains changes in the dependent variable. It confirms the perfect fit of the model being employed in explaining the impact of health safety and environmental policy on the occupational hazards and also shows that explanatory variables have a relationship at overall level of significance. The Durbin Watson statistic is a number that tests for autocorrelation in the residuals from a statistical regression analysis. The Durbin-Watson statistic is always between 0 and 4. Value approaching 2 means that there is no autocorrelation in the sample. Values approaching 0 indicate positive autocorrelation and values toward 4 indicate negative autocorrelation. From the estimation, Durbin Watson statistics is (1.631), this implies that there is no serial or autocorrelation. So, there is no evidence of positive first order serial correlation.

Also, the F-statistics value is (42.061) with a probability or significant level of 0.000 shows the overall analysis of variance of the model; while the result indicates that all explanatory variables are fundamental explaining the variation in the dependent variable. In conclusion, since at the overall level, Health Safety and Environmental Policy help in explaining significant changes in Occupational Hazards, therefore, H_1 that says, *Observance of the Health Safety and Environment policy reduce the occurrence of occupational hazards*, while H_0 is rejected since at overall, the explanatory variables collectively have a significant impact on the explained variable.

5. CONCLUSION & RECOMMENDATION

It was concluded that occupational hazards affect employee performance because of the visible effect of hazards on the health status of the worker. From the result it shows that there is correlation between the Occupational Hazard and Employee Performance at $r = (0.348^{**})$. Implying that as occupational hazard elements increases, employee performance will be also affected by 34.8 percent. It was recommended that organizations should endeavor to do continuous orientation on safety awareness for their employees and do a constant review of the Health safety and environment where possible in order to safe lost hour due to occupational hazards. Health compensation plan and medical insurance should be put in place so that employees will be rest assured that in any situation they know they are protected and secured.

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