



Evaluation Of HSE Practices At Construction Sites In Port Harcourt Local Government Area

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ABSTRACT

Safety is essential to industrial development. The evaluation of HSE practices at construction sites in Port Harcourt was undertaken in this study. Two research questions were developed in the study. The descriptive survey research design was used in this study. The population of the study comprise of 120 site managers in various construction firms in Rivers State. The study develops a questionnaire instrument titled "Evaluation of HSE Practice at Construction Sites" (EHSEPCS). The data obtained from the study will be analyzed using simple mean. Findings obtained from research question 1 table 1, revealed that items 1, 2, 3 and 4 all agree to the fact that workers put on regular safety signs when working, tool box meetings are usually organized before commencement of duties, the organization has a stand by medical response team in cases of emergency and workers put on regular PPE's required for each specified job. Also, further findings obtained from research question 2 table 2, revealed that items 5, 6, 7 and 8 all agree to the fact that accident occurrence sheet is available in most construction sites, construction sites have identified hazards points, there is maximum relation between safety and work ethics in most construction sites and company maintains global HSE practice with daily work activities. It was finally recommended regular seminars should be organised to enhance effective training of company compliance to HSE services in construction firms in Rivers State.

Keywords: Evaluation, HSE, Practices, Construction Sites

INTRODUCTION

Health, Safety and Environment is a very important element in today's daily activities exhibited by workers in most construction companies. In advanced nations, most industries put forward HSE as critical element in achieving success in their construction industries today. The health and safety in construction environment has become an integral part of project success, this is so because the construction has been labelled to have the most dangerous working environment compared to other sector. According to Akinwale & Olusanya (2016) of the accidents that occurs in workplaces greater number of them happens in the construction industry because of its difficult and tough working conditions. It is ranked one of the most hazardous work environments that experience high number of workplace injuries and mortality rate Awwad, El Souki and Jabbour (2016).

The safety and health of the construction industry has become essential due to the construction industry contributes to the socio-economic development of many nation through the provision of infrastructures and creating employment opportunities. Consequently, by implementing appropriate health and safety practices, it will create a safer, healthier and more pleasant working environment and reduce the risk of accidents not just to workers but the public. Berger, (2008) opined that a good health and safety conditions in construction constitute a good and safe business practice and could significantly contribute to quality assurance, cost efficiency, environmental sustainability and better employee-employer relationship and satisfaction.

Several factors has been identified as the causes of casualties on construction sites these include acts of God, law of awareness of safety regulations, indiscipline, poor working condition, inadequate communication, site characteristics, weak statutory operational safety and health regulations and provision (Champoux and Brun, 2003). However, the negative behavior and attitude of workers towards safety has been identified as the major cause of casualties on construction sites (Idoro, 2008). The behaviour and attitude of construction workers towards Health and Safety (HS) has become vital in achieving project objectives and eliminating accidents, injuries and losses on construction sites. The non-implementation of HS on construction sites has great impact not only on the workers and projects but also on the economy in terms of unemployment, loss of direct investment from the construction sector that provides the necessary infrastructural facilities for economic development. One of the sectors of the economy that requires special attention in terms of Health and safety is the educational institutions because many construction activities is been carried out there, from the construction of new facilities to modernization of the old ones to enhance teaching, learning and research. The Health and safety of educational institutions construction projects is important to the safety and wellbeing of staff, students and the long-time sustainability of the structures of the institutions. In view of this, this study assessed the Health and safety practices of construction workers in educational institutions projects with a view to reduce impact of construction casualties and enhance project delivery.

Purpose of the Study

The study looked at evaluation of HSE practices at construction sites in Port Harcourt local government area. Specifically, the study sought to:

1. Find out if site workers in construction sites observe regular HSE standard on job delivery.
2. Find out if site workers in construction sites observe general HSE protocols and documentations of daily work progression.

Research Questions

The following research questions were adopted and used for the study:

1. Do construction site workers observe regular HSE standard on job delivery?
2. Do construction site workers observe general HSE protocols and documentations of daily work progression?

Scope of the Study

The study is limited to evaluation of HSE practices at construction sites in Port Harcourt local government area of Rivers State.

LITERATURE REVIEW

Mainly due to the high level of activities faced with construction companies, there is every likelihood that accident may occur which requires proper steps to be taken to manage any eventuality. The labour-intensive nature of construction industry will demand more human involvement at the production stage. However, the magnitude of casualty suffered in execution of building projects across the globe, has made the construction industry the most dangerous or highly hazardous industry. Construction industry is viewed as labour intensive because labour cost amounts to 40-65% of the overall cost of a project. Therefore, the labour-intensive nature of the industry will demand more human involvement at the production stage. However, the industry compared with other sectors of the economy, due to the magnitude of casualty suffered in execution of building projects across the globe, has made the construction industry the most dangerous or highly hazardous industry in view of (International Labour Organisation, 2009). All over the world, construction is regarded as one of the most hazardous industries, due to its unique nature (Olutuase, 2014). Construction safety is always a grave concern for both practitioners and researchers. Construction workers face different kinds of safety and health hazards while working every day. Over 60,000 fatal injuries are reported every year from construction projects around the world. The occupational Safety and Health Administration (OSHA), an agency under the United State Department of Labour reports that 1 in 10 construction site workers are injured every year. The American Bureau of Labour Statistics figured that roughly 150,000 injuries occur each year in the construction site.

The safety of construction workers on sites is important towards the success of any project. Only when workers are in a sound state of mind and are healthy that work can go on efficiently (Okoye, Ezeokonkwo, & Ezeokoli, 2016). Occurrence of accidents or injury to workers tends to demoralise the workers in some cases and leads to suspension of construction activities.

A persistent health and safety challenge in Nigerian construction industry which ultimately results in different types of loss and magnitude is on the increase (Akinwale & Olusanya, 2016). A number of factors influencing safety performance in the construction industry was identified which include worker's attitudes, construction company size, safety policy and training, project coordination, and economic pressure. Thus, occupational Safety and Health Administration (OSHA), proposes the need for consistent training of artisans and managers about workplace hazards and control in order to ensure safety and productivity (Neale, 2013). Training, in this context, is to provide workers and managers with a greater understanding of health and safety policies and practices for them to work safely and ensure that their actions and inactions do not harm any other person.

Sustainable Development and Safety of Workers

Sustainable development is the optimum use of resources in all respects. Construction activities should incorporate structures for human health and environmental protection as a base line for sustainable development (Isa, Jimoh & Achuenu, 2013). Workplace safety and health brings sustainable development. Controlled environment, safer workplace, healthy workforce, improved occupational workplace safety knowledge and reduction of cost as a result of accident bring sustainable development (Surbeck & Hilger 2014; Hinze, et al, 2012). For any system to be sustainable it should be characterized by seven elements; vision, strategy, effective goal. The interface between OSH and sustainable development are (People, Planet and Profit) which are strongly infused entities for the improvement of OSH and sustainable development of the citizen. Construction Firms cannot be considered as sustainable, without significant consideration for occupational health and safety of workers (Wojick, 2015; Cary, 2013). Globally, costs of occupational health and safety diseases have been on the increase. Global financial losses due to workplace injuries and ill health exceed \$1250 billion International Labour Organisation (ILO, 2009). By conservative estimates workers suffers 270 million occupational accidents and 160 million occupational diseases each year. Occupational injuries alone account for more than 10 million Disability- Adjusted Life Years lost, or healthy years of life lost whether to disability or premature death, and 8% of unintentional injuries worldwide. Poor occupational health and reduced working capacity of workers may cause economic loss up to 10-20% of the Gross National Product of a country (ILO, 2009). In the past occupational health and safety was not the focus but nowadays health and safety has become a global issue. The prevalent of occupational health and safety problems is increasing the level of poverty in the society. Health and safety of construction workers is a socio – economic factor under sustainable development which has not been given adequate consideration. Most construction companies focus their attention on productivity improvement, technological advancement and profit maximisation with less concern for workers' safety (Kassu, Daniel & Beshah 2016).

METHODS

The descriptive survey research design was adopted in the study. The study used an instrument titled "Economic Gains in the Development of Paperless Policy System" (EGDPPS). The instrument is a four-point rating scale consisting of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The response options were weighed as 4, 3, 2 and 1 respectively. The population of study covers 130 senior administrative staff in Rivers state civil service commission. The entire populations were used as sample for the study. The instrument was validated by one expert in the department of mechanical engineering in Niger Delta University, Bayelsa State. The Expert checked the language content and the research questions to see if they are appropriate for the study. The data obtained from the study was analyzed using simple mean.

PRESENTATION OF RESULTS

Research Question One: *Do construction site workers observe regular HSE standard on job delivery?*

Table 1: construction site workers observe regular HSE standard on job delivery

S/N	Items	Mean	Decision
1	Workers put on regular safety signs when working	3.44	Agree
2	Tool box meetings are usually organized before commencement of duties.	3.23	Agree
3	The organization has a stand by medical response team in cases of emergency.	3.21	Agree
4	Workers put on regular PPE's required for each specified job.	3.27	Agree

Findings obtained from research question 1 table 1, revealed that items 1, 2, 3 and 4 all agree to the fact that workers put on regular safety signs when working, tool box meetings are usually organized before commencement of duties, the organization has a stand by medical response team in cases of emergency and workers put on regular PPE's required for each specified job.

Research Question Two: *Do construction site workers observe general HSE protocols and documentations of daily work progression?*

Table 2: Construction site workers observe general HSE protocols and documentations of daily work progression

S/N	Items	Mean	Decision
5	Accident occurrence sheet is available in most construction sites.	3.12	Agree
6	Construction sites have identified hazards points	3.22	Agree
7	There is maximum relation between safety and work ethics in most construction sites.	3.56	Agree
8	Company maintains global HSE practice with daily work activities.	3.45	Agree

Findings obtained from research question 2 table 2, revealed that items 5, 6, 7 and 8 all agree to the fact that accident occurrence sheet is available in most construction sites, construction sites have identified hazards points, there is maximum relation between safety and work ethics in most construction sites and company maintains global HSE practice with daily work activities.

Summary of Findings

The findings of the study are summarized below:

1. Findings obtained from research question 1 table 1, revealed that items 1, 2, 3 and 4 all agree to the fact that workers put on regular safety signs when working, tool box meetings are usually organized before commencement of duties, the organization has a stand by medical response team in cases of emergency and workers put on regular PPE's required for each specified job.
2. Findings obtained from research question 2 table 2, revealed that items 5, 6, 7 and 8 all agree to the fact that accident occurrence sheet is available in most construction sites, construction sites have identified hazards points, there is maximum relation between safety and work ethics in most construction sites and company maintains global HSE practice with daily work activities.

CONCLUSION

The study revealed that workers put on regular safety signs when working, tool box meetings are usually organized before commencement of duties, the organization has a stand by medical response team in cases of emergency and workers put on regular PPE's required for each specified job. Also, accident occurrence sheet is available in most construction sites, construction sites have identified hazards points, there is maximum relation between safety and work ethics in most construction sites and company maintains global HSE practice with daily work activities.

RECOMMENDATIONS

It was finally recommended regular seminars should be organised to enhance effective training of company compliance to HSE services in construction firms in Rivers State.

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