

Unsafe Work Behaviour of Unskilled Workers in Construction Sites in Port Harcourt Metropolis

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ABSTRACT

Unskilled casual workers make up the greater number of workers force in construction sites in developing countries. This paper considers the reasons why unskilled workers engage in unsafe behavior in construction sites using port Harcourt as the location of interest. Adapted questionnaire from various literatures to fit this study was done, the questionnaire was self-administered, they were distributed to 100 casual construction workers in Port-Harcourt. Purposive and snowball sampling technique was used to get respondents that fits this study. The findings showed that most workers are aware of the importance of abiding by safety rules and guideline. But this study shows that 66% of the respondents do not like using their PPE to work because it is uncomfortable and makes the work slow. 72% of the respondents believe accident is a matter of destiny and its unavoidable and 67% also indicated that there is high drug and alcohol usage in most sites. Further study revealed that due to various personal factors, they usually do not have a 100% focus and concentration on the job. The study also showed that 69% of the respondents like taking short cuts when there is pressure either from the supervisor or themselves so that they can receive higher pays. The study therefore suggests that proper education from enlightened supervisors to their workers about the consequences of drug and alcohol abuse also safety generally before starting jobs daily should be encouraged in most local construction building sites.

Keywords: unskilled workers, unsafe work behaviour.

I. INTRODUCTION

The construction sector is mainly faced with the problem of maintaining a trained and competitive craft workforce (Rowings, Federle, & Birkland, 1996). Rapid changes in the social, economic, organizational, and technological

environment, and lack of accurate statistics particularly in developing countries in addition to changing demographic characteristics are factors that makes maintaining a skilled work force difficult (Rowingset al., 1996). The construction site is a very important location, and the operations on the construction site require a good number of workers.

The truth about construction sites is that accidents happen on a regular basis, some of which even contribute to the loss of life. The concern is that most employers do not do their part by ensuring a secure and conducive working atmosphere, while in some cases employees do not use or do not know how to properly use these facilities, these incorrect practices have consequences for employees, the construction business and even society (Ikechukwu, Diugwu, Dorothy, & Ashem, 2012)

According to the International Labour Organization (ILO), around 60,000 deadly injuries occur on construction projects across the world last year, 950 workers suffer every day, and around 720,000 staff are wounded from workplace incidents with various degrees of seriousness. The (ILO) also estimates that USD 2.8 trillion is the global assessment of direct and indirect costs for construction accidents, equal to 4 percent of the annual Gross Domestic Product (GDP) of the nation (Leigh, Waehrer, Miller, & McCurdy, 2006).

II. LITERATURE REVIEW

Fang & Wu (2013) recorded that the construction industry is considered one of the most risky industries in the world because it represents a wide variety of operations, including the construction, repair, maintenance, reconstruction, alteration and demolition of houses, office buildings, temples, warehouses, hospitals, roads, bridges, tunnels, stadiums, airports, docks and more, which are heavily dependent on Building

personnel who are engaged in too many activities that can subject them to serious social, chemical, physical and biological hazards, such as contact with unguarded machinery, falling off rooftops and getting struck by large construction equipment (Popov, Lyon, & Hollcroft, 2016). Therefore, in many nations relevant to the construction industry or building sites, safety protocols and procedures have been developed to ensure that construction sites are safe for project employees and the public. Construction safety regulations are also necessary so that the completed project can meet the country's quality requirements (Muiruri and Mulinge, 2014).

Findings of most research projects have shown that the number of injuries in developing countries is higher than in developed countries (Idoro, 2007). Many of these incidents may be blamed on the fact that the work is conducted in inappropriate site conditions and over 70 percent of the workforce is made up of unskilled, uneducated, and low safety conscious workers. It is important to note that safety precautions are given little or no attention during construction projects in most developing countries, as it can be considered an unnecessary factor or too expensive (Mbuya and Lema, 1996).

The ILO (2001) perceived the construction business' ability to 'retain the eliminated.' The observation gathered is that the business makes occupations for others lacking aptitude or information, much of the time from the least fortunate segments of society. In a similar report, the ILO saw that practically all unskilled labourers at Indian building locales were youthful and severely from the lower social classification, and it was discovered that there was no tutoring for a huge level of these laborers in metropolitan habitats. Zylberstajn (1992) cited by ILO (2001) as expressing that unskilled worker in the development business in Brazil have a lower level of schooling than staff in different ventures and that the Brazilian development industry does not require any normal degree from institution from its site

laborers. In 1999, 14.6% of building staff were discovered to be uneducated and 57% had under four years of experience (ILO, 2001). The situation is very close in China, where 50% of the 600,000 transient labourers on building locales in Beijing have procured minimal level of essential training and more than 10% are unskilled (Lu and Fox, 2001).

III. METHODOLOGY

Cross sectional study approach was adopted for this research. It was conducted among casual construction workers in Port Harcourt, Rivers state to identify the safety perceptions, actions and awareness level, and PPE usage of some unskilled workers on construction sites in terms of the research aim which is to identify the reasons why unskilled workers engage in unsafe behaviors on construction site. 100 respondents had completed their questionnaire as against 105 that were distributed.

The research instrument used for the study was a well-structured questionnaire. The questions were constructed to address the study objectives. The research instrument was adapted from studies: (Asilian-Mahabadi, Khosravi, Hassanzadeh-Rangi, Hajizadeh, & Behzadan, 2018); (Danso, 2010); (Kolo, 2015); (Choudhry & Fang, 2008).

Snowball sampling technique was used to identify various clusters of casual construction workers in Port Harcourt. In snowball sampling, respondents who match the criteria of inclusion of the study was asked to recommend others who they know might meet the selection criteria. This is sometimes the only way to reach the population (Bhattacharjee, 2012). This was followed by non-randomized sampling method (purposive sampling technique); the researcher subjectively identified respondents who are willing to provide the needed information. Cronbach alpha was used to test the reliability of the questionnaire (Cronbach's Alpha= 0.783). A five-point Likert scale was used.

IV. RESULTS AND DISCUSSION

Mean responses on the different questionnaire items.

Actions and Awareness level

Table 1. Responses on actions and awareness at work

Action and awareness at work	N	mean	Sig	Remark
When I am working on something, part of my mind is occupied with other topics, such as what I will be doing later, or things I would rather be doing.	100	3.62	Yes	Agree
I tend to do several things at once rather than focusing on one thing at a time.	100	3.60	Yes	Agree

I take shortcuts when I feel work pressure and carry out my job how I feel it is best for me.	100	3.99	Yes	Agree
I have trouble thinking of the right words to express how I feel about things.	100	2.79	No	Disagree
Supervisors' attitudes do not allow you to ask important safety questions because you cannot predict how they will respond.	100	2.96	No	Disagree

Source: Field survey, 2020

The assessment in Table 4.2 was done to identify workers actions and awareness level at work.

One of the important focus on the research was to examine the actions and awareness of the respondent when carrying out their duties. The result gotten from this study demonstrated that most of the respondents while carrying out their duties are not fully focused on the job rather their mind is elsewhere which can lead to an error or errors which can lead to unsafe act or put a place in an unsafe condition for everyone working at the

site. Also, the result shows that 69% of the respondents prefer to take shorter measures or short cuts when there is pressure to deliver the project or they usually follow the way that suits them to carry out the job rather than following the better or safer procedure, this is probably to meet up the daily pay of the project. The result also highlighted that 59% of the workers tends to do several tasks at a time which can easily lead to confusion if the person is not focused or supervised.

PPE Usage

Table 2. Responses on PPE usage

PPE USAGE	N	Mean	Sig	Remark
I am aware of the consequences of my actions due to not following safety rules or use of PPE.	100	4.59	No	Agree
I use all necessary safety equipment to do my job because I am conscious of my safety when I work.	100	3.95	No	Agree
I leave PPE because these devices make working more difficult.	100	3.90	Yes	Agree
I consciously leave safety devices and PPE once I see the supervisor not using his safety devices and PPE.	100	2.82	No	Disagree
I work better and faster by not using safety equipment same as my co-workers.	100	3.71	Yes	Agree

Source: Field survey, 2020

The assessment in Table 4.3 was done to identify workers knowledge and usage of personal protective device. An overwhelming proportion of the respondents were aware of the consequences of not following safety rules, guidance, and the effects of not using their PPE, most stating that an accident could occur, and the defaulter could be kicked out of the site.

But the result from question 11 in table 4.3 shows that most of the respondents do not like using their PPE because it makes work difficult and

most of the time its uncomfortable wearing some of the devices. This is in line with Bruno et al., (2012) where he suggested that around 81.1 percent of construction workers in Nigeria do not wear personal protective equipment (PPE), since the protective equipment is either oversized/undersized or heavy and making work sluggish and Choudhry and Fang (2008) indicated weak protection attitudes that included not wearing personal protective equipment.

Safety Perception

Table 3. Responses on safety perception

SAFETY PERCEPTION	n	Mean	Sig	Remark
I feel that safety is both costly and time consuming.	100	3.38	Yes	Agree
I believe that an accident is a matter of destiny and almost always unavoidable.	100	4.05	Yes	Agree
I think that job schedules and deadlines are more important than job site safety.	100	2.22	No	Disagree
Most co-workers are proud of overcoming hard and risky conditions without safety equipment's	100	2.99	No	Disagree
I feel that safety is for show rather than a supported program.	100	2.53	No	Disagree

Source: Field survey, 2020

The assessment in Table 4.4 was done to identify workers perceptions about safety.

One of the objectives of the study was to highlight the perception of unskilled workers about some safety items. From the result most of the respondents indicated that safety is more important than meeting the deadline or schedules of projects so that they can deliver a quality project. They also indicated that safety is not for show-off rather, it is an important aspect of construction. But from the result there was a slight increase in number of those who believe safety is an expensive program and it consumes a lot of time also 72% of the respondents believe an accident is a matter of destiny that cannot be avoided without considering that human error makes up over 85% of accidents globally.

Identified unsafe behaviours and perceptions.

These are the identified unsafe behaviour and perceptions of unskilled workers in this research. They are all gotten from the Sig (significance) column of the five tables above. From the sig column those identified as yes are those to be included in the list below.

1. When most workers are working in the site, part of their mind is occupied with other topics, such as what they will be doing later, or things they would rather be doing.
2. Most workers tend to do several things at once rather than focusing on one thing at a time.
3. Most workers tend to take shortcuts when they feel work pressure and they carry out their job how they feel is best for them.
4. Most workers leave PPE because these devices make working more difficult.
5. Most workers work better and faster by not using safety equipment same as their co-workers.
6. Most workers feel that safety is both costly and time consuming.

7. Most workers believe that an accident is a matter of destiny and almost always unavoidable.

V. CONCLUSION

This study asserts that most of the respondents were aware of the effects or consequences of not following safety rules, guidelines and not using the appropriate PPE to carry out task. But the study showed that most of the respondents do not like donning on their PPE stating that it makes work difficult and slow, they also believe that accidents are unavoidable, and it is a matter of destiny and they indicated that there is high level of drug and alcohol abuse. This could be linked to the fact that most of these workers do not have proper education and have not been trained adequately on safety at work.

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