

ILO- Occupational Safety and Health Management Practices Existing in Building Construction Companies in Ebonyi State, Nigeria

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Abstract

This study examined the provision of ILO- Occupational safety and health management practices existing in building construction companies in Ebonyi state, Nigeria, using a descriptive research design. The population of the study comprised ninety- (91) professionals which include thirty (30) Architects, twenty-five (25) Builders, and thirty-six (36) Quantity Surveyors who are responsible for policy-making in the building construction industry. The instrument for data collection was a structured 10-item questionnaire titled “Examination of the Provision of ILO-Occupational Safety and Health Management Practices Existing in Building Construction Companies’ questionnaire” (Eopilooshmpeccq). The instrument was validated by three experts in the building department. Cronbach Alpha reliability technique was used to determine the reliability of the instrument which yielded an overall reliability coefficient of 0.81. Data for the study were collected by the researcher with the help of three research assistants. Out of 91 copies of the questionnaire administered to the respondents, 81 copies were filled and returned representing an 89% rate of return. The data collected were analyzed using frequency for demographic information of respondents, mean and standard deviation for answering the research questions while the null hypothesis was tested using chi-square at 0.05 level of significance. The results show That there is no existence of ILO- Occupational safety and health management practices in building construction companies in Ebonyi state, Nigeria. The implication of this study from the findings is that the study will serve as an eye opener to the management of construction companies on the need to follow Occupational safety and health management practices. Based on the findings, the study among others recommended that: the Ebonyi state government should enforce Occupational safety and health management practices on building construction companies by Ebonyi state and there should be routine checks at ongoing building construction sites by the Abakaliki Capital Territory Development Board (ACTDB) commission and professional bodies within the built industry to ensure adherence to with ILO- Occupational safety and health management practices.

Keywords: *ILO-Occupational safety and health, management practices, Building Construction Companies*

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Background to the Study

The construction sector at the production stage is labor-intensive and requires human involvement, which makes it complex, due to the kind of work performed in the sector. It has made the construction industry the most dangerous or highly hazardous sector (Smallwood and Haupt 2002). The construction industry moves in stages specifically with planning, financing, and designing and continues until the project is accomplished and ready to be used. This goal is accomplished by the parties involved in the built industry that work assiduously to ensure it is accomplished. During the process of achieving this goal, the construction workers encounter some hazards which affect their lives drastically (Ayangade, 2000).

According to Mgbeahuru, Okolie and Nwekete (2022), many hazards have been observed on various occasions in the building sector during the production stage when compared to other sectors in terms of accident cases, the construction workers in the industry encounter different challenges which pose a threat to their health. This shows that in the building industry accidents occur regularly. It is pertinent to note that the cause of accidents in the construction industry is as a result of unsafe behaviour. These incessant accidents or injuries occurrence in the construction industry bring loss to the construction worker and the industry at large, which creates economic losses and also gives rise to loss of productive time until the construction environment atmosphere is normalized (Mgbeahuru *et al*, 2022).

An occupational health and safety management system is imperative for any organization that wants to remain competitive in the construction industry. This is seen by management as a duty of care to the employees of their organizations, which should be pursued with commitment and cooperation (Kalejaiye, 2013). Injuries, accidents and ultimately death are Occupational hazards due to unsafe and unhealthy practices in an unregulated environment (Mgbeahuru *et al*, 2022). The origin of OSH regulations in Nigeria is traced to the United Kingdom and the US, where most of them are adopted. (Idoro, 2008). According to the Labour Safety Health and Welfare Bill, (2012) In 2012, the OSH Bill in Nigeria was specifically designed to ensure an enabling working environment in all industrial sectors both the formal and informal sectors while the National Council for Occupational Safety and Health is empowered to oversee the Bill. This repeals the Factories Act 1990 and serves as comprehensive Occupational Safety and Health legislation for the workplace. This is because the provisions and requirements of OSHMS encourage greater awareness of responsibilities and aspects of health and safety, highlighting the impact of poor health and safety standards on the performance of organizations (Diugwu, Baba, and Egila, 2012).

Aim of the Study

This study aimed to examine the provision of ILO- Occupational safety and health management practices existing in building construction companies in Ebonyi state, Nigeria.

Objectives of the Study

The research objective includes, to;

Examine the provision of ILO- Occupational Safety and Health Management practices existing in building construction companies in Ebonyi state, Nigeria.

Research Question

What is the ILO - Occupational Safety and Health Management practices existing in building construction companies in Ebonyi state, Nigeria?

Hypothesis

HO: There are no ILO - Occupational safety and health management practices existing in building construction companies in Ebonyi state, Nigeria.

Methodology

The study adopted a descriptive survey design. The study was carried out in Ebonyi state, Nigeria. The population for this study comprised ninety- (91) professionals which include thirty (30) Architects, twenty-five (25) Builders, and thirty-six (36) Quantity Surveyors who are responsible for policy-making and are working with the registered building construction companies with the Ebonyi state ministry of Housing and Urban Development. There was no sampling. Therefore, the entire population was used for the study. The data for the study were collected using a structured questionnaire titled “Examination of the Provision of ILO-Occupational Safety and Health Management Practices Existing in Building Construction Companies' questionnaire” (EOPILOOSHMPCECCQ). The instrument was subjected to validation by three experts (one in the building department and the other in Educational Measurement and Evaluation, all from Nnamdi Azikiwe University, Anambra state were used for the validation exercise. Cronbach alpha method was used to determine the internal consistency of the questionnaire items. The instrument yielded an overall reliability coefficient of 0.88 was obtained for the entire instrument. The 91 copies of the instrument were distributed to the respondents by the researcher with the help of three research assistants. Out of the ninety- one (91) copies of the questionnaire administered to the respondents, eighty-one (81) copies were filled and returned representing an 89% rate of return. The descriptive statistics of mean and standard deviation were used to answer the research questions. The hypotheses were tested using chi-square at a 0.05 level of significance. Chi-square was used to test the hypotheses since the data obtained are nominal data and it summarizes the discrepancies between the expected number of times each outcome occurs and the observed number of times each outcome occurs, by summing the square of the discrepancies, normalized by the expected numbers, over all the categories

Results

Table 1: General/ Demographic Information of Respondents

Demographic variables	Frequency	Percentage (%)
Professional background		
Architect	26	32
Builder	25	31
Quantity Surveyor	30	37
Gender		
Male	75	93
Female	6	7
Years of Experience		
1-5 years	27	33
6-10 years	20	25
11-15 years	15	19
Over 15 years	19	23
Highest Educational Qualifications		
HND	25	31
B.Sc/B.Tech	32	39
MSc/MPM	20	25
Phd	4	5

Data in Table above 1, shows that Quantity Surveyors- constituting 37% of the population sample. Architects constitute 32% of the respondents, 31% of the respondents are builders. Among the respondents 93% accounted for the male counterparts while 7% of the respondents are female professional in the construction industry. About 33% of the respondents possess 5 years professional experience in the construction industry, 25% possess 6-10 years' experience, 23% possess over 15 years professional experience and 19% possess 11-15 years' experience.

Respondents with HND were found to hold adequate academic qualification constituting 31% of the respondents, while the rest of the respondents (39% and 30%) possess B.Sc/B. Tech and Masters Degrees respectively as their highest educational qualification.

Research Question: What is the ILO- Occupational safety and health management practices existing in building construction companies in Ebonyi state, Nigeria?

Table 2: Mean and Standard Deviation on the ILO- Occupational safety and health management practices existing in building construction companies in Ebonyi state, Nigeria.

SN	Items	SA	A	D	SD	N	\bar{x}	SD	Decision
1	There is existence of daily supervision, to ensure the protection of workers on construction site	4	61	13	3	81	2.81	0.57	Agreed
2	There is existence of compensation for victims of occupational accidents and diseases in the construction company	1	23	29	28	81	1.96	0.82	Disagreed
3	There is existence of adequate arrangements to ensure a safe and healthy environment before commencement of work on construction site	4	16	16	45	81	1.74	0.94	Disagreed
4	There is enforcement of cooperation and communication among workers and their representatives in the construction site by the management	9	57	13	2	81	2.90	0.60	Agreed
5	Existence of adequate provision of resources including human and financial resources on construction site	2	12	29	38	81	1.72	0.80	Disagreed
6	Existence of full participation of workers in the fulfillment of the OSH policy on construction site	3	3	43	32	81	1.71	0.71	Disagreed
7	There is existence of daily inspection of work system, premises, plant and equipment in the construction site	28	48	2	3	81	3.24	0.68	Agreed
8	There is existence of daily performance evaluation of the OSH management system in the construction site	1	3	40	37	81	1.60	0.62	Disagreed
9	There is existence of day-to-day arrangements for hazard and risk identification, prevention and control in the construction companies	1	2	54	24	81	1.75	0.55	Disagreed
10	There is existence of OSH training for workers doing jobs subject to strict requirements for OSH in the construction site	3	13	29	36	81	1.79	0.84	Disagreed
Grand Mean							2.12	0.71	Disagreed

Source: Researcher's Field Work, 2021.

Result on Table 1 shows that the respondents in item 1, 4 and 7 agreed that the ILO- Occupational safety and health management practices exist in building construction companies in Ebonyi state, Nigeria. This is actually explained by the means scores of 2.81, 2.90 and 3.24. The individual mean scores are above 2.50, which means that respondents in items 1, 4, and 7 agreed that there is existence of daily supervision, to ensure the protection of workers on construction site, there is enforcement of cooperation and communication among workers and their representatives in the construction site by the management and there is existence of daily inspection of work system, premises, plant and equipment in the construction site.

However, respondents in item 1,2,3,5,6,8,9 and 10 disagree that the ILO- Occupational safety and health management practices are existing in building construction companies in Ebonyi state, Nigeria. This is explained by the mean scores of 1.96, 1.74, 1.72, 1.71, 1.60, 1.75 and 1.79 for respondent in item 2,3,5,6,8,9 and 10 respectively. The mean scores are below 2.50, which means that respondents in item 2,3,5,6,8,9 and 10 disagreed that; there is existence of compensation for victims of occupational accidents and diseases in the construction company, there is existence of adequate arrangements to ensure a safe and healthy environment before commencement of work on construction site, existence of adequate provision of resources including human and financial resources on construction site, existence of full participation of workers in the fulfillment of the OSH policy on construction site, There is existence of daily performance evaluation of the OSH management system in the construction site, there is existence of day-to-day arrangements for hazard and risk identification, prevention and control in the construction companies and there is existence of OSH training for workers doing jobs subject to strict requirements for OSH in the construction site. The grand mean score of 2.12 shows that the ILO- Occupational safety and health management practices do not exist in building construction companies in Ebonyi state, Nigeria.

Testing for Hypothesis

Table3: Chi-square Analysis of Mean Ratings the Professionals' Responses on the ILO- Occupational safety and health management practices existing in building construction companies in Ebonyi state, Nigeria

	D.f	X ² .cal	X ² .crit	Decision	Significance
Chi-square		9.064	40.11	Accept HO	Not significant
Number of valid Cases	81	27			

Decision rule: Accept Ho: if $X^2_{critical} > X^2_{calculated}$, Reject Ho: if $X^2_{critical} < X^2_{calculated}$

Decision:

From table 3, the Chi-square table shows a calculated value of 9.064, degree of freedom df =27. The $X^2_{calculated}$ (9.064) are less than the values of the $X^2_{critical}$ (40.11) gotten from the chi-square distribution table. We accept the null hypothesis that 'Health and safety risk has no significant management process in the Nigeria construction industry'; thereby rejecting the alternate hypothesis.

Discussion

The findings on Table 2 showed that the ILO- Occupational safety and health management practices do not exist in building construction companies in Ebonyi state, Nigeria. This is because there is no; existence of compensation for victims of occupational accidents and diseases in the construction company, existence of adequate arrangements to ensure a safe and healthy environment before commencement of work on construction site, existence of adequate provision of resources including human and financial resources on construction site, existence of full participation of workers in the fulfillment of the OSH policy on

construction site, existence of daily performance evaluation of the OSH management system in the construction site, existence of day-to-day arrangements for hazard and risk identification, prevention and control in the construction companies and existence of OSH training for workers doing jobs subject to strict requirements for OSH in the construction site. This connotes none existence of ILO- Occupational safety and health management practices in the building construction companies. Nag (2003) opined that the elements of ILO-Occupational safety and health management system require consultation, co-operation and commitment from all stakeholders and Workers' participation which is seen as a vital part of the process and on which ILO bases its assessment on construction industries.

The finding on table 2 agreed with Chudley and Greeno (2006), who examined that construction regulations as statutory instruments setting out the minimum legal requirements for construction works and relate primarily to the health, safety and welfare of the workforce which must be considered when planning construction operations and during the actual construction period. This shows that these minimal legal requirements for construction works are not followed, in order to tackle incessant accident occurrences in construction sites.

According to Okeola, (2009) the Ministry charged with enforcement of these laws has not been effective in identifying violators probably due to inadequate funding, lack of basic resources and training therefore, consequently neglect safety oversight of other enterprises, particularly construction sites and non-factory works. Umeokafor, Isaac, Jones and Umeadi (2014) agreed that the impact of the enforcement authority is ineffective, as the key stakeholders pay less attention to OSH regulations; thus, rendering the OSH scheme dysfunctional and unenforceable, at the same time impeding OSH development.

Idoro, (2004) and Kolawole, (2014) viewed the none existence of Occupational safety and health management system as problem to adopting almost all existing regulations of reference on health and safety in Nigeria from foreign countries, especially from the British legal system with little or no changes made and that some provisions from these laws do not necessarily meet the conditions experienced in Nigeria. In addition, the labour law does not provide workers with right to remove themselves from dangerous work situations without loss of employment. Nevertheless, the emergence of new regulations, laws, standards and codes has made many construction organizations to improve their safety performance. Mgbeahuru *et al* (2022) observed the management ill duty of care to the employees of their organizations are pursued with less commitment and cooperation accounts to none compliance building construction companies to ILO occupational safety and health management system.

Conclusion

This study examined ILO- Occupational safety and health management practices existing in building construction companies in Ebonyi state, Nigeria, the study concludes there is no existence of ILO- Occupational safety and health management practices in building construction companies in Ebonyi state, Nigeria and there is no compliance by building construction companies in Ebonyi state to ILO occupational safety and health management system.

Recommendations

1. The Ebonyi state government should enforce the Occupational safety and health management practices on building construction companies by Ebonyi state.
2. There should be routine checks at ongoing building construction sites by the Abakaliki Capital Territory Development Board (ACTDB) commission and professional bodies within the built industry to ensure adherence to with ILO-Occupational safety and health management practices.

References

- Ayangade, G. M. (2000). *Assessment of building failures in Nigeria*, Lagos and Ibadan Case study.
- Chudley, R. & Greeno, R. (2006). *Building construction handbook* (6th ed.), USA: Butterworth-Heinemann
- Diugwu I. A., Baba, D. L. & Egila, A. E. (2012). Effective regulation and level of awareness: An expose of the Nigeria's construction industry, *Journal of Safety Science and Technology*.2(1), 140-146.
- Idoro, G. I. (2008). Health and safety management efforts as correlates of performance in the Nigerian construction industry, *Journal of Civil Engineering and Management*, 14(4), 277-285.
- Idoro, G. I. (2004). Health and safety management efforts as correlates of performance in the Nigeria construction industry, *Journal of Civil Engineering*. 6 (23), 75-83
- Kalejaiye. P. O. (2013). Occupational health and safety: Issues, challenges, and compensation in Nigeria, *Peak Journal of Public Health and Management*, 1 (2), 16-23.
- Kolawole M. J. (2014). Assessment of safety measures on building sites (A case study of minna, North central Nigeria), *Greener Journal of Environmental Management and Public Safety*. 3. 001-008.
- Mgbeahuru, C. O., Okolie K. C. & Nwekete, C. J. (2022). Level of compliance to occupational safety and health management system by building construction companies in Ebonyi state, *Nigeria International Journal of Innovative Environment Studies Research* ,10(1):95-102.
- Nag. P. K & Nag. A. (2003). A national priority on occupational health and safety management system, *ICMR Bulletin*, 33 (1), 11-12.
- Okeola, O. G., (2009). *Occupational health and safety (OHS) assessment in the construction industry*, Physical Planning Unit, University of Ilorin, Nigeria.

- Okoye, P. U., Ezeokonkwo, J. U., & Ezeokoli, F. O. (2016). Building construction workers' health and safety knowledge and compliance on site, *Journal of Safety Engineering*, 5(1), 17-26.
- Smallwood, J. & Haupt, T. (2002). *Safety and health Team building construction safety and Health Management*, Prentice-Hall (New Jersey): Upper Saddle River; 59-83.
- Umeokafor, N., Isaac, D., Jones, K., & Umeadi, B. (2014). Enforcement of occupational safety and health regulations in Nigeria: An exploration. *European Scientific Journal*.