



The Effect of Health and Safety Rules on the Nigerian Construction Industry

Kamoli Adetunji and Razali Adul Hamid

EasyChair preprints are intended for rapid dissemination of research results and are integrated with the rest of EasyChair.

June 19, 2020

THE EFFECT OF HEALTH AND SAFETY RULES ON THE NIGERIAN CONSTRUCTION INDUSTRY

Adetunji Kamoli ^{*1}, Razali Adul Hamid ²

Quantity Surveying Department, Universiti Teknologi Malaysia, Johor Bahru, MALAYSIA.
(E-mail: *qsakinadetunji@gmail.com, b-razali@utm.my)

ABSTRACT

This paper examines the health and safety rules in the Nigerian construction. The objective of the study is to assess the effect of rules on the performance of the Nigerian construction industry. This study adopts a questionnaire survey to elicit information from construction professionals. 45 responses received and fit for analysis. Percentile means chart and means score were used in analysed the data received and appropriately ranked. The survey revealed that the level of awareness of the respondents about the health and safety act and its composition is 47% while education and training have the highest mean score of 3.73 as a method of improving safety practices. It also revealed that reduce the threat of legal action has the highest mean score of 3.91 as the effect of the health and safety rules. Its, therefore, suggested that all safety rules must be complied with and regulatory bodies must make the necessary effort to enforce the safety rules. It is also suggested that the government should continue to update all health and safety rules to meet with prevalent challenges in the construction industry. This study concludes that excellent safety practices can improve the safety performance of the Nigerian construction industry.

Keywords: employees, workplace, safety, health and construction industry

INTRODUCTION

Rules are set up so that the rights of individuals are respected and accountabilities are satisfied [1]. Small groups incline to embrace ordinary rules, that are not legally binding whereas governments of a nation or states establish comprehensive rules, that can be enforced [2, 3]. The essence of the regulation is to ensure individuals in society live and perform under the set of standard rules [4]. The consequence of contravention of the rules is in the form of a sanction imposed by the government of a nation or states considers being proportionate with the gravity of the breach [5, 6].

Occupational health and safety rules imposed responsibilities on the organization to safeguard the health and safety of their personnel in the course of their duties as well as the general public [7,8,9]. The health and safety rules also imposed responsibility on the employees to comply with these rules and ensure international best practices [10,11,12].

Therefore, there must be a collaboration between the employers and the employees concerning health and safety rules in the workplace [13, 14].

[15] highlighted that accident and injury rates in developing nations like Nigeria are high compared to Australia, the UK, and the US. This is due to poor health and safety culture among the building operatives in the Nigerian construction industry [16]. [17] revealed that different perceptions, behaviour, and actions displayed by construction employees lead to serious accidents on-site. This different cultural background has an impact on the construction safety climate. [18] elaborated that sufficient attention to these differences supports understanding of the different methods to prevent accidents. The construction industry in Nigeria is reasonably experiencing growth. Regrettably, enforcement of health and safety rules is not a prevailing activity in Nigeria [19]. Similarly, [20] opined that occupational health and safety legislation meant for the Nigerian construction sector is inadequate and does not impact health and safety in the industry. Hence, attributing to the high number of injuries and accidents in the construction sites.

The study aim is to assess the effect of health and safety rules on the Nigerian construction industry. The objectives of the study are: to access the level of awareness of safety rules and regulations in the Nigerian construction industry, to identify the deficiency of the of factories act of 1990, to identify methods of improving safety practices in the Nigerian construction industry, and to examine the effect of health and rules on the Nigerian construction industry. The study focus on the effect of health and safety rules on the Nigerian construction industry. The study addresses the major project stakeholders in the construction industry. Which include Quantity surveyors, Architects, Engineers, Builders, and health and safety experts.

The population for the study was the construction professionals in the building industry from the federal capital territory, Abuja, Nigeria. The target respondents consisted of Quantity surveyors, Architects, Engineers, Builders, and Health and Safety Experts. A well-structured 60 questionnaires were administered for the collection of the data on safety awareness, methods of improving safety, and the effect of safety rules on the Nigerian construction industry. The method of improving safety practices and the effects of safety rules were identified from the literature and presented for the respondents to appraise on a 5-point Linker scale. The levels of significance were acknowledged by the extent of their mean scores, with the highest mean illustrates the most significant factor.

MAIN RESULTS

The results from the data analysis obtained in the study are presented. Out of 60 questionnaires that were distributed only 45 were completed and returned representing a 75% response rate. From results analyzed, Master has the highest percentage of 42.2% from the respondents' academic qualification, engineers top with 35.6% of the respondents under professional affiliation while 31.1% are Coren registered engineers form the highest percentage of the respondent under professional registration body. 33.3% has the highest percentage of respondents. Furthermore, the percentage

distribution of the respondents according to the awareness of the health and safety act and its compositions. 47% has moderate knowledge of health and safety rules, 33% has high, 13% very high, 5% low, and 2% very low knowledge health and safety rules.

Also, the result analyzed illustrates that violators of the act are not deterred by the penalty has the highest percentage of 33%, under the deficiency of the factories act of 1990 as illustrated in figure 1 below. Equally, training and education rank the highest with a mean score of 3.73 as a method of improving safety. The reduction of Legal threats has the highest mean score of 3.91 of the effect of health and safety rules on the Nigerian construction industry as indicated in table 1 below.

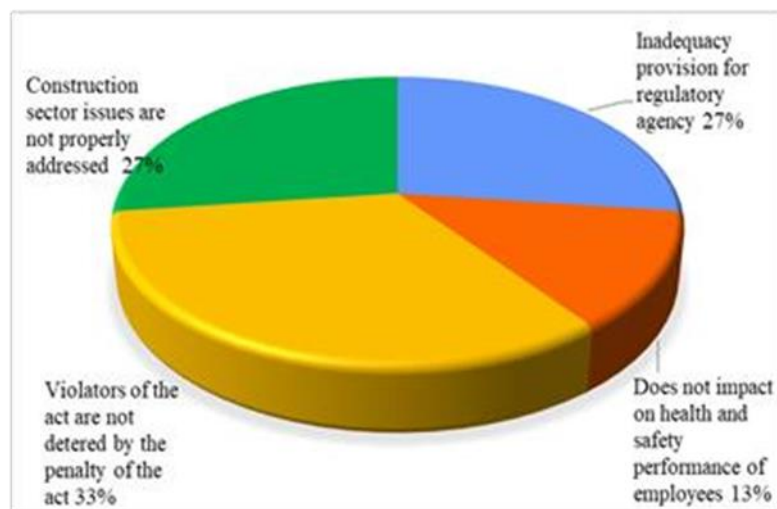


Figure 1 Deficiency of the Factories Act of 1990

Table 1 The effect of health and safety rules on the Nigerian construction industry

S/no	Research Questions	SD (1)	D (2)	M (3)	A (4)	S A (5)	Total Response	Mean Score	Ranking
1	Reduced number of accidents	2	4	12	15	12	166	3.69	3
2	Reduced costs	1	8	8	23	5	158	3.51	5
3	Reduced risks	1	5	9	21	9	167	3.71	2
4	Increased reputation	1	5	12	18	9	164	3.64	4
5	Increased productivity	3	3	10	17	12	167	3.71	2
6	Reduced threat of legal action	2	6	12	14	14	176	3.91	1

The result of the survey illustrates that level of awareness of health and safety acts and its composition of the respondents has the highest 47% percent which is still below average. This aligns with the study by [21] that only 5% of the construction firms acquainted with the composition of the act. The survey shows that 33% of the respondents strongly agree that the violators of the act are not deterred by the penalty imposed as shown in figure 1 above. This in line with [15] which highlighted that numerous sections of the act need review. The result of the survey indicates that education and training have the highest mean score of 3.73. The result of the survey aligns with the position of [22] which highlighted that employees must have adequate training in health and safety matters, Survey of the respondents shows that the reduced threat of legal action has the highest mean score of 3.91 as the effect of health and safety rules as shown in table 1 above. This was also the conclusion of [23] that the organization complied with the rule only to shun legal penalties.

CONCLUSION

Health and safety rules are essential for influencing safety practices in construction sites. Construction organizations must have a comprehensive knowledge of the statutory requirements that relate to their operations and ensure compliance. Resources must be made available by the organizations in the training and education of construction employees on health and safety rules so that they can aware of how their behaviour can affect themselves, co-employees and passerby, and the entire organization. Regular visitation of sites by the inspectorate officers to ensure compliance with health and safety rules. Health and safety rules must be continuously undergoing review to meet the challenges in the construction industry.

REFERENCES

1. Rowlinson HL and S. Occupational Health and Safety in Construction Project Management. 2005.
2. Morris et al. Laying Down the Law: The Foundations of Legal Reasoning, Research and Writing in Australia. Butterworths, Sydney.; 1996.
3. Vázquez CM. Direct vs. indirect obligations of corporations under international law. *Columbia J Transnatl Law*. 2005;43(3):927–59.
4. O'Rourke D. Multi-stakeholder regulation: privatizing or socializing global labor standards? *World Dev*. 2006;34(5 SPEC. ISS.):899–918.
5. Hale A, Heijer T, Koornneef F. Management of safety rules: the case of railways. *Saf Sci Monit*. 2003;7(1):1–11.
6. Whelan P. A Principled Argument for Personal Criminal Sanctions as Punishment under EC Cartel Law. *Compet Law Rev*. 2007;4(1):7–40.
7. Podgórski D. Workers' Involvement—A Missing Component in the Implementation of Occupational Safety and Health Management Systems in Enterprises. *Int J Occup Saf Ergon*. 2005;11(3):219–31.
8. Idubor EE, Oisamoje MD. An Exploration of Health and Safety Management Issues in Nigeria'S Effort To Industrialize. *Eur Sci J*. 2013;99(1212):1857–7881.
9. El-Menyar A, Mekkodathil A, Al-Thani H. Occupational injuries: Global and local perspectives. *Nepal J Epidemiol*. 2016;6(2):560–2.
10. Safety H and. Health and Safety at Work etc. Act 1974. Health and Safety. 1974.
11. OSHA. Occupational safety and health ACT 1994. Dep Occup Saf Heal Minist Hum Resour Malaysia. 1994;1994.
12. Singapore Act. Workplace Safety and Health Act (Chapter 354a)- Workplace Safety and Health (Construction) Regulations 2007. Work SAFETYAND Heal Regul 2007. 2007;(December 2007):1–8.
13. Rabinowitz RS, Hager MM. Designing Health and Safety: Workplace Hazard Regulation in the United

- States and Canada. *Cornell Int Law J.* 2000;33(2):372–433.
14. Teo EAL, Ling FYY, Chong AFW. Framework for project managers to manage construction safety. *Int J Proj Manag.* 2005;23(4):329–41.
 15. Idoro GI. Health and safety management efforts as correlates of performance in the Nigerian construction industry. *J Civ Eng Manag.* 2008;3730.
 16. Agwu, M.O. , & Olele H. Fatalities in the Nigerian Construction Industry: A Case Study of Poor Safety culture. *British J Econ Management & Trade.* 2014;4(3):431–52.
 17. Okoye P, Chuks KO. Assessment of National Culture Dimensions and Construction Health and Safety Climate in Nigeria. *Sci J Environ Eng Res.* 2012;167(January):1–6.
 18. Ismail F, Hashim AE, Ismail R, Majid MZA. The Operationalisation of Safety Culture for the Malaysian Construction Organisations. *Int J Bus Manag.* 2009;4(9):226–37.
 19. Idoro GI. Effect of mechanisation on occupational health and safety performance in the Nigerian construction industry. *J Constr Dev Ctries.* 2011;16(2):27–45.
 20. Adeyemo O, Smallwood J. Impact of Occupational Health and Safety Legislation on Performance Improvement in the Nigerian Construction Industry. *Procedia Eng [Internet].* 2017;196(June):785–91. Available from: <http://dx.doi.org/10.1016/j.proeng.2017.08.008>
 21. Aniekwu N. Accidents and safety violations in the Nigerian construction industry. *J Sci Technol.* 2007;27(1).
 22. EU-OSHA. Worker Participation in Occupational Safety and Health: A practical Guide. *Eur Agency Saf Heal Work [Internet].* 2012;6–18. Available from: <https://osha.europa.eu/en/publications/worker-participation-occupational-safety-and-health-practical-guide>
 23. Hawkins K. and BH. *The Reponse of Business to Social Regulation in England and Wales: An Enforcement Perspective.* Vol. 15, Law and Policy. 1993.