

Impact of Culture on Safety Risk Assessment in Construction Companies in Nigeria: A Review of Selected Literature.

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Abstract

This review focused on the impact of culture on safety risk assessment in construction companies in Nigeria, as well as the effect of culture on the smooth delivery of safety risk-related issues in organisations. This literature review will attempt to give an overview of the assessments of safety risk management processes in Nigeria. Organisations are more likely to succeed if they incorporate ideas, management commitment and methods of operation to attain the highest standards of safety rule application. However, if Employees are permitted to contribute meaningfully to welfare-related discussions, it will help to increase sustainability and transparency. The paper finishes with suggestions for alerting varied organisations about control measures that could be advantageous for all of Africa.

Key Words: *Culture, Safety, Risk Management, Risk Identification, Corporate Social Responsibility (CSR), Organisations*

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I. Introduction

This chapter reviewed the subject of safety risk assessment in Nigerian construction companies. It highlights the state of safety within the workplace risk assessment process, organisational commitment and how culture may impact the dynamics during project execution.

II. Review of Selected Literature

For several years, safety professionals, regulators and others have argued that safety is not merely a matter of compliance with externally imposed regulations. Instead, Hopkins (2006) argues that organisations need to manage safety proactively instead of the reactive style of approach in the same way as the organisation manages their production activities. Hence, investigating as to whether culture influences the perception, handling and implementing risk management policies at construction sites in Nigeria. The cultural approach to safety means that safety cannot be assured simply by introducing a safety management system alone. The cultural approach to safety suggested by Reason (2010) is something to bring safety management to life by examining the aspect of the national or local cultural attitudes that influence how safety and risk policies are applied. Schein (1992) provided a useful summary of the concept of culture as observed behavioural regularities, group norms, climate, and habits of thinking and shared meanings. He also emphasises the behavioural element in culture by defining it as “the way we do things around here”. This phrase carries with it the connotation that this is the right or the appropriate or acceptable way to do such things in this organisation. Cooper (2000) develops a three aspect approaches model for evaluation of safety culture in an organisation, namely the psychological aspects; behavioural aspects; and situational aspects of the safety culture. Cooper (2000) describes these aspects as organisational factors.

According to Othman (2012), risk includes the chance of an unfortunate happening and the potential for realising unwanted, negative consequences of an event. Also, exposure to a proposition of which one is not sure, the consequences of the activity and associated uncertainties, uncertainty about and severity of the consequences of movement concerning something that humans value, the happening of some specified consequences of the activity and related uncertainties, the non-conformity from a reference value and associated uncertainties. How we comprehend and define risk strongly impacts the way risk is studied, and therefore it may have severe consequences for risk management and decision-making. There should be no reason why some of the current views should not be erased, as they are only misleading the decision-maker in many cases (Tanko et al., 2019). (Mazouni et al., 2008), the risk is an intrinsic property of any decision, such as implementing the right risk assessment procedures within a construction site in Nigeria. It is measured by a combination of a variety of reasons (gravity, incident, and disclosure), though it is usually reduced to two aspects: severity and rate of occurrence of hypothetically damaging misfortunes that include some exposure aspects. In the British

Standard Occupational Health and Safety Assessment Series (BS OHSAS 18001), the risk is an amalgamation of the likelihood of a manifestation of a harmful event or exposures to danger and the ruthlessness that may be produced by the event or exposure (Aldred, 2013). In this regard, risk can be described as an uncertain event or set of circumstance, which, if the harm does happen, the consequences will lead to unsuccessful outcome of one or more objectives (Okeola, 2009). For Marhavalas et al. (2017) risk has been contemplated as the chance that somebody or something that is valued will be undesirably impacted by the danger, where the threat is any hazardous situation or possible cause of an unwanted event with possible for harm or damage. Bakr et al. (2018).the word “risk” signifies that uncertainty can be conveyed through likelihood. Aldred (2013) identified risk assessment as the next step of the risk management process. According to Breuer et al. (2018), risk assessment is a method of using available information to determine the frequency of occurrence and the level of consequences in risk management. According to Cooper et al. (2015) after all, the risks in a project have been identified; the process of qualitative risk assessment must follow which requires further analysis through assessing and estimating the likelihood risk events occurrence as well as its impact on each risk. Here, different factors need to be considered such as the degree of risk impact on project objectives and its manageability, the timing of an occurrence, and the likelihood of an occurrence and its relationship with other risks. All these factors provide a better understanding of each risk and allow room for a proper and appropriate way of responding to each risk.

III. Health and Safety in Africa

The world health organisation, define health as the complete physical, social well-being and mental balance of the person and not simply the absence of sickness. Health is wealth, when considering health, Tim Deveaux describes health as the soundness of the body, which simply mean a physically and mentally healthy person fit in all aspects. Health risk can lead directly to ill health when operating in an unsuitable environment such as; overcrowded condition, un-cleanliness, exposure to dust, pollution, confined space, poor working environment, inhaling of hazardous substances. The lack of mitigation of health risk can in turn give rise to expected ill health. Furthermore, Tim Deveaux (2008) defines safety as freedom from risk of likely threat; injury within workplace environment can occur due to lack of control or not adherent to work procedure. However, if the following safety issues are not supervised or protected appropriately such as; work equipment, designs, use of machinery, condition of the site, access to building (stairs, passages and floors), induction training, use of personal and protective equipment (PPE), use of child labour to do unsecured task can result in severe injury. Worldwide, issues connected with health and safety call for significant concerns. However, in consideration of the transparency in the working places in the construction department and the unpalatable vulnerability to weather conditions, a significant amount of the construction workers are unfavourably subjected to varying levels of health and safety risks. Nevertheless, drawing a comparison between the situation of the construction industry in Nigeria as an establishing country to other countries, Idoro (2008) identified the vulnerability of workers to hazards as being worse, with reasons given as lack of interest by stakeholders, lack of statutory legislative on the health and safety (H&S), and unavailability of precise records. Furthermore, there was an alliance between Okoye & Okolie (2014) and Idoro (2008). Noted that employees are subjected to various hazards and unsafe circumstances on the sites, and this is as a result of lack of medical infrastructure, lack of educational programs for the staff and employees, lack of orientation carried out for new staff and workers, failure to hold safety meeting and inability to point out hazards. This led Okoye & Okolie to further identify the hazardous condition on the construction industry as cave-ins throughout excavation in deep trenches (in the absence of adequate shoring or bracing). Also so much incident like the; cement burns due to inability to put on protective footwear and gloves, workers falling from heights, sustenance of injuries on the arm, head, feet, face and eyes due to lack of personal protective equipment (PPE) can cause harm. Also, excessive noise, inadequate lighting and ventilation have been described by Abdul Rahim et al. (2008) as affecting the safety of construction workers.

IV. Impact of Culture

Nigeria style of cultural dimension may be hierarchical (Nigeria Hofstede's Insight), Although Kalejaiye (2013) highlights the absence of family safety culture, the education sector as most of the issues facing the OSH environment in the workplace of Nigeria, Idubor and Osiamoje (2013) argue that the cultural dimension decides the cultural compliance with OSH compliance with OSH regulations. They further say that a company with a safety culture would have a lower injury rate than one without a culture of safety. In addition to tradition, Nigeria as a country has its ethical standards; nevertheless, there is no culture of enforcement or culture of execution. This culture (i.e. a way of doing things) in Nigeria is defined by Idubor and Osiamoje (2013) as ‘lack of political will (e.g. the Nigeria aspect, inadequate/unsuitable laws).’ They hold that a significant setback to comply with OSH regulations is the absence of completion of proposals. (2012) Okolie and Okoye

V. The Organisational Culture of Safety

Major accidents are frequently traced to failures in the safety management system, and investigations sometimes reveal that safety management systems bear little relation to what goes on at the workplace. Safety management systems virtually exist in theory and not in practice. For several years, safety professionals, regulators and others have argued that Safety is not merely a matter of compliance with externally imposed regulations. Instead, Hopkins (2006) argues that organisations need to manage Safety proactively in the same way as the organisation to manage their production activities. Hence, a cultural approach to enhancing the Safety of organisations is now receiving attention. The cultural approach to Safety means that Safety cannot be assured simply by introducing a safety management system alone. The cultural approach to Safety suggested by Reason (2000) is something to bring safety management to life. This means that the right organisational culture is necessary to make safety systems work. When talking about organisational culture, organisational behaviour and, hence, some relevant organisational factors will come into play. Schein (1992) provided a useful summary of the concept of culture as observed behavioural regularities, group norms, climate, and habits of thinking and shared meanings. He also emphasises the behavioural element in culture by defining it as "the way we do things around here". This sentence conveys the connotation that in this organisation, certain things are right, necessary, or reasonable. Cooper (2000) develops a three aspect approaches model for evaluation of safety culture in an organisation. The model consists of: psychological aspects; behavioural aspects; and situational aspects of the safety culture. Cooper (2000) describes these aspects as organisational factors.

VI. Organisational Citizenship Behaviour

Previous research on organisational citizenship behaviour indicates that such behaviour is critical for organisational effectiveness, but little theoretical work details how it might contribute to enhance the organisational functioning of Safety (Kuang, 2011). It is suggested that citizenship behaviours enhance the functioning of the organisation by contributing to the development of safety climate, collective mindfulness, and risk awareness for the creation of organisational behaviour of Safety. Organisational citizenship behaviours (OCB) can be defined as employee behaviours that go beyond role requirements, that, there is no direct or tacit awareness of the formal reward system, which facilitate organisational functioning (Carey, 2019). Bjerga et al. (2014) concluded that citizenship behaviours typically stem from positive job attitudes, task characteristics, and leadership behaviours. Thus, Previous research also shows that people are willing to go beyond the condition of service of their employment when they are tasked with work or are involved in the assignment of their organisations if they have inherently rewarding tasks or a transparent appraisal system or encouraging leadership. In 1991 Graham proposed a conceptualisation of organisational citizenship grounded in political philosophy and modern political theory (e.g., Cary, 1977; Inkeles, 1969; Rossiter, 1950). Graham (1991) suggested that there are three forms of organisational citizenship. It has been argued that OCBs facilitate organisational performance by "lubricating" the social machinery of organisations (Aven, 2010) Abassi et al., (2005) have discussed some more specific ways in which OCBs might positively influence organisational performance by OCBs may enhance co-worker or organisational productivity; OCBs may free up resources for more productive purposes; OCBs may reduce the need to devote scarce resources to purely maintenance functions; OCBs may facilitate the coordination of activities between team members and across workgroups and OCBs may enable organisations to attract and retain high-quality employees by making the work environment a more pleasant place to work. Also, OCBs may enhance the stability of organisational performance by reducing the variability in a work unit's performance, and OCBs may enhance an organisation's ability to adapt to environmental change.

VII. Organizational Commitment

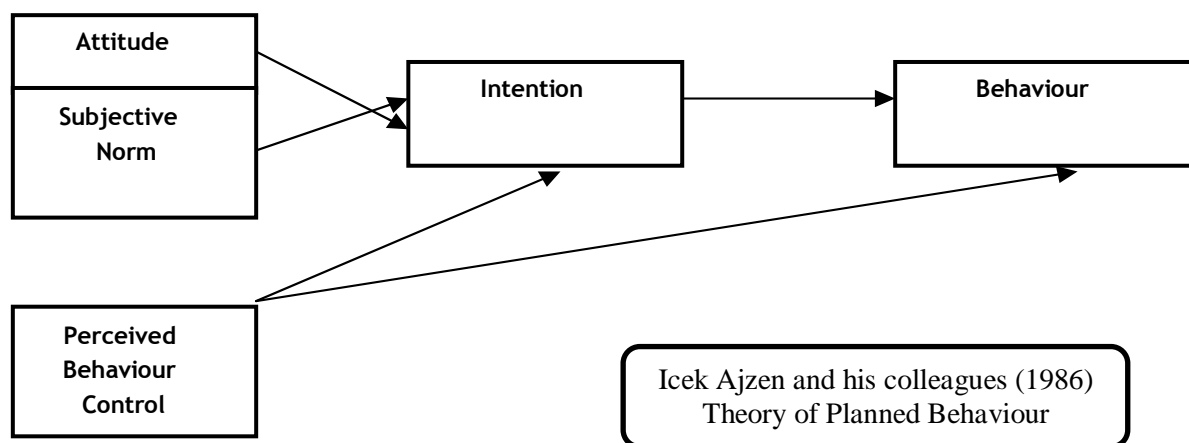
The definition of organizational commitment is that it is the worker's attitudes about the entire work organization. The concept of organizational commitment has been taken to imply worker attitudes and the concept of organizational citizenship behaviours (OCB) refers to commitment-related behaviours (Organ, 1990). Organizational commitment views it as composed of three dimensions: affective commitment, which is the employee's emotional attachment to the organization; continuance commitment, which refers to the commitment to continue with the organization because costs are associating with leaving; and normative commitment, which is like a sense of duty or obligation to stay with the company (Olainrinet al, 2012). In other words, affective commitment occurs when the employee wishes to remain with the organization because of an emotional attachment. Idubor & Ojsamoje (2013) states that significant commitment arises from job conditions and job expectations are met, which means that the job provides the rewards that employee expected.

VIII. Management Commitment

It may have been claimed that, the lack of safety sensitivity is widespread in Nigeria's leading construction organisations and must be regarded as poor examples. Adenuga et al. (2007) demonstrate that individual building firms do not attach priority to the welfare of employees. Similarly, Smallwood (2002) acknowledges that considering the lack of respect for protection, top management can value safety because of the assumption that safety is just cost-related, as argued in Smallwood (2002) by Hinze (1997). Therefore, if that is the case, it suggests that the construction industry is not obsessed with the welfare of its workers as its watchword; instead, it indicates the lack of agencies management engagement in the Nigerian construction industry. This is why Windapo and Oladipo (2012) contend that management involvement in the construction industry should be the deciding factor in dealing with OSH regulations.

IX. Conceptual Model

This review is to assess how culture impacts safety risk policies and how effective it is within the Nigerian Construction Industry. Icek Ajzen and his colleagues (1986) developed a useful model known as the theory of planned behaviour. The graphical representation of the theory is shown in the diagram. This theory is to the view that people consider the implications of their action before deciding to engage or not involve in a distinct behaviour. A meta-analysis reported that normative Commitment was related to OCB (Organ & Ryan 1995). It should be perceived that organisational Commitment is contributing to the contextual performance of employees. The organisational Commitment is linked with the employee's attitude. Attitude can be defined as the degree of positive and negative feeling of a person toward a particular person, place and thing. (Fishbein & Ajzen 1975). A subjective norm is an individual's perception of the social pressures to perform or not perform a particular behaviour. Perceived behaviour control is the individual's brief as to how easy or difficult performance of the behaviour is likely to be controlled.



From those as mentioned above, the theory of planned behaviour emerges as an appropriate framework to relate the process of organisation commitment; OCB; and three aspects of safety culture. Incorporating the above elements into the theory, behaviour becomes synonymous with three aspects of safety culture; OCB (organisational Commitment influenced by behaviour serves as the perceived behaviour control, and organisational culture of a commitment then becomes the factor representing the attitude. However, the new safety risk assessment model influenced by cultural perspective is suggested based on the theory of planned behaviour with organisational commitment serving as the attitude element, organisational citizenship behaviour serving as the behavioural element, and the corporate culture of safety as the outcome.

X. Conclusion

The overall review has accomplished its aim of giving a concise blueprint of core themes of the study. Subsequently, the pressure being put up to limit or stay away from accidents, incidents and near misses on the construction site will require the total duty of all the task members. End of hazards and counteraction of accidents on the location are inside the capacity of each gathering.

It has revealed that the critical issues to compliance with safety risk assessments and regulations in the Nigerian construction industry and perhaps the whole country are mostly related to, organisational issues, industrial issues, with the activities of the informal sector as a significant contributor. This review goes further to recommend that to sustain the risk-free work environment in Nigeria and improve safety implementation in

the nation's industry, government's involvement in OSH with adequate enforcement mechanisms, management commitment and support from stakeholders, can help to enhance compliance with OSH, hence improve productivity, communication and the chances of competing in the global market. Most importantly, governments of developing countries like Nigeria should expand the awareness of health and safety risk management in education and OSH by using all enlightening, OSH education and practice should be mandatory and integrated with the school syllabus right from the tertiary level.

XI. Recommendations

As explained in the literature review, this study is thought to be unique in exploration of safety risk assessment and impact of culture in organisation. Over the coming years, one of the suggestions that should be advanced here is to expand this research to the home and work environment. The government should look to cover subjects relating to health and safety, inclusion and belonging in the workplace including secondary and tertiary institutions. In addition, the government to also consider implementing socio cultural training in schools as this will help to minimise the impact of culture in the implementation of safety risk in the organisation. These will create more awareness about managing safety risk-related issues and the likely occurrence of injury in the private and public work environment. The national orientation agency should focus on talking about safety risk awareness, sending messages about how to respond to minimise risk, and teaching about basics of what to do when an incident occurs. There should be a workable strategic corporate social responsibility involvement from the top down. People in residential areas and government reserve areas should be told about safety checks or repairs that need to be done on public appliances. The government to, however, consider this approach regularly to ensure that public gadgets are safe for people to use. The check's date and time should be affixed to the equipment for future maintenance. Correct building assessment should be followed to minimise the risk of building collapse. The impact of culture in safety risk management has been a complex and diverse issue. Therefore, applying different model will help to better understand and enhance knowledge in both academic field and organisational practices.

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