

## Review of Previous Literature of Occupational Safety and Health (OSH) Factors Affecting Employees' Performance

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### Abstract

*This study aimed to assess the effects of occupational safety and health (OSH), risk assessment, training and education on the performance of the organization in a case study. The study focused on investigating OSH, risk assessment, training and education on the job performance and satisfaction of employees. It also identified the challenges that influence OSH programs implementation in the workplace. The paper conducted a review of prior studies dedicated to these variables to provide insight into the relationships among them and recommended how to enhance employee performance in organizations.*

**Keywords:** OSH, risk assessment, training and education, satisfaction, performance.

### INTRODUCTION

The production process activities are related to the machines and technology use, and this has burdened the employee in terms of using the machines effectively to steer clear of errors that may lead to accidents. However, the machine's engine has to be considered along with the surrounding environment within which the production process happens. This is because when the environment is ignored, then employees may face accidents in the workplace production process (Yusuf, Eliyana & Sari, 2012b). This information urges the preservation and maintenance of occupational safety and health (OSH) among companies.

The Robens Report was submitted in 1972 to the British Parliament within which the limitations of OSH activities were described on the basis of the regulations. It recommended that the government focuses its strategy on taking care of the existing risks (Robens, 1972). Following the Roben's report, risk-based care has been advocated in eastern industrial nations and in this regard, under the OSH responsible care strategy, the Occupational Safety and Health Management System (OSHMS) was implemented to realize continuous enhancement of OSH performance aligned with the system (Mori & Takebayashi, 2002). An OSHMS needs to be developed in each company/site based on the existing conditions, with guidelines and standards laid down for the development of dependable systems.

The health and safety risks management has a tendency to stress on gathering and simulating technical data that can be then utilized for decision-making regarding the workforce welfare (Assmuth & Hilden, 2008). The number crunching is vital in the process, but equal importance is the socio-cultural values of employees dealing with the processes of health and safety risk. For instance, the entire operational events that occurred in Kuwaiti oil and gas have been examined at the technical level, but not on the level of social, cultural and behavioral tendencies of the employees. Consequently, issues in both operations and environment have been priorities in Kuwait, owing to the accidents that are connected to oil and gas processes throughout the past years (Alhajri, 2014).

In the current times, it has been realized that assessing technical risk in all industries brings about the required quantitative data that is useful in comprehending the performance of the system (Aven & Vinnem, 2005; Aven & Vinnem, 2007). Nevertheless, the proper management of health and safety risks call for a framework functioning as a mechanism that guarantees installations and workers are taken care of in the same way the introduction of lean production is addressed (Alhajri, 2014). It can be stated that in the current times, decisions relying on cost-saving measures are inclined to lead to ineffective management of occupational safety and

health (OSH) (BBC, 2011). This is primarily due to the fact that safety and health analysts have been conditions psychologically to largely depend on technical data and ignore training and education of employees. In the context of developing nations, business strategies exclude OSH regulations (Lodi, Farooqui & Ahmed, 2008) and the CI is still dependent on labor rather than equipment (Yi & Chan, 2013).

If employees cooperate with employees to bring about effective management OSH on site, then the welfare of the workers can be enhanced. For this achievement, it is crucial to shed light on the issues related to the development and implementation of OSH. Therefore, this paper investigates and addresses the issues in advocating the OSH, risk management, training and education and their effects on performance.

### **EMPLOYEES' PERFORMANCE**

Evidently, OSH primarily aims to create a working environment that is safe, where employees are protected from accidents or negative events. This is connected to the job satisfaction factors like supporting employment conditions, where employees are concerned with the good working environment for their task ease and comfort and to meet their preference of working in a safe environment (Robbins, 1996). An effective OSH implementation would promote the status of security and comfort in the center of employees, and with such security and comfort, employees will be more capable of steering clear of work accidents and of realizing enhanced performance. In other words, the establishment of the security and comfort in the work environment would allow enhanced performance among employees. Also, positive OSH would result in furnishing a sense of security that could lead to improved performance of employees as they do not need to worry about their environment (Veltri, Pagell, Behm & Das, 2007).

### **EMPLOYEES' SATISFACTION**

Performance refers to the individual or group outcomes in the organization, and according to Matis and Jackson (2005), it is what is done or not done by employees. Other studies in literature like Prabu (2005) and Yusuf, Eliyana and Sari (2012a), it is the result of the work quality and quantity achieved by employees carrying out duties or responsibilities that are assigned to them. The above definitions indicate that work is achieved by an employee performing a task and this can be evaluated through his level of performance (achievement of distinct targets for a certain period of time).

Employee satisfaction has several drivers aside from OSH implementation (Fenton, Pinilla, Sing, Sadhra & Carmichael, 2014). Several factors encourage employee job satisfaction, and in order to bring that about, the following aspects have to be met; a well-balanced compensation, mentally challenging tasks, supportive co-workers, and supportive working environment (Yusuf et al., 2012a). If the above aspects are met, then employee performance can be expected to improve. The relationship between satisfaction and performance was suggested by Yusuf et al. (2012a).

### **OCCUPATIONAL SAFETY AND HEALTH (OSH)**

The performance of OSH system can be referred to as the measurement of the effectiveness level of risk controls related with the activities of business that are primarily geared towards preventing accidents at work (injury and illness). This performance can be gauged via performance indicators.

Owing to the several performance measures used to gauge the performance at individual and organizational level, different nature of industries, and different organizational cultures, the latency periods of hazards, and varying attitudes concerning accepted safety performance measures, it is challenging to determine what actually constitutes safety performance measurement of an organization in a specific industry.

### **RISK ASSESSMENT**

Risk assessments work towards preventing dangerous actions and allowing control measures to be developed based on understanding the relative risks importance. Assessment of risks should be conducted if there are five employees or over (Abihud, 2013; Armstrong, 2006; CCOHS, 2017). Risk assessment is of two types, the first of which is the quantitative risk assessment (generating an objective probability estimation built on risk information) that is applicable to the situation within which the risk exists. The second is the qualitative risk assessment that represents a subjective assessment built on judgment supported by generalized information – such assessment is opted for if the specific data exists but with lack of specific data, the assessment is still acceptable if it is systematically conducted considering the working conditions and hazards and the informed decisions addressing the possibility of harm being done. A risk assessment can be carried out only when the recipient of harm is considered (Abihud, 2013; CCOHS, 2017), which could include employees, visitors, cleaners, contractors and any part of the public when purchasing products or enlisting services (Armstrong & Taylor, 2014; Watson & Gallagher, 2005). Therefore, it is important to examine the relationship between risk assessment and performance (Alhajri, 2014).

### TRAINING AND EDUCATION

The ongoing enhancements of work processes are important but are only possible if the involved parties obtain proper training. Training is crucial to maintaining workplace health and safety and has been a crucial element of OSH management over the years (Marfa, 2016). Relevant individuals in the form of managers, supervisors, and workers have to be trained in occupational safety and health. Management has to provide the required instructions, guidelines and training while considering the different workers' levels in light of their functions and capacities. Training primarily aims to promote action in occupational safety and health, and as such, it has to promote awareness, relay and inculcate knowledge and assist in role adaption (Abihud, 2013).

OSH training should not be conducted on its own as it is critical to consider it as an integral component of job training that has to be included in day-to-day work procedures on the shop environment. It is pertinent for management to guarantee that relevant individuals to the process of production receive work training. More specifically, technical skills training should be incorporated in the OSH system (Alli, 2008) and in relation to this, Abihud (2013) highlighted the importance of examining the relationship between training and education, and performance of employees.

### THE CONCEPTUAL FRAMEWORK

Sustainable organizational performance can be realized via OSH system efforts, and the variable can be realized through interaction of different factors rather than just one variable (e.g., employees' satisfaction, risk assessment, training and education and management commitment). This paper's conceptual framework comprising the examined variables and the way they determine the performance of employees is presented in Figure 1.



Figure 1: Conceptual Framework

## CONCLUSION

Several recommendations can be provided from the above discussion of literature and findings according to path analysis and testing of hypotheses. Organizations have to enhance OSH aspects, particularly those that influence the performance and satisfaction of employees. Nonetheless, several things still need improvement, particularly aspects that are viewed by employees as lacking. For instance, training and education have to be improved to enhance performance. In relation to this, organizations have to urge supervisors to promote employees effective work activities. It is also pertinent for organizations to promote risk assessment as the perceptions of employees of such work risks could influence their performance quality, and because the performance of employees can only be enhanced by meeting their needs. Future studies can look into other variables to examine OSH-performance relationship that are not included in this study like employee's commitment as suggested by Yakubu and Bakri (2013) and Zahoor et al. (2016), safety culture as suggested by Noweir, Alidrisi, Al-Darrab and Zytoon (2013) and motivation as mentioned by (Abihud, 2013).

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