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Review Article

Strategic Management of Health and Safety at Work: Critical Insights for HR Professionals in the Construction Sector

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Abstract: The present article aims to underline the role and importance of health and safety in the workplace particularly in the construction sector. The article is posed to shed light and hence, educate professionals working in the construction sector on one of the most pressing issues of the 21st century. The paper outline outline how the sector operates, and the importance of health and safety of employees is in this sector. The paper outlines the various types of hazardous and the acts that could cause health and safety issues for the workers in the construction sector. Following to this, the paper outlines the significant role of human resource department and HR professionals in the sector in this regard. The paper provides an insightful information on some of the core aspects that personnel management professionals in this sector could work on to help avoid any unintended consequences.

Keywords: Strategic management; Health and safety; Construction sector; HRM

1. Introduction

Construction sector holds great significance for safety and health components. Even beyond the its significance in conventional work aspects, its prominence cannot be ignored across all aspects of human life. Due to the nature of work it involves, construction sector is very critical not only in Malaysia but also across the globe. Davies and Tomasin (1996) have stated that the diverse nature of the construction industry makes its’ workers prone to all kinds and types of accidents. Among industries, highest fatalities have been reported in this sector. Construction industry also ranks high in terms of workers ending up with major disabilities or death. The study is in agreement with Khalid (1996) who reported construction sector to be of high in fatalities and injuries compared to other industries. Not to forget that safety and health matters of workers is important across all the sectors but due to the volatile nature of the construction industry, its importance and urgency has tripled.

Across all the construction works, safety is essential which also includes ensuring the welfare of...
employees intact and making sure that they are working in a safe and healthy environment. Empirical findings have reported that safe work environment help employees to enhance their productivity, increase profitability and reduce operating cost (Levitt & Samelson, 1993). Several research studies can be traced who have landed support towards the significance of safety and health practices for the construction sector against other industries. Because of the involvement of various hazards and critical work procedures, there are more chances of accidents and fatalities. According to Ng et al. (2005), construction sites have prone to hazards, affecting workers’ health and safety.

2. Literature Review

2.1. Worker’s Health and Safety

According to Yip, Rowlinson, Kvan & Lingard (2005), health and safety is a multi-disciplinary idea which is principally concerned with the secure, protection and safety of employed people. On the grounds of explanations by Kheni et al. (2008) employees’ health and safety at construction sites involves both psychological as well as physical welfare at the construction sites.

Construction workers are tradesmen that are directly engaged in the infrastructure construction. These workers are focused on designing and building physical infrastructures. They have a very important and crucial role in the construction industry. There is a great deal of significance of construction workers as without them, infrastructural developments cannot be made possible.

Definition by World Health Organization (WHO) of health refers to individual physical, social, and mental well-being. Accordingly, positive workers’ health is defined as free from physical and mental illness particularly during the course of work (Rantanen and Fedotov, 1998). Sadly, poor health records have been reported in the construction industry. This sector is likely to get an increase of ill workers due to poor health and safety conditions. Moreover, the contact of workers with harsh working conditions and hazardous conditions makes it further complicated.

2.2. Health and Safety Issue in the Construction Sector

Casualties at work or illness caused due to work related injuries etc. Furthermore, the report has also reported 269 million minor fatalities and around 160 million workers ending up with work-based illness (ILO, 2015). It is important to realize that regardless of the strength and extent of health and safety measures, the issues and fatalities would continue to occur on the construction sites. However, control measures can help to ensure that they are controlled and kept to the minimum level. Henceforth, responsive health and safety measures are necessary and accordingly deployed.

Construction industry across the globe is considered as one of the most hazardous industries (Jannadi and Bu-Khamsin, 2002). This is due to the fact that the nature of work in the construction sector leads to different accidents and environmental hazards for workers due to which severe fatalities or major illness is an everyday happening (Davies & Tomasin, 1996).

2.3. Accidents on the Construction Sites and their Causes

According to Hinze (1997), accident is not something occurring on a deliberate ground. It is important to comprehend that accidents may not necessarily end up damaging company tools, equipment or resources. However, they may end up in injuries to workers which require a great deal of attention. Physical injuries to workers are a serious matter and there is a dire need of effective and efficient strategies and plans, particularly for the construction sector. Occupational accidents are
basically fatalities occurring during a course of work, resulting in a non-fatalfatal injury (Takala et al., 2009).

Accordingly, regarding the accidents, they mainly occur either because of lack of awareness of insufficient training. Additionally, supervision is also very important and thus, lack of supervisory may also end up causing hazards to people. These incidents may also occur due to error in judgment or carelessness (Sawacha, Naoum and Fong, 1999). This indicates towards the irresponsible and poor working culture in the society. According to Hamid et al., (2008), the major reason behind the construction of accidents is workers’ ignorance and failure to obey job procedures advised and directed by the management and supervisory authorities. Also, these elements occur due to poor management of sites, lack of knowledge, lack of skills, poor working conditions and no placement of safety measures in the use of heavy machinery. 99 percent of accidents and fatalities are basically the result of unsafe working conditions. Accordingly, Kartam and Bouz (1998) suggest that injuries can be the result of either unsafe acts and/or unsafe working conditions. The authors studied construction sector outlined that lack of safety procedures, improper cleaning and sanitary works; turnover and inappropriate maintenance are major causes of these elements.

Pipitsupaphol and Watanabe (2000) conducted a study in Thailand whereby, they outlined site conditions, unsafe equipment, practices, and poor management as the most influential factors. The study also concluded that due to these issues, workers end up mishandling the resources and equipment, inappropriate use of material, failure in guiding co-workers and improper work progression. The authors on grounds of this concluded that through handling these approaches and practices, accidents and fatalities can be responsively controlled. Reese and Eidson (2006) suggest that causes behind accidents can be categorized into three i.e basic causes, direct causes, and indirect causes.

Lubega et al., (2000) conducted a study in in Uganda on the accidents and their relationship with awareness of safety procedures. The authors concluded that accidents were mainly because of the deficiency of safety regulations, deployment of incompetent personnel, non-professionalism, emotional and psychological stress and chemical impairment.

According to Baxendale and Jones (2000), majority of the accidents are not due to poor handling of workers but because of failure to control tools and equipment which is the responsibility of top authorities to guide and mentor. Overall, table 1 gives a good overview of the major sources of accidents.

| Energy Sources | Hazardous Material |
|----------------|--------------------|
| 1) Mechanical: Equipment, Tools, Disturbing Sound, Explosion | 1) Compressed or liquefied gas: Flammable, Non-flammable |
| 2) Electrical: Uninsulated conductors, High Voltage Sources | 2) Corrosive Material |
| 3) Thermal: Flames, Hot Surfaces, Molten Metals | 3) Flammable Material: Solid, Liquid, Gas |
| 4) Chemical: Flammable fuels, Acidic liquids, reactive substances | 4) Poison |
| 5) | 5) Oxidizing Material |
| 6) | 6) Dust |

Source: (OSHA, 2006).
Table 2: Unsafe Acts and Unsafe Conditions

| Unsafe Act                                           | Unsafe Conditions                                      |
|------------------------------------------------------|-------------------------------------------------------|
| Not wearing essential protective clothes for personal protection | Clogged work sites                                    |
| Failure to warn co-workers or to secure equipment    | Defective machinery/tools                              |
| Ignoring equipment/tool defects                      | Poor lighting                                         |
| Inappropriate lifting                                | Lowly airing                                          |
| Improper working conditions                          | Insufficient supports/guards                          |
| Inappropriate use of tool and machinery: undue speed, using faulty machinery or tools, repairing machinery or tools while in use | Improperly stored explosive or hazardous materials |
| Deploying tools of machinery without permission      | Poor domestic tidiness                                |
| Horseplay                                            | Radioactive explosives                                 |

2.4. Human Resource Department and Health and Safety

A variety of different are required by the HR department to understand in this regard which are as follows:

2.4.1. Strategic Management

Safety concerns have been never been given much importance in the construction sector. This is principally due to the fact that there are no comprehensive safety or accident prevention strategies and policies in place. Businesses have to strategically focus of this issue and not just on the financial aspects only (Hamid et al., 2008). Many organizations across the globe seem to have ignored safety management practices.

2.4.2. Insufficient Safety Training

Poor training is among factors responsible for this high incidence of injury. Training is essential for ensuring the effective deployment and practice of safety measures (Cox & Cox, 1996). Parallel to this, safety training is planned to help workers learn about protective and appropriate ways towards machine usage, construction works and tips for avoiding hazardous stuff. Notably, according to Cooper and Cotton (2000), safety training can help workers to stay away from major accidents and minimize risks of all kind.

2.4.3. Tiredness of Workers

When workers are tired, they often end up not paying proper attention to the work and safety measures. Henceforth, lack of concentration and attention can be perilous which may also result in inappropriate use of machines and tools, causing major fatalities and damages.

2.4.4. Poor Quality of Construction Materials and Equipment

It is important to note that regardless of the safety measures being in place, materials, tools and equipment of low quality can also trigger hazards. It is therefore necessary that the tools and machinery provided to workers is of good quality and capable of sorting facilitating workers for effective working in a responsive manner.

3. Implications

Based on the review of the literature, the present study asserts that organizations need to look into the issue of worker’s health and safety with a strategic eye. Therein, a lot of things are related to how HR department can play its role to ensure that the business has all the policies, procedures and practices in place to minimize any unintended consequences. There is a great deal for HR
practitioners to address such issues. HR department and personnel professionals can actively work on developing safety work policies and practices that ensure secure work environment of the employees. Accordingly, HR also has a major role to play in this regard through making robust policies and practices that not only discourage highlight any hazardous working conditions but also take immediate action (Umran, Mahmood & Ahmed, 2016). Through education, workers can be better guided and mentored in this regard. They can responsively attain necessary skills, essential for safer healthy choices at work (Graham, 2004). Training in the domain of safety is another necessity, which denotes to providing proper skills and knowledge to employees regarding work safety for responsive operating (Law, Chan & Pun, 2006). According to Lin and Mills (2001), policies are needed to be developed by businesses in connection to safety training to help employees avoid accidents. Accordingly, it is also important to understand that workers perception regarding safety measures are important. It has been evidently reported that workers viewing their job roles and work responsibilities as safe, have mainly resulted in lesser number of accidents on an average. These workers work better compared to ones who perceive safety work procedures inappropriate (Guastello & Guastello, 1988).

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