The Importance of Occupational Health and Safety Culture in Manufacturing Companies

Alain Ndedi[1*], Lawrence Kok Vaal[2]

[1]Department of Entrepreneurship, Institute of Classic Entrepreneurship, South Africa
[2]Department of Technology, Vaal University of Technology, South Africa

ABSTRACT

Safety culture is a concept often used to highlight the fact that there are social processes in organizations that help or hinder behaviors or outcomes regarding of Occupational Health and Safety (OHS). Thus, the part of workplace culture that concerns health and safety, risks and hazards, is called safety culture. Unsafe attitudes and behaviors in an organization have been demonstrated to partly be a result of workplace culture. Workplace norms have been shown to predict unsafe and risky behavior among employees. Behavior is, however, influenced by many different factors, of which safety culture is one. How well safety rules and regulations are adhered to in an organization is considered to be influenced by culture. A poor safety culture for example has been associated with organizational accidents, such as the Chernobyl nuclear disaster and the two NASA space shuttle accidents. This paper is an attempt to position the place of safety culture and Occupational Health and Safety Culture in Manufacturing Companies.

Keywords: Safety culture; Occupational Health; Safety culture; Manufacturing companies

DESCRIPTION

Around the world, more and more companies have legislation intended to secure the health and safety of employees at work. Employers need to ensure that their organizations have a system of management that meets the demands of national, regional and international legislations. Hazards and risks in the workplace, for example, chemicals, machines, heavy lifting, repetitive work, noise, and air pollution, causing stress, falls, burns, cuts, and the like need to be assessed, and the dangerous conditions adjusted. Other day to day tasks of companies often come first, though. Increasing productivity is normally viewed as the most important task, and therefore gets greater priority than activities aimed at occupational health and safety (OHS). Since a company needs to handle many different tasks, it is not uncommon that a "conflict of priorities" is present. Adhering to all these legislations are important and results in, for example, fewer accidents and injuries. What is safety culture?

Analysis of Safety Culture and Occupational Health and Safety

Internationally, one finds that societies have laws and regulations in place with the aim to secure health and safety of humans in their occupations. Occupational health and safety laws across nations share many similarities. They have in common that the health and safety of employees must be secured by assessing, analyzing, adjusting, and minimizing hazards and risks for injury and disease in the workplace.

Safety Culture

To define safety culture, one needs first to describe culture. A definition of culture is that it "consists of the values the members of a given group hold, the norms they follow, and the material goods they create" (emphasis original). Values comprise what is perceived to be right and wrong, how things should and should not be; they are "abstract ideals". Norms are the rules for what behaviors are acceptable or not, the rules that govern social con-

duct, and they are definite principles or rules which people are expected to observe. Culture is learned through socialization, by humans learning values and norms from others in the groups they associate with, for instance, in a workplace. Another definition of culture is that it is 'a set of solutions produced by a group of people to meet specific problems posed by the situations that they face in common. The solutions become institutionalized, remembered and passed on as the rules, rituals, and values of the group'. Expressions of culture can, of course, contribute to either unsafe, or safe, attitudes or behaviours in an organization. In one study it was found that an organization was paralyzed in recognizing warning signs before an accident happened because of two unfortunate cultural expressions. Cultural expressions for a positive safety culture are, among others, to look for errors, not keeping out of sight when difficult situations arise, and to resolve conflicts in a constructive manner. Also, managers' commitment to safety stands out as a crucial factor associated with positive culture, attitudes, and behavior, regarding safety in the workplace [1]. If employees perceive an atmosphere in the company that suggests safety is supported and important, then they are less ambivalent about whether or not to use personal protective equipment.

A belief by employees that managers are insincere about stated safety values has been shown to predict unsafe and risky behaviour. Safety culture has also been described as 'the collection of characteristics and attitudes in an organization promoted by its leaders and internalized by its members that makes safety an overriding priority'. Earlier studies have used the concept of safety culture for organizations in two different ways, assuming either that: (1) Organizations that are really committed to OHS are the ones that have a safety culture, or (2) All organizations have a safety culture, and that it can vary in being strong/positive or weak/negative. The latter way of thinking about safety culture is used in this thesis. In a quasi-experimental case study of a company it was shown that safety culture indicators were improved after changes were made in the OHS organization, as well as by improving the communication and interaction between safety management agents and the shop floor workers. An association between safety culture and OHS management practices is assumed, but more research is needed to investigate whether it is possible to further establish a relationship.

Occupational Health and Safety

Occupational Health and Safety (OHS) legislation demands that companies secure health and safety of everybody in a workplace, but companies' commitments to this obligation vary. Some companies lack a systematic OHS management, some fulfill the legislative requirements, and some companies even invest further in OHS by using WHP to promote health and well-being. Much advancement in health and safety for humans at work has taken place in nations and companies over the decades since the inception of OHS laws. Still, there is room for improvement, considering, for example, that only about 55% of Swedish companies have a functioning systematic management of OHS in place. Benefits of managing OHS properly are, for instance, 18 that fewer accidents and injuries occur [2,3]. Financial benefits of OHS investments can often be estimated; such investments can result in reduced sick leave as well as improvements in productivity and quality (International Social Security Association. 2011). Another benefit is the possibility of being an attractive employer, as a part of the employer brand [4]. The theoretical and practical approach of HFE is to achieve general system improvements in work asks, and to ensure that they are fitted to the worker, not the other way around. Sociotechnical theory (STT) and Human–technology–organization (HTO) highlight that humans, technology, and organization are mutually interdependent and that a holistic approach to OHS therefore is preferable [5-8].

Designing work holistically is thus thought to improve health and well-being of the worker in conjunction with business performance. The concept of safety culture highlights that there are social processes at work that influence OHS, due to what people in organizations value as important and what social norms partly guide their activities regarding OHS. There are underlying factors regarding why companies succeed in prioritizing and managing OHS, as well as why they do not succeed. Some factors deemed to be relevant are the size of the company, the interplay between different professional roles at the company, whether formal OHS management procedures are used or not, lack of commitment and motivation, and a poor safety culture where OHS issues are not valued highly enough [9].

DISCUSSION

Further research is needed to better understand which factors play a part (and to what extent) in companies' prioritization and management of OHS. Another positive dimension of being committed to OHS, less often considered, is employer branding, that companies are more attractive to potential employees because of a reputation for prioritizing safety, health, well-being, and benefits for their staff. Often, for a company to want to prioritize OHS management there need to be some noticeable effects of the efforts taken. The perceived advantages are crucial for companies' decision making about how to set the priorities. But even if companies are motivated to improve OHS management, they often do not associate it with better business performance [10].

CONCLUSION

To achieve a functioning systematic management of OHS, there are different practices and tools available to use. Companies set up their own routines to meet the legislative demands on their types of businesses. This study has shown that the motivation for OHS management is that by managing hazards and minimizing risks a safe workplace ought to be achieved for everyone working there. It is a moral sentiment that nobody should have to be injured in an accident, suffer from disease, or become chronically ill or depressed from labouring in a workplace. The workplace should be organized in such a manner to achieve a sound physical as well as psychosocial environment. Reduced sick leave costs often come to mind as a direct beneficial effect, but frequently, there are productivity and quality improvements to consider as well. Estimations of return on prevention (ROP) done by the International Social Security Association (2011) indicate an average cost–benefit ratio of 1:2.2.

REFERENCES

1. Antonsen S (2009) Safety culture assessment: A mission impossible?. J Contingencies Crisis Manag; 17(4): 242–254.

2. Arocena P, Nunez I (2010) An empirical analysis of the effectiveness of occupational health and safety management sys-

tems in SMEs. Int. Small Bus. J; 28(4): 398–419.

3. Åteg M, Andersson IM, Rosén G (2009) Change processes for attractive work in small manufacturing companies. Hum Fac Ergo Manufac; 19(1): 35–63.

4. Brown KA, Willis PG, Prussia GE (2000) Predicting safe employee behavior in the steel industry: Development and test of a sociotechnical model. J Oper Manag; 18(4): 445-465.

5. Cavazza N, Serpe A (2009) Effects of safety climate on safety norm violations: Exploring the mediating role of attitudinal ambivalence toward personal protective equipment. J Safety Res; 40(4): 277–283.

6. Choudhry RM, Fang, Mohamed S (2007) The nature of safety culture: A survey of the state-of-theart. Safe Sci; 45(10): 993–1012.

7. Champoux D, Brun JP (2003) Occupational health and safety management in small size enterprises: An overview of the situation and avenues for intervention and research. Safe Sci;41(4): 301–318.

8. Cooper R, Foster M (1971) Sociotechnical systems. American Psychologist; 26(5): 567–474.

9. Dul J, Bruder R, Buckle P, Carayon P, Falzon P (2012) A strategy for human factors/ergonomics: Developing the discipline and profession. Ergonomics; 55(4): 377–395.

10. Duijm NJ, Fiévez C, Gerbec M, Hauptmanns U, Konstandinidou M (2008) Management of health, safety and environment in process industry. Safe Sci; 46(6): 908–920.