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Security and Safety, Zagreb, Croatia¹darko@vss.hr**OCCUPATIONAL HEALTH AND SAFETY
MANAGEMENT: AN OVERVIEW OF
FUNDAMENTAL PRINCIPLES AND
PHILOSOPHY**

Abstract: Occupational health and safety (OHS) is generally defined as the science of predicting, recognizing, assessing, and controlling hazards and risks arising at or from the workplace, which could adversely affect the health and well-being of workers and other persons at work, considering the possible impact on the local community and the general environment. OHS principles are linked to the rights, responsibilities, and obligations of stakeholders who have certain expectations. These include moral, social, legal, and economic issues. The need for OHS is permanent. The philosophy of OHS begins with the basic need or requirement of safety, its fundamentals, cause analysis and assessment, identifying unsafe conditions and actions and the sequence of events leading to accident occurrence. It examines the principles and methodologies for the prevention of accidents and the prompt implementation of control measures. The OHS philosophy critically studies the basic principles and concepts of this field as an integral part of business management, while also emphasizing their practical application to promote a safe and healthy work environment. Based on the theoretical research, the paper presents an overview of the fundamental principles and philosophy of OHS management and provides guidelines for future specific research.

Keywords: fundamental, philosophy, principles, occupational health and safety.

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Occupational health and safety (OHS) has emerged as a crucial issue from economic, ethical, and legal standpoints. Companies are attempting to remain profitable in an ever more competitive global economy. For many companies, addressing safety, health, and environmental issues goes beyond good business practice - it can be essential to their very survival (Friend, Kohn, 2007).

The OHS management system is part of the overall system dedicated to the management of health risks associated with the organization's business activities. The system includes the organizational structure, planning, responsibility, practice, procedures, processes, resources for the development, application, implementation, review and maintenance of the organization's health and safety policy (Palačić, Mudri, 2014). Therefore, the OHS management system can be different between organizations and between countries.

The human, social and economic costs of work-related accidents, injuries and illnesses and major industrial disasters have long been a concern at all levels, from individual workplaces to national and international. Measures and strategies intended to prevent, control, reduce or eliminate hazards and risks in workplaces have been developed and applied continuously over the

years to keep pace with technological and economic changes. However, despite gradual progress, work-related injuries and illnesses are still far too common and their cost in terms of human suffering and economic burden remains significant (Alli, 2008).

The management systems and characteristics required for success in OHS are the same as those required for success in any other area of industrial or commercial activity. Indeed, those organizations that are successful in business are usually those that have high standards of OHS (Cox, Tait, 1998).

Therefore, the purpose of OHS is to create safe conditions for the prevention of injuries at work, occupational diseases, and accidents at work. In the theoretical definition of the term occupational safety and health, there is no single position on what occupational safety and health is. Although various authors provide different definitions, it can be said that no definition contradicts the other, and in essence, they complement each other. The science of OHS aims to find measures and procedures that will eliminate the causes that lead to injuries and occupational diseases. Injuries and occupational diseases in modern society lead to major harmful consequences, primarily evident in the suffering experienced by injured workers or the

families of deceased workers, followed by major economic losses to society due to lost workdays, medical costs, recovery, etc.

The state of safety at work, in other words, the efficiency and effectiveness of the prevention of injuries at work and occupational diseases, depends on the success of the implementation of occupational safety in relation to the existing risks at work. Therefore, the key precondition for the planning and implementation of occupational safety is the assessment of occupational risks, and further and continual management of occupational risks.

From all the above, it is clear that OHS has its own principles and philosophy.

OHS principles are linked to the rights, responsibilities and obligations of stakeholders who have certain expectations. These include moral, social, legal, and economic issues.

The philosophy of OHS is rooted in the fundamental need for safety, its fundamentals, cause analysis and assessment, identifying unsafe conditions, unsafe actions, and examining the underlying reasons and the sequence of accident occurrence. It searches for the principles and methods of accident prevention and speedy control.

The need for OHS is permanent.

METHODOLOGY

Aim and tasks of the research

The problem that has been recognized in this area is the lack of understanding of the importance and relevance of OHS management in business. The importance and relevance of OHS management derive from its fundamental principles and philosophy.

Regarding the identified problem, the aim of the research is to provide an overview of the basic principles and philosophy of OHS management.

According to the set aim, the research tasks are:

- to analyse and present the fundamental principles of OHS management
- to analyse and present the fundamental philosophy of OHS management
- to encourage further empirical research into the principles and philosophy of OHS management.

Research methodology

Different scientific methods are used in the analysis, and their combination and sequence make up the research methodology. The principles and philosophy of OHS management were analyzed using the method of studying the content of scientific literature. A combination of deductive and inductive analysis is used to classify and summarize the theoretical foundations of the research subject. The content analysis method is used to analyze theoretical assumptions. The description method describes the fundamental principles and philosophy of OHS management. A combination of deductive and inductive analysis is

applied in order to classify and summarize the basics of the research subject. After the analysis and comparison, essential properties are synthesized and conclusions are drawn.

RESULT AND DISCUSSION

Occupational health and safety management

Occupational health and safety (OHS) is a term that has been used for many years to describe health and safety related to work. OHS is a set of policies, processes and practices designed to protect workers from injury and occupational hazards. So, OHS is a way of protecting the health of employees. It is a responsibility that every employer has towards their employees. Employers are legally obliged to provide a safe workplace for their employees (Tajuddin, 2023).

Occupational health and safety is a field of public health that focuses on trends in illness and injury in the workplace. Professionals in the field use this knowledge to develop and implement policies and regulations aimed at reducing risks that could lead to physical or mental harm now or in the future. The scope of occupational health and safety is broad and encompasses a variety of disciplines (Corell, 2023).

OHS is a key aspect of any workplace, encompassing policies, procedures and practices that protect the health, safety, and well-being of employees. Whether it is an office, factory, construction site, or any other work environment, occupational health and safety is essential to ensure that workers can carry out their tasks without the risk of injury or illness. Therefore, OHS management is extremely important (Terrey).

OHS refers to a multidisciplinary approach to preventing accidents and injuries at work by identifying potential hazards, assessing risks, and implementing controls to mitigate those risks. It also involves integrating different fields, including health, safety, psychology, engineering, and law, to create a holistic framework that promotes a safe and healthy work environment (Karanikas, Pryor, 2021).

Occupational health and safety (OHS) is often terminologically equated with occupational safety. However, after careful consideration, it can be concluded that terminologically these two concepts cannot represent and mean the same thing (Palačić, 2021).

OHS is generally defined as the science of predicting, recognizing, assessing, and controlling hazards and risks arising at or from the workplace, which could adversely affect the health and well-being of workers and other persons at work, considering the possible impact on the local community and the general environment. This area is very broad and encompasses many disciplines and numerous hazards in the workplace and the environment. Therefore, a wide range of structures, skills, knowledge, and analytical capacity is needed to coordinate and implement all the elements that make up OHS systems to protect workers as effectively as possible (Alli, 2008).

OHS is integrated into the organization and execution of work processes and is achieved by performing occupational safety and applying the prescribed, as well as agreed-upon and recognized rules of occupational safety and employer's measures and instructions. So, the OHS management system is very important for business (Katić, Palačić, 2024).

The employer is responsible for the organization and implementation of OHS on the basis of objective responsibility, regardless of whether it has hired an occupational safety expert, organized an occupational safety service, or has contracted cooperation with an authorized person for occupational safety, an institution, or company for occupational safety. The management of OHS goes beyond the minimum requirements defined by the regulations in this area (Palačić, 2011).

According to some authors, occupational health and safety is an interdisciplinary scientific and professional field (it comes out of the domain of the existing structure of basic sciences and scientific disciplines) as well as a multidisciplinary field (because it forms a new field in which there are many scientific disciplines that touch and overlap). This multidisciplinary field is characterized by work organization, technique, technology, occupational medicine, ergonomics, anthropology, occupational health and safety law, pedagogy and andragogy, psychology, ecology, sociology, economics, etc. (Kacian, 1998).

The OHS management system is a continuous, adaptable process consisting of a series of related activities, phases, elements, and procedures that enable the normal flow and functioning of business processes and systems in which all persons participating in the organization's business processes must be included. OHS management is one of the more complex and responsible jobs in an organization that requires a lot of activity, attention and thinking from the organization's management. Optimum processes are created through the OHS management system through constant improvement, in which all factors that can make their contribution participate. Through thoughtful application and guidance in the OHS management system, hazards are eliminated, i.e., the risks of basic hazards that occur in the business process are reduced (Katić, Palačić, 2022).

The consequences of ineffective OHS management are directly related to the reasons why employers care about occupational safety and health. These consequences include, but are not limited to, the following:

- injury or illness to members of the workforce
- loss of credibility as a responsible company
- liability for failure to address safety and health
- loss of productivity
- loss of employees due to hazards, risks, injuries, illnesses, deaths, or unsafe/unhealthy work environments
- decreased employee morale

- damage to or loss of capital investments (e.g. equipment or facilities)
- decreased reputation and integrity of the company
- the perception that the company does not demonstrate good business practices
- loss of profits (Rees 2019).

There are several approaches to defining OHS management systems. As noted by Gallagher et al. (2001), the existence of various definitions has inhibited discussion about OHS management systems and contributed to a lack of consensus about how to evaluate their effectiveness. Furthermore, it has been asserted that OHS management systems definitions "have been watered down, making it more likely that organizations can claim to have a system, but less likely that it will be effective" (Gallagher et al., 2003). OHS management systems are often defined in simple terms such as "An OHS management system is a coordinated and systematic approach to managing health and safety risks" (WorkSafe Victoria, 2020).

Given that the successful implementation of an OSH management system has been identified as the foundation of an effective approach to OSH risk management (Sinclair, 2012) and a top priority for organizations (Mohammadfam et al., 2016), many researchers have been discussing the evaluation of OSH management systems for decades and whether OSH management systems positively impact OSH outcomes (e.g. Robson et al., 2007; Yorio et al., 2015; da Silva and Amaral, 2019; Madsen et al., 2020).

Any organization is responsible for making every effort to operate in a safe environment and introduce a safety management system, primarily for three key reasons recognized within the field of occupational safety and health. These include moral, financial, and legitimate reasons (Center for International Private Enterprise, 2022).

Fundamental principles

The fundamental philosophy of OHS is that "those who create risks must manage risks". However, decisions and actions at other levels of the system have a significant impact on the configuration and management of OHS risks. To ensure positive outcomes, every decision and action that affects health and safety must be guided by fundamental principles. Any lack of guiding principles for such decisions and actions creates dilemmas in risk management and can exacerbate the burden of harm and risk control (Pandey, 2024).

Several key principles underpin the field of OHS. These principles and provisions of international labour standards are designed to achieve a key goal: to work in a safe and healthy environment (Alli, 2008).

OHS principles are linked to the rights, responsibilities and obligations of stakeholders who have certain expectations. These include moral, social, legal, and economic issues. As stated earlier, the need for OHS is permanent.

OHS is an extensive multidisciplinary field that inevitably touches on issues related to scientific fields such as medicine, ergonomics, physics, chemistry, technology, economics, law, and other fields specific to different industries and activities. Despite this diversity, according to Alli (2008), certain basic principles are recognized, such as:

- All workers have rights. Workers, as well as employers and governments, must ensure the protection of these rights and must strive to establish and maintain decent working conditions and a decent working environment.
- OHS policies must be established. Such policies must be implemented at both the national and enterprise levels.
- A national OHS system must be established. The system must include all the mechanisms and elements necessary to build and maintain a preventive safety and health culture.
- A national OHS program must be formulated. Once formulated, it must be implemented, monitored, evaluated, and periodically reviewed.
- Social partners (employers and workers) and other stakeholders must be consulted.
- OHS programs and policies must be focused on prevention and protection. Efforts must first be focused on primary prevention in the workplace.
- Continuous improvement of OHS must be promoted.
- Information is vital for the development and implementation of effective programmes and policies.
- Health promotion is a central element of occupational health practice. Efforts should be made to improve the physical, mental, and social well-being of workers.
- Occupational health services covering all workers should be established.
- Compensation, rehabilitation, and curative services must be made available to workers who suffer occupational injuries, accidents, and work-related diseases.
- Education and training are vital components of safe, healthy working environments.
- Workers, employers, and competent authorities have certain responsibilities, duties, and obligations.
- Policies must be enforced. A system of inspection must be in place to secure compliance with occupational safety and health measures and other labour legislation.

Although these key principles form the foundation of occupational safety and health programs and policies, this list is not exhaustive. Specific special areas may have their own corresponding principles. Ethical considerations regarding issues such as individuals' right to privacy must therefore be considered when designing policies (Alli, 2008).

The responsibilities of governments, employers and workers should be complementary and mutually

reinforcing in the common task of promoting occupational safety and health to the greatest extent possible within the limits of national conditions and practices.

Pandey (2024) concludes that from a systemic perspective, there are five OHS principles:

- utilise a system approach in decisions affecting the work systems
- a holistic and people-centric work system
- integrated lifecycle coverage
- inclusive process
- sustainable design.

The principles of OHS imply several different and broader perspectives. Regulatory frameworks, national policy instruments, or international conventions and recommendations are some of these perspectives. But at the core of all OHS activities, the primary objective is to prevent or protect against the risk of consequences.

Fundamental philosophy

The concept of philosophy is a branch of knowledge that investigates the elements, origin, source, causality, effect, reality and the means of their achievement and application in different fields. The concept of philosophy also includes science (Jadav, 2022).

As already mentioned, the need for safety is continuous and permanent. Safety is needed in all work activities. The goals of the OHS philosophy are to protect and serve people, to research, propose and implement safe ways of behaviour, human action, safe working conditions, and a safe environment for the safety, health, and well-being of workers. This shows the utmost importance of the OHS topic. OHS did not arise today. It has existed since ancient times, but it has developed in parallel with the demands of civilization and industry.

As already stated, the fundamental philosophy of occupational safety is that "those who create risks must manage risks." The OHS philosophy entails a critical study of the basic principles and concepts of OHS as an integral part of business, while ensuring that an understanding of these principles and concepts is applied in a way that ensures a safe and healthy workplace.

The OHS philosophy expresses the reasons and logic that dictate the decision-making process regarding the methodology, elements, and applications that should be used to implement successfully and effectively all OHS requirements (Reese, 2017).

All this includes safety devices, equipment, techniques and measures, factors that hinder and permit safety, safety responsibilities and roles of various agencies and authorized companies, terminology, theories and mysteries of causation, prevention, and control of accidents.

OHS is directly related to science, technology, law, engineering, health, hygiene, toxicology, psychology, and management. The OHS philosophy tries to find and

coordinate common causes and measures to solve general and specific safety problems.

OHS philosophy, in addition to the above, considers the study of physical, physiological, psychological, and other factors that influence and enhance OHS. It studies the costs and types of accidents and their significance, as well as the type of safety management required. This includes ways and means of ensuring and maintaining safe working conditions, human actions that affect human health and safety and environmental safety. OHS philosophy touches on the origin, development and amendment of safety legislation and its innovations and all safety needs in the fields of industrial safety and occupational safety.

The field of OHS philosophy is unlimited, its scope is very wide and includes the entire subject of safety from its origins to research, latest developments and from causality and behaviour analysis. This scope also includes the modern concept of design, testing, reliability, hazard control technology, risk analysis, assessment and audit, emergency planning, awareness and stakeholder involvement programs and future developments.

In fact, the OHS philosophy is reduced to the study of reality and phenomena. It analyses, considers, and examines the original or fundamental concepts of science or assumptions. This same philosophy coordinates scientific results with human moral experience, language, and meanings, visualizes or evaluates knowledge, its roots, measure, and limitations. The OHS philosophy is considered the foundation of the structure of safety culture (Jadav, 2022).

At the organizational level, the causal analysis of workplace incidents and the strategies that are subsequently adopted to identify and control OHS risks are based on one of two competing philosophical ideologies. The first is the “safe person” or “safe act” philosophy, which promotes an egocentric model of OHS risk. This view is criticized by safety experts who advocate an alternative perspective, known as the “safe place” philosophy, which promotes an ergonomic model of risk management. Current OHS legislation around the world is based precisely on the “safe place” philosophy (O’Neill, 2010).

Management's philosophy, procedures, policies, and procedures regarding OHS place workers in situations where they must implement safety and health practices in the performance of their work tasks.

The way the OHS management system is approached and how it works depends heavily on the OHS philosophy.

CONCLUSION

Business decisions and actions at the business system level have a significant impact on the configuration and management of occupational health and safety risks. To ensure positive outcomes, every decision and action that affects health and safety must be guided by

fundamental principles. OHS principles can be considered at the operative and systemic level, at the level of the organization, or the state. The principles of OHS imply several different and broader perspectives, such as: regulatory frameworks, national policy instruments or international conventions and recommendations of these perspectives.

The OHS philosophy critically studies the basic principles and concepts of this field as an integral part of business management, while at the same time ensuring that an understanding of these principles and concepts is applied in a way that promotes a safe and healthy workplace. The philosophy of OHS management is very complex. The principles of OHS are related to its philosophy. The philosophy of occupational health and safety (OHS) involves closely examining its core principles and concepts as a key part of doing business, while making sure this knowledge is put into practice to create a safe and healthy work environment.

It can be concluded that the objectives and tasks of this research have been fulfilled. The analysis was carried out and the fundamental principles of OHS and the fundamental philosophy of OHS were presented. The importance and relevance of OHS management derive from its fundamental principles and philosophy. A good understanding of the concepts and philosophy of OHS is necessary for the improvement of OHS management. It is undeniable that further empirical research into the concepts and philosophy of OHS management is needed.

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