

OCCUPATIONAL SAFETY CULTURE – AN IMPORTANT DIMENSION OF THE ORGANIZATIONAL CULTURE

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ABSTRACT

Organizational culture and safety culture are the subject of study in several scientific fields, including ergonomics. Representatives of these areas are still debating the associated meanings or the exact meaning of the concepts of "organizational culture" and "safety culture", including the interdependent relationships between them. The paper aims to present a framework of the historical incursion and the main attempts in defining the safety culture and its characteristics, having as results the stating of the integration of the safety culture in the general culture of the organizations.

KEYWORDS: *occupational safety culture, organizational culture, ergonomics.*

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1. INTRODUCTION

The concept of organizational climate was first developed in the 1970's and referred to a global concept underlying the events and processes of an organization (Guldenmund, 2000). During the 1980's this concept began to be referred to as organizational culture, and for some experts, the term climate has replaced the term culture. In a review of the literature, Guldenmund (2000) concludes that originally organizational climate referred to a global concept. This concept is now referred to as organizational culture while organizational climate is now seen as the manifestation of organizational culture. Although safety culture and climate definitions tend to be similar, the term safety culture is generally seen as more embracing than that of safety climate.

In reality the terms are not so clear cut, with many writers using the terms safety culture and safety climate interchangeably. A related term, safety management, has also emerged in recent years. Again, some researchers have often failed to distinguish between safety management and safety climate/culture.

In this context, the paper aims to present a framework of the historical incursion and the main attempts to define the safety culture and its characteristics.

2. METHODOLOGY

The first use of the term safety culture is attributed to a Report of the International Atomic Energy Agency (1986), which considered that the main causes of accidents or disasters are related to wrong practices of the safety culture in the organizations.

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The concept of safety culture has also developed thanks to the Nuclear Energy Agency - NEA, which mentions that errors and operating violations can be evidence of a weak safety culture (Pidgeon and O'Leary, 2000).

Subsequently, a number of other major events or disasters have been the subject of independent research (Fennel, 1988; Hidden, 1989; Cullen, 1990; McInerey, 2004) highlighting that the high level of safety culture in the organizations is extremely relevant in correlations with work incidents or accidents.

J. Reason (1997), quoted by A.I. Glendon (2006), emphasizes that in order to understand the nature of major accidents in socio-technical systems and organizations, it is essential to invoke the notion of a culture of safety which, according to the same author (Reason, 1998), must be known, appropriate, flexible and based on problem solving approach, rather than blaming, public disapproval, or blaming staff.

In this effort to define the safety and health culture, some authors, such as Sugden, Marshall, Binch and Bottomley (2009) stated: "*Organizations with a positive security culture have certain characteristics: communication based on mutual trust; general understanding of the importance of security; confidence in the effectiveness of prevention measures.*"

Therefore, higher trust must be associated with a non-blaming culture, effective communication and organizational learning in the context of a higher safety culture (Glendon, Clarke and McKenna, 2006).

Other attempts to ensure a better understanding of security culture by analyzing the mechanisms by which it influences security outcomes are widely presented in the literature by numerous authors such as Geller (1991, 1994, 1996), Reason (1997), Clarke (2000), Cooper (2000) and Watson et al. (2005) (apud Glendon, Clarke and McKenna, 2006)

There were also attempts to correlate safety culture, workplace stress and other variables (Glendon, Clarke and McKenna, 2006). From this perspective, a negative security culture is perceived as a lack of management concern about security; it reduces the feeling of safety at work; increases the perception of danger; increases organizational stress; determines dissatisfaction with security; reduces individual responsibilities towards security.

In this context, it is important to note that, due to its complexity and implications, safety culture is a key component of management, a component that increasingly influences the functionality and overall results of organizations, and can largely determine their performance.

All these aspects have determined some authors (Hale, 2000) to state that studying the organizational culture cannot be done without studying the implications of its dimensions on safety management; a study of organizational culture cannot be separated from a study of a structure that has the role to control the risk.

In the context of promoting a modern management of occupational safety and health, the importance of the safety culture lies in the fact that it allows the identification and description of many aspects of the organizational reality, with important implications on the development of the performed activities.

The security culture also allows for a better link between macro- and micro-social analysis, thus ensuring more coherence, as many complementary elements (values, meanings etc.) are examined and taken into account at the microeconomic level as well.

Richer and Koch (2004) tried to identify the social mechanisms that control the safety culture. The first mechanism identified is integration, which ensures the uniformity of a safety culture in the organization and helps to reduce or eliminate the influences of possible subcultures with divergent values from this point of view. Differentiation, the second mechanism that determines the safety culture, marks the absence of a consensus within the collectives of an organization regarding the meanings associated with things and events.

According to Grote, Kunzler and Cooper (2000) the safety culture is a product built differently depending on the country, sector of activity or profession. The safety culture provides a superior

basis for comparing organizations from the perspective of the performance of occupational safety and health approaches and for carrying out an effective transfer of know-how in the field of occupational safety and health.

Therefore, one of the major challenges facing modern organizations is to create, maintain and develop a culture of occupational safety and health that is consistent with the nature of the activities carried out and their strategic objectives.

Defining the occupational safety culture was one of the main issues of safety management, as well as a major challenge for researchers, as it is a relatively difficult concept to define due to its complexity as well as its interdisciplinary nature. Consequently, there is currently no unanimously accepted definition of the safety culture or a definition that meets the consensus of specialists.

Beyond the nuanced distinctions, summarizing the definitions of different specialists, we note that some important aspects of the safety culture are mentioned (Table 1):

Table 1. Different definitions of occupational safety culture

Author(s)	Aspects of the safety culture included in the definition
Glendon (2006); Cullen, (2001)	the understanding of people's fundamental values regarding risk and safety
Schein (1992)	those aspects of organizational culture that will have an impact on attitudes and behaviors related to increasing or decreasing risks
International Atomic Energy Agency (1986)	the set of characteristics and attitudes of organizations and individuals where safety issues receive increased attention due to their significance
Waring and Glendon (1998)	those aspects of culture that affect security
Reese (2009)	the value given to safety and health at work within the organization
Arboleda et al. (2003)	the level of interest that the organization manifests regarding occupational safety
Turner (1991)	a specific set of beliefs, norms, roles, attitudes, and practices within an organization that is concerned with minimizing the exposure of employees, managers, customers, suppliers, and members of the general public to dangerous, threatening, or harmful conditions
Mearns et al. (2003)	the context in which individual safe attitudes persist and develop and in which safe behaviors are promoted
Pidgeon (2000)	the set of hypotheses and associated practices that allow the construction of beliefs about hazards and safety at work
Wiegman, Zang and von Thaden (2002)	the value and priority given permanently to security by employees in each echelon of an organization
Sugden, Marshall, Binch and Bottomley (2009)	the product of values, attitudes, perceptions, individual and group skills and encourages types of behavior that determine the commitment to the management of safety and health of the organization, as well as a certain type of professionalism
UK Institute for Occupational Safety and Health – IOSH	common attitudes, values, beliefs and practices regarding security and the need for effective controls

Source: authors

Analyzing the definitions presented, it can be seen that the meanings and values that form the basis of the safety culture are a synthesis of individual and organizational approaches that appear at the intersection between them. In other words, the safety culture appears or manifests itself at the interface between the individual cultural elements and the predominant ones of the organizational culture.

Although definitions proliferate, the concept of security culture remains problematic, largely due to the fact that the theoretical foundation of security culture it is not yet fully clarified (Glendon, 2006).

3. RESULTS

Characteristics of the occupational safety culture

In order to facilitate a better understanding of the culture of occupational safety, including its approach from a dynamic perspective, without neglecting the conceptual variations of safety, it is necessary to identify, know and develop the main features of the safety culture, presented extensively in the literature.

Therefore, the culture of occupational safety: enjoys the support of senior management for security, a commitment that involves recognizing that occupational security is a priority of top management (Alli, 2008, ILO); assumes the existence of formalized safety strategies, policies, procedures and practices, adequate, understood, effectively communicated and effective, to be found in all organizational processes; they must be aligned with the organization's overall strategies, policies and objectives; requires the understanding, maintenance, development and support of safety objectives, as well as the operative and professional resolution of practical difficulties related to the implementation of security strategies, policies and objectives; assumes the existence of five general themes, which are also measurable: organizational commitment, leadership participation, employee rights, reward system, communication system; requires the appropriate training, education or training of all staff in the field of occupational safety; it is based on the development of systems that allow the organization to identify and control human errors, incidents or accidents at all levels; involves some relationship between organizational culture and workplace culture; involves the continuous motivation for safety of all personnel, which leads to the adherence to safety rules and regulations and to the observance of the legal requirements in force by each employee; is based on the involvement and deepest possible participation of all personnel or stakeholders; involves a general understanding of the importance of security and confidence in the effectiveness of prevention measures.

Knowledge of the characteristics of the occupational safety culture and its specific elements is an important requirement and a special source of challenges for a modern human resources management, especially if we consider the functions of the safety culture which, among other things, express the complexity of the safety culture, as it involves the employees and the organization as a whole as well. From this perspective, some specialists (Daniellou, Simard and Boissières, 2010) highlight the importance of safety culture by concisely presenting its functions:

- the function of amplifier of the results in the safety field; within an organization there is a culture of real occupational safety practices; the effect of safety culture is more or less accentuated, depending on the quality of the practices;
- the function of an effective coordination mechanism established between the members of an organization; such a mechanism is complementary and indispensable to the authority structure;
- the function of a favorable framework for the transfer of knowledge and experiences in the safety field to new employees; the importance of ensuring the best possible integration and socialization of staff;
- the function of contributor to maintain and improve the health of employees, by making relatively predictable their behaviors.

The culture of prevention

An important problem is that of prevention, as part of the culture of organizational in general and of the occupational safety and health in particular.

In this new world of work, with an increasingly technical culture, inter-condition with modern technology, digital innovations etc., human operator is exposed to multiple stressors and emerging risks that come from his work environment, job content, task demands or poor management. Therefore, the growing interest, both scientifically and practically, for the reliability of complex socio-technical systems, in general and human reliability in particular, has created a new impetus for a new attitude towards the culture of prevention at work.

The relevant progress in the field of occupational safety and health in general and in the culture of occupational safety in particular is only a positive experience and a point of reference from which to move to an up-to-date vision of knowledge and implementation of the new EU Strategic Framework on Safety and Health at Work 2021-2027 (EC, 2021). The new strategic framework takes into account, among other things, both the key objectives of anticipating and managing changes in the new world of work and reviewing the improvement of prevention at work to ensure that updated approaches, provisions and measures are known, assumed and applied at work properly.

Regarding, the characteristics of a positive culture of prevention and protection at work, International Atomic Energy Agency (2006) lists:

- prevention at work is a priority and must be included in every dimension (function) of the organization's management;
- prevention must be considered and communicated as values of organizational safety;
- the visible commitment of leadership to organizational security is important;
- employees must learn through intuition and understanding about prevention at work and change their way of thinking.

The Health and Safety Executive (HSE, 2001) also sets out some key aspects of an effective culture of prevention at work:

- management commitment that determines higher levels of motivation and concern for safety throughout the organization;
- good communication between all levels of employees or between all relevant actors;
- active participation of employees in prevention at work to exploit the unique knowledge they have about their own work.

The development of a culture of prevention at work throughout the organization can be achieved in three main stages (Manasse et al, 2002):

- stage 1: prevention management is based on rules and regulations; prevention and protection are requirements imposed by regulatory bodies;
- stage 2: performance in prevention at work is an organizational objective perceived as important by management, even in the absence of pressure from regulators;
- stage 3: the performance in the field is evaluated as dynamic and susceptible to improvement, without neglecting its continuous optimization.

The characteristics of the presented stages can serve the organizations as a basis for self-diagnosis and can be used to give a direction to the development of the prevention culture by identifying their current position and position (Carnino, n.d.).

Situation in Romania

In Romania, The National Research and Development Institute for Occupational Safety - INCDPM "Alexandru Darabont" Bucharest has developed a continuous activity for nearly 71 years, dedicated to studies and researches in occupational risks prevention area, substantiation of legal framework of

occupational safety and health, respectively, and development of training system in this field, as well as in practical solutions and technical assistance provided to companies in order to improve the work environment, certify the safety of work equipment and personal protective equipment, develop standards in the areas of safety and health at work and ergonomics, develop technical solutions to eliminate/reduce the risk factors in the work and general environment, implement management systems of safety and health at work and environment at the companies' level integrated in the general organisation management, optimize ergonomically the activities and work places, prevent ergonomic and psychosocial risks.

INCDPM work activity, directions of research and development, objectives, priorities:

- Fundamental and applicative researches to continuously improve the safety and health at work performance and create the well-being at work assess conformity and certification of the safety/protection quality of work and personal protective equipment. Development of standards in the safety and health at work area and technical solutions to eliminate/reduce the risk factors in the work environment
- Second areas of research and development; implement the integrated safety and health at work and environment management of companies; optimize ergonomically the work activities and work places, monitor the risk factors in the work environment and general environment; elaborate framework and specific instructions of safety and health at work, guides of good practices, technical sheets of safety data for dangerous substances and chemicals, training support materials, expert system of computer assisted.
- Services: micro-production (protective creams), training courses.

Also, in the field of occupational safety culture, INCDPM helps the organizations to develop policies, strategies and programs for occupational safety and health, taking into account all components of socio-technical or work systems; advocates and supports the increase of training by promoting an educational model of training, education or training in the field of occupational safety and health.

In conclusion, beyond the particularly important, complex, sufficiently provocative and fully justified issue, through its values, functions, dimensions and implications, including the positive effects or negative consequences it generates, the culture of safety and health at work represents a key component of organizational culture in general and the culture of occupational safety in particular.

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