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Young workers' occupational safety knowledge creation and habits

Irena Hejduk, Przemyslaw Tomczyk

Warsaw School of Economics, Niepodległości Av. 162, 02-554, Warsaw, Poland

Abstract

The problem of young workers' safety culture is important because of the unfavorable demographic trend occurring in the European Union and determinants of competitiveness and innovativeness of the economy. The paper presents the concept and the importance of safety culture and goals of the research program, the aim of which is the construction and verification of the model based on the transfer of knowledge regarding the safety and methods of its implementation. Safety culture is a derivative of the organizational culture and its emanation. During the preliminary research, the key factor affecting the occupational safety was identified. This factor is young workers safety culture or safety culture present in firms they work for. Man is effective only if in addition to the knowledge and skills have adequate habits. Habits developed in the area of occupational safety can greatly contribute to its improvement. Shaping habits should be systematically rather than spontaneously. Its practical implementation would have a major impact not only on the quality of teaching students, but also on the teachers professional development (teacher training center as the center forming positive habits) and the management of educational administration (board of education as a center for development of positive habits headmasters). In the light of recent discoveries in the field of neurology, human behavior and life decisions are not only determined by the knowledge and competence. The technology that is used to teach, plays a secondary role and is used rather to increase the decision makers ambition than to increase the efficiency of the learning process. There are a lot of ways to increase the effectiveness of education. One of them is widely understood digitization, which provides solutions such as e-books, interactive whiteboards, gamification (use to study the mechanisms of the game). The main goal of this type of action is to improve the knowledge and skills of school students. It is assumed that the results of the project will be used by vocational schools and companies in order to increase the effectiveness of the education and development of young professionals pro safe behavior in the workplace. It can be assumed that the results of the project will be implemented in at least 20 vocational schools educating 3,000 future employees. Within one year of the completion of the project may be able to increase the frequency of making pro safe behavior among young workers associated with cooperating schools.

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1. Introduction

In preparation for the research program titled Tacit and explicit knowledge and attitudes towards safety of young workers based on their practical preparation to the profession that team from the School of Economics in Warsaw performs on behalf of the Central Institute for Labour Protection-funded project by the TheNational Centre for Research and Development, it turned out that the key factor affecting the safety is safety culture of young workers employed in firms. Hence, the purpose of this article is to demonstrate the importance of safety culture as a derivative of organizational culture in the light of the analyzes based on available literature. For this purpose the rich experience of project partner - an expert from the University of Central Florida professorWaldemarKarwowskihas been used. Empirical studies will be completed in the next two years of the project. The article deals not only with a safety culture but also presents the basic assumptions of the project along with the conceptual model of knowledge transfer in the field of occupational safety.

2. Organizational and safety culture

Safety cultureis derived fromthe company's organizationalculture. There is nospecific definitionof organizational culture, butReason[1] has definedUttal's[2]asone that*recognizes the essence ofthe phenomenonwithout unnecessarynoise*:

(This organizational culture is) the shared values("what isimportant") and beliefs("how it works"), whichinteractwith theorganizational structuresandcontrol systemin order to producenormsof behavior("howwe do itthere").

Helmreich and Merritt [3] define organizational culture as *the values, beliefs, assumptions, rituals, symbols and behaviors defining the group, in particular in its relations with other groups or organizations*.Edgar. H. Schein, who studied in the USA the corporate and organizational culture, defines the latter in the following manner:

Organizational culture is a pattern of basic assumptions invented, discovered or developed in the group while learning to cope with external adaptation and internal integration. This is the pattern of assumptions, which were considered important and which form the basis for training new members as the correct perspective of perception, thinking and feeling about these issues.

Organizational culture is formed on the basis of shared beliefs. These beliefs have a strong influence on the behavior of employees and are hidden in different layers [4]. Taylor [5] describes Schein's construct as *general (generic) model of culture*. This model consists of layers controlling the human performance and behavior including beliefs, promoting values, attitudes and artifacts [5]. Beliefs stem from simple assumptions and general (common) organizational experience. Against this background, it is necessary to analyze the perception of employees and their beliefs regarding safety in the organization. The relationship between beliefs and behavior will help in understanding the safety culture in the organization and motivation of employees [5].

Patankar and Sabin built a safety culture pyramid, which describes the relationship between the four layers of culture in terms of their impact on the behavior and performance the individual person in the organization. The model ranks behaviors and, thus, the safety activities performance at the top of the pyramid. Another layer having an impact on the performance of the described activities is the security climate which is a function of attitudes and opinions regarding the safety of employees in the organization. The next layer of security concerns strategies, which are derived from the organization's mission, the nature of leadership, strategy, rules, history, legends and heroes. At the bottom of the pyramid are the values of safety, which are part of the fundamental values and unquestionable assumptions [6]. Pyramid of the value created by Patankar and Sabin was presented in the figure below (Figure 1).

Safety culture pyramid shows the relationship between the fundamental values of the organization and the employees' behaviour, which affects the performance of safety-related activities. It helps in the analysis of factors contributing to accidents and allows to understand how these factors contribute to generate of dangerous behavior. Neal et al. [7] built a model to explain the impact of organizational climate and the impact of safety related climate on individual behavior of employees. As a result of their research the organizational relationship between the environment and the behavior of individual safety, such as the tendency to conform to and participation, has

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