

Aneta Barbara CELOCH*, Klaudia SMOLAĞ**

THE IMPORTANCE OF LEADERSHIP AND THE CREATION OF A WORK SAFETY CULTURE

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The creation of safe workplaces is a complex issue. One important element is the development of a work safety culture (WSC). A work safety culture consists of elements such as attitudes, values, norms and employee behaviour. A significant factor influencing WSC is widely understood leadership? Achieving the goals set, both in terms of how well the organization operates as well as its health and safety record, depends to a large extent on leadership behaviour. The aim of the research was to determine the relationship between the assessment of a leader's behaviour and the creation of a work safety culture. The results of the authors' own research were preceded by an analysis of the source literature. A quantitative survey was carried out using the CAWI method on a group of 157 respondents in October 2023. Analysis of the results made it possible to conclude that a superior's behaviour significantly influences the development of a work safety culture. Moreover, the respondents represented enterprises in which the WSC was assessed as acceptable, but it required further development to be considered strong or desirable.

Keywords: leadership, work safety culture, leader

1. INTRODUCTION

A work safety culture, consisting of elements such as attitudes, values, norms and employee behaviour, has a crucial impact on the performance of employees in organizations. If an appropriate work safety culture is created, it affects employee behaviour in the workplace, an employee's awareness of health and safety, and their sense of responsibility during work. It not only influences the employee and their co-workers, but also the working environment. A significant element influencing the management of a work safety culture is broadly understood leadership?

* Częstochowa University of Technology, Faculty of Management. ORCID: 0000-0002-3101-8698.

** Częstochowa University of Technology, Faculty of Management. ORCID: 0000-0001-8875-9836.



The aim of this article is to present the importance of leadership in creating a work safety culture. The considerations are based on a review of the source literature and the authors' own surveys. The article characterizes a work safety culture, discusses the essence of leadership in an organization and indicates its importance in creating a work safety culture. The methodology of the authors' own research and the results derived are also presented.

2. WORK SAFETY CULTURE

The concept of a work safety culture (WSC) began to develop in the 1980s as a result of relatively frequent industrial disasters. At that time, steps were taken to determine the causes of such situations. This ultimately led to the conclusion that most commonly they were a result of the state of safety in the organization and its perception by employees. Researchers studying the subject also tried to formulate a definition of a work safety culture. After several decades, no universal definition has thus far been agreed upon. This is primarily due to the multidimensionality of WSC, as well as the diversity of the aspects through which it is viewed. The most commonly used definitions of WSC in the literature are presented in Table 1.

WSC, then, could almost be considered as the history of a organization, in which, on the basis of jointly collected experiences, certain principles, unwritten yet prac-

Table 1. Definitions of a work safety culture

Hale, 2000	The attitudes, beliefs and perceptions shared by natural groups as defining norms and values, which determine how they act and react in relation to risks and risk control systems.
Health and Safety Executive, 1997	The product of individual and group values, attitudes, perceptions, competencies, and patterns of behaviour that determine commitment to, and the style and proficiency of, an organisation's health and safety management.
Richter, Koch, 2004	The shared and learned meanings, experiences and interpretations of work and safety – partly expressed symbolically – which guide peoples' actions towards risks, accidents, and prevention.
Studenski, 2000	A set of psychological, social, and organizational factors triggering or fostering activities that protect life and health both at work and while performing extra-professional activities.
Cooper, 1998	The product of multiple goal-directed interaction between people (psychological), jobs (behaviour) and organization (situational)..... That observable degree of effort by which all organizational members direct their attention and actions towards improving safety on a daily basis.

Source: Hale, 2000; Health and Safety Executive, 1997; Richter, Koch, 2004; Studenski, 2000; Cooper, 1998.



tised by the whole group, are created. This is how the assumptions, values and norms characteristic of each enterprise are shaped, where a specific behaviour is expected. The aforementioned behaviour is based on the elements of a work safety culture. The most important of these include patterns, behaviours, beliefs, assumptions, attitudes, ways of acting, or the material environment of work (Kralewski, 2012).

The perception of occupational health and safety (OHS) rules and the number of accidents or near misses are contingent on a work safety culture that exists in all organizations, but its level in each enterprise may be different (Hopkins, 2006; Kočańska, Kowalski, 2021). The expenditure incurred by an organization in ensuring work safety determines whether it can be considered to have a weak or strong WSC. This expenditure should not simply be perceived in terms of finance – it primarily relates to an organization’s involvement in OHS issues, the attitude of superiors, the training carried out or the emphasis on compliance with safety regulations. When attempting to determine the state of WSC in an enterprise, two-stage gradations are most often used, such as: weak – strong, desired – undesired, as well as high – low. This is mainly due to the difficulty of evaluating qualitative characteristics. The desired culture (strong or high), which is characterized by a high level of safety, can be described as follows (Gembalska-Kwiecień, 2012):

- employees engage in activities to improve the state of work safety,
- additional programme-exceeding training sessions or talks related to safety are organized,
- OHS activities and promotional schemes are often initiated,
- great importance is attached to the health and safety of employees,
- the general state of work safety is at a higher level than required by the regulations, and at the same time is being constantly developed,
- good communication and cooperation are observed,
- employees feel responsible for work safety,
- matters related to OHS are frequently checked and supervised, and work risk assessment is updated regularly,
- a noticeable lack of accidents and near misses is observed in such enterprises.

In turn, the undesired (poor or low) work safety culture, defining a low level of work safety, can be described as follows (Gembalska-Kwiecień, 2012):

- employees do not engage in activities to improve safe and hygienic work, and do not pay attention to compliance with OHS regulations,
- discussion of OHS regulations takes place after an accident,
- a noticeable lack of interest in the development of work safety is observed,
- the performance of work is given priority, even at the cost of employee health,
- the implementation of OHS regulations by an organization is at the minimum level required,
- no cooperation and transfer of information is observed,
- employees avoid the use of safety measures, and they do not feel responsible for their own and their co-workers’ safety,

- the state of health and safety is not controlled, and the occupational risk assessment is not checked on an ongoing basis,
- frequent accidents and near misses occur at work and go unreported.

A two-stage gradation to describe a work safety culture is characterized by two extreme levels which help to indicate what WSC is. In addition, it indicates behaviour that should be avoided as well as an appropriate direction for the development of WSC. In enterprises, both strong and weak WSC behaviour may be exhibited, thus creating a certain level of work safety culture for a given organization.

When analyzing OHS issues in Polish enterprises, a significant improvement in the safety conditions of employees can be observed, as evidenced by the statistics published by the Central Statistical Office and the National Labour Inspectorate. In terms of the current millennium, the number of accidents at work has decreased by almost 30%, from 94,909 in 2000 to 68,777 in 2021. However, despite this decrease, there is a lack of interest in the development of a work safety culture in many enterprises. This is indicated by the leading cause of most accidents in the workplace – the human factor. Furthermore, there is an improper condition of the material factor or its lack and the inadequate use of it (<https://stat.gov.pl/obszary...>). It can therefore be concluded that, to a large extent, employers are still unaware of how significantly the efficient and effective operation of enterprises is influenced by work safety culture, which in the context of OHS (<https://osha.europa.eu/pl/...>):

- strengthens the image and value of a brand,
- portrays an organization as socially responsible,
- increases the efficiency of employees,
- improves the competencies and health of employees,
- reduces the cost of running a business,
- reduces the number of disruptions at work,
- improves employee engagement.

Increasingly, factors which may help improve and develop a work safety culture are being considered. In the behavioural approach to work safety, attention is often drawn to the fact that employees not only imitate the behaviour of their co-workers, but, above all, also imitate the behaviour of their superiors, considering it to be appropriate and accepted by the social group composed of the employees of the organization. In light of these observations, attention should be paid to the importance of leadership in creating a work safety culture.

3. THE ESSENCE OF LEADERSHIP IN AN ORGANIZATION AND THE LEVEL OF SAFETY IN THE WORKPLACE

Attempting to characterize leadership has been of interest to researchers for many years, but coining a universal definition of leadership is an extremely complex task. Stodgill argued that there would be as many definitions of leadership as

Table 2. Selected leadership definitions

Lachiewicz, 2007	The “ability” to influence others in such a way that they want to change “their behaviour”.
Payne, 2009	Possessing knowledge of the means needed to achieve the goal and using appropriate methods to persuade the team to work together.
Koźmiński, Jemielniak, 2011	The ability to “lead” more or less numerous groups of followers. This ability consists of the skill of indicating and communicating a vision of future states, which the group aims to jointly strive for.
Żukiewicz, 2011	A social process in which a social entity (e.g. citizen, group, organization) provides support to another social entity (citizen/group/organization) because it considers it to be currently the most fully consistent with the social perception of the ideal of a leader and to be the most likely to achieve specific goals accepted by both entities.
Yukl, 2018	Leadership is the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives.
Hampson, Jowett, 2014	It includes influencing others and helping to achieve a common goal.
Northouse, 2018	Process whereby an individual influences a group of individuals to achieve a common goal.

Source: Lachiewicz, 2007; Payne, 2009; Koźmiński, Jemielniak, 2011; Żukiewicz, 2011; Yukl, 2018; Hampson, Jowett, 2014; Northouse, 2018.

there were people trying to undertake this task (Bass, 1990). Selected leadership definitions are presented in Table 2.

In management sciences, the concepts of a head, leader, supervisor or manager are assigned different tasks, roles or importance in the running of an entire organization. However, in practice, these terms are usually used interchangeably to define one person in an enterprise who is attributed characteristics assigned to all of these functions (Smolağ, 2013). Modern enterprises need effective leaders who understand the rapidly changing environment of an enterprise. According to Nanjundeswaraswamy and Swamy (2014), if the tasks entrusted are properly designed, and the relationship of the superior with the employees is appropriate, their effectiveness will increase. Therefore, a leader should be credible, committed, and creative, and should be able to motivate other individuals to act. In addition, a leader should be an authority figure for a team of employees, be aware of his/her own competencies, but also able to appreciate the abilities of the team. It is also important that a leader is able to notice his/her own mistakes and be able to admit them, thus taking responsibility for them and attempting to act as a model of morality in the enterprise (Kolasińska, 2011). Leadership can be perceived by referring to the personality of a leader, his/her behaviour or motivational methods and characteristics that distinguish him/her from other people (Boal, Hooijberg, 2001). Among the

range of the many skills a leader should possess, there ought to be the ability to assess and select methods by which he/she will affect the people he/she supervises. A leader should be aware that a given method of influence will not work in the same way for all people. It is worth noting that clearly communicating the vision and purpose of activities to employees can significantly facilitate the management process. The common goal for both the leader and his/ her employees should be clearly defined, which will increase the team's sense of responsibility (Kociszewska-Panaszek, Panaszek, 2010).

In the source literature, many divisions of leadership styles have been proposed, which basically separate leader behaviour into transformational and transactional. Transformational leadership is characterized by a striving for the development of both the organization and individuals, not focusing solely on functioning in accordance with specific requirements. The main attributes that characterize this style are charisma or idealized influence, inspiring motivation, an individual approach to each employee and intellectual stimulation (Vaccaro et al., 2012). The individualized approach to staff focuses on the development of staff resources by creating conditions for personal progress, but also opportunities for learning. Transformational leaders can make creativity and innovation part of problem-solving in an organization (Bass et al., 2003; Abbas et al., 2012). Transformational leaders encourage the prioritization of an organization's goals and make employees aware of the goals set. In addition, they strive to meet employee needs, such as self-fulfillment, or encourage employees to be personally engaged by inspiring them with their own results (Żołnierczyk-Zreda, 2016; Bakker et al., 2023). In turn, transactional leadership focuses on maintaining compliance with the current requirements. Relations with employees are based on the exchange of favours, also using disciplinary methods (Pęciłło, 2022). The possibility of rewarding and coercing, personality traits, and the ability to influence others are the main features of this style of leadership. The influence that a transactional leader exerts on his/her staff stems from employees' belief that it is better to act in a way that is in line with the leader's expectations. Representatives of this style are characterized by the ability to negotiate, motivate and persuade, and are referred to as people with an appropriate level of knowledge (Lee et al., 2023). In addition, they are currently widely recognized as individuals predestined to manage personnel (Kociszewska-Panaszek, Panaszek, 2010). A manager identified as having this style specifies standards and priorities, defines the rules to be followed in the enterprise, draws attention to the rapid identification of errors, and also sets rewards and penalties for the quality of implementing the rules and goals (Żołnierczyk-Zreda, 2016).

The involvement of management in issues related to work safety helps to shape WSC and leads to work satisfaction and efficiency. It is not possible to indicate one appropriate leadership style because it should be selected in accordance with the current situation in the enterprise. The right approach, therefore, seems to be to determine leadership by actions, and evaluate it by the achievement of goals (Pęciłło,

2022). The tasks that leaders should perform concerning safety are specified in the Polish standard related to work safety PN-N 18001, which lists activities such as (PN-N-18001):

- providing the appropriate resources necessary to design, implement and operate the OHS management system, including knowledge and specialist assistance,
- assigning to selected members of the highest level a special responsibility for ensuring the compliance of OHS with the established requirements and its improvement, as well as for promoting employee participation in OHS activities,
- establishing and updating the OHS policy and objectives in an organization,
- conducting periodic management reviews to determine whether the OHS policy adopted and related activities are still appropriate, as well as indicating directions for their improvement.

The importance of leadership in terms of work safety is also reflected in ISO 45001. This standard specifies the required guidelines for management, which include (PN-ISO 45001:2018):

- assuming full responsibility for the prevention of accidents at work and work-related diseases, and for ensuring health and safety in the workplace,
- ensuring that the OHS policy has been established and OHS objectives have been defined and are consistent with the strategy adopted in the organization,
- ensuring the integration of OHS management system requirements with the organization's business processes,
- providing the resources necessary to establish, implement, maintain and improve the OHS management system,
- ensuring the active participation of employees or their representatives using consultations, and identifying and eliminating obstacles and barriers to co-participation,
- communicating the importance of effective OHS management and compliance with the requirements of the OHS management system,
- ensuring that the intended results are achieved within the OHS management system,
- managing and supporting people who have an impact on the effectiveness of the OHS management system,
- ensuring continuous improvement of the OHS management system and promoting it,
- supporting other members of management in demonstrating leadership in their areas of responsibility.

All the actions proposed should be implemented by leaders striving to build a high-level work safety culture. Comparing the ISO 45001 standard with the PN-N 18001 standard, it can be seen that the ISO guidelines focus more on the personal engagement of leaders and the active performance of OHS activities, and thus on a work safety culture (Peçiflo, 2022).

Table 3. Leaders' activities in terms of building a work safety culture

Management level	Transactional behaviour	Transformational behaviour
Immediate superior	<ul style="list-style-type: none"> – monitoring and strengthening safe behaviour – exemplifying safe behaviour 	<ul style="list-style-type: none"> – supporting OHS initiatives – encouraging employees to actively participate in OHS initiatives
Intermediate management	<ul style="list-style-type: none"> – engaging in OHS activities 	<ul style="list-style-type: none"> – prioritizing safety issues over performance – using a decentralized OHS management style – communicating vision related to OHS to superiors
Senior management	<ul style="list-style-type: none"> – ensuring compliance with OHS regulations – providing means for compliance with OHS 	<ul style="list-style-type: none"> – demonstrating a clear and consistent commitment to OHS issues – expressing genuine interest in employees – encouraging lower-level management to follow a participatory management style – allocating appropriate working time to OHS issues

Source: Żołnierczyk-Zreda, 2016.

It should be noted that the leadership style applied will affect how the work safety culture is created. In this context, Table 3 shows examples of leader behaviour characterized by the transformational and transactional styles in relation to different levels of management.

4. RESEARCH METHODOLOGY

The aim of the research was to determine the relationship between the assessment of leader behaviour and the creation of a work safety culture. To meet the purpose of this study, the authors conducted their own research. The research tool used was an originally devised questionnaire consisting of a main section and demographics. The main section of the questionnaire was divided into two groups of questions. The first group concerned the characteristics of a work safety culture and the second group concerned leadership. In the first group, referring to a work safety culture, there were 24 questions incorporating a 5-point Likert scale (the characteristics of WSC). The second group, referring to leadership, consisted of 16 questions and also made use of a 5-point Likert scale (the assessment of a leader). The demographics contained questions relating to such elements as gender, workplace, enterprise sector (production, service, and trade), type of enterprise (public or private), size (fewer than 10 people, 10-49 people, 50-249 people, and 250 and more), business area, number of accidents at work over the previous year and haz-

ards in the workplace (physical, psychophysical, chemical and biological). The survey was anonymous, although selection of the sample was deliberate. 157 people took part in the study, therefore it can be considered a pilot study since such a sample was not fully representative. The study was conducted in October 2023 using the CAWI method. The questionnaire was made available to selected enterprises operating in the Polish region of Silesia. During the study, it was possible for the respondents to send a completed questionnaire just once from a given electronic device. The survey was available to the respondents for 30 days.

5. SAMPLE CHARACTERISTICS

88 men and 69 women took part in the study. The respondents mainly represented service enterprises (84 indications). Production enterprises were represented by 45 respondents and trade enterprises were represented by 28 respondents. Taking into account the ownership of the enterprises, the respondents worked mainly for private enterprises (117 indications). The largest group that took part in the survey was composed of respondents working for enterprises employing from 10 to 49 people (56 indications), while the second group consisted of employees working for enterprises with fewer than 10 people (42 indications). The remaining respondents represented enterprises employing more than 250 people (31 indications) and enterprises employing from 50 to 249 people (28 indications).

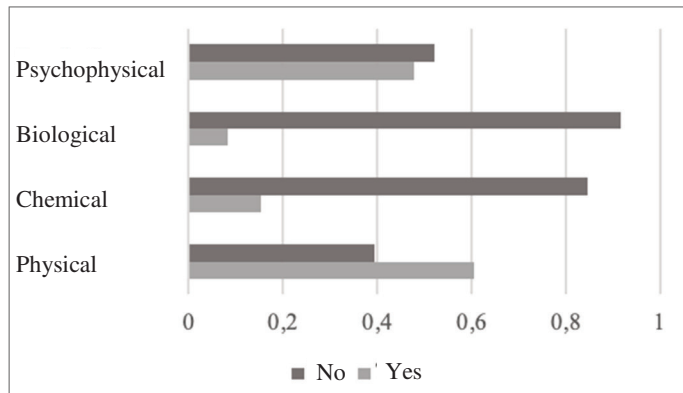


Fig. 1. Specific hazards in the workplace (authors' own development)

Figure 1 presents the hazards encountered in the respondents' workplaces. The results indicated that the respondents most often dealt with physical (61%) and psychophysical hazards (48%). They were much less likely to encounter biological (8%) and chemical (15%) hazards in the workplace. According to the collected

data, accidents did happen at work. The answers provided by the respondents regarding the number of accidents in the previous year were as follows:

- a few accidents,
- accidents happen often, but they are not dangerous,
- I do not know,
- I have no specific knowledge about it because no one counts it.

On average, in the study group, accidents at work occurred 2-3 times a year.

6. RESEARCH RESULTS AND DISCUSSION

A work safety culture in this study was characterized by 24 features (Fig. 2). The statements referred to the current state of safety in an enterprise and behaviour manifested in this regard by both managers and employees. Analyzing the results obtained, it can be seen that all the questions were dominated by positive answers (5 – I strongly agree, and 4 – I rather agree). The highest results were obtained by questions such as:

- *I know the health and safety hazards in my workplace* ($\bar{x} = 4.29$),
- *I feel responsible for the state of safety in my workplace as well as for the people there* ($\bar{x} = 4.12$),
- *I follow OHS rules and use personal protective equipment recommended for the workplace* ($\bar{x} = 4.07$),
- *I feel responsible for the safety of my co-workers* ($\bar{x} = 4.04$),
- *The health and safety of each employee is very important in the enterprise* ($\bar{x} = 4.01$),
- *Employees are informed about any occupational hazard existing in the workplace* ($\bar{x} = 4.00$).

The results obtained in the above-mentioned questions may indicate employees' involvement and interest in OHS. The lowest rating by the respondents was given to the statement "*There is always time to talk about OHS issues at meetings*" ($\bar{x} = 2.97$). When building a work safety culture, one should devote time to discussing OHS issues. This will both help in encouraging employee participation and increasing involvement. It can also provide valuable information necessary for improving OHS. The remaining question obtained results between $\bar{x} = 3.21$ and 3.83. The results of the assessment of work safety culture were as follows:

- 19 respondents rated WSC in their enterprise at a level below 3 ($\bar{x} = 1.54$ to 2.96),
- 86 respondents rated WSC in their enterprise at a level of 3 or more ($\bar{x} = 3$ to 3.96),
- 52 respondents rated WSC in their enterprise at a level of 4 or more ($\bar{x} = 4$ to 4.83).

The results presented make it possible to infer that the state of work safety culture among 55% of the respondents was at a good level; 33% of the respondents viewed their WSC as strong. The overall average of all the answers obtained by the respondents was $\bar{x} = 3.64$. Summing up the results, it can be concluded that the work safety culture existing among the respondents required further development, especially in terms of allocating time for discussions related to employee safety.

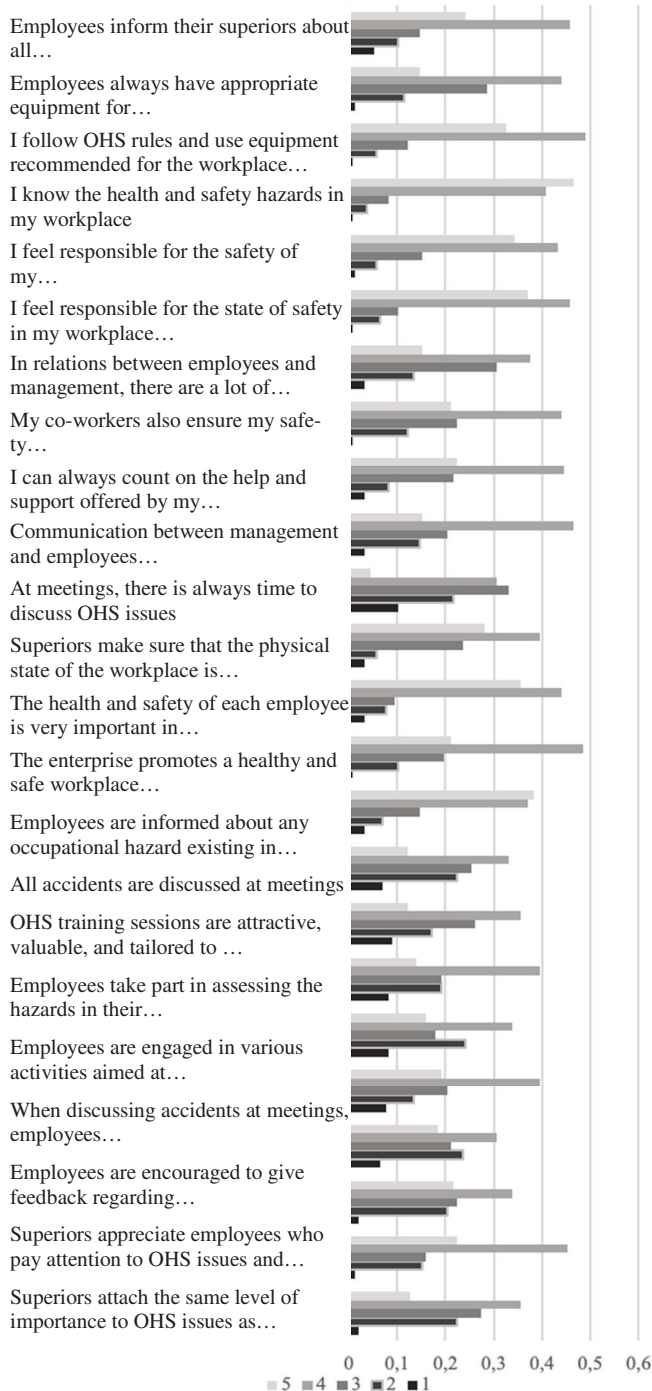


Fig. 2. Characteristics of work safety culture (authors' own development)



Table 4. The relationship between work safety culture (WSC) and the assessment of leader behaviour, where a filled circle means a relationship which is statistically highly significant, and an empty circle means a lack of relationship

	He/she efficiently encourages others to work	He/she is a competent person	He/she explains the taken actions	He/she shows what is important for him/her at work, e.g. paying attention to details, results, co-operation, etc.	He/she modifies performance on the basis of information obtained	He/she can admit to making a mistake	He/she supports new, interesting ideas and solutions	He/she is open to new ideas	He/she is a trustworthy person	He/she is shown respect and appreciation by employees and colleagues	He/she is open to opinions, even if critical, expressed by others	He/she does not avoid problems	He/she is able to inspire others to be active	He/she analyzes past events in terms of what worked and what failed	He/she sets ambitious, yet feasible, goals	He/she is available to talk to employees
Superiors attach the same importance to OHS issues as the main operations of the enterprise	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○
Superiors follow OHS rules	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Superiors appreciate employees who pay attention to OHS issues and follow OHS rules	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○
Employees are encouraged to give feedback related to improving the state of OHS in the enterprise	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
When discussing accidents at meetings, employees jointly consider their causes	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○
Employees are engaged in various activities aimed at improving the state of OHS in the enterprise	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○
Employees participate in the assessment of hazards in their respective workplaces, and the selection of appropriate equipment and protective gear	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	○
OHS training sessions are attractive, valuable and tailored to employee needs	●	○	○	○	○	●	●	○	○	○	●	●	●	●	●	○
All accidents are discussed at meetings	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Employees are informed about any occupational hazard existing in the workplace	●	●	○	○	○	●	●	○	○	○	○	○	○	○	○	○
The enterprise promotes a healthy and safe workplace	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
The health and safety of each employee is very important to the enterprise	●	●	●	●	○	●	●	●	●	○	●	●	○	●	●	●
Superiors make sure that the physical state of the workplace is safe and harmless to employee health	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
There is always time to discuss OHS issues at meetings	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Communication between management and employees is uninhibited and sufficiently frequent	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
I can always count on the help and support offered by my co-workers	●	●	●	●	○	●	○	●	●	○	○	○	○	○	○	○
My co-workers also ensure my safety (e.g. they pay attention to my personal protective equipment)	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
There is a lot of mutual understanding in relations between management and employees	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
I feel responsible for the state of safety in my workplace as well as for the people who are there	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
I feel responsible for the safety of my co-workers	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
I know the health and safety hazards in my workplace	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
I follow the OHS rules and use personal protective equipment recommended for the workplace	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Employees always have appropriate equipment to work safely	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Employees inform their superiors about any accidents	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Legend	dla p	< 0,01	●	0,01 - 0,001	○	0,05	○	< 0,01	○	0,05	○	> 0,1				



The aim of the study was to determine whether there is a correlation between leadership and work safety culture. Due to the use of an ordinal scale, qualitative variables and a small research sample, it was decided that Spearman's rank correlation coefficient would be used. This coefficient (Stanisz, 2006) is treated as adequate for this type of analysis. In addition, each time an analysis of its significance was taken into account (Szajt, 2014), which was possible thanks to the Statistica 13 package in which the calculations were carried out. If a large number of bundled pairs was suspected, this package used a formula containing an appropriate correction. The results are presented in Table 4. The proposed method of visualization made it possible, without losing important information from the point of view of the research, to fit the results into a relatively limited area (otherwise with sixteen variables, the tables would have had, in addition to the first column, 48 columns with widths matching the accuracy of the results obtained). Following the analysis of the results, it can be concluded that leader behaviour significantly influences the shaping of a work safety culture. The more highly that leader behaviour was assessed, the better the characterization of the work safety culture. Only in the case of a WSC feature defined as: *I feel responsible for the state of safety in my workplace as well as for the people who are there* only one assessment of leader behaviour showed a strong relationship. This behaviour was *He/she analyzes past events in terms of what worked and what failed*. Other behaviour did not affect the indicated WSC feature.

The results obtained confirm that the appropriate behaviour of a leader significantly affects WSC, which is corroborated by the research by Skeepers and Mbohwa (2015), who are also of the opinion that leadership positively affects the safety climate and improves an enterprise's results in terms of work safety. In turn, Cooper (2015) emphasizes in his work that leadership supports the development of a work safety culture, confirming the results obtained in this study, where there was only a positive correlation, which was, in most cases, statistically significant. The relationship between statements about leadership, such as: *"I follow occupational health and safety rules and use personal protective equipment recommended for the workplace"* or *"Employees always have appropriate equipment to work safely"* indicated the impact of leadership behaviour on safe employee behaviour. These results concurred with the research by Clarke (2013), which claims that leadership helps in shaping safe employee behaviour or employee involvement in work safety activities. Similar assumptions are also presented by Lu and Yang (2010), who in their research confirm the positive impact of management on safer employee behaviour by creating a clear mission, raising the level of responsibility and determining the direction for the development of OHS standards. Analyzing the results presented, it can be concluded that the development of leadership behaviour results in the improvement of a work safety culture. It is worth citing the research done by Mullen, Kelloway and Teed which points to a similar relationship by presenting it from the perspective of undesired leadership behaviour. The au-

thors believe that superiors' passivity in the area of OHS causes a deterioration in the safety climate

rather than simply the lack of its development (Mullen et al., 2011). It can be concluded from the research results presented that proper engagement in the role of a leader, through behaviour defined by the studied characteristics, contributes to the building of a lasting and strong work safety culture. A similar conclusion is drawn by Skład (2018), who states that the full and visible involvement of leaders in the running of an organization determines its appropriate compliance with safety rules, which in turn leads to the establishment of requirements for a work safety culture and work safety standards (Skład, 2018, p. 318).

7. SUMMARY

Analysis of the research presented in the source literature and included in the scope of this study indicates that leadership plays an important role in building a work safety culture. A properly conducted leadership process can raise the level of WSC in an organization, which leads to a strengthening of compliance with work safety regulations, and thus directly reduces the number of accidents. In this context, it is worth emphasizing that the real involvement of leaders in activities related to shaping WSC can help employees realize that they are important to an enterprise and their health and safety matter. It can also affect employees in their motivation to take action to improve work safety and promote it among their co-workers, therefore imitating their superiors.

The results of the research indicated that the respondents taking part in the study worked in enterprises in which the WSC was assessed as acceptable, but it required further development to be considered strong or desirable. Important elements of WSC development include, for example, allocating more time to discussing OHS issues or accidents at work. In addition, leader behaviour significantly influenced the building of a work safety culture. The assessment of 16 leader behaviours does not influence only one of 24 features that describe WSC.

Based on the research conducted, it can be concluded that the state of a work safety culture, and thus the safety of employees, depends on overall leadership, and not only that related to OHS management. When choosing a person for a managerial position or deciding on a specific management style, it should be remembered that it does not only affect the success of an enterprise, but it can also be a decisive factor in employee safety. From the point of view of the development of science, the results obtained took into account the existing correlation between broadly understood leadership and work safety culture, where the current research has focused only on selected aspects of leadership. The study presented may also be valuable for management practitioners as it draws attention to the importance of choosing leadership methods or styles and may help build a greater awareness

among managers in this area and those responsible for creating a work safety culture.

However, the research presented has some limitations, which include the size of the sample, and geographical and temporal coverage. In light of the research conducted, the question remains what other indirect factors or methods affect the level of a work safety culture. It is worth paying attention to communication, which is the basis for understanding the goals set and their acceptance, and thus can help a company attain the goal of “zero” accidents. Future research should take into account communication, forms used or types of messages that have a significant impact on the perception of both the work safety culture and leadership behaviour.

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ZNACZENIE PRZYWÓDZTWA A KREOWANIE KULTURY BEZPIECZEŃSTWA PRACY

Streszczenie

Problematyka kształtowania bezpiecznych miejsc pracy jest wieloaspektowa. Jednym z ważnych jej elementów jest odpowiednie kreowanie kultury bezpieczeństwa pracy (KBP). Na kulturę bezpieczeństwa pracy składają się takie elementy, jak: postawy, wartości i normy oraz zachowania pracowników. Istotnym czynnikiem, który wpływa na KBP, jest szeroko pojęte przywództwo. Osiągnięcie wyznaczonych celów, zarówno tych dotyczących funkcjonowania organizacji, jak i samego bezpieczeństwa i higieny pracy, w dużym stopniu zależy od zachowań przywódczych. Celem przeprowadzonych badań było określenie zależności pomiędzy oceną zachowań przywódcy a kreowaniem kultury bezpieczeństwa pracy. Wyniki badań własnych zostały poprzedzone analizą literatury przedmiotu. Przeprowadzone badanie ankietowe miało charakter ilościowy i zostało zrealizowane z wykorzystaniem metody CAWI na grupie 157 respondentów w październiku 2023. Analiza wyników pozwala na stwierdzenie, że zachowania przełożonego istotnie wpływają na kształtowanie kultury bezpieczeństwa pracy. Ponadto respondenci reprezentowali przedsiębiorstwa, w których KBP jest oceniana jako akceptowalna, ale wymagająca dalszego rozwoju, by mówić o silnej czy pożądanym kulturze bezpieczeństwa pracy.

Słowa kluczowe: przywództwo, kultura bezpieczeństwa pracy, przywódca



