

Employee Motivations in Maintaining Occupational Health and Safety (OHS) Compliance: Research on Nine Construction Firms in Poland

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Received: 15.12.2016, accepted: 01.02.2017

Abstract: The main aim of this article is to verify the awareness of employers regarding the use of motivational tools for promoting OHS compliance and to explore the effects of their application. Structured interviews were carried out in a purposefully selected group of Polish construction companies between September and November 2016. The interviews confirmed the following thesis that resulted from previous studies based on which financial tools were found to be main motivators: a risk of “a loop” is indicated where the financially motivated OHS compliance is perceived by employees mostly as a source of financial gain.

Keywords: Occupational health and safety (OHS), motivation, construction sector (industry)

INTRODUCTION

Dynamic market conditions affect preferred business models and enforce flexibility in response to the expectations of the market and company owners. Flexibility guarantees adaptability to end-users' evolving preferences in an environment of growing uncertainty. The ability to adapt to fluctuations, in terms of such things as production volumes, can translate into solutions which bring about changes for the whole organisation and its staff. In the United States and Europe, the percentage of temporary, contract and leased employees is on the rise. This necessitates the use of specific work management and organisation techniques, and impacts the attitudes of employees.

One of the areas affected by these changes is occupational health and safety (OHS). This article was inspired by the professional experience of one of its authors, an OHS specialist and the owner of a company implementing OHS solutions. His professional observations called for in-depth and well-structured research to be carried out in a larger team. Inspired by an analysis of cases from the Polish construction industry, this article addresses the issue of motivating employees to comply with OHS guidelines and explores how such motivation measures affect the actual safety at work. The aim of the authors was to verify employers' awareness and use of tools for promoting OHS compliance, as well as the effects of their application.

The choice of the construction sector for the analysis was intentional. Many other researchers addressing the topic of OHS focus on this industry (e.g. Lingard 2002, Paap 2003, Wadick 2010, Dester and Blockley 1995, Meldrum, Hare, and Cameron 2009). The construction sector is also among those with the highest numbers of occupational accidents being reported. It involves strenuous work in which the observance of OHS rules may have a profound impact on the actual safety. The nature of the industry itself and of its working methods is universal, even if different measures are used to ensure safety. The sector is among the leaders in the use of flexible forms of employment and is regarded as a barometer of the economic situation of a nation. It is also often referred to as a good example of general work culture trends in society (see Paap 2003, p. 200).

The analysis in this article was further encouraged by a certain paradox often pointed out by researchers exploring the topic: OHS costs are typically incurred by entrepreneurs, while its benefits seem to be reserved for employees and insurance companies (Bartusik 2008, p. 133). Nevertheless, employers feel compelled to take OHS into account in order to avoid the risk of additional costs (Haupt and Pillay 2016, p. 375), while for employees it is their safety that matters the most.

MOTIVATION BEHIND OHS MEASURES

Actions aimed at ensuring safety typically come down to the elimination of hazards at work. Work hazards are divided into two categories: those resulting from the work environment, and those occurring from the way in which work is carried out. Studies show that most workplace-related accidents are caused by employee behaviour (e.g. in Poland over half) (Gładysz 2011, p. 30). While an analysis of accident causes does not fall within the scope of this article, it is worth remembering that a number of factors may be involved; for example, construction projects are named among the environments that are most conducive to work hazards (Manu et al. 2014, p. 65).

Based on the structure of the causes of accidents or dangerous situations at work, employee involvement is highlighted as a crucial condition to ensure safety and effective implementation of OHS systems (Bartusik 2008, p. 121). In such systems as OHSAS (Occupational Health and Safety Assessment System, an international occupational health and safety management system specification), or other OHS management systems (e.g. HSG65, ILO-OSH 2001), the following key elements are identified for decreasing accidents: planning, implementation, evaluation, improvement

(Mrugalska and Sławińska 2014, p. 133). While these systems provide a number of required procedures, such as training, communication, and availability and distribution of information, rarely do they directly address the issue of motivating employees to comply with OHS rules, even though such motivation is considered to be crucial for their effective implementation.

In participatory ergonomics (PE), the analysis of a work system assumes people's involvement, regardless of their function, which is to increase their sense of responsibility and satisfaction with the job. Similarly, the CIMOP (Computer-Integrated Manufacturing, Organisation and People) system, used in production plants for evaluating computer-integrated areas for design purposes, offers an element of motivation to introduce and accept changes (Mrugalska and Sławińska 2014, p. 132).

A number of methods are used to support OHS observance, including the BAS system (autonomous safety system), which recognises employee involvement as a key factor for the development of OHS (good practice) (Danielewicz 2011, p. 2010). Many studies provide a number of specific techniques how to motivate people to a greater OHS compliance and involvement in its development and modification, discussing the factors that affect employees' participation and which are the cornerstone of work safety (Harris, Olsen and Walker 2012, p. 481).

Training (e.g. first aid training) seems to be an obvious course of action, as it increases awareness and consequently, encourages avoidance of hazardous, particularly life- or health-threatening behaviours (Lingard, 2002, p. 263). However, as some authors have pointed out, while training may significantly contribute to an increase in knowledge, it has a smaller effect on the actual behaviour, and consequently, less of an impact on the health and safety of workers (Ricci et al. 2016, pp. 366-367).

Among the factors promoting improved safety, J. Onufer (2015, p. 171) names the following: autonomy in the workplace, support from superiors, participation in decision-making, teamwork, positive atmosphere at work, feedback, adequate pay, and continued employment. He also emphasises the importance of involvement and the sense of co-responsibility of all employees. Such involvement depends on a number of factors, such as knowledge, capability to engage with others in the work environment, perceptions, attitudes and behaviours, and actual involvement in OHS risk management (Meldrum, Hare, and Cameron 2009, p. 612).

The most frequently mentioned element conducive to the provision of safety is “safety culture” (Dester and Blockley 1995) or “safety climate” (e.g. Lingard, Wakefield, and Cashin 2011, pp. 34, 38), which is dependent on the approach of superiors in organizations, specifically in their understanding of safety concerns, and employees. Studies show that hazardous behaviours may be inspired by employee attitudes. H. Lingard (2002, p. 265) discusses a relationship between hazardous acts and employee beliefs (e.g. a highly attractive job always includes work hazards): approaches to work (e.g. work hazards cannot be avoided, and work safety has a negative effect on productivity); and behavioural intentions (e.g. taking risks, and ignoring procedures).

Similarly, K. Paap (2003, p. 198) points to the cultural choice of employees to intentionally forgo OHS rules, in an attempt to demonstrate their working-class masculinity. In her research Paap identifies what she terms “cultural rules”, axiomatic statements responsible for OHS non-compliance. One example of this is what she labels “Cultural Rule No. 1”, or “expect pain and take it like a man”. She draws attention to both employee and employer reasoning related to the disregarding of OHS guidelines, which is based on the common belief that following such guidelines will not result in higher efficiency and lower labour costs, and consequently, better wages. This view seems to be consistent with social observations particularly characteristic of smaller construction or logistics companies. In these enterprises, approval for exceeding work limits or lack of high-quality equipment is perceived as a sign of resourcefulness and efficiency.

Wadick (2010, p. 112) presents similar views and quotes studies which show that employees are aware of the danger and accept higher levels of risk “because it pays the bills”. Studies confirm that employee motivation has a significant effect on their approach to safety. If OHS procedures are implemented as a result of a top-down initiative, they tend to focus on the employer’s interest, including the financial one; worker participation in OHS management, however, ensures a more pro-employee approach (Harris, Olsen, and Walker 2012, p. 496), and allows OHS to actually fulfil its function of ensuring safety.

In conclusion, considering the most common causes of occupational accidents, i.e. employees’ errors or omissions, it can be concluded that worker involvement (participation) seems to be the key to ensure safety on-the-job. In order to achieve this, the following need to be implemented:

- training, communication of rules, information on procedures and measures;
- participation in developing work- and OHS-related rules, policies and procedures;
- employee autonomy in the workplace, support from superiors, feedback;
- teamwork and a positive atmosphere at work;
- adequate pay and continued employment.

The actual involvement of employees depends also on safety culture, as well as on knowledge and capability to engage, perceptions, attitudes and behaviours.

When applying support tools in OHS management, it is necessary to take into account the elements that may make the actual implementation of the procedures difficult. In the case of the construction sector the following typically hinder the implementation of OHS guidelines:

- paying attention mainly to work and OHS compliance of general contractors, and not of subcontractors (Wadick 2010, p. 109);
- reduced skills resulting from different categories of employees (highly skilled/core employees and contingent employees);
- reduced role of trade unions (see Paap, 2003, p. 201);
- focus on the formal aspects of OHS-related rules (Pawłowska 2002, p. 11);
- negative image of OHS inspectors/officers (Wadick 2010, p. 113).

In terms of the OHS cost-effect paradox, it is recommended to evaluate the outcomes expected by the employer separately from actions aimed at increasing safety. The main goal of OHS management is to secure the proper conditions in order to minimise work-related adverse events which might generate losses, i.e. situations which have a negative effect on employees’ health (Mrugalska and Sławińska 2014, p. 132).

Traditionally, OHS management is regarded to be effective when the number of work-related injuries or illnesses is reduced (Pawłowska 2002, p. 9). This directly translates into lowering the costs that are otherwise generated by inappropriate working conditions, including the following: costs of time lost, overtime, replacements, interruptions, material injuries/damage, medical care, or other benefits. Following this approach, OHS management is all about minimising losses due to a failure to ensure safety.

Many studies confirm that the use of programmes or systems aimed at improving safety and ergonomics has

a positive effect on work motivation, and consequently, on the company achieving its aims (Słowikowski 2004, p. 25). Researchers point to a number of benefits, such as improved working conditions, which in turn result in increased efficiency of employees, greater employee involvement in production-related processes, improved company image, and reduced turnover (Bartusik 2008, p. 136). The Job Demands-Resources (JD-R) model is based on the assumption that the well-being of employees (and consequently, their involvement) is influenced by OHS requirements specific for the given work environment and available workforce (Onufer 2015, p. 170).

RESEARCH AND RESULTS

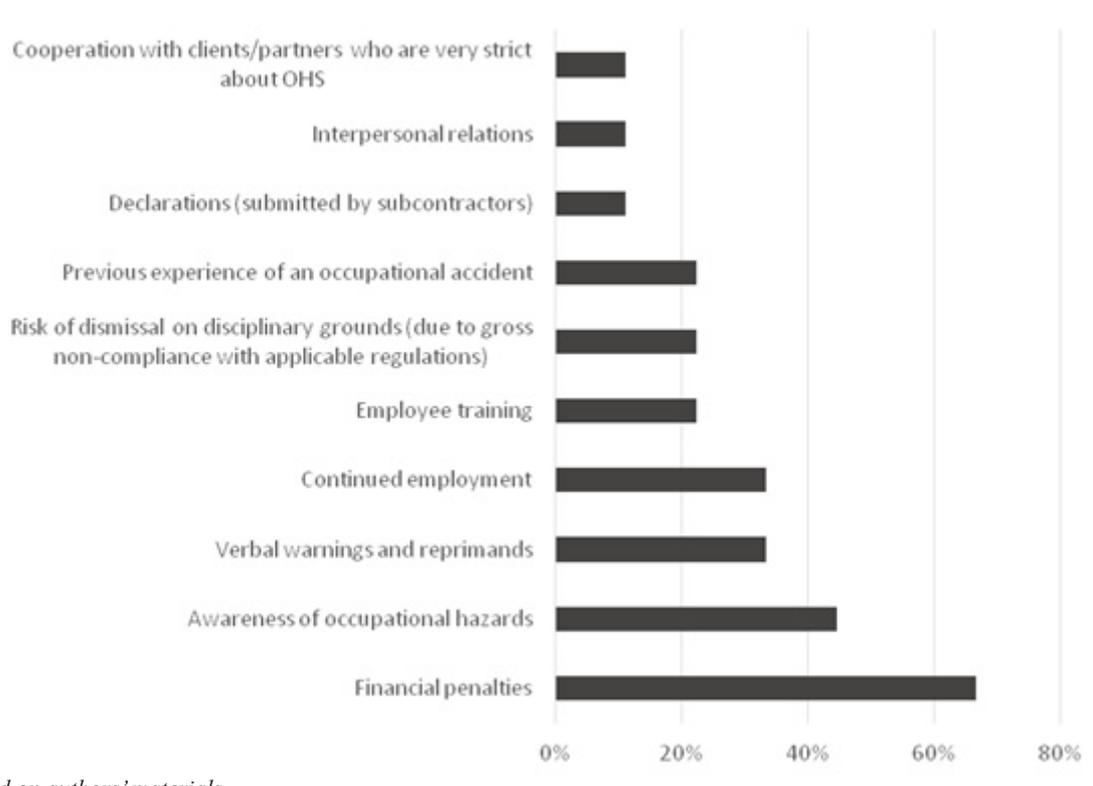
The research focused on the organisation of motivation system in selected construction companies in Poland. Its aim was to analyse what motivates employees to observe OSH rules, which OSH tools are applied, and what are the effects of their use. The data for this field research was collected between September and November 2016 by the means of structured interviews with employers and top managers of the selected companies. For the interviews a dedicated questionnaire was used. Nine construction companies operating in

Poland were studied using the questionnaire. Purposive sampling was applied based on the criterion of accessibility (in particular, based on professional contact) in order to ensure the availability of the data and reliability of the responses.

The questionnaire contained five groups of questions (with the total of 13 questions) regarding the company, relationship between motivation, observance of OHS rules, and the effect of OHS on employee motivation, motivation tools, and effects of programmes motivating employees to OHS compliance. Some study questions offered the possibility of open responses. Due to the scale of the study its results cannot be applied to a general population and an in-depth statistical analysis is not required. The results are presented with the focus on the structure of the responses and factors provided by the study participants.

In the first question the respondents were asked to name the factors, which according to them, are the strongest motivators for employees to abide by OHS rules. In most responses, possible financial penalties were identified as having a direct effect on employee motivation; indeed, this was identified as a stronger motivation than the awareness of occupational hazards. This corresponds to the previously discussed specific

Factors affecting employee motivation to OHS compliance



Source: Based on authors' materials.

work culture in the construction sector under which certain hazardous behaviours are allowed. Similarly, other motivating factors, also recognised as key by the employers, primarily included motivation through warnings or reprimands (with probable financial consequences), and continued employment or the risk of dismissal in case of non-compliance. Employee training or previous experience were also named; however, these last two motivators were not mentioned as often as the previously mentioned motivators.

One of the questions asked was about motivation methods actually applied by the employers. An informed and well-structured approach was reported by three of the study companies, while others used indirect forms of motivation. The respondents listed the following tools (apart from obligatory training or information actions):

- solutions in the form of financial programmes with elements for promoting positive behaviours (specific behaviours facilitating OHS included the reporting and implementation of new ideas, and providing support to other employees);
- financial solutions focused on negative behaviours; OHS compliance as a condition for bonus payment (e.g. performance or efficiency bonus);
- system of verbal praise in front of co-workers for an outstanding behaviour;
- giving precedence for OHS guideline observant employees over others in choosing the dates for time off (when preparing holiday schedules).

The answers to the question about how OHS contributes to work motivation were not clear. Most of the respondents (44%) pointed to employees' awareness as affecting their motivation in terms of concerns for their own safety and employers' care about personal protective equipment (its quality and availability). Otherwise the respondents talked about financial consequences (employees' pay being affected by their OHS compliance), which in fact is an example of a direct response to the way in which employees are motivated. In terms of employees' feelings related to safety or stability of employment, the positive impact of OHS measures was rarely reported.

According to the respondents (including those in whose case the use of motivating factors was informed and intentional), the implementation of motivational programmes or OHS support systems does not translate into direct economic results. Linking efficiency to OHS solutions was reported to be impossible, as the latter is affected by too many factors; similarly,

none of the companies pointed to a relationship, for example, between OHS changes and staff turnover, or an increased ease in recruiting new staff. Finally, it was also pointed out that for a vast majority of temporary or contract employees, work safety (understood both as stability of employment and OHS components) is not a priority when choosing an employer.

Interesting responses were provided on the questionnaires about the employers themselves and their motivation to maintain OHS systems and see to their effective functioning. When the respondents were asked not to focus on formal requirements, risks of non-compliance or consequences of occupational accidents, their main motivation turned out to be their cooperation with a client or a partner who strictly adheres to OHS rules. In such cases, whenever construction services are contracted, the respective OHS standards and restrictions are specified, while the behaviour and attitudes toward OHS standards are monitored. Such expectations enforce further actions and contribute to translating the internal rules and regulations into OHS-compliant behaviours of employees.

The employers also related their own motivation to the effects on the company. According to them, the implementation of OHS in practice resulted in the following:

- increased independence of individual teams;
- spontaneous division of employees into groups based on mutual trust (not only in terms of OHS), and improved internal cooperation (people manifesting risky behaviours were rejected by other team members out of their respect for OHS, which may have also been inspired by the motivation system);
- increased self-control and ability to respond to inappropriate behaviour.

These effects seem to indicate that there was a development of a certain work culture impacted by OHS standards, in which other spheres of work, such as quality or effectiveness, saw positive improvements.

The employers also identified a clearly demotivating factor in terms of OHS observance, i.e. excessive bureaucracy, due to more attention being paid to compliance to the formal regulatory prescriptions rather than to the actual safety. Concerns were reported, for example, regarding situations in which any OHS irregularity results in immediate cessation of all work, which had financial consequences. This makes employees more reluctant to report any incidents or inform employers of possible hazards.

DISCUSSION

In the analysis of the results it is worth coming back to the paradox mentioned in the introduction: OHS costs are typically incurred by entrepreneurs, while its benefits seem to be reserved for employees. As revealed by the study, financial penalties, rather than possible hazards, constituted the main motivator for the entrepreneurs. Employees seem to be afraid of the potential costs of their decisions not to adhere to OHS standards. This is also confirmed by what was reported with respect to OHS compliance and its effect on work in the form of financial consequences (related to the motivation system). The responses imply a certain loop here: OHS compliance is motivated by financial factors, while the positive impact of OHS on other areas of work depends on the applied motivation methods.

These results seem to confirm the observations of K. Paap (2003, p. 198) and P. Wadick (2010, p. 112), who point to cultural conditions of the motivation behind OHS. Its perception, as represented by studied entrepreneurs, is based on the same conviction, only that their desire to increase efficiency at the expense of OHS was replaced by a direct link between OHS and financial implications for employees (thus turning financial considerations into the main motivator).

Paradoxically, the client/partner's expectations were among the factors recognised by the employers as motivating, while the risk of consequences for the contractor due to OHS incidents and irregularities, or reporting of possible hazards was a demotivating factor. Thus, it is in the interest of both employer and employee, not only to follow OHS rules, but also to be able to demonstrate and prove their strict compliance.

The observed practice of clients/partners enforcing OHS compliance is consistent with conclusions of other researchers. In his study of OHS in outsourcing, J. Onufer (2015, p. 163) argues that outsourcers are first and foremost interested in cost reduction through increasing flexibility in certain areas of operation. However, as the responses presented above show, this may lead to OHS irregularities.

The concept of "safety capital" is described in the literature (Nunez and Villanueva 2011, p. 58) to denote the organisation's knowledge of OHS. This knowledge should bring further benefits in terms of employee protection. Safety capital should reflect both the human and structural capital, i.e. the knowledge and skills of employees, as well as the implementation of procedures and mechanisms. With the ever rising precarious nature of the human capital and the widespread use of subcontractors in the construction sector,

building such capital may prove to be a difficult task. Its development will therefore require for contracts to be appropriately managed, taking into account the need for the coordination of OHS compliance among subcontractors (Nunez and Villanueva 2011, p. 65); to this end, clients/partners will be forced to acquire the necessary coordination skills.

Based on the professional experience of one of the authors of the article and conclusions from the interviews, it seems that the key to the development of a safety culture and the involving employers in it is to convince them of the effects of OHS in practice for the entire organisation (particularly in the light of the growing popularity and significance of the concept of well-being (e.g. *Absence Management* 2016, p. 144). Therefore, further research should focus not as much on understanding the sources of motivation of both employers and employees, as on familiarization of both groups with the measurable outcomes of OHS in practice. The results regarding the effect of practical implications of OHS rules for promoting positive behaviours in groups of employees seem to confirm this trend.

CONCLUSION

The results of the study appear to be consistent with those presented by other research. However, its practical dimension is rather surprising; although entrepreneurs are aware of the significance of motivation and are familiar with examples of risky behaviour in the construction sector, they do not change their employees' attitudes, but rather they accept it and use financial motivators instead (i.e. the very factor which promotes hazardous behaviour).

Increased flexibility of resources (particularly in this industry) may lead to savings on safety, while financial repercussions are perceived as the main motivator for ensuring OHS. Consequently, if contractors (or subcontractors) and their employees are to adhere to OHS rules in practice, it is necessary to work on their approaches, either by raising the public awareness or by increasing their competence, and thus the significance of OHS officers employed by the client/partner. Thus, many researchers seem to be right when they argue that modification of employee approaches and the development of a safety culture are the keys to ensuring safety in practice, albeit not supported by the ever increasing market inclination towards flexibility of employment.

REFERENCES

- Bartusik, K., 2008, *System zarządzania BHP jako narzędzie doskonalenia organizacji przedsiębiorstwa*, Zeszyty Naukowe [Research Bulletin] No 782 of the Cracow University of Economics, pp. 117-131.
- CIPD, 2016, *Absence Management*, https://www.cipd.co.uk/Images/absence-management_2016_tcm18-16360.pdf [accessed on: 1 December 2016].
- Danielewicz, D., 2011, *Zarządzanie bezpieczeństwem pracy w przedsiębiorstwie produkcyjnym*, in: Juchnowicz, M. (ed.), *Najlepsze praktyki w zarządzaniu kapitałem ludzkim. Metodyka badania, opisy przypadków*, Oficyna Wydawnicza Szkoła Główna Handlowa [The Publishing House of the Warsaw School of Economics], Warsaw, pp. 207-215, 210-211.
- Dester, W.M., Blockley, D.I., 1995, *Safety – behaviour and culture in construction*, Engineering, Construction and Architectural Management, Vol. 2, No 1, pp. 17-26.
- Gładysz, W., 2011, *System zarządzania bezpieczeństwem i higieną pracy jako narzędzie zapobiegania wypadkom przy pracy*, Systemy Zarządzania w Inżynierii Produkcji [Management Systems in Production Engineering] No 3 (3), pp. 28-32.
- Harris, L.A., Bendix Olsen, K., Walker, R.J., 2012, *Role typology for health and safety representatives*, Employee Relations, Vol. 34, No 5, pp. 481-500.
- Haupt T.C., Pillay, K., 2016, *Investigating the true costs of construction accidents*, Journal of Engineering, Design and Technology, Vol. 14, No 2, pp.373-419.
- Lingard, H., 2002, *The effect of first aid training on Australian construction workers' occupational health and safety knowledge and motivation to avoid work-related injury or illness*, Construction Management and Economics, Vol. 20, pp. 263-273.
- Lingard, H., Wakefield, R., Cashin, P., 2011, *The development and testing of a hierarchical measure of project OHS performance*, Engineering, Construction and Architectural Management, Vol. 18, No 1, pp. 30-49.
- Manu, P., Ankrah, N., Proverbs, D., Suresh, S., 2014, *The health and safety impact of construction project features*, Engineering, Construction and Architectural Management, Vol. 21, No 1, pp. 65-93.
- Meldrum, A., Hare, B., Cameron, I., 2009, *Road testing a health and safety worker engagement tool-kit in the construction industry*, Engineering, Construction and Architectural Management, Vol. 16, No 6, pp. 612-632.
- Mrugalska, B., Sławińska, M., 2014, *Narzędzia makroergonomii w sterowaniu bezpieczeństwem procesów pracy*, Organizacja i Zarządzanie [Organisation and Management], Zeszyty Naukowe [Research Bulletin] of the Poznań University of Technology, No 63, pp. 131-139.
- Muñoz, I., Villanueva, M., 2011, *Safety capital: the management of organizational knowledge on occupational health and safety*, Journal of Workplace Learning, Vol. 23, No 1, pp. 56-71.
- Onufer, J., 2015, *Ryzyka partnerów outsourcingowych na tle najlepszych praktyk zarządzania w obszarze BHP*, Organizacja i Zarządzanie [Organisation and Management], Zeszyty Naukowe [Research Bulletin] of the Łódź University of Technology, No 1202 (61), pp. 163-178.
- Paap, K., 2003, *“Voluntarily put themselves in harm's way”: the “bait and switch” of safety training in the construction industry*, Research in the Sociology of Work, Vol. 12, pp. 197-227.
- Pawłowska Z., 2002, *Skuteczność systemów zarządzania bezpieczeństwem i higieną pracy*, Bezpieczeństwo pracy: nauka i praktyka [WorkSafety: Learning and Practice], pp. 9-12.
- Ricci, F., Chiesi, A., Bisio, C., Panari, Ch., Pelosi, A., 2016, *Effectiveness of occupational health and safety training. A systematic review with meta-analysis*, Journal of Workplace Learning, Vol. 28, No 6, pp. 355-377.
- Słowikowski, J., 2004, *Zastosowanie zasad ergonomii w przedsiębiorstwie – przegląd rozwiązań*, [WorkSafety: Learning and Practice], No 4, pp. 24-26.
- Wadick, P., 2010, *Safety culture among subcontractors in the domestic housing construction industry*, Structural Survey, Vol. 28, No 2, pp. 108-120.