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Workers' representation in OHS activities: Example of Estonian industrial sector

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Abstract. The safety level in 11 Estonian enterprises was investigated. Some of them have implemented OHSAS 18001 or belong to foreign corporations. These enterprises have generally good or very good safety level. The larger the enterprise is, the better are the possibilities to give regular training for the work environment representative (WER) in occupational health and safety. The study includes quantitative and qualitative study. The MISHA method is used as the tool for quantitative study. The parts from the interviews with the enterprises representatives' (management and employees) concerning the role of the WER in the safety performance (qualitative study) are included. The clarification and appropriate application of the WER's role and position are the key elements to raise the safety level at enterprises. Two hypothesis: 1) on the connections between the real and formal safety elements concerning WERs and 2) OHSAS 18001 implementation effectiveness on safety activities (including WERs' role improvement) were proved with statistics: Factor analysis were carried out with *KMO and Barlett's* test, *ANOVA and T-square test with Wilks' Lambda row*. Additionally, knowledge management in safety may enhance the activities among WERs and thus, increase the safety performance in enterprises.

Key words: work environment, safety and health management, management responsibilities in safety and health, work environment representative, safety activities at small and medium-sized enterprises.

INTRODUCTION

Work environment is a broad term and means all surroundings when worker is engaged in the work process. The physical work environment contains work tools, inconvenient indoor air, noise, insufficient lighting, vibration, electromagnetic fields, but also chemicals and biological agents. Furthermore, the work environment includes the psychological aspects such as work organization and the worker's wellbeing at work.

The previous study for improvement of safety and health at workplace (Paas et al., 2015a, b, c) determined the nature of real, formal and combined safety elements and the importance and possibilities to harmonize the safety level in advanced companies (e.g. enterprises which possess OHSAS 18001) and companies without any systematic work in occupational health and safety (OHS). In an enterprise where safety is a priority and safety activities are regular and systematic, usually three levels of management line in OHS exist: the top or product manager, the work environment specialist (WES) or safety manager and the work environment representative (WER). The latter may be the weakest link in the chain, especially because of lack of time to devote oneself on safety and health matters. The legislation (Occupational Health and Safety Act of Estonia (OHS Act),

1999) allows the WER to perform OHS duties for two hours per week. Often, this seems not to be enough.

The activities of WER often depend on company's type: either locally owned small or medium-size enterprise or belonging to a bigger corporation. The implementation of OHSAS 18001, due to systematic audits, improves the knowledge of all the key employees in the safety and health management chain. The previous research has also suggested possibilities of offering safety training through MISHA questionnaire, used as the tool for assessment of safety level in both OHSAS 18001 implemented and non-implemented Estonian enterprises (Paas et al., 2016).

Work environment representatives shall safeguard the interests of staff in matters relating to the working environment (WE) and ensure that the regulations on OHS are followed. The WER is elected by the employees of the company and his/her main role is to represent the employees in issues related to OHS. Additionally, if the company's size exceeds 50 workers, a working environment council must be formed. This is an internal association where OHS-related issues are discussed and possibly resolved. Employer and employee representatives are members of the council in equal part. The WER has the duty, among other things, to represent the workers in work environment-related issues. OHS Act (1999) states that the employer and the employee should co-operate and work together managing working environment. As the WERs know the best the workers and workplace connected health and safety problems, it is important to involve them in positive progress of safety level in the company. It is also clear that employee's behaviour is one of the greatest determinants in workplace safety that can be influenced by WER's good examples.

By the Occupational Health and Safety Act (1999), WER has been guaranteed with a number of rights. The WER has, among other things, the authorisation to: a) receive training, b) be a part of actions that concern the relationships in the WE and c) participate during the planning of new premises as well as changes in the premises (OHS Act, 1999).

Special attention is needed for enterprises who belong to small-sized enterprises, with 10-49 employees who tend to see less practical value in WER activities and often excuse with other priorities (Sorensen et al., 2007; Paas et al., 2015a).

The research question is the following: is it possible to raise the safety level in a small and medium-scale enterprise prioritizing the role of the work environment representative?

Hypothesis H1. The firm type has a significant impact on real safety performance?

Hypothesis H2. Implementation of OHSAS 18001 helps effectively to organise OHS activities in the companies?

THEORETICAL APPROACH

Organizational culture is a concept that is often used to describe the values that influence members' attitudes and behaviours. Safety culture is a sub-facet of organizational culture (Cooper, 2000). There are three components in the organization that it is necessary to follow: focusing on physical workplace, focusing on people, focusing on management issues (Makin & Winder, 2008).

The work accidents in industrial enterprises continue to happen. The decrease of accidents could be foreseeable with the change of safety culture. Safety culture has been identified as a critical factor that sets the tone for importance of safety within an

organization (O'Toole, 2002). Different levels of safety culture can be distinguished: pathological, reactive, calculative, proactive and generative (Parker et al., 2006). Creating the better safety culture requires not only stronger surveillance from the side of Labour Inspectorate (state surveillance), but also a mental change and an authentic commitment from firms, where everyone participates and commits themselves to OSH (Fernandez-Muniz et al., 2007; 2009).

To the development of a good safety management system positively influences the employees' involvement and participation in safety activities. Safety researchers have become increasingly interested in understanding how social exchange processes help to shape the safety-related perceptions and behaviours of employees (DeJoy et al., 2010). Various theories have been used to explain the exchange relationship between organizations and employees, but theories involving organizational support have been most common (DeJoy et al., 2010).

A major incident is generally the result of a number of interacting human, technological, environmental and organisational factors all influenced by the prevailing safety culture. However, extensive time and resources are often required to undertake a detailed assessment. Factor analysis was used to structure eight underlying dimensions: management commitment, leadership, learning, risk, communication, competence, processes and procedures, and engagement. In order to help an organisation diagnose the extent of behavioural failures, the factor structures were grouped to assess learning, compliance, intervention, reporting and progressive (cultural sustainability) sub-cultures (Fernandez-Muniz et al., 2007; 2009). It is an advanced approach for analyse the accidents' possible mechanism scientifically.

In DeJoy et al. (2004), the employees were asked about the extent to which their organization has specific policies and programs related to such matters as safety training, hazard communication, and personal protective equipment. The safety level at enterprise was improved. Employee behaviour is arguably one of the greatest determinants in workplace safety, especially as employees interact with varying issues. Nevertheless, every person's behaviour is unique, and even one particular person's behaviour can change from day to day. No employee can think about safety continuously.

According to Wachter & Yorio (2013), the most important tools for improvement of employee's behaviour are improvement of communication, the leadership commitment to health and safety, working and solving problems in teams, adequate training, risk assessments with practical value, reporting of near-accidents, quality-based improvement processes.

In the ageing society, beside workers' safety, also health and well-being of workers have become important topics at the workplaces (Danna & Griffin, 1999). First, health and well-being can refer to the actual physical health of workers; second, health and well-being can refer to the psychological and emotional aspects of workers as nowadays trends in illnesses structure (Danna & Griffin, 1999).

The paper of Hovden et al. (2008) examines the role of WERs in the modern working environment. The data from Norwegian offshore oil and gas sector showed that employers rely more on the capacity of the formal health and safety management systems, than do the WER put more emphasis on the need for daily and continuous health and safety consultations. The study also revealed that the climate of participation and

collaboration is assessed by the safety representatives as being less conductive to the overall objectives of the health and safety regulations than perceived by the managers. The results of the study also demonstrate a lack of consistency between identified problems in the role of WERs and proposed measures of improvements in their role and functions.

There is a need for safety climate measurement instruments (Hall et al., 2013). Measurement of safety climate requires an instrument to record employees' self-reported perceptions on safety issues. The safety climate instrument has to be theory-based. The method worked out by Hall et al. (2013) consists of the following parts: 1) manager and supervisor attitude toward safety, 2) risk, 3) group norms, 4) workplace pressure, 5) competence, 6) safety system. They all are directed to intention to follow safety procedures. Testing the Hall model among managers, supervisors and other employees, the result showed that managers and supervisors self-reported a significantly higher safety climate than other participating employees.

There is a strong connection between worker representation and participation and the establishment of an effective preventive OHS system at the workplace (Walters et al., 2005). Working in small enterprises, there is a bigger risk to get into accident or get injury than in big enterprises (Sorensen et al., 2007; Kongtip et al., 2008). In small enterprises:

1) there is a higher risk of severe and fatal accidents;
2) there is a higher risk of minor accidents if all accidents are reported;
3) OHS management system is less common;
4) there is only scattered data about other hazards.

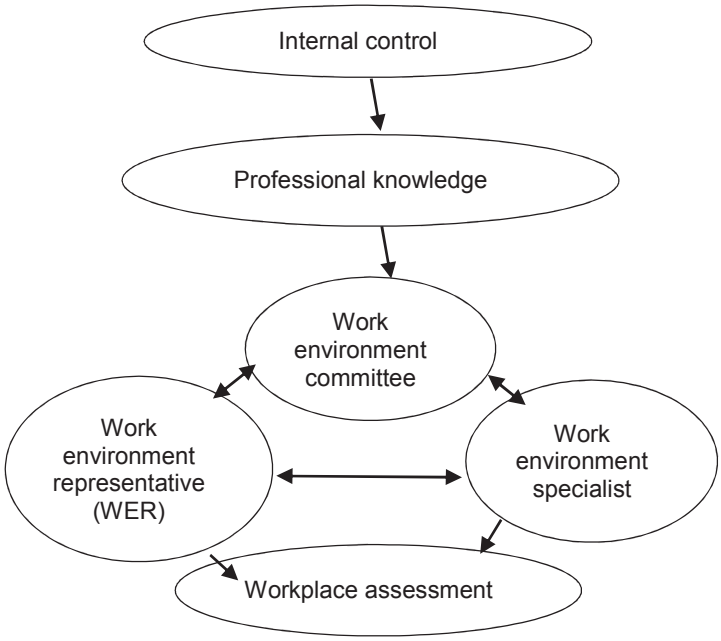

Figure 1. The arrangement of OHS command at workplace.

The OHS activities in the Nordic countries are organized (Karlsen & Lindoe, 2006), combining a top-down and a bottom-up approach to the organizing of health and safety activities to be effectuated as a part of the line organization (Fig. 1), where everyone at his/her level has a particular responsibility to improve the OHS quality of the workplace. The overall responsibility rests with the employer, who will seek the support both from his professional staff and from the participants in the OHS organization of the company. The same model applies to Estonia as well; nowadays Labour Inspectorate offers free consultancy in OHS expertize for those enterprises where professional knowledge is lacking.

OHS experts are not available in small enterprises in Estonia, therefore the professional knowledge has to be ordered outside.

Four areas in MISHA: A) organization and administration (including safety activities in practice (**A2,** the numbering in Kuusisto, 2000)), including in turn WER activities (**A2.6**), B) participation, communication, and training; C) work environment, D) follow-up.

Formal safety elements include (in parenthesis given the influence of OHSAS 18001 implementation in Estonian enterprises to the safety key element, correlated to the total safety level (score)): safety documents, contents of the safety policy (R = 0.895), revising the safety policy (R = 0.972), written policy (R = 0.964), assignment of tasks and responsibilities (R=0.885), safety policy's connections to the company's other activities (R = 0.964) and follow-up of accidents statistics (R = 0.929) (Paas, 2015a). These were the most correlated safety key elements that influenced on the total safety level positively.

Real safety elements include the safety key elements from the part **A2** as follows: top management's, line management's and supervisor safety knowledge; resources**.** From this part, OHSAS 18001 implementation in the enterprise influences only on resources (Paas, 2015a, p.30).

Combined safety elements include the safety key elements from the part **A2** as follows: 1) safety committee/ and or other cooperative teams, safety manager, safety representatives (WER) and/ or other cooperative teams (**A2.6**). The results (Paas, 2015a) show that all these elements have no correlation with the total safety score at the enterprise.

The safety activities in practice (**A2**) include (MISHA, Kuusisto, 2000): 1) top management's safety knowledge, 2) line management's safety knowledge, 3) supervisor's safety knowledge, 4) safety committee and/ or other safety team, 5) safety manager, 6) **safety representative (WER)** and/or other personnel representative(s) (**A2.6**), 7) occupational health services and 8) resources.

MATERIAL AND METHOD

Eleven Estonian manufacturing enterprises (Table 1) were examined with modified MISHA method (Kuusisto, 2000) for clarifying the role of the WER in OHS matters as well as for studying the perspectives to improve the safety level of the enterprise through more effective WER activities.

The qualitative study was carried out in these 11 companies in the form of interviews of before given persons. The interviewing of employer or WER both give the

information about the present and possible role of WER. The interviews were assessed independently by all the authors of the current paper. The interviews were also taken as the basis for the quantitative study.

For assessment to the MISHA questionnaire, the Likert scale (1 – poor, 2 – average, 3 – good, 4 – very good, 5 – excellent) was used.

The safety key elements connected with the WER activities at enterprises are presented in Table 3. The questions from the MISHA questionnaire that concern the WER activities in enterprises and analysed in the current study, are as follows:

A1.5. Participation in the preparation of the policy: the participation of employers, WER and other workers' representatives is very important as so the information motion inside the enterprise is achieved.

A1.6. Initial status review: contains the first description of the work environment situation included into the safety policy.

A1.10. Informing external bodies about the policy: it is suggested that somebody outside (e.g. the inspector from the Labour Inspectorate or from the accreditation authorities) has examined the content of the policy. This part also includes how the temporary workers, sub-contractors and clients can access the safety policy of the current enterprise.

A2.4. Safety committee: if the enterprise has the safety committee, containing from the workers 'representatives (WERs) and the representatives of the employers, the safety and health questions at work are better dealt with and improvements in the field of OHS are possible.

A2.5. Safety manager: if the enterprise has the occupation as safety manager, the questions of safety certainly are in the foreground and the safety level could be improved. Usually, in Estonia, the enterprises are small-scale or medium-sized and they cannot afford the occupation 'safety manager'. The responsibilities are usually taken by the production manager or even by the manager of human resources.

A2.6. Safety representative: (or called working environment representative) is the workers' delegate in the safety committee. His (her) possibilities to improve the safety level at enterprises are very large. Enough time to deal with the safety matters has to be given to WER. He (she) has to be trained and the employer and safety manager have to be in good relations with the WER.

A3.3. Selection of the line management: the candidates have to be able to evaluate how the personnel copes with the work, to motivate the personnel, to be able to identify the health and safety hazards and handle the problems related to the human relations.

B3.1. Safety training needs: it has to be insured that the employees can to participate in the evaluation of the safety trainings. The safety training has to cover all the personnel groups.

D1.2. Accident investigation: the question concerns if there in the company, a person who investigates the accidents, is defined. If the corrective actions have been identified in the safety policy how to prevent similar accidents to occur, this gives the extra points to the safety level.

D3.1. Assessment of the social environment: does the company have a system for measuring social climate (e.g. climate surveys)? Are the corrective actions done immediately when problems to social relations have been observed?

In some of these companies, employees from three different level in the line of the safety management system were interviewed: the employer, the work environment

specialist and the work environment representative. In locally owned companies, where the safety level is rather low, the managers did not recommend to have interviews with WER as their knowledge in OHS tends to be low. This presented the quantitative study.

The possibilities to improve and subsequently to use the knowledge of the WER in OHS are different in corporated or OHSAS 18001 implemented companies compared with small and medium- sized locally owned companies.

The statistics used in the paper involved IBM SPSS Statistics 22.0 and R.2.15.2. The following statistical methods were used: correlation, MANOVA, factor analysis, principal component method, independent T-test (Field, 2013).

RESULTS

The results of the quantitative analysis are given in Table 1. In the first columns the characterization of the investigated enterprises is given. The interviews with the enterprises' representatives (column 5) carried out and recorded, were afterwards listened and analysed by the four authors of the paper independently. The total average score (column 6) is derived with MISHA method.

Table 1. The characterization and results of quantitative study by the MISHA method in the investigated enterprises (N = 11)

1	2	3	4	5	6
Id. of the company	The activity area	Size, employees	OHSAS company /corporated company	The person interviewed: position, age	Total average score (100 max)
I	Plastic industry	50–249	+/	Quality manager, 41 Safety manager, 62WER, 25	78 76 78
II	Electronics	> 250	/+	Quality manager, 35 Safety specialist, 42 WER, 53	84 90 80
III	Food industry	> 250	/+	Safety manager, 62 WER I, 34 WER II, 39	75 80 58
IV	Electronics	> 250	+/	Quality manager, 59 Safety manager, 39 WER, 66	92 88 78
V	Textile industry	50–249	-/-	Production manager, 38	47
VI	Printing industry	< 50	-/-	Production manager, 36	29
VII	Glass industry	< 50	-/-	Production manager, 41	41
VIII	Chemical industry	50–249	+/	Management's representative, 55 WER, 62 External auditor, 34	88 85 78
IX	Chemical industry	50–249	+/	Management's representative, 45 WER, 40 External auditor, 34	87 87 78

Table 1 (continued)

X	Metal industry	50–249	-/-	Management's representative, 40	61
				WER, 53	55
				External auditor, 53	50
XI	Metal industry	> 250	-/+	Safety manager, 35	89
				Trade union representative, 60	86

Quantitative study:

The total scores given on the safety level, derived with the MISHA method (Paas et al., 2015a) from employer, WES and WER were compared. In the corporated companies and OHSAS 18001 companies, the total scores are high (80–85 from 100 possible). In locally owned companies, the scores are lower (below 50 from 100 possible). There is no significant difference between the scores given by three employees involved in safety in the same company in the corporated or OHSAS 18001 implemented companies. In some companies, only a slight decrease in the case of WER compared to employer representative was observed. The situation varies in locally owned companies. The scores do not differ significantly, but the knowledge of WER in these companies about safety matters was negligible and was clearly seen and heard in the interviews carried out by the safety experts.

The difference between the meanings of the assessors (employer, auditor or WES and WER) was until 24.7% in some of the subareas, like A) organization and administration (including safety activities in practice, including in turn WER activities), B) participation, communication, and training; C) work environment, D) follow-up) containing in the MISHA method.

The correlation analysis connected with safety activities areas (including WER)

The most correlated safety key elements in the studied enterprises were: top management commitment to the safety policy & resources (R = 0.99); revising the safety policy & resources (R = 0.96); written safety policy & resources (R = 0.95); safety policy's connections to company's other activities & resources (R = 0.95); assignment of tasks and responsibilities & resources (R = 0.93); dissemination of the policy & resources (R = 0.93); follow-up of accidents and illnesses & resources (R = 0.93); participation in the preparation of the policy & resources (R = 0.92); contents of the policy & resources (R = 0.91); resources & assessment of the social work environment (R = 0.9); WER & the content of the policy (R = 0.9).

The results can be interpreted as follows: a) the safety overall safety level depends on the resources given to the OHS activities by the employer in the enterprise; 2) the psychosocial work environment is getting gradually more attention by the employees; 3) the workers are not involved on practical issues of safety policy development, yet.

Among OHSAS 18001 implemented enterprises, there is a strong correlation between safety activities in practice **A2** & personnel management (R = 0.7); safety activities in practice **A2** & personnel safety training (p = 0.05). Among non-OHSAS the correlation between safety activities in practice **A2** & personnel management is 0.94

(p = 0.1); safety policy & safety activities in practice **A2** R is 0.90; safety activities in practice **A2** & hazard analysis procedures has correlation coefficient R = 0.88.

Safety activities in practice **A2** (MISHA) has good correlation in all non-OHSAS companies in Estonia (Fig. 2).

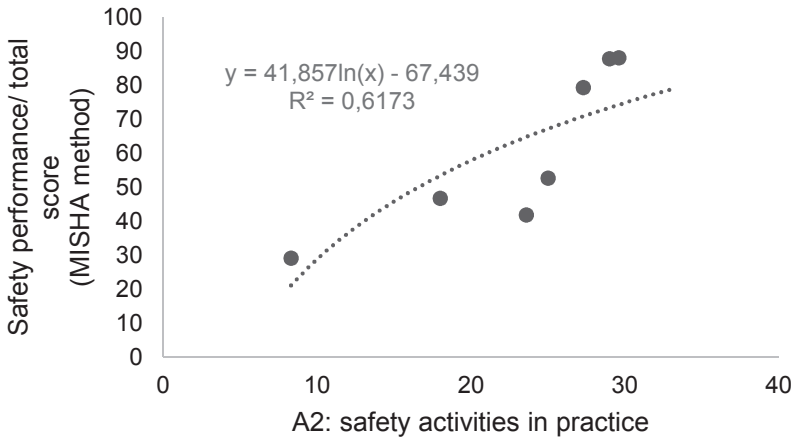

Figure 2. The influence of safety activities (including WER) on the total safety score in non-OHSAS companies.

Hypothesis H1

Factor analysis were carried out with KMO and Barlett's test (Field, 2013). The alpha correction (ANOVAs with Tukey's HSD post-hoc tests) was implemented and so the **H1** and **H2** were confirmed.

From **A2,** the following key elements were taken into the statistical analysis: top management, line management and supervisor safety knowledge, safety manager, WER, occupational health services activities and resources for these activities (Table 2).

The result showed that there was a statistically significant difference in real safety performance based on a firm type (OHSAS or non-OHSAS), F (26.2) = 17.311, $p < 0.1$. Wilk's $\Lambda = 0.000$, partial $\eta^2 = 0.996$. Power to detect the effect was 0.854.

It can be concluded from the Table 2 that at the present time, the firm type influences the safety policy part in the OHSAS implemented and non-OHSAS companies (p = 0.000), but only concerning the safety activities in practice on the top management's safety knowledge (p = 0.039). The role of WER is not significant (p = 0.350). At the same time, the firm's type is significant on the supervisor/employee communication (p = 0.001) and on general communication procedures (p = 0.006).

Table 2. Correlation between the safety key elements **H1**

Safety key element	Sum of squares (KMO and Barlett's test)	p-value
A1.2.Top management commitment to the safety policy	22.250	0.000
A1.9.Dissemination of the policy	21.007	0.000
A2.1. Top management's safety knowledge	3.005	0.039
A2.2. Line management safety knowledge	0.854	0.383
A2.3. Supervisor's safety knowledge	0.410	0.412
A2.5.Safety manager	0.540	0.450
A2.6. Safety representative	**0.250**	**0.350**
A2.7. Occupational health services	2.410	0.193
A2.8. Resources	22.688	0.000
A3.4. Promotion, rewards and career planning	4.264	0.006
B1.1. Supervisor/employee communication	**5.672**	**0.001**
B2.1. General communication procedures	**2.896**	**0.006**
B2.3. Suggestions for improvements	5.500	0.027
B2.4. Campaigns	9.797	0.039
C1.2. Chemical hazards	3.563	0.021
C1.8. Maintenance	4.500	0.002

Hypothesis H2

There was a statistically significant difference in both formal and real safety performance based on a firms type (OHSAS and non-OHSAS), F (26.2) = 11.472, $p < 0.1$; Wilk's $\Lambda = 0.000$, partial $\eta^2 = 0.993$. Power to detect the effect was 0.730.

The type of the firm (Table 3) influences on the policy section (A1, p = 0.000-0.001). We can see from the Table 3 that the safety committee's (p = 0.214), safety manager's (p = 0.220) or WER's (p = 0.282) position in Estonian enterprises is very low. At the same time, the significance of selection of a safety manager (personnel policy), safety training needs (p = 0.000), assessment of social environment (0.000) were very high. These are the areas in the enterprise, where WER can influence in case her/his position is supported by the regulations and the employer.

Table 3. Correlation between the safety key elements **H2**

Safety key element	Sum of squares (KMO and Barlett's test)	p-value
A1.5. Participation in the preparation of the policy	21.250	0.000
A1.6. Initial status review	13.375	0.001
A1.10. Informing external bodies about the policy	17.241	0.001
A2.4. Safety committee	**3.200**	**0.214**
A2.5. Safety manager	**1.194**	**0.220**
A2.6. Safety representative	**1.521**	**0.282**
A3.3.Selection of the line management	3.063	0.017
B3.1. Safety training needs	8.491	0.000
D1.2.Accident investigation	4.125	0.007
D3.1. Assessment of the social work environment	19.125	0.000

Qualitative study:

Case A: a company, belonging to the foreign concern with a high safety level has 16 WERs per 250 workers, one in each department. The safety committee meetings are carried out regularly; all the WERs are included in the mailing list of the meetings. Written reports of the meetings are distributed to the WERs after the meeting, the distribution of information in the company is very good. Even when WERs are informed well, they are not involved in decision-making processes concerning OSH such as preparing safety policy, conducting risk assessments etc.

The question (**1**) to the work environment specialist (WES): '*Are the WERs as the representatives of workers allowed to make changes in the safety policy?'*

The answer: '*No, the safety policy is given in the written form to the subsidiary company (in Estonia) from the owner of the corporation (in Finland)' (Company A, Int 1)*

Case B: a small locally owned company (15 employees), where OHS matters are not a priority and no systematic OSH work is visible. A production manager (PM) has shortly signed to fulfil the responsibilities of WES, on labour inspector's request. The risk levels of occupational hazards in manufacturing department are high. Before the visit of the labour inspector, the responsibilities in OHS were delegated to the accountant. At present, she represents workers as WER, however no formal elections have been organized and her knowledge in OSH is questionable. There are several areas where WER can be involved; however, the PM and WES do not see the potential in her. Many safety shortages were identified during the interview, for example how to maintain the protective clothing or educate experienced workers in safety matters or how to involve the workers to risk assessment process.

The question (**2**): '*How do you carry out the protective clothing maintenance? Is there a washing machine in the enterprise or is it performed by the subcontracting firm?'*

The answer of the PM: '*We have the washing machine, but we do not use it, as the workers wash the work clothes at home together with the other everyday clothes*.' *(Company B, Int 2)*

Additionally, the PM confessed that the workers have not been told about the danger of the sharp particles that can be found in the work clothes and the work clothes are not allowed to wash together with the everyday ones. No WER is involved in this problem.

The question (**3**): '*Has the car driver educated in slippery road driving (the courses are available in Estonia) or has he provided with sunglasses for creating the better driving conditions*?'

The answer of the PM: *'The driver has worked already 40 years without sunglasses and he knows how to drive the car in winter. Training is not necessary*.' *(Company B, Int 2)*

The question (**4**): '*Is the risk analysis carried out and improved according to the changes in the industrial process regularly? Is the action plan to reduce the risk level compiled in the enterprise?'*

The answer of the PM: '*We have carried out measurements of noise and conducted risk analysis after the visit of labour inspector, but as the noise level was not over the norm, we have not had time to compile the action plan.' (Company B, Int 2)*

The PM of the company pointed out that template for work descriptions would be useful from the side of Labour Inspectorate to support the overall improvement of the OHS level in small and medium-sized enterprises in Estonia.

Case C: a locally owned company with 40 workers. The production manager (PM) was questioned. A lot of OSH shortages were identified; no systematic work and no representation of workers in OSH matters were detected. No clear answer was given about safety policy and it is quite clear that workers are not informed about it.

The question **(5)**: '*Do you have the safety policy at the enterprise? Who has compiled it?'*

The answer of the PM: '*We had something when the ISO (?) was implemented; something has still remained from it. We have no WES, also no WERs. Everything is explained during the production process. If a new machine is obtained, then the providers train the workers in safety matters.' (Company C, Int 4)*

The question (**6**): '*Have you visited the occupational health doctor lately? Do you have the plan for medical examinations of workers?'*

The answer of PM*: 'No, we have not the plan, but I visited the doctor over 5 years ago.' (Company C, Int 4)*

Case D: a corporated enterprise with 25 employees. The production manager (PM) was questioned. The safety level in the company is high. WERs have been elected, no WE committee needed, but two workers in the production area are continuously following the hazards in the work environment (using measurement devices). Safety as seen as an investment and not as an expense by the management. Line and top managers possess high knowledge in safety matters. Recently, a special meeting concentrating on safety matters, was organized internationally, were all 10 subcontractors from different countries participated. However, some shortages were identified during the interview, mainly about safety policy and dissemination of the document among workers – where WER can be involved. The management had an attitude that workers do not need to know the general policy about safety, they should concentrate on their workplace safety only.

The question (**7**): '*Do you have the safety policy? Are workers aware of this policy?'*

The answer of the PM: '*The policy has been worked out by the foreign owner (some corrections from Estonian side were possible). The workers need not know about the details of the policy.' (Company D, Int 6)*

DISCUSSION

Our study revealed that management plays an essential role in WER's systematic and active work and workers' participation on workplace health and safety matters. In O'Toole (2002), it is also postulated that management leadership is influencing the employee perceptions of the safety management system. Those perceptions appear to influence employee decisions that relate to at-risk behaviours and decisions on the job. Organizational commitment did affect perceived safety at work, but not on work accidents (DeJoy et al., 2010). According to our study, management commitment to safety policy forms a positive starting point for regular activities of WERs. Studies of occupational safety program effectiveness have also highlighted safety policies and programs as important ingredients of effective programs (DeJoy et al., 2004). Neal et al.

(2000) also found a relationship between general organizational climate and safety climate: when the organizational climate improves (the standards are implemented), the safety climate also will be better.

Our study examined three different types of companies: OHSAS certified companies, corporated companies and small and medium-sized locally owned companies. It turned out that the definition of 'small enterprises' is not sufficiently specific. Small enterprises cover many types of work activities, which naturally lead to large differences in the work environment. Small enterprises are more susceptible to influence from various 'external' sources e.g., though the ownership structure. It might be important whether the small enterprise is part of a larger organization and whether it is publicly or privately owned (Sorensen et al., 2007). This problem remains for the future research.

Compared to Estonian OHS system in companies, Nordic OHS regime contains three different collaborating arenas or structures within the company: 1) a work environment or safety committee with balanced representation from the parties; 2) safety representatives elected by the employees; 3) in-house or external health and safety experts employed by and representing the management (Lindoe et al., 2001). According to the OHS Act (1999), based on EU Framework Directive 89/91, the employer and employees have to co-operate and there have to be opportunities for both parties to consult on the relevant OHS matters. The ensuring right of worker participation is stated in mandatory forms of industrial health and safety national legislation and in the EU Framework Directive 89/391. In Estonia, WER has to be trained following the 24-h training programme provided in the regulation. In Norway, the social partners agree that a 40-h course covers the basic training necessary to function as a WER (Hovden et al., 2008).

In our qualitative study, we concluded that WERs assessed the time for dealing with OHS matters unsatisfactory. The results in Nordic countries (Hovden et al., 2008) show similar pattern – often WERs complained about lack of time. The examples of the best experiences of the Nordic countries should be used in order to increase workers' participation and representation in health and safety matters.

CONCLUSIONS

The answer to the *hypothesis H1*: the firm type (OHSAS-implemented and non-OHSAS enterprises) has an impact on real safety performance.

The answer to the *hypothesis H2*: the type of the firm has a significant impact both on formal and real safety performance.

The general conclusions are following:

1. The position of safety representative has often a low status in the company.
2. WERs do not have enough time to fulfil their safety functions to keep employees safe.
3. There is a limited understanding among employers about the role of WER. The study showed that in small enterprises, the WER has a formal position, although required by the law. In that case, employers do not understand the need of the WER and while electing them only formally, there is no practical value and often, employees are unaware of the position. The interviews also revealed that it is complicated to find the candidates to the WER position even in larger companies, especially in locally owned companies

as managers do not know how to motivate workers on taking an additional responsibility. Safety management system plays a role in effective work of WERs. If the management does not give enough priorities to OHS, the employees will follow the example of the employer. WER should be elected among the peers rather than using WERs from other departments.

4. The WER of the organization is not well known or acknowledged by all the employers and subcontractors. The subcontracting work may cause several accident and near-accident situations. The importance of the person (WER), who knows how to deal with the problems in OHS, becomes evident only after the accident has occurred or some of the workers are already seriously ill with occupational disease, such as musculoskeletal disease. The MSD is, at the present time, the number one occupational illness in almost every European country (Kaergaard & Andersen, 2000).

5. Doing WER work successfully is difficult due to conflicting expectations from employer and colleagues. The interviews revealed that nobody in the enterprise wants to be the resolver of a risky situation or even accident. Therefore, it is particularly important to prevent these situations by increasing the knowledge on OHS. For this occasion, WER and his/her knowledge and activities are a very good solution. It is important to mention that he/she needs enough time to gather the information on OHS and his/her activity has to be acknowledged by the employer.

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