

ASSESSMENT OF IMPLEMENTATION OF WORK SAFETY MANAGEMENT PROCESSES IN MANUFACTURING COMPANIES THAT HAVE VARYING RISK CATEGORIES

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Abstract: This Chapter presents results of research conducted in 2011 in small and medium manufacturing companies of southern Poland. The objective of our research was to obtain a reply to the question if there were any differences in enforcement levels of selected work safety management processes in small and medium manufacturing companies that belong to do trades with varying levels of risk resulting from the type of business they run.

Key words: work safety management, risk, small and medium enterprises

1. Introduction

Both the theory and practice of management indicate that the best effects in improving the way organisations are operated are offered by improvements that are enforced the level of company processes [8, s.46].

The notion of a *process* should be understood as each sequence of actions being performed within a company, connected both with direct manufacturing (basic processes), as a result of which a product or service arises, and with indirect manufacturing (auxiliary processes) aimed at effective operation of and support for basic processes [2, s.67]. Typical auxiliary processes are processes connected with management of finance, material assets, strategies, human resources, as well as with work health and safety management.

In their activities, most organisations are focused upon improving the attributes of their basic processes, which create the company's added value, thus being crucial from the point of view of its survival and expansion, at the same time paying less attention towards their auxiliary processes, including work health and safety processes, unless their determined operations are forced by legal regulations or result from standards adopted by the company. Such processes, which result from legal regulations and from the Polish Standards series 18000, include [5, s.18-21]:

- The identification of hazards and occupational risk assessment process,
- The work conditions monitoring process,
- the process of enforcement of WH&S corrective and preventive actions,
- the WH&S internal communication process,
- the process of enforcement of WH&S training programmes, and
- the process of identification and implementation of legal regulations and other external rules in the area of WH&S.

2. Characteristics of selected work health and safety management processes

The identification of hazards and occupational risk assessment process covers the following four basic operations [3, s.90]:

- identification of hazards,
- risk analysis and identifying means of protection,
- estimating risk levels, and
- deciding whether or not a given risk is acceptable the company.

In order to conduct the occupational risk assessment, the following preparations should be made [7, s.26]:

- providing for necessary resources, appointing persons required to do the job,
- identifying training needs and training conditions for persons supposed to conduct the occupational risk assessment,
- providing for employee participation in occupational risk assessment,
- providing for availability of required information to persons supposed to assess the occupational risk
- making a list of work stands, reviewing them, and
- defining manners to inform about occupational risk conditions.

The work conditions monitoring process consists in watching the status of conditions of work, employee behaviours, and results of actions being taken in order to improve work health and safety [4, s.222]. Monitoring can be divided into reactive and proactive. In line with the PN-N-18001 Standard, reactive monitoring consists in watching the WH&S status by recording and analysing reasons for accidents at work and for occupational illnesses in order to draw conclusions about effectiveness of preventive and protective plans and procedures and means based upon analysis of reasons for accidents at work and for occupational illnesses [6]. On the other hand, proactive monitoring consists in watching the WH&S status by checking the degree of implementation and effectiveness of plans, actions and means used to prevent from occurrence of accidents at work and occupational illnesses [6].

Any monitoring process should [1, s.82]:

- be a source of feedback upon the WH&S status within a company,
- make it possible to acquire information required to identify the reliability of using organisational solutions concerning identification of hazards and preventing or limiting occupational risks, and
- offer grounds to make decisions concerning making improvements in the process of identifying hazards, limiting occupational risk and functioning of the work health and safety management system.

The process of enforcement of WH&S corrective and preventive actions constitutes a reaction towards irregularities uncovered in monitoring or auditing sessions. Corrective actions are enforced in case any irregularities are discovered, i.e. existing (actual) non-conformances, whereas preventive actions – in case any potential irregularities (non-conformances) are discovered, which may lead to the occurrence of actual non-conformances within a foreseeable moment in time [4, s.232]. Corrective and preventive actions should be initiated by company management, and their reliability should be verified on a regular time basis [6]. Corrective and preventive actions may also be initiated and performed as a result of decisions, orders or recommendations received from authorities that supervise conditions of work, complaints or postulates submitted by employees or remarks submitted by customers and subcontractors. Depending on the particular needs or situations, corrective and preventive actions may be performed immediately, or they may be more comprehensive and long-term in nature. Effects of irregularities should be immediately limited wherever they are associated with any unacceptable levels of occupational risk.

The internal WH&S communication process includes acquisition of required WH&S issues inside the organisation, and delivering them into the places where they can be required [4, s.210].

Within the frameworks of the communication process, it is necessary to define the scopes, types and forms of information being conveyed, and to implement procedures of obtaining, documenting and reacting to relative information and enquiries from the parties involved [6]. Internal manners of conveying WH&S information include leaflets, newsletters, posters, bulletin boards, arranging meetings, and internal correspondence using electronic mail. Reliable internal communication requires for the information to be understandable and properly clarified, possible to be verified, reliable, and mirroring the company's WH&S operations and their effects. It also must be presented in a uniform format. Communication should be bidirectional.

The WH&S training process should account for needs, tasks and responsibilities of particular employee groups. Their training programmes should cover [6]:

- information concerning work health and safety policies and functioning of those elements of the management system, which are connected with actions being carried out by trained employees;
- information upon statutory requirements concerning work health and safety issues within a company;
- general information upon hazards that occur within a company, occupational risks associated with them, and work health and safety rules being in force;
- information upon hazards that occur at the particular work stands, occupational risks associated with them, and safe work principles;
- information upon potential consequences of failure to abide by the prescribed procedures, and upon how to proceed in situations of accident at work or machinery failure.

Training programmes should be verified for quality and reliability, and examination results should be documented and accounted for while preparing contents of training programmes and planning subsequent ones. Periodically, conformance of training programmes with statutory requirements and the company's current internal requirements should also be verified. In case use is made training services externally, it is necessary to assess such services suppliers.

The process of identification and enforcement of WH&S legal regulations and other external rules should cover such operations as [6]:

- providing for availability of relative legal and other requirements,
- keeping track of legal and other requirements and amendments being made to them,
- conveying relative information concerning legal and other requirements to employees.

Identification of legal and other requirements should cover:

- regulations concerning work health and safety,
- regulations and standards that refer to safety of products and services, regulations that refer to a given business or the technology used,
- guidelines from trade-specific and professional associations,
- voluntary rules, which the companies may oblige themselves to meet.

Each of the processes as enumerated above may be described by means of a number of attributes, the most important one of which is effectiveness measured by costs and duration

of the process as well as its reliability, i.e. its capability of achieving the objectives that have been adopted for the process.

By using the process approach towards the work health and safety management issue, reliability and effectiveness in enforcement of actions being run in this area may be improved, and the first action to be taken within the frameworks of implementing this approach should be to identify the processes and to assess their current enforcement levels.

In the light of the above, it becomes important to identify enforcement levels of work health and safety processes in small and medium manufacturing companies that have varying risk categories for the business type they run.

3. Research methodology

This article is based upon results of tests conducted in 95 small and medium industrial processing businesses (section C of the economy) in southern Poland (mainly in the Silesian Province). The majority of this group were small companies, i.e. those that employed 10 to 49 employees inclusive (63.68% - Table 2). The remaining part was made up of medium companies, i.e. those that employed 50 to 250 employees inclusive. Micro companies were not covered by the tests.

Tests were carried out using the polling method in 2011. Questionnaires were delivered to companies that had been selected in line with random selection principles, whereas the precondition for the poll to be accepted was to fill in a standard questionnaire form containing basic information upon the company (its name, seat of business, employment, legal form, etc.). Respondents were top level managers and direct supervisors. The statistical data obtained was processed using the STATISTICA software. Basic statistical measures were used in statistical analysis.

The objective of our research was to obtain a reply to the question if there were any differences in the assessment of enforcement levels of basic work health and safety management processes in manufacturing companies that varied in size and whose businesses had different risk categories.

Initially, it was assumed that the companies that had higher business risk categories should pay more attention towards enforcement of their work safety management processes, (which should translate into higher assessment of their enforcement levels), than the companies that had lower business risk categories. The following basic work health and safety management processes were adopted for the analysis:

- identification of hazards and occupational risk assessment (IDE),
- the monitoring process conditions of work (MON),
- the process of enforcement of WH&S corrective and preventive actions (PRE),
- the WH&S internal communication process (COM),
- the process of enforcement WH&S training programmes (TRA)
- the process of identification and implementation of legal regulations and other external rules in the area of WH&S (REG).

4. Business risk categories within the analysed group of companies

Particular business risk categories are identified pursuant to Annex No. 2 to the Ordinance by the Minister of Labour and Social Policies of 29 November 2002 upon differentiating interest rates of social insurance instalments on account of accidents at work and occupational illnesses, depending on occupational hazards and their effects [9].

Business risk categories are calculated based upon partial risk categories connected with the value of such factors as: victims of accidents at work in total, victims of fatal and serious accidents, and victims of accidents who have been employed in hazardous conditions, which occur in case the highest allowable concentrations and intensities of agents that are detrimental to human health are exceeded in their work environments. Partial risk categories are defined in Annex No. 3 to the Ordinance by the Minister of Labour and Social Policies of 29 November 2002 upon differentiating interest rates of social insurance instalments on account of accidents at work and occupational illnesses depending on occupational hazards and their effects [9]. The higher the risk category, the higher the input value of instalments paid by the company for accident insurance (higher interest rate).

Companies may adjust the interest rate's input values both up and down by using appropriate adjustment factor, whose value depends upon difference between the risk category for the group of businesses, to which a given company belongs as per the PKD [Polish Classification of Business Activities] and the so called company risk category, calculated based upon such factors as: victims of accidents at work in total, victims of fatal and serious accidents, and victims of accidents who have been employed in hazardous conditions for a given company. This means that if a company runs effective work health and safety policy, which manifest itself in lower factors of victims of accidents and victims of accidents who have been employed in hazardous conditions, then it is allowed to pay lower instalments for accident insurance than the average rate being in force for the particular type of business activity.

The studied group of small and medium companies was significantly differentiated for the type of business they ran. Table 1 lists data concerning: the type of business (16 sectors), number of companies that represented a given business type (N from 1 to 24), business risk category (3 to 10) and the interest rate on instalments for accident insurance in 2011, which corresponded to this category (0.93% to 2.80%).

Table 1. Risk categories and their corresponding interest rate on instalments for accident insurance for the analysed industrial processing sectors

Business types in industrial processing sectors (section C of the economy)	Risk categories and interest rate from 1.04.2010 to 31.03.2012	
	Category	Rate
C14 – Manufacture of wearing apparel (N=6)	3	0.93%
C26 – Manufacturing of computer, electronic and optical products (N=5)	4	1.20%
C19 – Manufacture of coke and refined petroleum products (N=1)	5	1.47%
C20 – Manufacture of chemicals and chemicals products (N=2)	5	1.47%
C10 – Manufacture of ford products (N=10)	6	1.73%
C11 – Manufacture of beverages (N=3)	6	1.73%
C22 – Manufacture of rubber and plastic products (N=8)	6	1.73%
C29 – Manufacture of motor vehicles, trailers and semi-trailers (N=2)	6	1.73%
C17 – Manufacture of paper and paper products (N=5)	7	2.00%
C25 – Manufacture of fabricated metal products, except machinery and equipment (N=24)	7	2.00%
C28 – Manufacture of machinery and equipment n.e.c. (N=2)	7	2.00%

C31 – Manufacture of furniture (N=12)	7	2.00%
C23 – Manufacture of other nonmetallic mineral products (N=8)	8	2.26%
C16 – Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials (N=2)	9	2.53%
C30 – Manufacture of other transport equipment (N=1)	9	2.53%
C24 – Manufacture of basic metals (N=4)	10	2.80%

Source: Own work based upon [9]

Within the analysed group of companies, 8 business risk categories were identified. Table 2 lists risk category data taking into account company sizes: S is the group of small size companies (10 to 49 employees), and M is the group of medium size companies (50 to 249 employees).

Table 2. Risk categories for business types within the analysed group of 95 small (S) and medium (M) manufacturing companies

		Risk categories for business types								Total
		Cat.3	Cat.4	Cat.5	Cat.6	Cat.7	Cat.8	Cat.9	Cat.10	
Sample size in total		6	5	3	23	43	8	3	4	95
% of the total (from 95)		6.32	5.26	3.16	24.21	45.26	8.42	3.16	4.21	
S	Sample size	5	3	1	11	23	4	3	1	51
	% from the column	83.33	60.00	33.33	47.83	53.49	50.00	100.00	25.00	
	% from 51	9.80	5.88	1.96	21.57	45.10	7.84	5.88	1.96	
	% of the total	5.26	3.16	1.05	11.58	24.21	4.21	3.16	1.05	63.68
M	Sample size	1	2	2	12	20	4	0	3	44
	% from the column	16.67	40.00	66.67	52.17	46.51	50.00	0.00	75.00	
	% from 44	2.27	4.55	4.55	27.27	45.45	9.09	0.00	6.82	
	% of the total	1.05	2.11	2.11	12.63	21.05	4.21	0.00	3.16	46.32
Cat.3 – Manufacture of wearing apparel										
Cat.4 – Manufacture of computer, electronic and optical products										
Cat.5 – Manufacture of coke and refined petroleum products										
Cat.6 – Manufacture of food products, manufacture of beverages, manufacture of rubber and plastic products, manufacture of motor vehicles, trailers and semi-trailers										
Cat.7 – Manufacture of paper and paper products, manufacture of fabricated metal products, except machinery and equipment, manufacture of machinery and equipment n.e.c., manufacture of furniture										
Cat.8 – Manufacture of other nonmetallic mineral products										
Cat.9 – Manufacture of wood and products of wood and cork, except furniture, manufacture of articles of straw and plaiting materials, manufacturing of other transport equipment										
Cat.10 – Manufacture of basic metals										

Source: Own research

In terms of number of companies in the particular risk categories, only two groups of companies were accepted for the analysis of the relation between a given risk category and the assessment of enforcement of work safety management processes: companies with business risk category 6, i.e. those that manufactured foodstuffs, beverages, rubber and

plastic and motor vehicles, trailers and semi-trailers (23 entities in total), and companies with business risk category 7, i.e. those that manufactured paper and paper products, finished metal products, machinery and furniture (43 entities in total).

5. Performance of work health and safety management processes within the analysed companies

The companies studied were asked to assess their enforcement levels of their selected work health and safety management processes using a 5-score Likert scale, where assessment score 1 meant that a given action's enforcement level was unsatisfactory, 2 – “low enforcement level”, 3 – “average enforcement level”, 4 – “high enforcement level”, and assessment score 5 meant that the process enforcement level could be assessed as very high.

Table 3 lists values of descriptive statistics of variables concerning the studied management processes for companies in total (N=95). We did not take into account any “0” reply cases in our analyses of the particular processes, hence differences in the values of N.

Table 3. Values of descriptive statistics of variables concerning enforcement of WH&S management processes for companies in total (N=95)

Processes	Values of descriptive statistics of variables							
	N	Average	Median	Min	Variance	Standard deviation	Skewness	Kurtosis
TRA	95	3.9684	4	1	0.6479	0.8049	(-)0.6923	1.0193
REG	94	3.9680	4	3	0.4828	0.6948	0.0426	(-)0.8907
PRE	94	3.6915	4	1	0.6672	0.8168	(-)0.4597	0.4704
IDE	95	3.6737	4	2	0.4988	0.7062	0.0061	(-)0.2617
COM	95	3.6526	4	2	0.5482	0.7404	0.1790	(-)0.4726
MON	93	3.5591	4	1	1.0753	1.0369	(-)0.6993	0.2145

TRA - the process of enforcement WH&S training programmes
 REG - the process of identification and implementation of legal regulations and other external rules in the area of WH&S
 PRE - the process of enforcement of WH&S corrective and preventive actions
 IDE - identification of hazards and occupational risk assessment
 COM - the WH&S internal communication process
 MON - the monitoring process conditions of work

Source: Own research

Negative asymmetry (slope) proves to numerical superiority of entities with relatively higher number of variants of the analysed feature, whereas additional kurtosis informs us about higher degree of their concentration than normal as compared to their average arithmetic level. Additional asymmetry proves to numerical superiority of entities with relatively lower number of variants of the analysed feature, whereas negative kurtosis – to lower degree of their concentration than normal.

5.1. Performance of work health and safety management processes taking into account sizes of the companies studied

In the first part of our analysis, we identified the values of descriptive statistics of variables concerning enforcement of WH&S management processes studied in the group of

small companies – Table 4, and for the group of medium companies – Table 5. Also in this case, we did not take into account any “0” reply cases in our analyses of the particular processes, hence differences in the values of N as compared to the input value. Processes were structured in Tables 4 and 5, taking into account the average value.

Table 4. Values of descriptive statistics of variables concerning enforcement of WH&S management processes for small companies (N=51)

Processes	Values of descriptive statistics of variables							
	N	Average	Median	Min	Variance	Standard deviation	Skewness	Kurtosis
TRA	51	3.9019	4	1	0.7701	0.8776	(-)0.9123	1.4170
REG	50	3.8400	4	3	0.4636	0.6809	0.2094	(-)0.7820
PRE	50	3.6400	4	2	0.5616	0.7494	(-)0.1992	(-)0.1155
IDE	51	3.6078	4	2	0.5231	0.7232	0.1016	(-)0.2587
COM	51	3.5882	3	2	0.6470	0.8044	0.4209	(-)0.6056
MON	50	3.4400	3	1	1.1085	1.0528	(-)0.4364	0.0582

TRA - the process of enforcement WH&S training programmes
REG - the process of identification and implementation of legal regulations and other external rules in the area of WH&S
PRE - the process of enforcement of WH&S corrective and preventive actions
IDE - identification of hazards and occupational risk assessment
COM - the WH&S internal communication process
MON - the monitoring process conditions of work

Source: Own research

Table 5. Values of descriptive statistics of variables concerning enforcement of WH&S management processes for medium companies (N=44)

Processes	Values of descriptive statistics of variables							
	N	Average	Median	Min	Variance	Standard deviation	Skewness	Kurtosis
REG	44	4.1136	4	3	0.4751	0.6893	(-)0.1509	(-)0.8131
TRA	44	4.0454	4	3	0.5095	0.7138	(-)0.0664	(-)0.9646
IDE	44	3.7510	4	2	0.4709	0.6862	(-)0.0848	(-)0.0731
PRE	44	3.7500	4	1	0.7965	0.8924	(-)0.7068	0.9666
COM	44	3.7272	4	2	0.4355	0.6599	(-)0.1513	0.0848
MON	43	3.6976	4	1	1.0254	1.0126	(-)1.0760	0.9761

TRA - the process of enforcement WH&S training programmes
REG - the process of identification and implementation of legal regulations and other external rules in the area of WH&S
PRE - the process of enforcement of WH&S corrective and preventive actions
IDE - identification of hazards and occupational risk assessment
COM - the WH&S internal communication process
MON - the monitoring process conditions of work

Source: Own research

Within the group of small companies, unsatisfactory level of enforcement of actions (assessment score 1) observed for work conditions monitoring processes (MON) and WH&S training programmes (TRA), whereas within the group of medium size companies – for work conditions monitoring processes (MON) and enforcement of WH&S corrective and preventive actions (PRE).

5.2. Performance of work health and safety management processes taking into account risk category for the analysed companies

In the second part of our analysis, we identified the values of descriptive statistics of variables concerning enforcement of WH&S management processes studied in the group of companies with business risk category 6 – Table 6 (those that manufactured foodstuffs, beverages, rubber and plastic products and motor vehicles, trailers and semi-trailers – 23 entities), and for the group of companies with business risk category 7 – Table 7 (those that manufacture paper and paper products, finished metal products, machinery and furniture – 43 entities). Also in this case, we did not take into account any “0” reply cases in our analyses of the particular processes, hence differences in the values of N with reference to the input value. Processes were structured in Tables 6 and 7, taking into account the average value.

Table 6. Values of descriptive statistics of variables concerning enforcement of WH&S management processes for companies with business risk category 6 (N=23)

Processes	Values of descriptive statistics of variables							
	N	Average	Median	Min	Variance	Standard deviation	Skewness	Kurtosis
REG	23	3.9565	4	3	0.4071	0.6380	0.0326	(-)0.2391
TRA	23	3.9560	4	3	0.4980	0.7057	0.0610	(-)0.8195
IDE	23	3.7826	4	3	0.5415	0.7359	0.3755	(-)0.9748
COM	23	3.6956	4	2	0.5849	0.7648	(-)0.0669	(-)0.1544
PRE	22	3.6818	4	2	0.7987	0.8937	(-)0.1673	(-)0.5311
MON	22	3.5909	4	1	1.1103	1.0537	(-)0.6659	0.3562

TRA - the process of enforcement WH&S training programmes
REG - the process of identification and implementation of legal regulations and other external rules in the area of WH&S
PRE - the process of enforcement of WH&S corrective and preventive actions
IDE - identification of hazards and occupational risk assessment
COM - the WH&S internal communication process
MON - the monitoring process conditions of work

Source: Own research

Within the group of companies with business risk category 6, unsatisfactory level of enforcement of actions (assessment 1) was observed for the work conditions monitoring process (MON), whereas within the group of companies with business risk category 7 – for work conditions monitoring processes (MON) and enforcement of corrective and preventive actions (PRE).

Table 7. Values of descriptive statistics of variables concerning enforcement of WH&S management processes for companies with business risk category 7 (N=43)

Processes	Values of descriptive statistics of variables							
	N	Average	Median	Min	Variance	Standard deviation	Skewness	Kurtosis
TRA	43	4.0232	4	3	0.5470	0.7396	(-)0.0372	(-)1.1175
REG	42	3.9047	4	3	0.4785	0.6917	0.1270	(-)0.8213
PRE	43	3.6279	4	1	0.7153	0.8458	(-)0.6703	1.1762
COM	43	3.5813	3	2	0.5348	0.7313	0.4702	(-)0.4047
IDE	43	3.4883	4	2	0.3034	0.5508	(-)0.4004	(-)0.9736
MON	42	3.4047	4	1	0.9785	0.9891	(-)0.9128	0.7276

TRA - the process of enforcement WH&S training programmes
 REG - the process of identification and implementation of legal regulations and other external rules in the area of WH&S
 PRE - the process of enforcement of WH&S corrective and preventive actions
 IDE - identification of hazards and occupational risk assessment
 COM - the WH&S internal communication process
 MON - the monitoring process conditions of work

Source: Own research

5. Assessment of work health and safety management within the analysed companies of varying sizes and with varying business risk categories

Fig. 1 presents changes in values of average assessments concerning enforcement levels of the analysed WH&S management processes for various size companies (determination of processes and values in line with Tables 4 and 5).

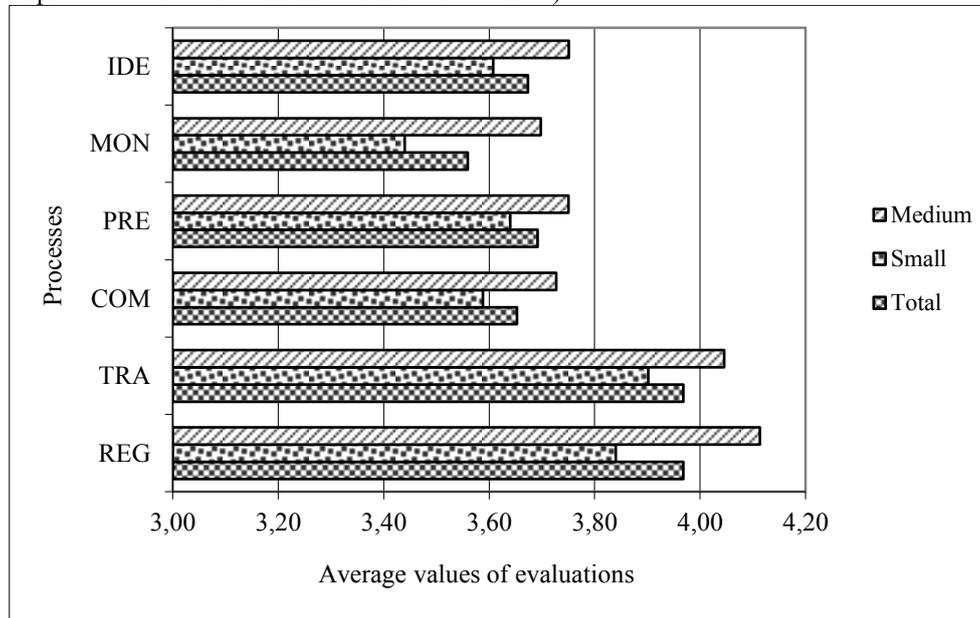


Fig.1. Average values of assessments of enforcement levels of WH&S management processes for companies of varying sizes

Source: Own research

Based on Fig. 1, it can be concluded that medium companies tended to assess enforcement of their work health and safety management processes higher than small ones.

Fig. 2 illustrates changes in values of average assessments concerning enforcement levels of the analysed WH&S management processes for companies with varying business risk categories (determination of processes and values in line with Tables 6 and 7).

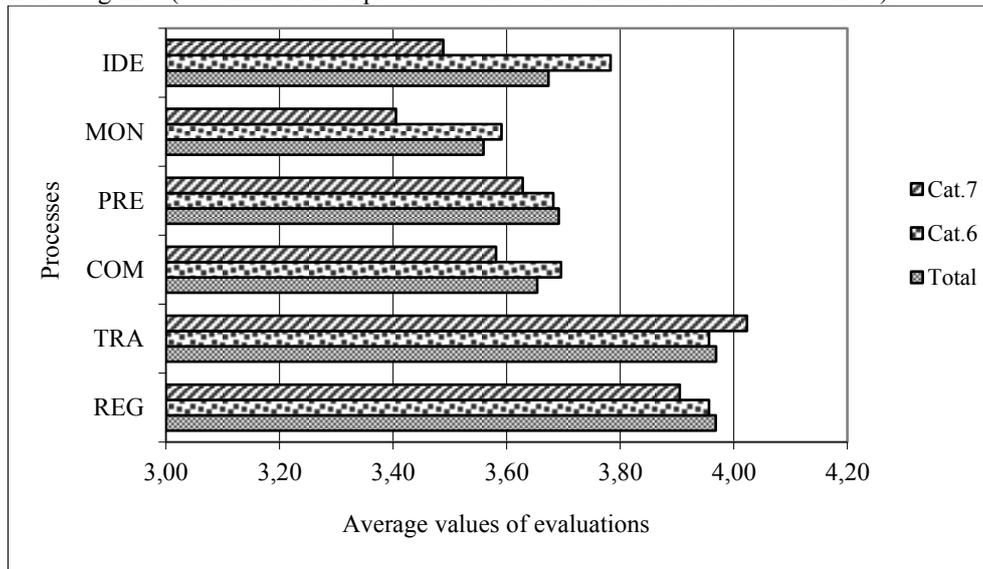


Fig. 2. Average values of assessments of enforcement levels of WH&S management processes for companies with varying business risk categories

Source: Own research

Based on Fig. 2, it can be concluded that companies that had a higher business risk category (cat. 7) tended to assess enforcement of their work health and safety management processes lower than companies with lower risk category (except for the WH&S training programmes process).

6. Conclusion

The process approach assumes that it is necessary to optimise company operations, taking into account its processes as being natural determinants of achieving growth in company effectiveness. The internal processes perspective should comprise not only the basic processes being enforced within the company, but also its auxiliary processes, which include, *inter alia*, work health and safety management processes.

As part of health and safety management processes it is possible to distinguish: identification of hazards and occupational risk assessment (IDE), the monitoring process conditions of work (MON), the process of enforcement of WH&S corrective and preventive actions (PRE), the WH&S internal communication process (COM), the process of enforcement WH&S training programmes (TRA) and the process of identification and implementation of legal regulations and other external rules in the area of WH&S (REG).

The objective of the research we conducted was to obtain a reply to the if there were any differences in assessment of enforcement levels of the above-mentioned work health

and safety management processes in manufacturing companies that varied size and whose businesses had different risk categories.

Table 8 lists results of analyses of assessment of enforcement levels of work health and safety management processes for companies of varying sizes and with varying business risk categories.

Table 8. Results of analyses of assessment of enforcement levels of WH&S processes for companies of varying sizes and with varying business risk categories

Companies of varying sizes and with varying business risk categories	Juxtapose of processes together according to the value of the average than highest (1) to lowest (6)					
	1	2	3	4	5	6
Companies in total	TRA	REG	PRE	IDE	COM	MON
Small companies	TRA	REG	PRE	IDE	COM	MON
Medium companies	REG	TRA	IDE	PRE	COM	MON
Companies with 6 business risk category	REG	TRA	IDE	COM	PRE	MON
Companies with 7 business risk category	TRA	SPE	PRE	COM	IDE	MON
TRA - the process of enforcement WH&S training programmes REG - the process of identification and implementation of legal regulations and other external rules in the area of WH&S PRE - the process of enforcement of WH&S corrective and preventive actions IDE - identification of hazards and occupational risk assessment COM - the WH&S internal communication process MON - the monitoring process conditions of work						

Source: Own research

The small and medium manufacturing companies we studied assessed relatively high their enforcement levels of training processes and their enforcement levels of processes of identification and implementation of legal regulations and other external rules in the area of WH&S, whereas the lowest assessment score was given by them to their WH&S internal communication processes and their work conditions monitoring processes.

The literature devoted to safety management points out that in order to provide for successful work safety management, it is necessary to [10, s.263]:

- identify hazards that occur within the company,
- define reasons for errors made by employees at all levels,
- estimate the size of the risk, and devise ways to reduce it,
- formulate safe work policies and objectives, and an action plan aimed at enforcing the policies that have been adopted,
- create an organisational structure and a work safety management system, and improve its performance on a regular basis,
- engage people who are able to implement policies and objectives adopted,
- keep raising employee qualifications – train employees in safe behaviours and motivate them to behave safely, and
- monitor conditions of work and behaviours of employees at their work stands on a regular basis.

Within the group of the companies we studied, irrespective of the particular company's size and its risk category, enforcement of their work conditions monitoring processes was

assessed as unsatisfactory (1). An equally low assessment was observed for their monitoring-related process, i.e. for enforcement of corrective and preventive actions.

Therefore, it can be concluded that the companies we studied may find it difficult to obtain an appropriate feedback upon the WH&S status, to identify the effectiveness of organisational solutions they use in their hazard identification and prevention processes, and to limit their occupational risks, as well as to take proper decisions concerning their processes of identifying hazards, limiting occupational risks and functioning of their own work health and safety management systems.

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