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Employee Direct Participation in Organisational Decisions and Workplace Safety

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Managers from 192 companies filled out the Employee Direct Participation in Organisational Change questionnaire measuring employees' direct participation (DP) in organisational decisions. Four main forms of DP were identified: individual and group consultations, and individual and group delegation. Workplace safety was measured with the number of accidents, the number of employees working in hazardous conditions, accident absenteeism and sickness absence. Results showed that the 2 latter indicators were significantly related to some parameters of DP. Thus, companies that used face-to-face individual consultation had lower accident absenteeism than ones that did not. The same effect was true for group consultation with temporary groups, and individual and group delegation. Workplaces with high scores for scope for group consultation had lower accident absenteeism, and those with high scores for scope for group delegation had lower sickness absence. It was concluded that employee DP had a positive influence on workplace safety, even if involvement was not directly related to safety.

direct participation safety accidents sickness absence

1. INTRODUCTION

Research on employee participation in organisational decisions has been carried out for about 50 years. Even the classics of social psychology have stressed the advantages of including group members in decision making involving the whole group [1, 2]. Group members' stronger commitment increased motivation to work, and higher readiness to follow jointly made decisions have been recognised as the main advantages of such an approach. However, research on employee participation in organisational decisions has rarely related such participation to workplace safety. The focus has been mainly on such consequences of employee participation as job performance, quality, job satisfaction, absences and turnover. In spite of the widespread view that implementing employee participation into management practice is beneficial, systematic reviews of psychological research have not led to clear conclusions. Some reviews point to a moderately positive correlation between participative decision making and employee outcomes (e.g., Cotton, Vollrath, Froggatt, et al. [4]), while other ones do not indicate any positive correlation (e.g., Cotton et al. [4]) [3]. Moreover, most research indicating a positive correlation has been encumbered with the single-method variance bias, which results from the fact that both the dependent and independent variables are self-report, and the responses are obtained from the same respondent [5]. Thus, it is possible that strong correlations between participation and outcomes are an artefact of the methodology used. Therefore, it is necessary to document the benefits of employee participation in decision-making processes using objective outcome indicators.

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Reports on the advantages of one specific type of employee participation i.e., participation in decision making related to improving working conditions are more explicit and prove that this form of participation is effective in meeting its objectives, i.e., reducing risk. In particular, much literature and many examples have been collected within a field called participative ergonomics [6]. Thus, an intervention carried out in Daiken plants with the methods of participative ergonomics has led to a decreased workload at workstations occupied by older employees, who were the focus of the intervention [7]. An intervention in Mitsubishi plants has significantly reduced lower back injuries for assemblers in Japan [8, 9]. Organisational changes implemented in Fuji plants with participative methods have led to substantial changes in the manufacturing system: a one-person production system was introduced, which eliminated the feeling of monotony among staff, and increased job satisfaction and commitment [7].

Awareness of the advantages of employee participation in improving working conditions is so strong among the circles and institutions established to support the quality of work that it is often recommended as an indispensable element of an occupational safety and health (OSH) management system [10]. For example, the International Labour Organization has recommended organisational solutions that would make staff actively participate in organising, planning, implementing and evaluating actions aimed at improving OSH management systems [11]. Documents issued by individual countries also emphasise the need to involve employees in the process of improving working conditions (e.g., Standard No. PN-N-18001:2004 [12]).

However, the problem is whether reduced risk and improved work safety are directly connected with employee participation in decisions on improving working conditions, or whether they are associated with participation in organisational decisions in general. The mechanisms that determine the benefits of involving employees in decisions relating to the improvement of working conditions are probably different than those behind the advantages of employee participation in organisational decisions in general. In the first case, benefits may arise from the employees' familiarity with their workplace and from their awareness of the sources of the greatest strain. Therefore, they are in the best position to identify risk and suggest preventive measures.

In the case of organisational decisions pertaining to other issues, such as manufacturing, cost-cutting measures, co-operation with partners, etc., management and experts might be more knowledgeable than rank-and-file workers. If we expect work safety to benefit from the involvement of rank-and-file workers in general decisions, it is for the sole fact that participation in organisational decisions, irrespective of what they pertain to, increases the feeling of control at work, supports job satisfaction, strengthens ties with the workplace and obligates employees to comply with the decisions they participated in making. Neal and Griffin agree stressing that employee participation shapes organisational climate, a basis for motivating employees to safe behaviour in the workplace; this motivation affects both individuals' performance and the general safety-related results of the entire organisation [13].

As mentioned before, there have been few studies of the links between employee participation in general and workplace safety. This paper analyses them. Because of criticism of past research on the relation between employee participation and the resultant variables, objective indicators of the outcome, i.e., the level of safety, are used in addition to self-report measures. This analysis was possible thanks to a study carried out peripherally to EPOC, the Employee Direct Participation in Organisational Change project.

1.1. EPOC Project

In 1993–1998, the European Foundation for the Improvement of Living and Working Conditions carried out a project known as EPOC [14, 15, 16]. It was a thorough analysis of direct participation (DP), which was defined thus: "Opportunities which management provide, or initiatives to which they lend their support, at workplace level for consultation with and/or delegation of responsibilities and authority for

decision making to their subordinates either as individuals or as groups of employees relating to the immediate work task, work organisation and/or working conditions" (p. 11) [16]. According to another definition DP is "Consultative participation, whereby management encourages employees to make their views known on work-related matters, but retains the right to take action or not. Delegative participation, whereby management gives employees increased discretion and responsibility to organise and do their jobs without reference back" (p. 5) [14]. DP is contrasted with delegative participation (e.g., by trade unions) and financial participation.

A representative postal survey of managers in some 5 800 workplaces in 10 European countries (Denmark, France, Germany, Ireland, Italy, The Netherlands, Portugal, Spain, Sweden and the UK) was an important component of EPOC. It made it possible to outline the first European map of DP, which provided information on the most frequent forms of DP in each country, the intensity with which they were used, the fields they applied to, management's motives for introducing DP, managers' views on the effectiveness of DP, etc. The results indicated that managers thought highly of the effects of DP. Major benefits included improved quality (according to 92–95% of surveyed managers, depending on the form of participation they were asked about), reduced throughput time (62–69% of respondents), reduced costs (56–66%) and increased total output (44–58%). In other words, manufacturing benefited the most. The effects on the employees' health were less frequently mentioned: 22–40% of the respondents experienced a decrease in sicknesses and 28–42% reported a decrease in absenteeism. Respondents were not asked about the effects of DP on workplace safety.

Since EPOC did not include Poland, which was not a European Union Member State at that time, a few years later a similar survey was carried out in Poland. It was expanded with data on the level of workplace safety. This provided an opportunity to study the relationship between DP and workplace safety, which had not been considered in the original EPOC survey.

1.2. Objective of the Study

The objective of this study was to find out whether the intensity and scope of employee DP in organisational decisions were related to workplace safety.

2. METHOD

2.1. Sample

The sample included 192 companies; they filled in and returned EPOC questionnaires that analysed DP (see section 2.2.1.) and submitted data on selected workplace safety indicators. Questionnaires were sent to a representative sample of 1 500 Polish companies with over 50 employees. This sample was obtained from the Central Statistical Office. Two hundred and forty businesses returned a correctly completed questionnaire, thus the rate of return was 16%. Other countries in the EPOC project had similar return rates (9.4–38.8%; 17.8% on average [15]). However, some companies which returned the EPOC questionnaire failed to provide data on the level of safety. More or less complete data were sent by the aforementioned 192 workplaces. Their characteristics follow.

The surveyed companies represented various sectors: industry (22%); trade and services (21%); education, culture/leisure, banking and insurance (20% altogether); health care (13%) and construction (9%). The size of those businesses varied. Medium-sized enterprises (50–199 employees) prevailed (57%), 17% were mid-large (200–499 employees), 9% were large. The sample included a substantial representation (18%) of small enterprises (under 50 employees)[1].

[1] As mentioned before, the sample selected randomly by the Central Statistical Office included workplaces with over 50 employees. However, in the period between the selection of the sample and the study, the number of employees probably decreased in some workplaces, and thus they automatically fell into the under-50-employees category.

In terms of ownership, 50% of the surveyed workplaces were state-owned, the other 50% private. The legal status of the surveyed organisations was as follows: 53% were independent entities, 28% were subsidiaries of domestic companies and 5% had foreign owners.

2.2. Measures

2.2.1. Measurement of DP

DP was measured with the use of a questionnaire called Employee Direct Participation in Organisational Decisions, whose original version had been developed within the framework of the EPOC project [15]. The questionnaire was translated into Polish. The structure of the Polish version was partly modified to make the questionnaire clearer and more comprehensible. The meaning of the original questions, however, remained unchanged. The following parameters of DP were taken into account in the analyses presented in this paper:

- Is DP used in the organisation at all (at least one form of DP);
- Which forms of DP are used, specifically,
  - individual consultation, including face-to-face consultation and arm's-length consultation;
  - group consultations, including permanent groups and temporary groups;
  - individual delegation;
  - group delegation.

  Separate questions were asked with regards to each form of DP, e.g., "Does management seek rank-and-file workers' opinion by means of individual work-related meetings and consultations?" or "Does management give individuals, rank-and-file workers, the right to decide how to do their job without the need to refer to their immediate superiors?" The respondents were expected to choose *yes* or *no*.
- How many forms of DP are used (the maximum number of forms was six [see section 4], the minimum was one;
- What is the scope of DP (the number of issues in which DP is practised).

  The questions about the scope of individual and group consultations were "On what issues and how often are the views of individual employees (or a group of employees, depending on the question) in the largest occupational group sought?" These questions included the following categories of replies: (a) work organisation, (b) working time, (c) health and safety, (d) training and development, (e) quality of product or service, (f) customer relations, (g) changes in technology, (h) changes in investments and (i) other issues. Respondents were expected to mark their answers on a 3-point scale (1—*regularly*, 2—*sometimes*, 3—*never*). The mean score in all categories, calculated for individual and group consultations separately, was the measure of the scope of consultations. It was assumed that means ranging from 1.00 to 1.66 indicated a broad scope of consultations of a particular type, means between 1.67 and 2.33 a medium scope and means of 2.34–3.00 indicated a narrow scope of consultations.

  The questions about the scope of individual and group delegation were "Please mark in which fields (one or more) individual nonmanagerial employees have the right to make decisions on how their own work is performed without reference to their immediate manager". The possible answers were (a) work schedules, (b) quality of product or service, (c) improvement of work processes, (d) internal customers, (e) external customers, (f) time keeping, (g) attendance and (h) working conditions. The question about group delegation, on the other hand, included the following categories of answers: (a) work allocation, (b) work schedules, (c) quality of work, (d) time keeping, (e) attendance and absence control, (f) job rotation, (g) co-ordination of work with other internal groups and (h) improvement of work processes. Respondents were expected to mark those categories where delegation was used. The number of categories marked by the respondent was the measure of the scope of delegation, calculated separately for individual

and group delegation. It was assumed that 0–2 categories indicated a narrow scope of delegation, 3–5 a medium scope and 6–8 a broad scope of delegation.

- How long DP had been used in the organisation.

  In relation to each major form of DP, the following question was asked: "How long ago was the practice of [the name of the form] introduced in this workplace?" Four answers were possible: 0–2 , 2–5 , 5–10, over 10 years ago.

2.2.2. Measurement of workplace safety

Workplace safety was measured with the use of four indicators derived from a list developed by the Department of Safety Management of the Central Institute for Labour Protection – National Research Institute: (a) the number of accidents in the workplace (per 1000 employees); (b) the number of days of accident absenteeism (per person injured in the workplace); (c) the number of days of sickness absence (per employee in the workplace); (d) the number of employees working in hazardous conditions (per 1000 employees).

Those indicators covered 2001 and 2002. A mean indicator for both years was calculated. Subsequently, relative indicators were calculated for indicators related to accidents, accident absenteeism and the number of employees working in hazardous conditions, i.e., indicators for each workplace were divided by mean indicators for respective sectors. Sector indicators were derived from the statistics of the Central Statistical Office [17, 18]. Operating with relative indicators made it possible to compare workplaces from different sectors, since obviously sectors differ both in terms of the number of accidents and the level of exposure to risk. Therefore, workplace safety reflects not only the management style in a particular workplace, but also the specific nature of its sector. The use of relative indicators in calculations made control of the specific nature of particular sectors possible. Relative indicators were not calculated for sickness absences, as it was assumed that in this case the specific nature of the sector was insignificant.

2.3. Procedure

The Employee Direct Participation in Organisational Decisions questionnaire and an appendix concerning workplace safety indicators were mailed to the representative sample of workplaces. A stamped, self-addressed envelope was enclosed for convenience and to guarantee anonymity. Businesses which wished to learn more about the results of the study were asked to provide their addresses.

The DP questionnaire was addressed to the general manager or a person designated by the general manager. The appendix was addressed to OSH officers. The collected data show that in 192 of the analysed plants, 63% of the questionnaires were filled in by general managers, 7% by human resources managers, 18% by rank-and-file workers designated by the general manager and 4% by OSH officers. The remaining ones were filled in by other categories of staff.

3. RESULTS

The results of univariance analyses, where the relative number of accidents indicator was the dependent variable and individual parameters of DP were subsequent independent variables did not indicate a statistically significant relationship between the variables referred to earlier (Table 1). Similarly, no statistically significant relationships were found between another safety indicator, i.e., the relative number of employees working in hazardous conditions, and parameters of DP (Table 2).

On the other hand, several significant relations were found between the relative accident absenteeism indicator and parameters of DP (Table 1). That is, in workplaces where DP was not used at all, accident-related absences were substantially longer than in workplaces with at least one form of DP ($F = 4.493$, $p < .04$). In addition, the more forms of DP were practised in a workplace, the lower its accident absenteeism indicator was (Table 1). However, statistically

significant differences in the value of this indicator were only revealed between workplaces with 5–6 forms of DP and those with only one form of DP or none at all. In addition, the relative indicator of accident absenteeism was significantly related with the use of each of the four main forms of DP. This indicator was higher in workplaces which did not use

- individual face-to-face consultations ($F = 6.786$, $p < .01$);
- group consultations based on temporary groups ($F = 4.244$, $p < .04$);
- individual delegation ($F = 4.416$, $p < .04$);
- group delegation ($F = 3.847$, $p < .04$)

compared to workplaces which used the forms of DP referred to earlier.

TABLE 1. Direct Participation (DP) and Its Relation to the Number of Accidents and Absenteeism Due to Accidents

	Accidents				Absenteeism Due to Accidents			
DP Indicator	No. of Organisations	Mean Relative Indicator	*F*	*p*	No. of Organisations	Mean Relative Indicator	*F*	*p*
At least one form used								
yes	153	2.50			152	0.55		
no	23	2.23	0.019	.89	19	0.85	4.493	.04
No. of forms used								
0–1	25	2.20			21	0.87[a]		
1–2	52	2.66			50	0.60[ab]		
3–4	61	1.72	1.202	.31	63	0.57[ab]	2.916	.04
5–6	38	2.16			37	0.41[b]		
Forms used								
individual consultation								
face-to-face								
yes	111	2.14			112	0.50		
no	64	2.19	0.016	.89	58	0.74	6.786	.01
arm's-length								
yes	99	2.04			98	0.56	0.155	.69
no	76	2.32	0.461	.50	72	0.60		
group consultation								
temporary groups								
yes	35	1.70			33	0.39		
no	140	2.28	1.39	.24	137	0.62	4.244	.04
permanent groups								
yes	96	2.20			95	0.54		
no	79	2.12	0.04	.84	75	0.62	0.647	.42
delegation								
individual delegation								
yes	90	2.20			89	0.49		
no	85	2.13	0.014	.91	81	0.68	4.416	.04
group delegation								
yes	116	2.17			62	0.46		
no	60	2.01	0.379	.54	106	0.65	3.847	.05
Scope (no. of fields)								
individual consultation								
high scores for scope	81	2.15			82	0.49		
low scores for scope	50	1.99	0.108	.74	50	0.65	2.170	.14

TABLE 1. (*continued*)

	Accidents				Absenteeism Due to Accidents			
DP Indicator	**No. of Organisations**	**Mean Relative Indicator**	***F***	***p***	**No. of Organisations**	**Mean Relative Indicator**	***F***	***p***
group consultation								
high scores for scope	62	1.82			62	0.42		
low scores for scope	50	2.63	2.430	.12	50	0.68	5.557	.02
individual delegation								
high scores for scope	51	2.48			49	0.43		
low scores for scope	43	1.76	1.583	.21	44	0.55	1.062	.31
group delegation								
high scores for scope	50	2.17		.21	51	0.47		
low scores for scope	11	1.06	1.625		11	0.43	0.054	.82
When introduced								
individual consultation								
<2 years ago	27	1.48			27	0.66		
2–5 years ago	35	2.18			34	0.58		
5–10 years ago	27	2.67	0.856	.47	28	0.46	0.695	.56
>10 years ago	43	2.22			44	0.49		
group consultation								
<2 years ago	28	1.09			27	0.53		
2–5 years ago	22	2.21	2.801	.43	22	0.51	0.059	.98
5–10 years ago	26	3.17			27	0.48		
>10 years ago	37	2.22			37	0.54		
individual delegation								
<2 years ago	18	1.20			17	0.38		
2–5 years ago	23	1.71		.22	21	0.60		
5–10 years ago	19	2.66	1.500		21	0.55	0.621	.60
>10 years ago	30	2.72			29	0.44		
group delegation								
<2 years ago	10	1.14			16	0.39		
2–5 years ago	14	1.21			21	0.53	0.232	.19
5–10 years ago	16	1.93	1.627	.19	22	0.41		
>10 years ago	21	2.88			27	0.51		

Notes. a, b—means differ significantly, $p < .05$ (tested with a post hoc test).

The relative accident absenteeism indicator was also related to the scope of DP; however, significant relations only applied to one form of DP: plants where group consultations were practised in a broad scope (i.e., in many fields) had a significantly lower accident absenteeism indicator than those where this form of DP was practised in a narrow scope ($F = 5.557$, $p < .02$). No significant relations were found, however, between the accident absenteeism indicator and the time a given form of DP was implemented (Table 1).

The relative sickness absence indicator was another safety indicator related with parameters of DP. It was significantly related with the time two forms of DP, namely individual and group consultations, were implemented. Where individual consultations had been introduced less than 2 years earlier, sickness absence was significantly higher than in those plants which had introduced this form over 2 years earlier ($F = 6.411$, $p < .00$). In addition, plants which had group consultations for over 10 years demonstrated significantly lower sickness

absence than plants which had them for less than 2 years ($F = 3.111$, $p < .03$).

It was also found that the relative sickness absence indicator in a given workplace was significantly related with the scope of group delegation in that workplace. The broader the scope of group delegation, the lower the sickness absence ($F = 6.253$, $p < .02$).

TABLE 2. Direct Participation (DP) and Its Relation to the Number of Employees Working in Hazardous Conditions and to Sickness Absence

	Employees in Hazardous Conditions				Sickness Absenteeism			
DP Indicator	No. of Organisations	Mean Relative Index	*F*	*p*	No. of Organisations	Mean Relative Index	*F*	*p*
At least one form used								
yes	127	0.63			144	10.30		
no	19	0.31	0.886	.35	18	8.41	0.722	.40
No. of forms used								
0–1	21	0.28			20	8.34		
1–2	44	0.95			48	10.57		
3–4	54	0.62	2.329	.08	60	10.76	0.513	.67
5–6	27	0.16			34	9.26		
Forms used								
individual consultation								
face-to-face								
yes	87	0.58			105	10.16		
no	58	0.58	0.000	.99	56	10.01	0.105	.92
arm's-length								
yes	79	0.58			88	10.38	0.321	.57
no	66	0.58	0.000	.99	73	6.81		
group consultation								
temporary groups								
yes	26	0.65			29	8.96		
no	119	0.30	1.341	.25	131	10.40	0.617	.43
permanent groups								
yes	79	0.44			90	10.90		
no	66	0.76	1.981	.16	70	9.16	1.496	.22
delegation								
individual delegation								
yes	74	0.61			89	9.80		
no	71	0.57	0.029	.87	73	10.45	0.181	.67
group delegation								
yes	47	0.38			58	8.62		
no	96	0.70	1.720	.19	100	11.09	2.602	.11
Scope (no. of fields)								
individual consultation								
high scores for scope	64	0.52			76	10.67		
low scores for scope	42	0.75	0.569	.45	47	10.64	0.000	.99
group consultation								
high scores for scope	54	0.29			55	11.37		
low scores for scope	38	0.70	3.713	.06	49	10.00	0.511	.48

TABLE 2. (*continued*)

DP Indicator	Employees in Hazardous Conditions: No. of Organisations	Mean Relative Index	*F*	*p*	Sickness Absenteeism: No. of Organisations	Mean Relative Index	*F*	*p*
individual delegation								
high scores for scope	43	0.42			47	8.76		
low scores for scope	34	0.85	1.414	.24	45	10.97	1.620	.21
group delegation								
high scores for scope	38	0.33			48	7.25		
low scores for scope	9	0.62	0.638	.43	10	12.21	6.253	.02
When introduced								
individual consultation								
<2 years ago	25	1.40			25	17.46[a]		
2–5 years ago	26	0.73			31	9.53[b]		
5–10 years ago	22	0.17	6.826[1]	.08	30	8.91[b]	6.411	.00
>10 years ago	34	0.30			38	8.16[b]		
group consultation								
<2 years ago	26	0.66			24	15.16[a]		
2–5 years ago	15	0.44	0.788	.50	19	11.60[ab]		
5–10 years ago	23	0.21			31	9.99[ab]	3.111	.03
>10 years ago	28	0.46			33	7.59[b]		
individual delegation								
<2 years ago	17	0.96			16	10.85		
2–5 years ago	20	0.39			21	9.02		
5–10 years ago	15	1.01	1.381	.26	22	10.52	0.365	.78
>10 years ago	22	0.17			27	8.53		
group delegation								
<2 years ago	9	1.14			9	12.35		
2–5 years ago	10	0.01			12	7.04	1.248	.30
5–10 years ago	13	0.37	6.628[1]	.09	20	9.86		
>10 years ago	16	0.18			17	6.30		

Notes. 1—chi-square coefficients computed with the Kruskal-Wallis test because an analysis of variance could not be used; a, b—means differ significantly, $p < .05$ (tested with a post hoc test).

4. DISCUSSION

It had been indicated before that involving rank-and-file workers in the process of improving working conditions brought good results: it favoured elimination of the most crucial shortcomings in the field of working conditions (e.g., Noro and Imada [6]) and effectively eliminated undesirable, as far as safety was concerned, employee behaviours (e.g., Nagamachi [7], Wilson [19], Likert, Joseph and Ulin [20]). In other words, employee participation in decisions concerning working conditions was related with higher workplace safety. This study demonstrated that participation not only in decisions on improving working conditions, but in decisions in general, was reflected in higher workplace safety. This was so because measurement of employee participation in this study covered a wide range of decisions, which applied not only to working conditions and safety, but also to work organisation, planning work, contact with customers, quality of products and services, etc.

This broadly understood employee participation was related with two out of the four workplace safety indicators considered: accident absenteeism and sickness absence. The result

showing that the broader the scope of employee participation, the higher the safety level measured with accident absenteeism, especially clearly proved that workplace safety was related not only with the participation in decisions pertaining to working conditions, but also with participation in organisational decisions in general. This result can be interpreted in two ways: firstly, recognising employees and allowing them to participate in decisions in general strengthens their bond with the organisation and enhances the sense of responsibility for their work and its safe performance. On the other hand, it is conceivable that by participating in decisions not directly related to working conditions (planning work, quality of products and services, contacts with customers, etc.) employees perforce affect such decisions in such a way as not to leave out the issue central to their health, i.e., safe working conditions.

The results of the EPOC project, to which this study refers, indicated that managers saw DP's key benefits to be cost reduction (the opinion of 92–95% of managers, depending on the form of participation, in the 10 countries covered by EPOC [14]) and throughput time (62–69% of respondents [14]). DP's benefits in the areas of a decrease in sickness and a decrease in absenteeism were less frequently recognised, approximately one third of the surveyed managers mentioned them (22–40% indicated a decrease in sickness, 28–42% in absenteeism). This study, based not on managers' subjective views on the benefits of DP but on objective safety indicators, points out that DP's benefits may also include its significant relation with a higher safety level, a particularly meaningful example being its relation with the length of accident-related absences: the higher the DP indicator, the lower the accident absenteeism.

We may wonder why DP was not related with the other two safety indicators covered by the analyses, i.e., with the number of accidents and the number of employees working in hazardous conditions. Perhaps the fact that employee participation in decisions was related with a lower number of particularly serious accidents or with an elimination of particularly high risk was significant. Therefore, even though the number of accidents was not significantly reduced, they did not involve long recovery, and thus they did not cause prolonged absences. Similarly, even though the number of employees working in hazardous conditions was not substantially reduced, the level of risk was lower. Therefore, the incidence rate was lower, and consequently so was sickness absence.

The obtained results also demonstrated that all of the discussed forms of DP were important for workplace safety. When discussing DP, most significance is attached to delegative participation, considered to be a more advanced form of participation, and relatively little to consultative forms of DP [14]. This study demonstrated that the four main forms of participation (face-to-face consultations, arm's-length consultations, individual and group delegation) were significantly related to reduced accident absenteeism. Therefore, it should be recognised that all those forms favour greater workplace safety. This conclusion is supported by the obtained result indicating that where all or almost all of the mentioned forms of participation are practised (5–6 forms), accident absenteeism is significantly lower than where only one or two forms are practised within an organisation.

This study was cross-sectional; therefore, it did not lead to clear conclusions on the causality of the phenomena, i.e., on whether employee DP in organisational decisions resulted in greater workplace safety. The only conclusion that can be drawn from these analyses is that those phenomena coincide. The fact that they have the same cause, such as an employee-oriented management style, could be an equally probable explanation. Such a style could be the reason for both greater workplace safety (as management was more interested in staff safety) and a broader scope of employee involvement in organisational decisions (and thus stronger DP). One of the results, however, can be considered as evidence pointing to the causality of the investigated phenomena: it was found that the earlier DP was introduced, the higher was workplace safety measured with the length of sickness absence. That is, organisations with group

consultations implemented over 10 years earlier, had significantly lower sickness absence than establishments with this form of DP introduced less than 2 years earlier.

Significant relations between DP and workplace safety call for practising DP in the broadest possible scope, also on account of occupational safety.

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