Analysis of the findings of the European Survey of Enterprises on New and Emerging Risks on the effectiveness and support for worker representation and consultation on health and safety

By

David Walters*, Emma Wadsworth*, Rhys Davies, Huw Lloyd-Williams** & Katie Marsh***

Cardiff University

*Cardiff Work Environment Research Centre (CWERC)

**Wales Institute of Social and Economic Research, Data and Methods (WISERD)

Technical Report

February 2011

Contents

List

List of Figures

List of Tables

1.0 Annex 1: full details of the further analysis of the ESENER data on worker representation and health and safety management

1.1 Stage 1: Worker representation and workplace characteristics

As described in the EU-OSHA report (2010), in the ESENER data formal representation of employees in matters at the workplace falls into two broad types: general workplace representation; and specific health and safety committees or health and safety representatives. Works councils or trade union representatives are the primary bodies for the former and are concerned with representing employees and their interests in all issues directly affecting their working conditions. This can, and of course often does, include workplace health and safety. The latter, however, are specifically involved in representing the views and needs of employees in all matters concerning OSH. The analyses in this stage are concerned with the workplace characteristics associated with establishments reporting that employees are represented on health and safety issues. The focus, therefore, is on these forms of representation both individually and in combination.

Across the EU-27 countries[1], 41% of workplaces within the ESENER dataset were reported to have general representation and 67% specialist representation (Table Ax1.1a, weighted data). Considering possible combinations of types of worker representation, approximately one third of workplaces were reported to have both forms of representation, a further third specialist but not general representation and seven percent general but not specialist representation (Table Ax1.1b, weighted data). However, one in four workplaces were described as having neither general nor specialist worker representation systems in place (Table Ax1.1b, weighted data).

Table Ax1.1a – Type of worker representation

Type of representation	Whole sample				EU-27			
	Unweighted		Weighted		Unweighted		Weighted	
	N	%	N	%	N	%	N	%
General								
No	12393	43.3	16595	57.9	10724	43.5	15249	58.6
Yes	16256	56.7	12054	42.1	13955	45.5	10788	41.4
Total	28649	100	28649	100	24679	100	26036	100
Specialist								
No	8618	30.1	10228	35.7	6761	27.4	8504	32.7
Yes	20031	69.9	18421	64.3	17918	72.6	17532	67.3
Total	28649	100	28649	100	24679	100	26036	100

General representation = a works council and/or a trade union representative
Specialist representation = a health a safety committee and/or a health and safety representative

[1] *This report is based on EU-27 data, but equivalent tables for the whole sample (N=31 countries) are shown in Appendix 1).*

Table Ax1.1b – Combination of worker representation

Combination of representation	Whole sample				EU-27			
	Unweighted		Weighted		Unweighted		Weighted	
	N	%	N	%	N	%	N	%
Neither	6254	21.8	7675	26.8	5033	20.4	6598	25.3
General representation only	2364	8.3	2553	8.9	1728	7.0	1907	7.3
Specialist representation only	6139	21.4	8920	31.1	5691	23.1	8651	33.2
Both	13892	48.5	9501	33.2	12227	49.5	8881	34.1
Total	28649	100	28649	100	24679	100	26036	100

General representation = a works council and/or a trade union representative
Specialist representation = a health a safety committee and/or a health and safety representative

This stage of the analyses considered the associations between worker representation and both workplace characteristics (or firm "demographics") and organisations' approach to OSH management. This approach is described in Figure Ax1.1a.

Figure Ax1.1a – Stage 1: Worker representation – approach

Associations between:	
Worker representation: • Any • General • Specialist H&S • Both	**Firm demographics:** • Site type • Workplace size • Sector • Workforce make-up
	Approach to OSH management: • Management commitment to H&S • Reasons for addressing H&S issues • OSH risk types identified as of concern

Univariate analyses showed that general representation was associated with:

- Multiple site organisations
- Larger organisations
- Public services
- 20% or more of the work force aged 50 or over (Appendix 1, Table Apx1.1b, weighted EU-27 data).

Similarly, specialist representation was associated with:

- Multiple site organisations
- Larger organisations
- Public services or producing industries
- Workforce of less than 80% women
- 20% or more of the work force aged 50 or over (Appendix 1, Table Apx1.1b, weighted EU-27 data).

The approach taken to OSH management by establishment managers was considered in terms of the importance of various reasons for addressing health and safety, the types of risk that managers thought were a concern in their establishment

("traditional" (i.e. dangerous substances, accidents, noise and vibration and musculoskeletal disorders) and/or "psychosocial" (i.e. work-related stress, violence or threat or violence and bullying or harassment)) and in terms of management commitment to health and safety. The latter was measured using a combination of two variables: the regularity with which OSH issues are raised at high-level management meetings; and the degree of involvement of line managers or supervisors in the management of health and safety. These variables (combined because of their strong association) were each recoded as indicated in Table Ax1.2. They were then summed to give a total score for each establishment (ranging from 0 (very low management commitment) to 5 (very high management commitment)), and this total score was dichotomised with those scoring 2 or lower classified as "low" and those scoring 3 or higher classified as "high".

Table Ax1.2 Recoding measures of management commitment

Measure	Original coding	Re-coding
MM158 – Are health and safety issues raised in high level management meetings regularly, occasionally or practically never?		
Regularly	1	2
Occasionally	2	1
Practically never	3	0
No answer	4	0
MM159 – Overall, how would you rate the degree of involvement of the line managers and supervisors in the management of health and safety?		
Very high	1	3
Quite high	2	2
Quite low	3	1
Very low	4	0
No answer	5	0

Among the EU-27 countries, 71% (N=18438, using weighted data) of ESENER workplaces fell into the high management commitment category.

Approach to OSH management was also associated with worker representation at the univariate level. General representation was associated with:

- high management commitment to OSH
- identifying both traditional and psychosocial risks as important concerns in the establishment
- identifying all six reasons for addressing health and safety as of major or minor importance (reasons were: fulfilment of legal obligation; requests from employees or their representatives; staff retention and absence management; economic or performance-related reasons; requirement from clients or organisation's reputation; and pressure from the labour inspectorate) (Appendix 1, Table Apx1.2b, EU-27 weighted data).

Similarly, specialist representation was associated with:

- high management commitment to OSH
- identifying just traditional risks as important concerns in the establishment
- Identifying all reasons for addressing health and safety except staff retention and absence management as of major or minor importance (Appendix 1, Table Apx1.2b, EU-27 weighted data).

Logistic regression models (using unweighted data) were then used to assess the independent associations of workplace characteristics and approach to OSH

management with worker representation. Binary models considered associations with any form of representation, and then with general, specialist and both types of representation, and a multinomial model considered associations with levels of the combined representation variable (Table Ax1.1b). These analyses confirmed the associations between worker representation and both workplace characteristics and approach to OSH management. Specifically, in comparison with organisations reporting no form of representation any form of worker representation (i.e. general, specialist or both) (Table Ax1.3, EU-27) was associated with:

- Multiple sites
- Larger workplaces
- Public services
- More than 20% of the workforce aged over 50
- High management commitment to health and safety
- Identifying traditional only or both traditional and psychosocial risks as of concern in the establishment
- Identifying the importance of legal obligation, requests from employees or their representatives and labour inspectorate pressure as important reasons for addressing health and safety issues
- Not identifying economic performance as an important reason for addressing health and safety issues.

Table Ax1.3: EU-27 sample, any representation

		P	OR	CI	CI
Model N= 23771 Demographics only: Nagelkerke R^2 = 0.190 Demographics and approach: Nagelkerke R^2 = 0.216					
Site	**Single site**	.000			
	Multiple site - HQ	.000	1.914	1.707	2.147
	Multiple site-subsidiary	.000	2.239	1.980	2.532
	DK/missing	.830	1.045	.700	1.561
Size	**10 to 19**	.000			
	20 to 49	.000	1.770	1.636	1.916
	50 to 249	.000	3.713	3.384	4.074
	250 to 499	.000	8.150	6.698	9.917
	500+	.000	15.214	11.338	20.416
Sector	**Public Services**	.000			
	Producing industries	.000	.651	.581	.730
	Private services	.000	.536	.480	.598
Gender	**80% + female**	.062	.911	.826	1.005
Age	**<20% aged 50+**	.000	.698	.651	.748
Foreign workers	**80% + foreign**	.822	1.023	.839	1.248
Management commitment	**High**	.000	1.919	1.783	2.066

Risk type	**Neither**	.000			
	Traditional	.000	1.429	1.217	1.678
	Psychosocial	.408	.918	.749	1.125
	Both	.000	1.290	1.118	1.489
Importance of legal obligation	**Major / minor**	.000	1.604	1.340	1.920
Requests from employees/reps	**Major / minor**	.000	1.463	1.272	1.683
Staff retention/ absence management	**Major / minor**	.480	.958	.850	1.079
Economic performance	**Major / minor**	.034	.881	.784	.990
Clients/ reputation	**Major / minor**	.066	.901	.806	1.007
LI pressure	**Major /minor**	.004	1.134	1.042	1.234

In comparison with all other groups (i.e. those with no worker representation systems and those with either specialist only or both forms of worker representation) general worker representation only (Appendix 1, Table Apx1.4b, EU-27) was associated with:

- Multiple site (subsidiary)
- Medium sized workplaces
- Public services
- 80% or more female workers
- 80% or more foreign workers
- Low management commitment to health and safety
- Identifying psychosocial only or both traditional and psychosocial risks as of concern in the establishment
- Not identifying economic performance or labour inspectorate pressure as important reasons for addressing health and safety.

Specialist worker representation only (Appendix 1, Table Apx1.5b, EU-27) was associated with:

- Single site
- Smaller workplaces
- Producing industries or private services
- Fewer than 20% of the workforce aged 50 or over
- Fewer than 80% foreign workers
- Identifying traditional only or neither traditional nor psychosocial risks as of concern in the establishment
- Identifying the importance of legal obligation and labour inspection pressure as important reasons for addressing health and safety
- Not identifying staff retention or absence management as an important reason for addressing health and safety.

Both types of worker representation (Appendix 1, Table Apx1.6b, EU-27) were associated with:

- Multiple site workplaces

- Larger workplaces
- Public services
- Fewer than 80% female workers
- More than 20% of workers aged 50 or over
- High management commitment to health and safety
- Identifying traditional only or both traditional and psychosocial risks as of concern in the establishment
- Identifying the importance of legal obligation, requests from employees or their representatives and staff retention or absence management as important reasons for addressing health and safety.

Similarly, in comparison with neither form of representation (Appendix 1, Table Apx1.7b, EU-27), general worker representation only was associated with:

- multiple site workplaces
- larger workplaces
- public services
- 20% or more workers aged 50 or over
- 80% or more foreign workers
- high management commitment to health and safety
- identifying either traditional or psychosocial risks only, or both types of risk, as of concern in the establishment
- identifying requests from employees or their representatives as an important reason for addressing health and safety
- Not identifying economic performance as an important reason for addressing health and safety.

In comparison with neither form of representation (Appendix 1, Table Apx1.7b, EU-27), specialist worker representation only was associated with:

- multiple site (HQ) workplaces
- larger workplaces
- 20% or more workers aged 50 or over
- fewer than 80% foreign workers
- high management commitment to health and safety
- identifying traditional risks only as of concern in the establishment
- not identifying psychosocial risks only as of concern in the establishment
- identifying the importance of legal obligation, requests from employees or their representatives and labour inspection pressure as important reasons for addressing health and safety
- Not identifying staff retention or absence management or clients' requests or the organisation's reputation as an important reason for addressing health and safety.

In comparison with neither form of representation (Appendix 1, Table Apx1.7b, EU-27), both types of worker representation were associated with:

- multiple site workplaces
- larger workplaces
- public services
- less than 80% female workers
- more than 20% workers aged 50 or over
- high management commitment to health and safety
- identifying traditional risks only or both traditional and psychosocial risks as of concern in the establishment

- identifying the importance of legal obligation and requests from employees or their representatives as important reasons for addressing health and safety
- Not identifying economic performance or clients' requests or the organisation's reputation as important reasons for addressing health and safety.

1.1.1 Stage 1 – Conclusion

Worker representation, therefore, was associated with both workplace characteristics and the organisation's approach to OSH management. Those reporting at least one form of representation were more often multiple site organisations, those with larger workforces (e.g. those with 500 or more workers were over 15 times more likely than those with fewer than 20 workers to report having a form of worker representation), those operating in the public sector and organisations with more older workers. They were also nearly twice as likely to report high management commitment to health and safety; they were more likely to identify traditional risks (with or without psychosocial risks) as of concern in their establishment; and they were more likely to identify requests from employees or their representatives (as well as legal obligation and labour inspectorate pressure) as important reasons for addressing health and safety issues.

Analyses of each form of worker representation separately showed a similar pattern of associations, suggesting that the context conducive to representation does not vary greatly. The factors associated with worker representation are consistent with previous work suggesting that worker representation is more common in larger organisations, and that it is more likely in workplaces where health and safety, and the views of workers, are seen as a priority. It is important to bear in mind, of course, that these findings are drawn from analyses of cross-sectional data, so they give no indication of the direction (or causality) of relationships – that is they cannot shed light on whether worker representation encourages organisations to prioritise health and safety and the views of their workers, or vice versa. They do, however, give an indication of the kinds of workplace situations in which worker representation is more common. These findings are summarised in Figure Ax1.1b.

Figure Ax1.1b – Stage 1: Worker representation – findings

Associations between:	
Worker representation: • Any	**Firm demographics:** • Multiple site • Larger workplaces • Public services • More older workers
	Approach to OSH management: • High management commitment to H&S • Identifying traditional only or both traditional and psychosocial risks as of concern in the establishment • Seeing legal obligation, requests from employees or reps and inspectorate pressure (and not economic performance) as important reasons for addressing H&S issues
Worker representation: • General	**Firm demographics:** • Multiple site • Larger workplaces • Public services • More older & foreign workers

	Approach to OSH management: • High management commitment to H&S • Identifying traditional or psychosocial risks only or both types of risks as of concern in the establishment • Seeing requests from employees or reps (and not economic performance) as important reasons for addressing H&S issues
Worker representation: • Specialist H&S	**Firm demographics:** • Multiple site (HQ) • Larger workplaces • More older and fewer foreign workers
	Approach to OSH management: • High management commitment to H&S • Identifying traditional only (and not psychosocial risks only) as of concern in the establishment • Seeing legal obligation, requests from employees or reps and inspectorate pressure (and not staff retention or clients' requests) as important reasons for addressing H&S issues
Worker representation: • Both	**Firm demographics:** • Multiple site • Larger workplaces • Public services • Fewer female and more older workers
	Approach to OSH management: • High management commitment to H&S • Identifying traditional only or both traditional and psychosocial risks as of concern in the establishment • Seeing legal obligation, requests from employees or reps and inspectorate pressure (and not economic performance) as important reasons for addressing H&S issues

1.2 Stage 2 Health and Safety Management

Our method took a 'stepped' approach to the consideration of how establishments deal with health and safety issues. This is made up of 3 steps:

i) Approach to OSH Management – the priority that health and safety is given by management and their commitment to it
ii) H&S Management – the measures implemented to manage and monitor health and safety in the workplace
iii) Process, Outcomes and Inhibitors to OSH Management – the outcomes of those measures, and the processes and reasons behind decisions about health and safety management.

This stage of the analyses, therefore, focuses on H&S management (ii), and considers the workplace characteristics and approach to OSH management (i) associated with it, as well as the association with worker representation.

Three measures of Health and Safety Management were considered: having a documented policy, established management system or action plan on safety and

health; routine collection of causes of sickness absence; and carrying out regular workplace checks[2]. Overall, 51% of EU-27 workplaces report that they routinely collect data on sickness absence; 77% report the presence of a documented Health and Safety policy; and 88% report that they regularly undertake workplace checks (Table Ax1.4, weighted data).

Table Ax1.4: Health and safety management measures

Measure	Whole sample				EU-27			
	Unweighted		Weighted		Unweighted		Weighted	
	N	%	N	%	N	%	N	%
Routine collection of causes of sickness absence								
No	11784	42.1	13638	48.7	10417	43.2	12568	49.3
Yes	16210	57.9	14389	51.3	13705	56.8	12916	50.7
Total	27994	100	28027	100	24122	100	25484	100
Documented policy, established management system or action plan								
No	5599	19.8	7020	24.9	4472	18.4	5848	22.8
Yes	22642	80.2	21180	75.1	19890	81.6	19811	77.2
Total	28241	100	28200	100	24362	100	25659	100
Regular workplace checks								
No	2837	10.0	3774	13.3	2165	8.8	3151	12.2
Yes	25637	90.0	24685	86.7	22375	91.2	22718	87.8
Total	28474	100	28459	100	24540	100	25869	100

The approach taken in this stage of the analyses is summarised in Figure Ax1.2a.

Figure Ax1.2a – Stage 2: Health and safety management – approach

<table>
<tr><th colspan="2">Associations between:</th><th>Controlling for:</th></tr>
<tr><td rowspan="2">Health and safety management:
H&S policy
Routine collection of sickness absence data
Regular workplace checks</td><td rowspan="2">Worker representation:
General
Specialist H&S
Both</td><td>Firm demographics:
Site type
Workplace size
Sector
Workforce make-up</td></tr>
<tr><td>Approach to OSH management:
Management commitment to H&S
Reasons for addressing H&S issues
OSH risk types identified as of concern</td></tr>
</table>

Logistic regression analyses were used to consider the association between each of these forms of health and safety management and worker representation independent of workplace characteristics and approach to OSH management.

In order to consider the relationship between worker representation and management commitment to health and safety in more detail, the two variables were combined into a single measure (Table Ax1.5) and models were run first including management

[2] *The Advisory Group for the original ESENER project requested broadening the original question, which asked specifically about risk assessments, so as to catch the more informal measures that are more common in the smallest enterprises. This compromise resulted in the relatively high rates obtained here.*

commitment and worker representation as separate variables and second including this combined measure.

Table Ax1.5: Worker representation and management commitment

Commitment	Worker representation	Whole sample				EU-27			
		Unweighted		Weighted		Unweighted		Weighted	
		N	%	N	%	N	%	N	%
Low commitment	Neither form	2534	8.8	3415	11.9	1935	7.8	2835	10.9
	General only	796	2.8	985	3.4	514	2.1	649	2.5
	Specialist only	1624	5.7	2631	9.1	1492	6.0	2548	9.8
	Both	2126	7.4	1703	5.9	1864	7.6	1567	6.0
High commitment	Neither form	3720	13.0	4259	14.9	3098	12.6	3763	14.5
	General only	1568	5.5	1568	5.5	1214	4.9	1258	4.8
	Specialist only	4515	15.8	6290	22.0	4199	17.0	6103	23.4
	Both	11766	41.1	7798	27.2	10363	42.0	7314	28.1
Total		28649	100	28649	100	24679	100	26036	100

Having a health and safety management policy (Table Ax1.6, full model shown in Appendix 1, Table Apx1.8b.1, EU-27) was associated with:

- Multiple site
- Larger workforce
- Producing industries or private services
- 80% or more women in the workforce
- Fewer than 80% foreign workers
- High management commitment
- Identifying traditional risks only as of concern in the establishment
- Identifying the importance of legal obligation and clients' requests or organisation's reputation as reasons for addressing health and safety issues
- Worker representation – each form separately (more strongly with specialist than general) and most strongly with both forms together.

Considering worker representation and management commitment to health and safety together (Table Ax1.6, full model shown in Appendix 1, Table Apx1.8b.2, EU-27) showed that having a health and safety management policy was associated with worker representation at both low and high levels of management commitment. The pattern of association was the same at each level of management commitment, with each form separately associated, specialist more strongly associated than general, and both forms together most strongly associated with having a health and safety management policy in place. The presence of high management commitment, however, significantly increased the likelihood of reporting having a health and safety management policy, particularly in combination with both forms of worker representation.

Table Ax1.6: EU-27 sample, having a health and safety management policy

		P	OR	CI	CI
Model N= 23482 Demographics only: Nagelkerke R^2 = 0.061 Demographics and approach: Nagelkerke R^2 = 0.135 Demographics, approach and worker representation: Nagelkerke R^2 = 0.177					
Worker Representation	**Neither**	.000			
	Gen only	.000	1.498	1.311	1.711
	HS only	.000	2.405	2.188	2.642
	Both	.000	3.350	3.035	3.697
Model N= 23482, Nagelkerke R^2 = 0.178					
Worker representation and management commitment	**Low commitment no rep**	.000			
	Low and general only	.005	1.344	1.096	1.650
	Low and HS only	.000	2.804	2.415	3.256
	Low and both	.000	2.876	2.473	3.343
	High commitment and no rep	.000	2.681	2.370	3.032
	High and general only	.000	4.321	3.609	5.173
	High and HS only	.000	5.882	5.172	6.691
	High and both	.000	9.628	8.461	10.956

Carrying out regular workplace checks (Table Ax1.7, full model shown in Appendix 1, Table Apx1.9b.1, EU-27) was associated with:

- Multiple site (HQ)
- Larger workforce
- Producing industries
- 80% or more women in the workforce
- Fewer than 80% foreign workers
- High management commitment
- Identifying traditional risks only as of concern in the establishment
- Identifying the importance of legal obligation, requests from employees or their representatives, economic performance, clients' requests or organisation's reputation and labour inspection pressure as reasons for addressing health and safety issues
- not identifying staff retention or absence management as a reason for addressing health and safety issues
- Worker representation – just specialist representation separately and both forms together.

Considering worker representation and management commitment to health and safety together (Table Ax1.7, full model shown in Appendix 1, Table Apx1.9b.2, EU-

27) showed that carrying out regular workplace checks was associated with worker representation at both low and high levels of management commitment. The pattern of association was the same at each level of management commitment, with just specialist representation separately and both forms together associated with regularly carrying out workplace checks. The presence of high management commitment, however, significantly increased the likelihood of reporting carrying out regular workplace checks, particularly in combination with both forms of worker representation.

Table Ax1.7: EU-27 sample, regular workplace checks

		P	OR	CI	CI
Model N= 23640 Demographics only: Nagelkerke R^2 = 0.075 Demographics and approach: Nagelkerke R^2 = 0.168 Demographics, approach and worker representation: Nagelkerke R^2 = 0.182					
Worker Representation	Neither	.000			
	Gen only	.901	.989	.836	1.170
	HS only	.000	1.958	1.720	2.228
	Both	.000	1.860	1.631	2.121
Model N= 23640, Nagelkerke R^2 = 0.182					
Worker representation and management commitment	Low commitment no rep	.000			
	Low and general only	.742	1.040	.821	1.318
	Low and HS only	.000	1.755	1.472	2.092
	Low and both	.000	1.638	1.367	1.963
	High commitment and no rep	.000	2.960	2.527	3.467
	High and general only	.000	2.861	2.287	3.579
	High and HS only	.000	6.589	5.494	7.901
	High and both	.000	6.175	5.239	7.278

Routinely collecting sickness absence data (Table Ax1.8, full model shown in Appendix 1, Table Apx1.10b.1, EU-27) was associated with:

- Multiple site
- Larger workforce
- Producing industries or private services
- Fewer than 80% foreign workers
- High management commitment
- Identifying both traditional and psychosocial risks as of concern in the establishment
- Identifying staff retention of absence management, economic performance and clients' request or organisation's reputation as reasons for addressing health and safety issues
- Worker representation – each form separately and most strongly with both forms together.

Considering worker representation and management commitment to health and safety together (Table Ax1.8, full model shown in Appendix 1, Table Apx1.10b.2, EU-27) showed that the routine collection of sickness absence data was associated with worker representation at both low and high levels of management commitment. The pattern of association was similar at each level of management commitment with having both forms of worker representation. At low levels of management commitment only having both forms of representation was associated with routinely collecting sickness absence data (though general representation only also approach significance), and at high levels of management commitment both forms of representation together and general representation only were associated with routinely collecting sickness absence data. The presence of high management commitment, however, significantly increased the likelihood of reporting routinely collecting sickness absence data, particularly in combination with both forms of worker representation.

Table Ax1.8: EU-27 sample, routinely collecting sickness absence data

		P	OR	CI	CI
Model N= 23268 Demographics only: Nagelkerke R^2 = 0.105 Demographics and approach: Nagelkerke R^2 = 0.173 Demographics, approach and worker representation: Nagelkerke R^2 = 0.190					
Worker Representation	**Neither**	.000			
	Gen only	.000	1.456	1.291	1.642
	HS only	.000	1.162	1.069	1.262
	Both	.000	2.041	1.881	2.216
Model N= 23628, Nagelkerke R^2 = 0.191					
Worker representation and management commitment	**Low commitment no rep**	.000			
	Low and general only	.108	1.197	.961	1.492
	Low and HS only	.452	1.062	.908	1.243
	Low and both	.000	1.825	1.575	2.114
	High commitment and no rep	.000	2.193	1.929	2.493
	High and general only	.000	3.477	2.957	4.088
	High and HS only	.000	2.656	2.348	3.004
	High and both	.000	4.688	4.155	5.290

1.2.1 Stage 2 – Conclusions

Overall, therefore, specialist H&S representation only and both forms of worker representation were associated with all three forms of health and safety management, with general worker representation only, also associated with both having a documented H&S policy in place and routinely collecting sickness absence data. For each health and safety management measure there was also a strong association with management commitment to health and safety which, in combination

with worker representation (particularly both forms together), was also significantly associated with each of these measures. Again, it is important to stress that these cross-sectional data cannot identify causal relationships. Nevertheless, the analyses suggest that health and safety management generally is more likely in workplaces where there is worker representation and particularly so where there is also high management commitment to health and safety. Interestingly, our results also point to a particular association between specialist health and safety worker representation and carrying out regular workplace checks. These findings are summarised in Figure Ax1.2b.

Figure Ax1.2b – Stage 2: Health and safety management – findings

Associations between:	
Health and safety management: • H&S policy	**Worker representation:** • General, specialist H&S (more strongly than general), both (most strongly) • Associations stronger in conjunction with high management commitment to H&S
Health and safety management: • Routine collection of sickness absence data	**Worker representation:** • General, specialist H&S, both (most strongly) • Associations stronger in conjunction with high management commitment to H&S
Health and safety management: • Regular workplace checks	**Worker representation:** • Specialist H&S, both • Associations stronger in conjunction with high management commitment to H&S

1.3 Stage 3: Process, outcomes and inhibitors to OSH Management

This stage of the analyses focuses on the process, outcomes and inhibitors of OSH management. It considers the workplace characteristics, approach to OSH management and H&S management measures associated with the process and outcomes of those H&S management measures, as well as the workplace characteristics and OSH management approach factors associated with inhibitors to OSH management. It also considers associations with worker representation for each of these sets of dependent variables.

1.3.1 Process and outcomes

Three measures of the process or outcomes of OSH management were considered: taking measures to support employees' return to work following a long-term sickness absence; the reported impact of the organisation's documented policy, established management system or action plan[3]; and actions taken as a follow-up to workplace

[3] *Those reporting a large or some impact were compared with those reporting practically no impact.*

checks[4]. Overall, 85% of EU-27 workplaces report that they support employees' return to work; 87% report some or a large impact of their documented Health and Safety policy; and 95% report taking at least one action as a result of their workplace checks (Table Ax1.9, weighted data).

Table Ax1.9: Process and outcomes measures

Measure	Whole sample				EU-27			
	Unweighted		Weighted		Unweighted		Weighted	
	N	%	N	%	N	%	N	%
Support for return to work								
No	2169	14.1	1945	14.5	1880	14.5	1758	14.6
Yes	13212	85.9	11513	85.5	11105	85.5	10308	85.4
Total	15381	100	13458	100	12985	52.6	12066	100
Impact of policy, system or plan								
None	2168	9.8	2630	12.7	1976	10.2	2508	12.9
At least some impact	19997	90.2	18090	87.3	17481	89.8	16865	87.1
Total	22165	100	20719	100	19457	100	19373	100
Action following workplace checks								
None	1234	4.8	1274	5.2	1096	4.9	1180	5.2
At least one action taken	24403	95.2	23410	94.8	21279	95.1	21538	94.8
Total	25637	100	24685	100	22375	100	22718	100

Figure Ax1.3a summarises the analytical approach taken during this stage.

Figure Ax1.3a – Stage 3: Process and outcomes to OSH management – approach

Associations between:		Controlling for:
Process and outcomes to OSH management: • Impact of H&S policy • Support for employees returning from sickness absence • Action following workplace checks	**Worker representation:** • General • Specialist H&S • Both	**Firm demographics:** • Site type • Workplace size • Sector • Workforce make-up **Approach to OSH management:** • Management commitment to H&S • Reasons for addressing H&S issues • OSH risk types identified as of concern **Health and safety management:** • H&S policy • Routine collection of sickness absence data • Regular workplace checks

[4] *Those reporting at least one were compared with those reporting none of the following actions: changes to equipment or working environment; changes to the way work is organised; changes to working time arrangements; provision of training.*

Logistic regression analyses were again used to consider the association between each of these measures of OSH management process or outcome and worker representation independent of workplace characteristics, approach to OSH management and (other[5]) forms of H&S management.

As before, models were run first including management commitment and worker representation as separate variables and second including the combined measure in order to consider the relationship between worker representation and management commitment to health and safety in more detail.

Some or a large impact of an organisation's H&S policy (Table Ax1.10, full model shown in Appendix 1, Table Apx1.11b.1, EU-27) was associated with:

- Multiple site (subsidiary)
- Larger workforce
- Public services or producing industries
- Fewer than 80% women in the workforce
- High management commitment
- Identifying both traditional and psychosocial risks as of concern in the establishment
- Identifying the importance of legal obligation, staff retention or absence management and clients' requests or organisation's reputation as reasons for addressing health and safety issues
- Routinely collecting sickness absence data
- Regular workplace checks
- Worker representation – specialist H&S representation and both forms together.

Considering worker representation and management commitment to health and safety together (Table Ax1.10, full model shown in Appendix 1, Table Apx1.11b.1, EU-27) showed that some or a large impact of an organisation's H&S policy was associated with worker representation at both low and high levels of management commitment. The pattern of association was the same at each level of management commitment, with only both specialist and general representation together associated with some or a large impact of an organisation's H&S policy. The presence of high management commitment, however, significantly increased the likelihood of reporting some or a large impact of an organisation's health and safety management policy, particularly in combination with both forms of worker representation.

[5] *For example, models with the dependent variable of the impact of the organisation's documented H&S policy included both the routine collection of sickness absence data and carrying out regular workplace checks as independent variables, but did not include the presence or absence of the documented H&S policy itself.*

Table Ax1.10: EU-27, impact of H&S policy

		P	OR	CI	CI
Model N= 18236 Demographics only: Nagelkerke R^2 = 0.075 Demographics & approach: Nagelkerke R^2 = 0.162 Demographics, approach & management: Nagelkerke R^2 = 0.171 Demographics, approach, management and worker representation: Nagelkerke R^2 = 0.183					
Worker Representation	Neither	.000			
	Gen only	.180	1.155	.936	1.425
	HS only	.013	1.186	1.037	1.357
	Both	.000	1.701	1.470	1.968
Model N= 18236, Nagelkerke R^2 = 0.187					
Worker representation & management commitment	Low commitment no rep	.000			
	Low and general only	.123	1.294	.933	1.794
	Low and HS only	.060	1.219	.992	1.498
	Low and both	.000	1.550	1.243	1.932
	High commitment and no rep	.000	2.994	2.449	3.660
	High and general only	.000	3.210	2.433	4.236
	High and HS only	.000	3.490	2.884	4.223
	High and both	.000	5.339	4.386	6.499

Taking action following workplace checks (Table Ax1.11, full model shown in Appendix 1, Table Apx1.12b.1, EU-27) was associated with:

- Multiple site
- Larger workforce
- Public services or producing industries
- 20% or more of the workforce aged 50 or over
- High management commitment
- Identifying traditional risks only or both traditional and psychosocial risks as of concern in the establishment
- Identifying the importance of legal obligation, requests from employees or their representatives, staff retention or absence management, clients' requests or organisation's reputation and labour inspectorate pressure as reasons for addressing health and safety issues
- Routinely collecting sickness absence data
- Having a documented H&S management policy
- Worker representation – specialist H&S representation and both forms together.

Considering worker representation and management commitment to health and safety together (Table Ax1.11, full model shown in Appendix 1, Table Apx1.12b.1,

EU-27) showed that taking action following workplace checks was associated with worker representation at both low and high levels of management commitment. The pattern of association was the same at each level of management commitment, with just specialist representation and both forms of representation together associated with taking action following workplace checks. The presence of high management commitment, however, significantly increased the likelihood of reporting taking action following workplace checks, particularly in combination with both forms of worker representation.

Table Ax1.11: EU-27, action following workplace checks

		P	OR	CI	CI
Model N= 20829 Demographics only: Nagelkerke R^2 = 0.068 Demographics & approach: Nagelkerke R^2 = 0.129 Demographics, approach & management: Nagelkerke R^2 = 0.141 Demographics, approach, management and worker representation: Nagelkerke R^2 = 0.153					
Worker Representation	Neither	.000			
	Gen only	.967	1.005	.786	1.286
	HS only	.000	1.458	1.232	1.725
	Both	.000	1.939	1.598	2.353
Model N= 20829, Nagelkerke R^2 = 0.154					
Worker representation & management commitment	Low commitment no rep	.000			
	Low and general only	.348	1.209	.814	1.796
	Low and HS only	.002	1.502	1.154	1.954
	Low and both	.002	1.586	1.181	2.129
	High commitment and no rep	.000	1.597	1.281	1.992
	High and general only	.024	1.441	1.049	1.980
	High and HS only	.000	2.296	1.826	2.888
	High and both	.000	3.392	2.639	4.360

Providing support for employees returning from long-term sickness absence (Table Ax1.12, full model shown in Appendix 1, Table Apx1.13b.1, EU-27) was associated with:

- Multiple site
- Larger workforce
- Fewer than 80% foreign workers
- High management commitment

- Identifying both traditional and psychosocial risks as of concern in the establishment
- Identifying requests from employees or their representatives and staff retention or absence management as reasons for addressing health and safety issues
- Having a documented H&S management policy
- Worker representation – both forms together only.

Considering worker representation and management commitment to health and safety together (Table Ax1.12, full model shown in Appendix 1, Table Apx1.13b.1, EU-27) showed that providing support for employees returning from long-term sickness absence was associated with worker representation at both low and high levels of management commitment. The pattern of association was the same at each level of management commitment, with just both forms of representation together associated with providing support for employees returning from long-term sickness absence. The presence of high management commitment, however, significantly increased the likelihood of reporting providing support for employees returning from long-term sickness absence, particularly in combination with both forms of worker representation.

Table Ax1.12: EU-27, support for return to work

		P	OR	CI	CI
Model N= 12258 Demographics only: Nagelkerke R^2 = 0.057 Demographics & approach: Nagelkerke R^2 = 0.096 Demographics, approach & management: Nagelkerke R^2 = 0.102 Demographics, approach, management and worker representation: Nagelkerke R^2 = 0.106					
Worker Representation	Neither	.000			
	Gen only	.671	.954	.766	1.187
	HS only	.551	1.051	.893	1.236
	Both	.000	1.425	1.217	1.667
Model N= 12258, Nagelkerke R^2 = 0.106					
Worker representation & Management commitment	Low commitment no rep	.000			
	Low and general only	.663	1.098	.721	1.673
	Low and HS only	.597	1.089	.793	1.496
	Low and both	.054	1.323	.996	1.758
	High commitment and no rep	.000	1.857	1.438	2.398
	High and general only	.001	1.692	1.256	2.27

					9
	High and HS only	.000	1.935	1.511	2.478
	High and both	.000	2.689	2.114	3.419

Stage 3 Process and outcomes – Conclusions

Overall, therefore, both forms of worker representation were associated with all three measures of the process and outcomes to OSH management, with specialist worker representation only also associated with both the impact of an organisation's H&S policy and taking action following workplace checks. For each measure of the process and outcomes to OSH management there was also a strong association with management commitment to health and safety which, in combination with worker representation (particularly both forms), was also significantly associated with each of these measures. OSH management measures, therefore, are more likely to be effective in workplaces in which there is worker representation, and in particular where that is combined with high management commitment to health and safety. Again, the direction of these associations cannot be determined using these cross-sectional data. However, it is also interesting to note that specialist H&S representation was associated with effective policy and workplace check management measures. These findings are summarised in Figure Ax1.3b.

Figure Ax1.3b – Stage 3: Process and outcomes to OSH management – findings

Associations between:	
Process and outcomes to OSH management: • Impact of H&S policy	**Worker representation:** • Specialist H&S, both • Associations stronger in conjunction with high management commitment to H&S
Process and outcomes to OSH management: • Support for employees returning from sickness absence	**Worker representation:** • Both • Associations stronger in conjunction with high management commitment to H&S
Process and outcomes to OSH management: • Action following workplace checks	**Worker representation:** • Specialist H&S, both • Associations stronger in conjunction with high management commitment to H&S

1.3.2 Inhibitors

Finally, analyses considered the factors organisations identified as reasons for not having a documented H&S management policy and for not carrying out regular workplace checks. Overall, 27% of workplaces which did not have a documented H&S management policy cited lack of time, expertise or financial resources as the reason, 20% reported that they did not see the benefit of such a policy or did not see

it as necessary given their H&S risks, and 47% reported both of these reasons (Table Ax1.13a, EU-27 weighted). Similarly, 32% of those who reported that workplace checks were not carried out regularly cited lack of expertise, time or money or finding the legal obligations too complex as reasons for not doing so, and 58% cited both lack of expertise, time or money or finding the legal obligations too complex and not seeing it as necessary because they did not have major problems as reasons (Table Ax1.13b, EU-27 weighted).

Table Ax1.13a – Reasons for not having developed a documented H&S management policy, system or plan

	Whole sample				EU-27			
	Unweighted		Weighted		Unweighted		Weighted	
	N	%	N	%	N	%	N	%
Neither	537	10.2	398	6.0	470	11.2	346	6.3
Lack of time, expertise or financial resources only	1448	27.5	1792	27.1	1117	26.7	1471	26.7
Do not see the benefit of such a policy or do not see it is necessary given their H&S risks only	1132	21.5	1240	18.7	983	23.5	1107	20.1
Both	2146	40.8	3193	48.2	1615	38.6	2581	46.9
Total	5263	100	6624	23.1	4185	100	5504	100

Table Ax1.13b – Reasons why workplace checks are not regularly carried out

	Whole sample				EU-27			
	Unweighted		Weighted		Unweighted		Weighted	
	N	%	N	%	N	%	N	%
Neither	246	13.0	240	9.0	209	14.7	217	9.8
Lack of expertise, time, or money or legal obligations too complex only	582	30.8	796	29.7	473	33.3	718	32.4
Not necessary as no major problems only	0	0	0	0	0	0	0	0
Both	1060	56.1	1644	61.3	740	52.0	1282	57.8
Total	1888	100	2680	100	1422	100	2217	100

The approach taken here is summarised in Figure Ax1.4a.

Figure Ax1.4a – Stage 3: Inhibitors to OSH management – approach

<table>
<tr><th colspan="2">Associations between:</th></tr>
<tr><td rowspan="4">Inhibitors to OSH management:
• No H&S policy
- Lack of resources
- No benefit/need
- Both

• No regular workplace checks
- Lack of resources/legally complex
- No need
- Both</td><td>Firm demographics:
• Site type
• Workplace size
• Sector
• Workforce make-up</td></tr>
<tr><td>Approach to OSH management:
• Management commitment to H&S
• Reasons for addressing H&S issues
• OSH risk types identified as of concern</td></tr>
<tr><td>Health and safety management:
• H&S policy
• Routine collection of sickness absence data
• Regular workplace checks</td></tr>
<tr><td>Worker representation:
• General
• Specialist H&S
• Both</td></tr>
</table>

Logistic regression models were used to assess the independent associations of workplace characteristics, approach to OSH management, other forms of H&S management and worker representation with these inhibitors. Binary models considered associations with each reason separately, and multinomial models considered associations with levels of the combined inhibitor variables (Tables 13a and b). Citing lack of time, expertise or financial resources as a reason for not having a documented H&S policy (Appendix 1, Table Apx1.14b.1, EU-27) was associated with:

- larger workplaces
- public services
- Identifying both traditional and psychosocial risks as of concern in the establishment
- identifying the staff retention or absence management as an important reason for addressing health and safety
- routinely collecting sickness absence data
- not carrying out regular workplace checks
- Worker representation – having general representation only or both forms in place.

Considering worker representation and management commitment together (Appendix 1, Table Apx1.14b.2, EU-27) showed that organisations with both forms of worker representation together and either high or low levels of management commitment to safety were more likely to cite lack of time, expertise or financial resources as a reason for not having a documented H&S policy than organisations with low management commitment and no form of worker representation.

Citing not seeing the benefit or not seeing it as necessary given their H&S risks as a reason for not having a documented H&S policy (Appendix 1, Table Apx1.15b.1, EU-27) was associated with:

- smaller workplaces
- producing industries or private services
- High management commitment to health and safety
- Not identifying both traditional and psychosocial risks and of concern in the establishment
- not identifying economic performance or labour inspectorate pressure as important reasons for addressing health and safety
- Carrying out regular workplace checks.

Considering worker representation and management commitment together (Appendix 1, Table Apx1.15b.2, EU-27) showed that organisations with high management commitment to health and safety and no form of worker representation, specialist representation only or both forms or representation together were more likely than those with low management commitment to health and safety and no form of worker representation to cite not seeing the benefit or not seeing it as necessary given their H&S risks as a reason for not having a documented health and safety policy.

Citing both as reasons for not having a documented H&S policy (Appendix 1, Table Apx1.16b.1, EU-27) was associated with:

- smaller and larger workplaces (i.e. not being a medium-sized workplace)
- 80% or more women in the workforce
- low management commitment to H&S
- identifying traditional risks only, psychosocial risks only or both types of risk as of concern in the establishment
- identifying economic performance and labour inspectorate pressure as important reasons for addressing health and safety
- not identifying requests from clients or organisation's reputation as an important reason for addressing health and safety
- not collecting sickness absence data
- not carrying out regular workplace checks.

Considering worker representation and management commitment together (Appendix 1, Table Apx1.16b.2, EU-27) showed that those with high management commitment to H&S and either no form of representation or both forms or representation were less likely than those with low management commitment to H&S and no form of representation to cite both reasons for not having a documented H&S policy.

Citing lack of time, expertise or money or too legally complex as a reason for not carrying out regular workplace checks (Appendix 1, Table Apx1.17b.1, EU-27) was associated with:

- Having a documented H&S policy in place.

Considering worker representation and management commitment together (Appendix 1, Table Apx1.17b.2, EU-27) showed no association with citing lack of time, expertise or money or too legally complex as a reason for not carrying out regular workplace checks.

Not seeing it as necessary because of no major problems was not exclusively cited by any organisations as a reason for not carrying out regular workplace checks (Appendix 1, Tables A18b.1 and A18b.2, EU-27) so these two models were not run.

Citing both as reasons for not carrying out regular workplace checks (Appendix 1, Table Apx1.19b.1, EU-27) was associated with:

- low management commitment to H&S
- identifying the importance of legal obligation as an important reason for addressing health and safety
- not collecting sickness absence data
- Not having a documented H&S policy.

Considering worker representation and management commitment together (Appendix 1, Table Apx1.19b.2, EU-27) showed that those with high management commitment to H&S and either only specialist H&S representation or both forms of representation were less likely than those with low management commitment to H&S and no form of representation to cite not seeing it as necessary because of no major problems as a reason for not carrying out regular workplace checks.

Similarly, in comparison with neither reason for not having a documented H&S policy (Table Ax1.14), citing lack of time, money or expertise only was associated with:

- multiple site (HQ)
- larger workplaces
- low management commitment to H&S
- identifying traditional risks only or both traditional and psychosocial risks as of concern in the establishment
- not carrying out regular workplace checks
- Worker representation – either or both forms.

In comparison with neither reason for not having a documented H&S policy (Table Ax1.14), citing not seeing the benefit only was associated with:

- public services or producing industries
- not identifying labour inspection pressure as an important reason for addressing health and safety issues
- not carrying out regular workplace checks
- Worker representation – specialist only.

In comparison with neither reason for not having a documented H&S policy (Table Ax1.14), citing both reasons was associated with:

- multiple site (HQ)
- public services or producing industries
- 80% or more of the workforce being female
- Low management commitment to H&S
- Identifying traditional risks only or both traditional and psychosocial risks as of concern in the establishment
- not collecting sickness absence data
- not carrying out regular workplace checks
- Worker representation – either or both forms.

Considering worker representation and management commitment together (Appendix 1, Table Apx1.20b.2, EU-27) showed that:

- in comparison with neither reason for not having a documented H&S policy citing lack of time, money or expertise only was associated with:
    - low management commitment and either or both forms of worker representation.

- in comparison with neither reason for not having a documented H&S policy citing not seeing the benefit only was associated with:
    - low management commitment and either or both forms of worker representation.
- in comparison with neither reason for not having a documented H&S policy citing both reasons was associated with:
    - low management commitment and specialist only or both forms of worker representation.

Table Ax1.14: EU-27, reasons for not having a health and safety policy – reference group = neither lack of resources nor no need or benefit

			P	OR	CI	CI
Model N= 4039, Nagelkerke R^2 = 0.147						
Lack of time, money or expertise only	**Site**	Multiple site - HQ	.009	1.770	1.156	2.709
		Multiple site-subsidiary	.496	.867	.574	1.308
		DK/missing	.476	1.502	.491	4.594
	Size	20 to 49	.409	1.128	.847	1.503
		50 to 249	.060	1.361	.987	1.877
		250 to 499	.018	2.049	1.133	3.705
		500+	.213	1.502	.792	2.851
	Sector	Producing industries	.135	.818	.628	1.065
		Private services	.535	.901	.647	1.253
	Gender	80% + female	.372	1.160	.838	1.605
	Age	<20% aged 50+	.529	.927	.733	1.173
	Foreign workers	80% + foreign	.595	1.198	.616	2.330
	Management commitment	High	.001	.671	.527	.854
	Risk type	Traditional	.008	2.102	1.210	3.653
		Psychosocial	.887	1.051	.530	2.081
		Both	.000	3.494	2.159	5.654
	Importance of legal obligation	Major / minor	.466	1.229	.706	2.140
	Requests from employees/reps	Major / minor	.779	1.073	.656	1.754
	Staff retention/ absence management	Major / minor	.496	1.151	.768	1.726
	Economic performance	Major / minor	.559	1.114	.775	1.600
	Clients/ reputation	Major / minor	.370	1.170	.830	1.650
	LI pressure	Major /minor	.466	1.111	.837	1.475

	Worker representation	General only	.003	1.959	1.265	3.032
		H&S only	.001	1.682	1.227	2.306
		Both only	.000	1.890	1.360	2.628
	Sickness absence	Routine collection	.126	1.208	.948	1.539
	Workplace checks	Regular	.000	.468	.344	.636
No benefit or need only	**Site**	Multiple site - HQ	.148	1.392	.889	2.178
		Multiple site-subsidiary	.521	.870	.567	1.333
		DK/missing	.064	.196	.035	1.103
	Size	20 to 49	.370	.882	.670	1.161
		50 to 249	.120	.772	.558	1.069
		250 to 499	.993	1.003	.531	1.892
		500+	.177	.604	.290	1.257
	Sector	Producing industries	.460	1.103	.850	1.431
		Private services	.002	.580	.409	.821
	Gender	80% + female	.325	1.180	.849	1.639
	Age	<20% aged 50+	.066	.801	.633	1.015
	Foreign workers	80% + foreign	.087	1.728	.923	3.236
	Management commitment	High	.731	.958	.752	1.221
	Risk type	Traditional	.180	1.363	.867	2.141
		Psychosocial	.898	.966	.568	1.642
		Both	.479	1.149	.782	1.688
	Importance of legal obligation	Major / minor	.741	.922	.570	1.491
	Requests from employees/reps	Major / minor	.764	.933	.594	1.467
	Staff retention/ absence management	Major / minor	.270	.805	.548	1.184
	Economic performance	Major / minor	.388	.856	.602	1.218
	Clients/ reputation	Major / minor	.430	1.145	.818	1.604
	LI pressure	Major /minor	.007	.685	.520	.901
	Worker representation	General only	.073	1.506	.962	2.356
		H&S only	.016	1.458	1.074	1.980
		Both only	.104	1.324	.944	1.858
	Sickness absence	Routine collection	.128	.825	.644	1.057
	Workplace checks	Regular	.014	.677	.497	.923

Both reasons	**Site**	Multiple site - HQ	.012	1.704	1.122	2.586
		Multiple site-subsidiary	.081	.696	.463	1.045
		DK/missing	.918	.942	.303	2.935
	Size	20 to 49	.423	.899	.692	1.167
		50 to 249	.062	.747	.550	1.015
		250 to 499	.601	1.170	.650	2.106
		500+	.375	.745	.389	1.428
	Sector	Producing industries	.489	.917	.716	1.173
		Private services	.008	.646	.469	.890
	Gender	80% + female	.041	1.379	1.014	1.875
	Age	<20% aged 50+	.092	.826	.661	1.032
	Foreign workers	80% + foreign	.308	1.381	.743	2.565
	Management commitment	High	.000	.604	.482	.758
	Risk type	Traditional	.001	2.169	1.358	3.465
		Psychosocial	.066	1.665	.967	2.866
		Both	.000	2.861	1.912	4.279
	Importance of legal obligation	Major / minor	.355	1.258	.773	2.047
	Requests from employees/reps	Major / minor	.782	1.065	.683	1.660
	Staff retention/ absence management	Major / minor	.309	.824	.568	1.196
	Economic performance	Major / minor	.164	1.275	.906	1.794
	Clients/ reputation	Major / minor	.294	.843	.613	1.160
	LI pressure	Major /minor	.194	1.193	.914	1.558
	Worker representation	General only	.016	1.674	1.099	2.548
		H&S only	.000	1.735	1.298	2.319
		Both only	.039	1.398	1.017	1.922
	Sickness absence	Routine collection	.032	.774	.613	.978
	Workplace checks	Regular	.000	.522	.390	.699

Similarly, in comparison with neither reason for not carrying out regular workplace checks (Table Ax1.15), citing lack of time, money or expertise or too legally complex only was associated with:

- Low management commitment to H&S.

In comparison with neither reason for not carrying out regular workplace checks (Table Ax1.15), citing both reasons was associated with:

- smaller and medium sized workplaces
- Low management commitment to H&S
- Identifying both traditional and psychosocial risks as of concern in the establishment
- Identifying the importance of legal obligation as an important reason for addressing health and safety issues
- not collecting sickness absence data
- Not having a documented H&S policy.

Considering worker representation and management commitment together (Appendix 1, Table Apx1.21b.2, EU-27) showed that:

- in comparison with neither reason for not carrying out regular workplace checks citing lack of time, money or expertise or too legally complex only was associated with:
  - low management commitment and general representation
  - not having high management commitment and both forms representation
- in comparison with neither reason for not carrying out regular workplace checks citing both reasons was associated with:
  - Not having high management commitment and specialist representation or both forms of representation.

Table Ax1.15: EU-27, reasons for not carrying out workplace checks – reference group = neither lack of resources or too legally complex nor no need or no problem

			P	OR	CI	CI
Model N= 1365, Nagelkerke R^2 = 0.150						
Lack or resources or too legally complex only	**Site**	Multiple site - HQ	.534	1.200	.676	2.129
		Multiple site-subsidiary	.138	.670	.395	1.137
		DK/missing	.399	.421	.056	3.140
	Size	20 to 49	.154	.730	.474	1.125
		50 to 249	.356	.786	.471	1.311
		250 to 499	.969	1.018	.415	2.495
		500+	.083	.430	.165	1.118
	Sector	Producing industries	.092	.701	.464	1.059
		Private services	.997	1.001	.591	1.696
	Gender	80% + female	.596	1.146	.692	1.899
	Age	<20% aged 50+	.837	.963	.670	1.383
	Foreign workers	80% + foreign	.946	.974	.446	2.126
	Management commitment	High	.005	.590	.409	.852
	Risk type	Traditional	.168	1.769	.787	3.976
		Psychosocial	.203	1.942	.698	5.399

		Both	.053	1.976	.990	3.941
	Importance of legal obligation	Major / minor	.101	1.820	.890	3.723
	Requests from employees/reps	Major / minor	.970	1.011	.563	1.818
	Staff retention/ absence management	Major / minor	.442	.802	.457	1.408
	Economic performance	Major / minor	.355	1.268	.766	2.099
	Clients/ reputation	Major / minor	.583	1.145	.707	1.854
	LI pressure	Major /minor	.315	1.238	.816	1.879
	Worker representation	General only	.132	1.701	.852	3.396
		H&S only	.986	1.005	.610	1.654
		Both only	.369	.794	.480	1.314
	Sickness absence	Routine collection	.723	.934	.640	1.362
	H&S policy	In place	.245	1.246	.860	1.806
No need or no problem only	**Site**	Multiple site - HQ				
		Multiple site-subsidiary				
		DK/missing				
	Size	20 to 49				
		50 to 249				
		250 to 499				
		500+				
	Sector	Producing industries				
		Private services				
	Gender	80% + female				
	Age	<20% aged 50+				
	Foreign workers	80% + foreign				
	Management commitment	High				
	Risk type	Traditional				
		Psychosocial				
		Both				
	Importance of legal obligation	Major / minor				
	Requests from employees/reps	Major / minor				
	Staff retention/ absence management	Major / minor				

	Economic performance	Major / minor				
	Clients/ reputation	Major / minor				
	LI pressure	Major /minor				
	Worker representation	General only				
		H&S only				
		Both only				
	Sickness absence	Routine collection				
	H&S policy	In place				
Both reasons	**Site**	Multiple site - HQ	.620	1.154	.656	2.030
		Multiple site-subsidiary	.179	.704	.422	1.175
		DK/missing	.205	2.715	.580	12.716
	Size	20 to 49	.255	.787	.520	1.189
		50 to 249	.121	.674	.410	1.110
		250 to 499	.138	.487	.188	1.260
		500+	.007	.252	.093	.685
	Sector	Producing industries	.895	.973	.650	1.458
		Private services	.312	1.305	.779	2.188
	Gender	80% + female	.111	1.477	.914	2.387
	Age	<20% aged 50+	.327	.839	.591	1.192
	Foreign workers	80% + foreign	.661	1.180	.563	2.476
	Management commitment	High	.000	.398	.279	.567
	Risk type	Traditional	.116	1.847	.859	3.970
		Psychosocial	.215	1.825	.705	4.720
		Both	.042	1.941	1.024	3.680
	Importance of legal obligation	Major / minor	.002	2.984	1.483	6.006
	Requests from employees/reps	Major / minor	.637	1.146	.651	2.018
	Staff retention/ absence management	Major / minor	.689	1.118	.647	1.932
	Economic performance	Major / minor	.418	1.221	.753	1.979
	Clients/ reputation	Major / minor	.654	1.111	.701	1.761
	LI pressure	Major /minor	.838	.959	.643	1.431
	Worker representation	General only	.190	1.561	.802	3.038
		H&S only	.528	.856	.528	1.387

		Both only	.190	.723	.444	1.175
	Sickness absence	Routine collection	.018	.639	.441	.927
	H&S policy	In place	.009	.623	.436	.890

Stage 3 Inhibitors – Conclusions

Overall, therefore, factors associated with inhibitors to OSH management varied with specific inhibitors. However, low management commitment to health and safety was associated with all the inhibitor measures except not seeing the benefit of or need for a documented health and safety policy, again highlighting the importance of an organisation's managerial approach to health and safety. These findings are summarised in Figure Ax1.4b.

Figure Ax1.4b – Stage 3: Inhibitors to OSH management – findings

Associations between:	
Inhibitors to OSH management: • No H&S policy - Lack of resources	**Firm demographics:** • Multiple site (HQ) • Larger workplaces
	Approach to OSH management: • Low management commitment to H&S • Seeing traditional only or both types of risk as of concern
	Health and safety management: • No regular workplace checks
	Worker representation: • General • Specialist H&S • Both
Inhibitors to OSH management: • No H&S policy - No benefit/need	**Firm demographics:** • Public services or producing industries
	Approach to OSH management: • Not seeing inspectorate pressure as an important reasons for addressing H&S issues
	Health and safety management: • No regular workplace checks
	Worker representation: • Specialist H&S
Inhibitors to OSH management: • No H&S policy - Both	**Firm demographics:** • Multiple site (HQ) • Public or producing industries • More female workers
	Approach to OSH management: • Low management commitment to H&S • Seeing traditional only or both types of risk as of concern
	Health and safety management: • No routine collection of sickness absence data • No regular workplace checks
	Worker representation:

	• General • Specialist H&S • Both
• **No regular workplace checks** - Lack of resources/legally complex	**Firm demographics:**
	Approach to OSH management: • Low management commitment to H&S
	Health and safety management:
	Worker representation:
• **No regular workplace checks** - Both	**Firm demographics:** • Smaller and medium sized workplaces
	Approach to OSH management: • Low management commitment to H&S • Seeing both traditional and psychosocial risks as of concern • Seeing legal obligation as an important reasons for addressing H&S issues
	Health and safety management: • No H&S policy • No routine collection of sickness absence data
	Worker representation:

1.4 Stage 4: The case of psychosocial risk management

The aim of this stage of the analyses is to repeat the approach taken in stages 2 and 3 above and apply it to the sub-set of ESENER data focused on the management of psychosocial risk.

1.4.1 Health and safety management of psychosocial risk

First, analyses focused on the health and safety management of psychosocial risks in the workplace. Two measures of psychosocial risk management were considered: having procedures to deal with work-related stress and/or bullying or harassment and/or work-related violence; and reporting the use of at least one method or action[6]

[6] *This included at least one from the following: changes to the way work is organised; a redesign of the work area; confidential counselling for employees; set-up of a conflict resolution procedure; changes to working time*

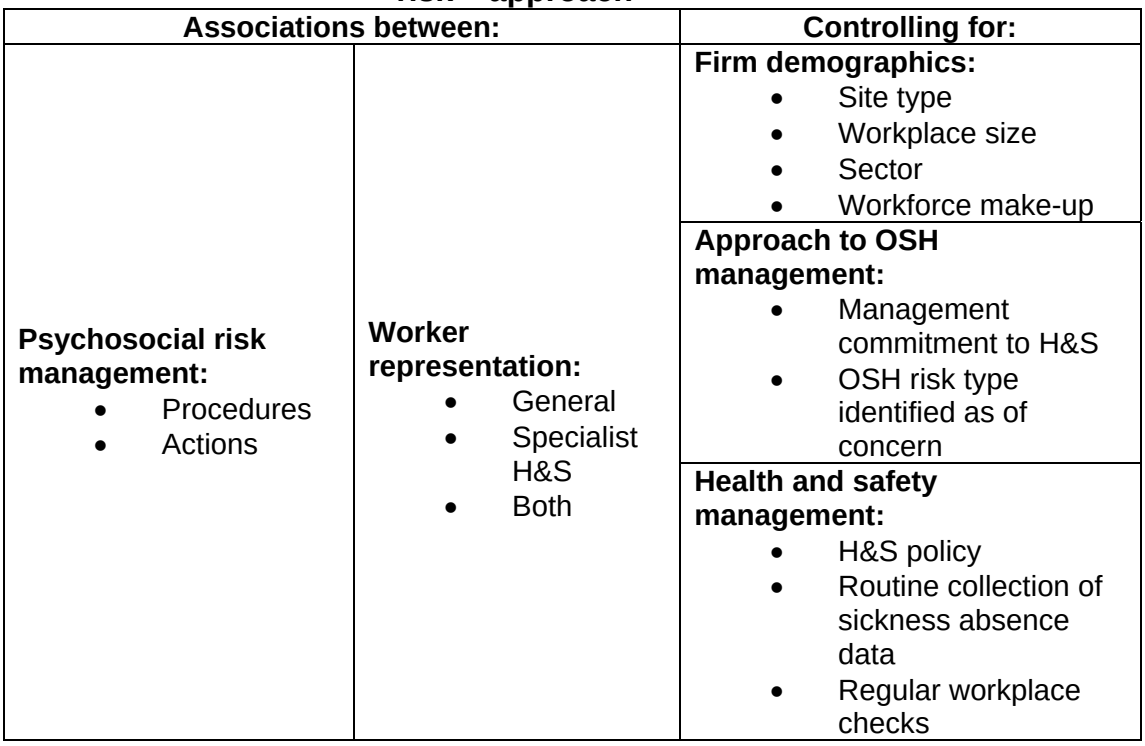
for dealing with psychosocial risk. Overall, 41% of EU-27 workplaces reported having at least one procedure in place to deal with psychosocial risk, though 92% reported having taken at least one action to address psychosocial risk (Table Ax1.16, weighted data).

Table Ax1.16: Health and safety management measures of psychosocial risks

Measure	Whole sample				EU-27			
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
	N	%	N	%	N	%	N	%
Psychosocial risk management procedures								
No	15404	54.4	16677	58.7	13444	55.1	15178	58.8
Yes	12935	45.6	11735	41.3	10959	44.9	10634	41.2
Total	28339	100	28412	100	24403	100	25812	100
Actions to deal with psychosocial risk								
No	1987	6.9	2235	7.8	1815	7.4	2092	8.0
Yes	26662	93.1	26414	92.2	22864	92.6	23944	92.0
Total	28649	100	28649	100	24679	100	26036	100

The approach taken in this stage of the analyses is summarised in Figure Ax1.5a.

Figure Ax1.5a – Stage 4: Health and safety management of psychosocial risk – approach



Logistic regression analyses were again used to consider the association between each of these forms of psychosocial risk management and worker representation independent of workplace characteristics, approach to OSH management and

arrangements; provision of training; taking action when employees work excessively long or irregular hours; informing employees about psychosocial risks and their effect of health and safety; and informing employees about whom to address in the case of work-related psychosocial problems.

management of traditional health and safety risks. As before, models were run first including management commitment and worker representation as separate variables and second including the combined measure.

Having at least one psychosocial risk management procedure in place (Table Ax1.17, full model shown in Appendix 1, Table Apx1.22b.1, EU-27) was associated with:

- Multiple site
- Larger workforce
- Public services
- 80% or more women in the workforce
- 20% or more workers aged 50 or over
- High management commitment
- Identifying psychosocial risks only or both traditional and psychosocial risks as of concern in the establishment
- Having a documented H&S management policy
- Routinely collecting sickness absence data
- Worker representation – each form separately and most strongly with both forms together.

Considering worker representation and management commitment to health and safety together (Table Ax1.17, full model shown in Appendix 1, Table Apx1.22b.2, EU-27) showed that having at least one psychosocial risk management procedure in place was associated with worker representation at both low and high levels of management commitment. The pattern of association was the same at each level of management commitment, with specialist representation only and both forms of representation together associated with psychosocial risk management procedure. The presence of high management commitment, however, significantly increased the likelihood of reporting having at least one psychosocial risk management procedure in place, particularly in combination with both forms of worker representation.

Table Ax1.17: EU-27, psychosocial risk management procedure

		P	OR	CI	CI
Model N= 22707 Demographics only: Nagelkerke R^2 = 0.153 Demographics, approach and traditional risk management: Nagelkerke R^2 = 0.245 Demographics, approach, traditional risk management and worker representation: Nagelkerke R^2 = 0.262					
Worker Representation	Neither	.000			
	Gen only	.000	1.292	1.131	1.476
	HS only	.000	1.459	1.327	1.603
	Both	.000	2.268	2.070	2.485
Model N= 22707, Nagelkerke R^2 = 0.262					
Management commitment and worker representation	Low commitment no rep	.000			
	Low and general only	.140	1.207	.940	1.550
	Low and HS only	.000	1.425	1.190	1.706

	Low and both	.000	1.818	1.535	2.153
	High commitment and no rep	.000	1.359	1.163	1.587
	High and general only	.000	1.813	1.509	2.179
	High and HS only	.000	2.025	1.746	2.349
	High and both	.000	3.292	2.848	3.805

Taking at least one psychosocial risk management action (Table Ax1.18, full model shown in Appendix 1, Table Apx1.23b.1, EU-27) was associated with:

- Multiple site
- Larger workforce
- Public services
- 80% or more women in the workforce
- High management commitment
- Identifying traditional risks only, psychosocial risks only or both risk types as of concern in the establishment
- Having a documented H&S management policy
- Routinely collecting sickness absence data
- Worker representation – each form separately and most strongly with both forms together.

Considering worker representation and management commitment to health and safety together (Table Ax1.18, full model shown in Appendix 1, Table Apx1.23b.2, EU-27) showed that taking at least one psychosocial risk management action was associated with worker representation at both low and high levels of management commitment. The pattern of association was the same at each level of management commitment, with specialist representation only and both forms of representation together associated with psychosocial risk management action. The presence of high management commitment, however, significantly increased the likelihood of reporting having taken at least one psychosocial risk management action, particularly in combination with both forms of worker representation.

Table Ax1.18: EU-27, psychosocial risk management action

		P	OR	CI	CI
Model N= 22898 Demographics only: Nagelkerke R^2 = 0.067 Demographics, approach and traditional risk management: Nagelkerke R^2 = 0.150 Demographics, approach, traditional risk management and worker representation: Nagelkerke R^2 = 0.169					
Worker Representation	Neither	.000			
	Gen only	.000	1.450	1.182	1.780
	HS only	.000	1.642	1.440	1.872
	Both	.000	2.889	2.469	3.380
Model N= 22898, Nagelkerke R^2 = 0.170					

Management commitment and worker representation	Low commitment no rep	.000			
	Low and general only	.119	1.271	.940	1.718
	Low and HS only	.000	1.498	1.221	1.837
	Low and both	.000	2.157	1.691	2.752
	High commitment and no rep	.006	1.265	1.070	1.495
	High and general only	.000	2.055	1.549	2.726
	High and HS only	.000	2.243	1.869	2.691
	High and both	.000	4.279	3.489	5.247

Stage 4 – Health and safety management of psychosocial risk: Conclusions

Overall, therefore, both forms of worker representation, separately and in particular together, were associated with both forms of psychosocial risk management. For each psychosocial risk management measure there was also a strong association with management commitment to health and safety which, in combination with worker representation (specialist and, particularly, both forms together), was also significantly associated with each of these measures. Again, it is important to stress that these cross-sectional data cannot identify causal relationships. Nevertheless, the analyses suggest that psychosocial risk management generally is more likely in workplaces where there is worker representation and particularly so where there is also high management commitment to health and safety. It is also more likely in workplaces where procedures for managing traditional health and safety risks (a documented policy and the routine collection of sickness absence data, though, interestingly, not regular workplace checks) are also in place. These findings, which are found even after controls have been made for workplace characteristics and approach to OSH management, are summarised in Figure Ax1.5b.

Figure Ax1.5b – Stage 4: Health and safety management of psychosocial risk – findings

Associations between:	
Psychosocial risk management: • Procedure	**Worker representation:** • General, specialist H&S, both (most strongly) • Associations stronger in conjunction with high management commitment to H&S
Psychosocial risk management: • Action	**Worker representation:** • General, specialist H&S, both (most strongly) • Associations stronger in conjunction with high management commitment to H&S

1.4.2 Process and outcomes to OSH management of psychosocial risks

A single measure of the process or outcomes to the OSH management of psychosocial risks was used: workplaces describing the measures taken by their establishment to manage psychosocial risks as very or quite effective were compared with those describing them was quite or very ineffective. Overall, 88% of EU-27 workplaces described their establishment's psychosocial risk management measures as quite or very effective (Table Ax1.19, weighted data).

Table Ax1.19: Process and outcomes to OSH management of psychosocial risks

Measure	Whole sample				EU-27			
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
	N	%	N	%	N	%	N	%
Effectiveness of measures taken to manage psychosocial risks								
Ineffective	2524	11.0	2798	12.3	2101	10.7	2431	11.8
Effective	20411	89.0	19957	87.7	17599	89.3	18178	88.2
Total	22935	100	22755	100	19700	100	20608	100

At this point the ESENER questionnaire also included a measure of employee involvement by asking whether employees: a) have been consulted regarding measures to deal with psychosocial risks; and b) are encouraged to participate actively in the implementation and evaluation of the [psychosocial risk management] measures. Among the EU-27 countries, 52% of workplaces reported both consulting and actively encouraging employees to participate, 6% reported consulting them but not actively encouraging them to participate, 18% reported actively encouraging them to participate but not consulting them and 24% reported doing neither (Table Ax1.20, weighted data).

Table Ax1.20: Employee involvement in psychosocial risk management

Measure	Whole sample				EU-27			
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
	N	%	N	%	N	%	N	%
Neither	5701	23.1	6074	24.5	4958	23.4	5458	24.3
Consultation	1742	7.1	1480	6.0	1540	7.3	1345	6.0
Active encouragement to participate	3632	14.7	4374	17.7	3141	14.8	4034	18.0
Both	13621	55.2	12843	51.8	11593	54.6	11613	51.7
Total	24696	100	24772	100	21232	100	22450	100

Analyses similar to those carried out in Stage 1 were repeated to consider factors associated with employee involvement in psychosocial risk management.

Figure Ax1.6a describes the approach taken during this stage of the analyses.

Figure Ax1.6a – Stage 4: Employee involvement – approach

<table>
<tr><th colspan="2">Associations between:</th></tr>
<tr><td rowspan="3">Employee involvement:
Any
Consultation
Participation
Both</td><td>Firm demographics:
Site type
Workplace size
Sector
Workforce make-up</td></tr>
<tr><td>Approach to OSH management:
Management commitment to H&S
Reasons for addressing H&S issues
OSH risk types identified as of concern</td></tr>
<tr><td>Worker representation:
General
Specialist H&S
Both</td></tr>
</table>

Logistic regression models were used to assess the independent associations of workplace characteristics, approach to OSH management and worker representation with employee involvement in psychosocial risk management. Binary models considered associations with any type of involvement, and then with consultation, encouragement to active participation and both types of involvement, and a multinomial model considered associations with levels of the combined employee involvement variable (Table Ax1.20). These analyses showed that any type of involvement (Table Ax1.21) was associated with:

- Multiple site
- Smaller workforce
- Public services
- Less than 20% of the workforce aged 50 or over
- High management commitment to health and safety
- Identifying both traditional and psychosocial risks as of concern in the establishment
- Identifying requests from employees or their representatives, staff retention or absence management, economic performance and clients' requests or the organisation's reputation as important reasons for addressing health and safety issues
- Not identifying labour inspectorate pressure as an important reason for addressing health and safety issues
- Worker representation – each form separately and, most strongly, both forms together.

Table Ax1.21: EU-27, any employee involvement in psychosocial risk management

		P	OR	CI	CI
Model N= 20532 Demographic variables only: Nagelkerke R^2 = 0.032 Demographic and approach variables: Nagelkerke R^2 = 0.091 Demographic, approach and worker representation variables: Nagelkerke R^2 = 0.109					
Site	Single site	.000			
	Multiple site - HQ	.052	1.103	.999	1.218
	Multiple site-subsidiary	.000	1.285	1.153	1.432
	DK/missing	.001	.568	.406	.795
Size	10 to 19	.003			
	20 to 49	.109	1.078	.983	1.181
	50 to 249	.073	.916	.832	1.008
	250 to 499	.045	.870	.759	.997
	500+	.909	1.009	.862	1.181
Sector	Public Services	.000			
	Producing industries	.000	.562	.504	.627
	Private services	.000	.689	.618	.767
Gender	80% + females	.089	1.091	.987	1.207
Age	<20% aged 50+	.046	1.073	1.001	1.151
Foreign workers	80% + foreign	.110	.846	.689	1.039
Management commitment	High	.000	2.277	2.110	2.456
Risk type	Neither	.000			
	Traditional	.238	.896	.746	1.075
	Psychosocial	.568	.934	.737	1.182
	Both	.010	1.247	1.055	1.475
Importance of legal obligation	Major / minor	.215	1.137	.928	1.393
Requests from employees/reps	Major / minor	.004	1.245	1.074	1.444
Staff retention/ absence management	Major / minor	.000	1.394	1.242	1.565
Economic performance	Major / minor	.035	1.132	1.009	1.269
Clients/ reputation	Major / minor	.002	1.186	1.062	1.325
LI pressure	Major /minor	.002	.869	.796	.948

Worker representation	None	.000			
	General	.000	1.368	1.185	1.579
	Specialist	.000	1.316	1.196	1.448
	Both	.000	2.199	1.993	2.425

Employee consultation only (Appendix 1, Table Apx1.24b, EU-27) was associated with:

- Larger and medium sized workplaces
- Low management commitment to health and safety
- Identifying traditional risks only as of concern in the establishment.

Encouragement to active participation only (Appendix 1, Table Apx1.25b, EU-27) was associated with:

- Smaller and medium sized workplaces
- Producing industries or private services
- Fewer than 80% women workers
- Low management commitment to health and safety
- Identifying the importance of legal obligation and requests from employees or their representatives as important reasons for addressing health and safety
- Worker representation – not having both forms of representation.

Both types of employee involvement (Appendix 1, Table Apx1.26b, EU-27) were associated with:

- Multiple site (subsidiary)
- Not medium sized workplaces
- Public services
- More than 80% female workers
- High management commitment to health and safety
- Not identifying traditional risks only as of concern in the establishment
- Identifying staff retention or absence management and requests from clients or organisation's reputation as important reasons for addressing health and safety
- Not identifying labour inspectorate pressure as an important reason for addressing health and safety issues
- Worker representation – each form separately and both forms together.

Similarly, in comparison with neither form of involvement (Appendix 1, Table Apx1.27b, EU-27), consultation only was associated with:

- multiple site workplaces
- larger workplaces
- private and public services
- high management commitment to health and safety
- identifying both traditional and psychosocial risks as of concern in the establishment
- identifying staff retention or absence management and economic performance as important reasons for addressing health and safety
- not identifying labour inspectorate pressure as an important reason for addressing health and safety
- Worker representation – general only and both forms together.

In comparison with neither form of involvement (Appendix 1, Table Apx1.27b, EU-27), encouragement to active participation only was associated with:

- multiple site (subsidiary) workplaces
- small to medium sized workplaces
- private and public services
- high management commitment to health and safety
- identifying both traditional and psychosocial risks as of concern in the establishment
- identifying the importance of legal obligation, requests from employees or their representatives and staff retention or absence management as important reasons for addressing health and safety
- Worker representation – specialist only and both forms together.

In comparison with neither form involvement (Appendix 1, Table Apx1.27b, EU-27), both types of employee involvement were associated with:

- multiple site (subsidiary) workplaces
- smaller workplaces
- private and public services
- more than 80% female workers
- less than 20% of the workforce aged 50 or over
- high management commitment to health and safety
- not identifying traditional risks only as of concern in the establishment
- identifying requests from employees or their representatives, staff retention or absence management, economic performance and requests from clients or organisation's reputation as important reasons for addressing health and safety
- not identifying labour inspectorate pressure as an important reason for addressing health and safety
- Worker representation – each form separately and both forms together.

Stage 4 – Employee involvement in psychosocial risk management: Conclusions

Employee involvement in psychosocial risk management was associated with workplace characteristics, the organisation's approach to OSH management and worker representation. Reporting at least one form of employee involvement (consultation, encouragement to active participation or both) was more likely in multiple site organisations, those with smaller workforces, those in the public sector and those with a particularly young workforce. In addition, those reporting employee involvement were over twice as likely to also have high levels of management commitment to health and safety, were more likely to identify both traditional and psychosocial risks as important concerns in their establishment, and were more likely to see requests from employees or their representatives and staff retention or absence management (as well as economic performance and the requests of their clients or their organisational reputation) as important reasons for addressing health and safety issues. They were also more likely to have at least one form or worker representation in place, and were over twice as likely to have both forms operating.

Although some of the factors associated with each form of employee involvement separately were similar (e.g. multiple site, public sector, high management commitment to health and safety, identifying staff retention or absence management as an important reason for addressing health and safety issues and having both forms or worker representation in place), there were also some interesting differences by type of employee involvement. First, workforce size: involving employees only by consulting them was more common in workplaces with more workers whereas involving employees only by encouraging them to actively

participate was more common in workplaces with fewer workers. And second, form of worker representation: involving employees only by consulting them was more common in workplaces with general worker representation whereas involving employees only by encouraging them to actively participate was more common in workplaces with specialist worker representation. This suggests that there are a number of factors which are associated with employee involvement in the management of psychosocial risk generally, and also that they way that employees are involved may vary with certain workplace conditions.

Again, these findings are consistent with previous work suggesting that employee involvement is more common in workplaces where health and safety generally, and both worker representation and staff retention, are seen priorities. It is important to bear in mind, of course, that the findings are drawn from analyses of cross-sectional data, so they give no indication of the direction (or causality) of relationships. These findings are summarised in Figure Ax1.6b.

Figure Ax1.6b – Stage 4: Employee involvement in psychosocial risk management – findings

Associations between:	
Employee involvement: • Any	**Firm demographics:** • Multiple site • Smaller workplaces • Public services • Fewer older workers
	Approach to OSH management: • High management commitment to H&S • Identifying both traditional and psychosocial risks as of concern • Seeing requests from employees or their reps, staff retention, economic performance and clients' requests (but not labour inspectorate pressure) as important reasons for addressing H&S issues
	Worker representation: • General, specialist and both
Employee involvement: • Consultation	**Firm demographics:** • Multiple site • Larger workplaces • Private and public services
	Approach to OSH management: • High management commitment to H&S • Identifying both traditional and psychosocial risks as of concern • Seeing staff retention and economic performance (but not labour inspectorate pressure) as important reasons for addressing H&S issue
	Worker representation: • General and both
	Firm demographics: • Multiple site (subsidiary) • Small to medium sized workplaces • Private and public services
	Approach to OSH management: • High management commitment to H&S

Employee involvement: • Encouragement to active participation	• Identifying both traditional and psychosocial risks as of concern • Seeing legal obligation, requests from employees or reps and staff retention as important reasons for addressing H&S issues
	Worker representation: • Specialist and both
Employee involvement: • Both	**Firm demographics:** • Multiple site (subsidiary) • Smaller workplaces • Private and public services • More female and fewer older workers
	Approach to OSH management: • High management commitment to H&S • Not identifying traditional risks only as of concern • Seeing requests from employees or reps, staff retention, economic performance and clients' requests (and not inspectorate pressure) as important reasons for addressing H&S issues
	Worker representation: • General, specialist and both

In order to explore the relationship between management commitment, worker representation and employee involvement further, a combined variable was created showing possible levels of these three variables (Table Ax1.22).

Table Ax1.22: Employee involvement in psychosocial risk management by management commitment and worker representation

Management commitment to health and safety	Worker representation	Employee involvement	Whole sample				EU-27			
			Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
			N	%	N	%	N	%	N	%
Low	None	None	924	3.7	1316	5.3	710	3.3	1084	4.8
		At least 1 form	1271	5.1	1474	6.0	1086	5.1	1300	5.8
	At least 1 form	None	981	4.0	1362	5.5	708	3.3	1106	4.9
		At least 1 form	2509	10.2	2948	11.9	2126	10	2629	11.7
High	None	None	808	3.3	1004	4.1	685	3.2	911	4.1
		At least 1 form	2698	10.9	2280	9.2	2477	11.7	2163	9.6

	At least 1 form	**None**	2214	9.0	2652	10.7	1804	8.5	2305	10.3
		At least 1 form	1329	53.8	11735	47.4	11636	54.8	10952	48.8
Total			24696	100	24772	100	21232	100	22450	100

Logistic regression analyses were again used to consider the association between the measure of process or outcomes to OSH management of psychosocial risk (effectiveness) and worker representation and employee involvement independent of workplace characteristics, approach to OSH management, management of traditional health and safety risks, approach to psychosocial risk management (including both reasons prompting the establishment to deal with psychosocial risks and perception of the comparative difficulty of tackling psychosocial risks as opposed to other health and safety issues). The approach taken to these analyses is summarised in Figure Ax1.7a.

Figure Ax1.7a – Stage 4: Process and outcomes to OSH management of psychosocial risk – approach

<table>
<tr><th colspan="2">Associations between:</th><th>Controlling for:</th></tr>
<tr><td rowspan="4">Psychosocial risk management process and outcomes:
Effectiveness</td><td rowspan="4">Worker representation:
General
Specialist H&S
Both
Employee involvement:
Consultation
Participation
Both</td><td>Firm demographics:
Site type
Workplace size
Sector
Workforce make-up</td></tr>
<tr><td>Approach to OSH management:
Management commitment to H&S
OSH risk types identified as of concern</td></tr>
<tr><td>Health and safety management:
H&S policy
Routine collection of sickness absence data
Regular workplace checks</td></tr>
<tr><td>Approach to psychosocial risk management:
Reasons for dealing with psychosocial risks
Comparative difficulty of dealing with psychosocial risks</td></tr>
</table>

Again, models were run twice, first including management commitment to health and safety, worker representation and employee involvement separately and second including the combined measure (Table Ax1.22).

Quite or very effective psychosocial risk management (Table Ax1.23, full model shown in Appendix 1, Table Apx1.28b.1, EU-27) was associated with:

- Single site
- Small and medium sized workforce
- Private services
- Less than 20% of the workforce aged 50 or over
- 80% or more foreign workers
- High management commitment
- Not identifying both traditional and psychosocial risks as of concern in the establishment
- Regular workplace checks
- Routine collection of sickness absence data
- Identifying fulfilment of legal obligation and requests from employees or their representatives as reasons prompting the organisation to deal with psychosocial risks
- Not identifying labour inspectorate pressure as a reason prompting the organisation to deal with psychosocial risks
- Seeing the difficulty of managing psychosocial risks as less difficult
- Worker representation – none or either form separately
- Employee involvement – either form separately and (particularly) both forms together.

Considering worker representation, management commitment to health and safety and employee involvement together (Table Ax1.23, full model shown in Appendix 1, Table Apx1.28b.2, EU-27) showed that quite or very effective psychosocial risk management was associated with employee involvement at both high and low levels of management commitment. The combination of high management commitment and some employee involvement, either with or without worker representation, was most strongly associated with effective psychosocial risk management.

Table Ax1.23: EU-27, effectiveness of psychosocial risk management

		P	OR	CI	CI
Model N= 17736 Demographics only: Nagelkerke R^2 = 0.005 Demographics, approach, traditional risk management, approach to PS management: Nagelkerke R^2 = 0.116 Demographics, approach, traditional risk management, approach to PS management, worker representation and employee involvement Nagelkerke R^2 = 0.215					
Worker Representation	Neither	.011			
	Gen only	.319	.890	.707	1.120
	HS only	.130	.884	.753	1.037
	Both	.001	.764	.650	.897
Employee involvement	Neither	.000			
	Employees consulted only	.000	2.808	2.328	3.386
	Employees active only	.000	2.336	2.028	2.692
	Both	.000	7.355	6.440	8.399
Model N= 17736, Nagelkerke R^2 = 0.192					
Management commitment, worker representation and employee involvement	None	.000			
	Low commitment, some representation, no involvement	.022	.746	.580	.958
	Low commitment, no representation, some involvement	.000	4.222	3.038	5.867
	Low commitment, some representation, some involvement	.000	3.084	2.413	3.942
	High commitment, no representation, no involvement	.000	2.170	1.600	2.943
	High commitment, some representation, no involvement	.000	1.810	1.426	2.299

	High commitment, no representation, some involvement	.000	8.370	6.180	11.336
	High commitment, some representation, some involvement	.000	8.872	7.015	11.220

Stage 4 – Process and outcomes to OSH management of psychosocial risk: Conclusions

Overall, therefore, both forms of employee involvement individually were associated with effective psychosocial risk management, and both forms together were particularly strongly associated with effective psychosocial risk management. However, the association with worker representation was less clear cut, with workplaces with both forms of representation in place less likely than those with neither form in place to report effective psychosocial risk management. This may, perhaps, reflect a greater awareness of psychosocial risk management (in terms of both actual workplace practice and an aimed for "ideal") on the part of managers of organisations with stronger worker representation in place. Again, however, the association with high management commitment to health and safety was clear, with the combination of high commitment and employee involvement most strongly associated with effective psychosocial risk management. Again, it is important to stress that these cross-sectional data cannot identify causal relationships. Nevertheless, the analyses suggest that effective psychosocial risk management generally is more likely in workplaces where there is employee involvement and particularly so where there is also high management commitment to health and safety. It is also more likely in workplaces where there are procedures for managing traditional health and safety risks (regular workplace checks and the routine collection of sickness absence data, though, interestingly, not a documented H&S policy). These findings are summarised in Figure Ax1.7b.

Figure Ax1.7b – Stage 4: Process and outcomes to OSH management of psychosocial risk – findings

Associations between:	
Psychosocial risk management process and outcomes: • Effectiveness	**Worker representation:** • None or either form separately **Employee involvement:** • Consultation, participation and both (most strongly) • Associations stronger in conjunction with high management commitment to H&S

1.4.3 Inhibitors to OSH management of psychosocial risks

Finally, analyses considered the factors organisations identified as making dealing with psychosocial risks particularly difficult. Overall, 13% of EU-27 organisations identified a lack of resources (time, staff, money, training, expertise, technical support

or guidance) as a factor, 14% identified lack of awareness (or the culture within the establishment or the sensitivity of the issue) as a factor, 58% identified both the factors and 16% neither of them (Table Ax1.24, weighted data).

Table Ax1.24: Inhibitors to OSH management of psychosocial risks

Measure	Whole sample				EU-27			
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
	N	%	N	%	N	%	N	%
Neither	1823	13.9	1740	14.9	1668	14.6	1655	15.5
Lack of resources*	1502	11.4	1507	12.9	1268	11.1	1379	12.9
Lack of awareness**	2002	15.2	1548	13.3	1818	15.9	1474	13.8
Both	7816	59.5	6889	59.0	6705	58.5	6159	57.7
Total	13143	100	11684	100	11459	100	10668	100

*Lack of resources included at least one of the following: a lack of resources such as time, staff or money; a lack of training and/or expertise; a lack of technical support or guidance

**Lack of awareness included at least one of the following: a lack of awareness; the culture within the establishment; the sensitivity of the issue

Logistic regression models were used to assess the independent associations of workplace characteristics, approach to OSH management, management of traditional risks, management of psychosocial risks, worker representation and employee involvement with these inhibitors. Binary models considered associations with each reason separately and multinomial models considered associations with levels of the combined inhibitor variable (Table Ax1.24). The approach to these analyses is summarised in Figure Ax1.8a.

Figure Ax1.8a – Stage 4: Inhibitors to OSH management of psychosocial risk – approach

<table>
<tr><th colspan="2">Associations between:</th></tr>
<tr><td rowspan="5">Psychosocial risk management inhibitors:
• Lack of resources
• Lack of awareness
• Both</td><td>Firm demographics:
• Site type
• Workplace size
• Sector
• Workforce make-up</td></tr>
<tr><td>Approach to OSH management:
• Management commitment to H&S
• OSH risk types identified as of concern</td></tr>
<tr><td>Health and safety management:
• H&S policy
• Routine collection of sickness absence data
• Regular workplace checks</td></tr>
<tr><td>Psychosocial risk management:
• Procedures
• Actions</td></tr>
<tr><td>Worker representation:</td></tr>
</table>

	• General • Specialist H&S • Both
	Employee involvement: • Consultation • Participation • Both

Citing lack of resources as a factor making dealing with psychosocial risks particularly difficult (Appendix 1, Table Apx1.29b.1, EU-27) was associated with:

- Smaller workplaces
- Public services
- 80% or more women in the workforce
- Not carrying out regular workplace checks
- Not routinely collecting sickness absence data
- Employee involvement – consulting employees only, encouraging employees to participate only and both forms of involvement.

Considering management commitment, worker representation and employee involvement together (Appendix 1, Table Apx1.29b.2, EU-27) showed that organisations with high management commitment to health and safety in combination with: no worker representation and some employee involvement; and some worker representation and some employee involvement; were more likely than those with low management commitment, no worker representation and no employee involvement to cite lack of resources as a factor making dealing with psychosocial risks particularly difficult.

Citing lack of awareness as a factor making dealing with psychosocial risks particularly difficult (Appendix 1, Table Apx1.30b.1, EU-27) was associated with:

- Fewer than 80% women in the workforce
- High management commitment
- Not identifying both traditional and psychosocial risks as of concern in the establishment
- Carrying out regular workplace checks
- Routinely collecting sickness absence data
- Having a psychosocial risk procedure in place
- Employee involvement – consulting employees only, encouraging employees to participate only and both forms of involvement.

Considering management commitment, worker representation and employee involvement together (Appendix 1, Table Apx1.30b.2, EU-27) showed that organisations with high management commitment to health and safety in combination with: no worker representation and some employee involvement; and some worker representation and some employee involvement; were more likely than those with low management commitment, no worker representation and no employee involvement to cite lack of awareness as a factor making dealing with psychosocial risks particularly difficult.

Citing both as factors making dealing with psychosocial risks particularly difficult (Appendix 1, Table Apx1.31b.1, EU-27) was associated with:

- Larger workplaces
- Public services or producing industries
- 20% or more of the workforce aged 50 or over

- Low management commitment
- Identifying traditional risks only, psychosocial risks only or both types of risk as of concern in the establishment
- Not having a documented H&S policy
- Not carrying out regular workplace checks
- Not having a psychosocial risk procedure in place
- Employee involvement – not consulting employees, not encouraging active participation and not having both forms of involvement.

Considering management commitment, worker representation and employee involvement together (Appendix 1, Table Apx1.31b.2, EU-27) showed that organisations with high management commitment to health and safety in combination with: no worker representation and no employee involvement; no worker representation and some employee involvement; and some worker representation and some employee involvement; were less likely than those with low management commitment, no worker representation and no employee involvement to cite both as a factors making dealing with psychosocial risks particularly difficult.

Similarly, in comparison with neither factor cited as making dealing with psychosocial risks particularly difficult (Table Ax1.25), citing lack of resources was associated with:

- Private services
- Low management commitment
- Identifying both traditional and psychosocial risks as of concern in the establishment
- Not carrying out regular workplace checks
- Worker representation – both forms together
- Employee involvement – each form separately and both forms together.

In comparison with neither factor cited as making dealing with psychosocial risks particularly difficult (Table Ax1.25), citing lack of awareness was associated with:

- Multiple site (HQ)
- Larger workforces
- Fewer than 80% of the workforce being female
- 20% or more of the workforce aged 50 or over
- Low management commitment
- Identifying traditional risks only or both traditional and psychosocial risks as of concern in an establishment
- Having a psychosocial risk procedure in place
- Worker representation – each form separately and both forms together
- Employee involvement – consultation only and both forms together.

In comparison with neither factor cited as making dealing with psychosocial risks particularly difficult (Table Ax1.25), citing both factors was associated with:

- Multiple site (HQ)
- Larger workforces
- Private or public services
- 20% or more of the workforce aged 50 or over
- Low management commitment
- Identifying traditional risks only, psychosocial risks only or both risk types as of concern in the establishment
- Not having a document H&S policy
- Not carrying out regular workplace checks
- Worker representation – specialist only and both forms together
- Employee involvement – not having both forms together.

Considering worker representation, management commitment and employee involvement together (Appendix 1, Table Apx1.32b.2) showed that:

- In comparison with neither factor cited as making dealing with psychosocial risk particularly difficult, citing lack of resources was associated with:
  - Low management commitment, some worker representation and some employee involvement.
- In comparison with neither factor cited as making dealing with psychosocial risk particularly difficult, citing lack of awareness was associated with:
  - Low management commitment, some worker representation and some employee involvement.
- In comparison with neither factor cited as making dealing with psychosocial risk particularly difficult, citing both factors was associated with:
  - Not having high management commitment, no worker representation and no employee involvement
  - Not having high management commitment, no worker representation and some employee involvement
  - Not having high management commitment, some worker representation and some employee involvement.

Table Ax1.25: EU-27, factors making dealing with psychosocial risks particularly difficult – reference group = neither lack of resources nor lack of awareness

			p	OR	CI	CI
Model N=9641, Nagelkerke R^2 = 0.093						
Lack of resources	**Site**	Multiple site – HQ	.802	1.030	.816	1.301
		Multiple site – subsidiary	.723	1.043	.825	1.320
		DK/missing	.178	2.242	.693	7.251
	Size	20 to 49	.526	1.077	.856	1.356
		50 to 249	.956	1.007	.791	1.282
		250 to 499	.524	.899	.649	1.247
		500+	.280	.819	.571	1.176
	Sector	Producing industries	.765	.971	.799	1.179
		Private services	.000	1.679	1.303	2.164
	Gender	80% + female	.276	1.137	.902	1.433
	Age	<20% aged 50+	.119	.873	.736	1.036
	Foreign workers	80% + foreign	.794	.924	.511	1.671
	Management commitment	High	.001	.684	.543	.862
	Risk type	Traditional	.077	1.620	.949	2.764
		Psychosocial	.354	1.348	.717	2.535
		Both	.000	2.475	1.522	4.024

	H&S policy	In place	.077	.802	.627	1.024
	Sickness absence data	Collected	.061	.841	.701	1.008
	Workplace checks	Regular	.002	.594	.429	.823
	PS procedure	In place	.119	1.157	.964	1.388
	PS actions	Carried out	.463	1.586	.463	5.435
	Worker representation	General	.070	1.390	.973	1.986
		Specialist	.209	1.185	.909	1.543
		Both	.020	1.350	1.048	1.740
	Employee involvement	Consultation	.018	1.560	1.079	2.254
		Action	.008	1.475	1.107	1.966
		Both	.001	1.461	1.156	1.845
Lack of awareness	**Site**	Multiple site – HQ	.015	1.289	1.050	1.582
		Multiple site – subsidiary	.120	1.182	.957	1.460
		DK/missing	.208	2.085	.665	6.537
	Size	20 to 49	.052	1.252	.998	1.571
		50 to 249	.120	1.203	.953	1.519
		250 to 499	.014	1.445	1.079	1.935
		500+	.019	1.460	1.063	2.003
	Sector	Producing industries	.071	.854	.719	1.014
		Private services	.991	1.001	.788	1.273
	Gender	80% + female	.023	.762	.604	.963
	Age	<20% aged 50+	.004	.794	.679	.928
	Foreign workers	80% + foreign	.853	1.053	.609	1.822
	Management commitment	High	.026	.771	.614	.969
	Risk type	Traditional	.009	1.920	1.177	3.132
		Psychosocial	.926	1.030	.557	1.903
		Both	.000	2.286	1.453	3.596
	H&S policy	In place	.298	.877	.686	1.122
	Sickness absence data	Collected	.200	1.118	.942	1.327
	Workplace checks	Regular	.735	1.064	.742	1.527
	PS procedure	In place	.000	1.658	1.400	1.965
	PS actions	Carried out	.235	2.104	.616	7.186
	Worker representation	General	.036	1.468	1.024	2.105
		Specialist	.004	1.464	1.127	1.901
		Both	.000	1.696	1.322	2.175

	Employee involvement	Consultation	.005	1.623	1.157	2.277
		Action	.084	1.272	.968	1.670
		Both	.000	1.476	1.187	1.834
Both	**Site**	Multiple site – HQ	.015	1.241	1.042	1.478
		Multiple site – subsidiary	.491	1.066	.889	1.278
		DK/missing	.047	2.811	1.015	7.786
	Size	20 to 49	.222	1.118	.935	1.337
		50 to 249	.002	1.344	1.117	1.617
		250 to 499	.023	1.327	1.039	1.694
		500+	.013	1.408	1.076	1.843
	Sector	Producing industries	.000	.752	.653	.868
		Private services	.603	1.055	.862	1.291
	Gender	80% + female	.733	.968	.803	1.167
	Age	<20% aged 50+	.000	.774	.680	.881
	Foreign workers	80% + foreign	.865	.963	.621	1.493
	Management commitment	High	.000	.505	.422	.606
	Risk type	Traditional	.000	3.920	2.576	5.966
		Psychosocial	.000	2.512	1.529	4.127
		Both	.000	6.987	4.723	10.337
	H&S policy	In place	.004	.752	.621	.911
	Sickness absence data	Collected	.744	.977	.850	1.123
	Workplace checks	Regular	.007	.687	.524	.902
	PS procedure	In place	.147	1.108	.965	1.273
	PS actions	Carried out	.270	1.616	.689	3.787
	Worker representation	General	.298	1.163	.875	1.546
		Specialist	.009	1.301	1.067	1.585
		Both	.000	1.468	1.212	1.777
	Employee involvement	Consultation	.526	1.094	.829	1.442
		Action	.757	.967	.785	1.193
		Both	.009	.801	.678	.946

Stage 4 – Inhibitors to OSH management of psychosocial risk: Conclusions

Overall, therefore, factors associated with inhibitors to OSH management of psychosocial risk varied with specific inhibitors. However, low management commitment to health and safety was associated with all the inhibitor measures again highlighting the importance of an organisation's managerial approach to health and safety. These findings are summarised in Figure Ax1.8b.

Figure Ax1.8b – Stage 3: Inhibitors to OSH management of psychosocial risk – findings

Associations between:	
Inhibitors to OSH management of psychosocial risk: • Lack of resources	**Firm demographics:** • Private services
	Approach to OSH management: • Low management commitment to H&S • Seeing both traditional and psychosocial risks as of concern
	Health and safety management: • No regular workplace checks
	Psychosocial risk management:
	Worker representation: • Both forms together
	Employee involvement: • Each form separately and both forms together
Inhibitors to OSH management of psychosocial risk: • Awareness	**Firm demographics:** • Multiple site (HQ) • Larger workplaces • Fewer women and more older workers
	Approach to OSH management: • Low management commitment to H&S • Seeing traditional risks only or both types of risk as of concern
	Health and safety management:
	Psychosocial risk management: • PS procedure in place
	Worker representation: • Each form separately and both forms
	Employee involvement: • Consultation only and both forms together
Inhibitors to OSH management of psychosocial risk: • Both	**Firm demographics:** • Multiple site (HQ) • Larger workplaces • Private or public services • More older workers
	Approach to OSH management: • Low management commitment to H&S • Identifying each risk type separately or both together as of concern
	Health and safety management: • No documented H&S policy • No regular workplace checks
	Psychosocial risk management:
	Worker representation: • Specialist only and both forms together
	Employee involvement: • Not having both forms together

1.5 Stage 5: Corroboration with ER Variables

The ESENER dataset includes responses from 7226 employee representatives. Using weighted data, this means that just under a fifth of the participating organisations from the EU-27 sample returned both management and employee representative data (Table Ax1.26).

Table Ax1.26 – Employee representative responses

Employee representative response	Whole sample				EU-27			
	Unweighted		Weighted		Unweighted		Weighted	
	N	%	N	%	N	%	N	%
No	21423	74.8	23563	82.2	18077	73.2	21190	81.4
Yes	7226	25.2	5086	17.8	6602	26.8	4846	18.6
Total	28649	100	28649	100	24679	100	26036	100

1.5.1 The ER subset

First, univariate analyses were carried out to consider any differences between organisations with and without an employee representative (ER) response in terms of the workplace characteristics, worker representation and worker involvement in psychosocial risk management, approach to OSH management, H&S management and the process, outcomes and inhibitors to H&S management measures considered in Stages 1-4 of the analyses.

Significant differences were found between the two groups in terms of each of these sets of measures. Considering workplace characteristics (EU-27 data, Appendix 1 Table A33b) more organisations with an ER response were:

- multiple site
- larger workforce
- public sector
- 20% or more of the workforce aged 50 or over
- Less than 80% foreign workers.

Considering worker representation and worker involvement in psychosocial risk management (EU-27 data, Appendix 1 Table A33b) more organisations with an ER response:

- Had both forms (general and specialist) of worker representation
- Used both forms (consultation and encouragement to participate) of worker involvement in psychosocial risk management.

Considering approach to OSH management (EU-27 data, Appendix 1 Table A33b) more organisations with an ER response:

- Had high management commitment
- Identified both traditional and psychosocial risks of as concern in the establishment
- Identified the legal obligation, requests from employees or their representatives, staff retention and absence management, economic or performance reasons, requirements from clients or the organisation's reputation and labour inspection pressure as reasons for addressing health and safety issues.

Considering health and safety management (EU-27 data, Appendix 1 Table A33b) more organisations with an ER response:

- Had a documented health and safety policy

- Routinely collected sickness absence data
- Regularly carried out workplace checks.

Considering the process, outcomes and inhibitors to health and safety management (EU-27 data, Appendix 1 Table A33b), more organisations with an ER response:

- Described their H&S policy as having some or a large impact
- Reported supporting employees returning from long-term sick leave
- Reported taking action following workplace checks
- Identified lack of time, money or expertise only as a reason for not having an H&S policy.

Considering psychosocial risk management (EU-27 data, Appendix 1 Table A33b), more organisations with an ER response:

- Had a documented psychosocial risk management policy
- Had taken action over psychosocial risks.

Considering the process, outcomes and inhibitors to psychosocial risk management (EU-27 data, Appendix 1 Table A33b), more organisations with and ER response:

- Identified lack of awareness only or both lack or awareness and lack of resources are reasons for not addressing psychosocial risks.

The ER subset - Conclusions

This subset of the ESENER data, therefore, unsurprisingly represents a significantly different group of organisations which are clearly from "the better end of the spectrum" in terms of health and safety management.

1.5.2 Robustness of the management data results

In order to consider the robustness of the analytical results derived from the management data, the logistic regression analyses from Stage 3 of the analyses were repeated on the subset of data from organisations with an ER response. Changes were made to the worker representation variables used in these analyses for two reasons: first there were, necessarily, no organisations in the ER subset where the manager reported no worker representation; and second there were very few organisations in this subset where the manager reported having general representation only (N=5, 0.1%, using EU-27, weighted data). In addition, analyses were restricted to the process and outcome measures because of the small number of workplaces in the ER subset reporting not having policies etc in place (and therefore being available for inclusion in inhibitor analyses: e.g. N=660, 13.7% reporting not having a documented H&S policy in place; N=275, 5.7% reporting not carrying out regular workplace checks (both using EU-27, weighted data)). These analyses, therefore, compare organisations with both forms of representation against those with only one form of representation. Where possible, new analyses were also run using "mirrored" dependent variables from the employee representative dataset.

Reporting some or a large impact of an organisation's H&S policy (Tables 27 and 28a, b and c, full models shown in Appendix 1, Tables A34b.1 and A35b.1, EU-27) was considered across the whole (EU-27) sample and within the ER-subset, as well as using the "mirrored" dependent variable from the employee representative dataset. Considering just the management dependent variable models (columns 1 and 2 of Table Ax1.27) shows that both showed similar associations:

- having a larger workforce
- high management commitment to health and safety

- identifying both traditional and psychosocial risks as of concern in the establishment
- identifying both the importance of legal obligation and staff retention or absence management as reasons for addressing health and safety issues
- routinely collecting sickness absence data
- carrying out regular workplace checks
- having both forms of worker representation in place.

Several factors were also associated with some or a large impact of an organisation's H&S policy in each of these three models:

- having a larger workforce
- high management commitment to health and safety
- the importance of staff retention or absence management as a reason for addressing health and safety issues.

Table Ax1.27 Factors associated with impact of H&S policy

Whole sample (EU-27)	**ER-subset (EU-27)**	**ER-subset (EU-27) – ER dependent variable**
Multiple site (subsidiary)		
Larger workforce	Larger workforce	Larger workforce
Public services or producing industries		Public services or producing industries
Fewer than 80% women in the workforce		
	Fewer than 80% foreign workers	
High management commitment	High management commitment	High management commitment
Identifying both traditional and psychosocial risks as of concern in the establishment	Identifying psychosocial risks only and both traditional and psychosocial risks as of concern in the establishment	
Identifying the importance of legal obligation, staff retention or absence management and clients' requests or organisation's reputation as reasons for addressing health and safety issues	Identifying the importance of legal obligation and staff retention or absence management as reasons for addressing health and safety issues	Identifying staff retention or absence management as a reason for addressing health and safety issues
		Not identifying labour inspectorate pressure as a reason for addressing health and safety issues
Routinely collecting sickness absence data	Routinely collecting sickness absence data	
Regular workplace checks	Regular workplace checks	
Worker representation – specialist H&S representation and both forms together.	Worker representation – both forms together.	

Considering worker representation and management commitment to health and safety together (Table Ax1.28b, full model shown in Appendix 1, Table Apx1.34b.2, EU-27) showed that some or a large impact of an organisation's H&S policy was associated with (both forms of) worker representation at both low and high levels of management commitment. Using the mirrored dependent variable however (Table Ax1.28c, full model shown in Appendix 1, Table Apx1.35b.2, EU-27) showed no significant association between some or a large impact of an organisation's H&S policy and worker representation at either low or high levels of management commitment to health and safety.

Table Ax1.28a: EU-27, impact of H&S policy – whole sample

		P	OR	CI	CI
Model N= 18236 Demographics only: Nagelkerke R^2 = 0.075 Demographics & approach: Nagelkerke R^2 = 0.162 Demographics, approach & management: Nagelkerke R^2 = 0.171 Demographics, approach, management and worker representation: Nagelkerke R^2 = 0.183					
Worker Representation	Neither	.000			
	Gen only	.180	1.155	.936	1.425
	HS only	.013	1.186	1.037	1.357
	Both	.000	1.701	1.470	1.968
Model N= 18236, Nagelkerke R^2 = 0.187					
Worker representation & management commitment	Low commitment no rep	.000			
	Low and general only	.123	1.294	.933	1.794
	Low and HS only	.060	1.219	.992	1.498
	Low and both	.000	1.550	1.243	1.932
	High commitment and no rep	.000	2.994	2.449	3.660
	High and general only	.000	3.210	2.433	4.236
	High and HS only	.000	3.490	2.884	4.223
	High and both	.000	5.339	4.386	6.499

Table Ax1.28b: EU-27, impact of H&S policy – ER subset

		P	OR	CI	CI
Model N= 5387 Demographics only: Nagelkerke R^2 = 0.070 Demographics & approach: Nagelkerke R^2 = 0.154 Demographics, approach & management: Nagelkerke R^2 = 0.163 Demographics, approach, management and worker representation: Nagelkerke					

R^2 = 0.184					
Worker Representation	Both	.000	1.698	1.301	2.217
Model N= 5387, Nagelkerke R^2 = 0.184					
Worker representation & management commitment	Low and one form only	.000			
	Low and both	.024	1.614	1.067	2.441
	High and one form only	.000	3.278	2.171	4.951
	High and both	.000	5.744	3.902	8.455

Table Ax1.28c: EU-27, impact of H&S policy – ER subset, ER dependent variable

		P	OR	CI	CI
Model N= 5282 Demographics only: Nagelkerke R^2 = 0.021 Demographics & approach: Nagelkerke R^2 = 0.035 Demographics, approach & management: Nagelkerke R^2 = 0.035 Demographics, approach, management and worker representation: Nagelkerke R^2 = 0.035					
Worker Representation	Both	.887	1.019	.783	1.326
Model N= 5282, Nagelkerke R^2 = 0.035					
Worker representation & management commitment	Low and one form only	.011			
	Low and both	.497	1.180	.731	1.906
	High and one form only	.018	1.770	1.103	2.841
	High and both	.015	1.709	1.109	2.634

Reporting taking action following workplace checks (Tables 29 and 30a and b, full model shown in Appendix 1, Table Apx1.36b.1) was considered across the whole (EU-27) sample and within the ER-subset. Again there were some similar associations (Table Ax1.29):

- having a larger workforce
- high management commitment to health and safety
- identifying both traditional and psychosocial risks as of concern in the establishment
- identifying staff retention or absence management as a reason for addressing health and safety issues.

Having specialist only and both forms or worker representation together was associated with taking action following workplace checks in the whole (EU-27)

sample, and having both forms of representation approached significance in the ER subset (Table Ax1.30b).

Table Ax1.29 Factors associated with action following workplace checks

Whole sample (EU-27)	ER-subset (EU-27)
Multiple site	
Larger workforce	Larger workforce
Public services or producing industries	
	Less than 80% female
20% or more of the workforce aged 50 or over	
High management commitment	High management commitment
Identifying traditional risks only or both traditional and psychosocial risks as of concern in the establishment	Identifying both traditional and psychosocial risks as of concern in the establishment
Identifying the importance of legal obligation, requests from employees or their representatives, staff retention or absence management, clients' requests or organisation's reputation and labour inspectorate pressure as reasons for addressing health and safety issues	Identifying staff retention or absence management as a reason for addressing health and safety issues
Routinely collecting sickness absence data	
Having a documented H&S management policy	
Worker representation – specialist H&S representation and both forms together.	

Considering worker representation and management commitment to health and safety together (Table Ax1.30b, full model shown in Appendix 1, Table Apx1.36b.2, EU-27) showed that organisations with (both forms of) worker representation and high management commitment were more likely than those with low management commitment and only one form of representation to report taking action following workplace checks.

Table Ax1.30a: EU-27, action following workplace checks – whole sample

		P	OR	CI	CI
Model N= 20829 Demographics only: Nagelkerke R^2 = 0.068 Demographics & approach: Nagelkerke R^2 = 0.129 Demographics, approach & management: Nagelkerke R^2 = 0.141 Demographics, approach, management and worker representation: Nagelkerke R^2 = 0.153					
Worker Representation	Neither	.000			
	Gen only	.967	1.005	.786	1.286
	HS only	.000	1.458	1.232	1.725
	Both	.000	1.939	1.598	2.353
Model N= 20829, Nagelkerke R^2 = 0.154					
Worker representation	Low commitment	.000			

& management commitment	no rep				
	Low and general only	.348	1.209	.814	1.796
	Low and HS only	.002	1.502	1.154	1.954
	Low and both	.002	1.586	1.181	2.129
	High commitment and no rep	.000	1.597	1.281	1.992
	High and general only	.024	1.441	1.049	1.980
	High and HS only	.000	2.296	1.826	2.888
	High and both	.000	3.392	2.639	4.360

Table Ax1.30b: EU-27, action following workplace checks – ER subset

		P	OR	CI	CI
Model N= 5821 Demographics only: Nagelkerke R^2 = 0.088 Demographics & approach: Nagelkerke R^2 = 0.167 Demographics, approach & management: Nagelkerke R^2 = 0.170 Demographics, approach, management and worker representation: Nagelkerke R^2 = 0.154					
Worker Representation	Both	.062	1.442	.982	2.119
Model N= 5821, Nagelkerke R^2 = 0.176					
Worker representation & management commitment	Low and one form only	.009			
	Low and both	.999	1.000	.512	1.952
	High and one form only	.549	1.210	.648	2.261
	High and both	.024	2.050	1.099	3.821

Reporting providing support for employees returning from long-term sickness absence (Tables 31 and 32a and b, full model shown in Appendix 1, Table Apx1.37b.1) was considered across the whole (EU-27) sample and within the ER-subset. Again there were some similar associations (Table Ax1.31):

- being multiple site organisation
- high management commitment to health and safety
- identifying both traditional and psychosocial risks as of concern in the establishment
- identifying both requests from employees or their representatives and staff retention or absence management as reasons for addressing health and safety issues

- having a documented H&S management policy
- having both forms of worker representation in place.

Table Ax1.31: Factors associated with providing support for employees returning from long-term sickness absence

Whole sample (EU-27)	ER-subset (EU-27)
Multiple site	Multiple site
Larger workforce	
	Fewer than 80% female
Fewer than 80% foreign workers	
High management commitment	High management commitment
Identifying both traditional and psychosocial risks as of concern in the establishment	Identifying both traditional and psychosocial risks as of concern in the establishment
Identifying requests from employees or their representatives and staff retention or absence management as reasons for addressing health and safety issues	Identifying requests from employees or their representatives and staff retention or absence management as reasons for addressing health and safety issues
	Not identifying labour inspectorate pressure as a reason for addressing health and safety issues
Having a documented H&S management policy	Having a documented H&S management policy
Worker representation – both forms together only.	Worker representation – both forms together.

Considering worker representation and management commitment to health and safety together (Table Ax1.32b, full model shown in Appendix 1, Table Apx1.37b.2, EU-27) suggested that organisations with (both forms of) worker representation and high management commitment were more likely than those with low management commitment and only one form of representation to report providing support from employees returning from long term sickness absence.

Table Ax1.32a: EU-27, support for return to work – whole sample

		P	OR	CI	CI
Model N= 12258 Demographics only: Nagelkerke R^2 = 0.057 Demographics & approach: Nagelkerke R^2 = 0.096 Demographics, approach & management: Nagelkerke R^2 = 0.102 Demographics, approach, management and worker representation: Nagelkerke R^2 = 0.106					
Worker Representation	Neither	.000			
	Gen only	.671	.954	.766	1.187
	HS only	.551	1.051	.893	1.236
	Both	.000	1.425	1.217	1.667
Model N= 12258, Nagelkerke R^2 = 0.106					
Worker representation & Management commitment	Low commitment no rep	.000			
	Low and	.663	1.098	.721	1.673

	general only				
	Low and HS only	.597	1.089	.793	1.496
	Low and both	.054	1.323	.996	1.758
	High commitment and no rep	.000	1.857	1.438	2.398
	High and general only	.001	1.692	1.256	2.279
	High and HS only	.000	1.935	1.511	2.478
	High and both	.000	2.689	2.114	3.419

Table Ax1.32b: EU-27, support for return to work – ER subset

		P	OR	CI	CI
Model N= 3921 Demographics only: Nagelkerke R^2 = 0.41 Demographics & approach: Nagelkerke R^2 = 0.079 Demographics, approach & management: Nagelkerke R^2 = 0.082 Demographics, approach, management and worker representation: Nagelkerke R^2 = 0.085					
Worker Representation	Both	.013	1.438	1.079	1.917
Model N= 3921, Nagelkerke R^2 = 0.088					
Worker representation & Management commitment	Low and one form only	.000			
	Low and both	.235	.667	.342	1.302
	High and one form only	.882	.951	.490	1.846
	High and both	.128	1.634	.869	3.073

Similarly, analyses from the process, outcomes and inhibitors section of Stage 4 (focusing on psychosocial risk management) were also repeated using the ER subset.

Reporting that their organisation's psychosocial risk management was quite or very effective (Tables 33 and 34a and b, full model shown in Appendix 1, Table Apx1.38b.1) was considered across the whole (EU-27) sample and within the ER-subset. Again there were some similar associations (Table Ax1.33):

- having a small or medium sized workforce
- private services
- high management commitment to health and safety
- routinely collecting sickness absence data
- identifying the fulfilment of legal obligation as a reason prompting the organisation to deal with psychosocial risks

- not identifying labour inspectorate pressure as a reason prompting the organisation to deal with psychosocial risks
- employee involvement - either form separately and (particularly) both forms together.

Table Ax1.33: Factors associated with quite or very effective psychosocial risk management

Whole sample (EU-27)	ER-subset (EU-27)
Single site	
Small and medium sized workforce	Small and medium sized workforce
Private services	Private services
Less than 20% of the workforce aged 50 or over	
80% or more foreign workers	
High management commitment	High management commitment
Not identifying both traditional and psychosocial risks as of concern in the establishment	
Regular workplace checks	
Routine collection of sickness absence data	Routine collection of sickness absence data
Identifying fulfilment of legal obligation and requests from employees or their representatives as reasons prompting the organisation to deal with psychosocial risks	Identifying fulfilment of legal obligation and requests from clients or the organisation's reputation as reasons prompting the organisation to deal with psychosocial risks
Not identifying labour inspectorate pressure as a reason prompting the organisation to deal with psychosocial risks	Not identifying labour inspectorate pressure as a reason prompting the organisation to deal with psychosocial risks
Seeing the management of psychosocial risks as less difficult	Not seeing the management of psychosocial risks as more difficult
Worker representation – none or either form separately	
Employee involvement – either form separately and (particularly) both forms together	Employee involvement – either form separately and (particularly) both forms together

Considering worker representation, management commitment to health and safety and employee involvement together (Table Ax1.34b, full model shown in Appendix 1, Table Apx1.38b.2, EU-27) showed that quite or very effective psychosocial risk management was associated with employee involvement at both high and low levels of management commitment. The combination of high management commitment and some employee involvement, either with one or with both forms of worker representation, was most strongly associated with effective psychosocial risk management.

Table Ax1.34a: EU-27, effectiveness of psychosocial risk management – whole sample

		P	OR	CI	CI
Model N= 17736 Demographics only: Nagelkerke R^2 = 0.005 Demographics, approach, traditional risk management, approach to PS management: Nagelkerke R^2 = 0.116 Demographics, approach, traditional risk management, approach to PS management, worker representation and employee involvement Nagelkerke R^2 = 0.215					
Worker Representation	Neither	.011			
	Gen only	.319	.890	.707	1.120
	HS only	.130	.884	.753	1.037
	Both	.001	.764	.650	.897
Employee involvement	Neither	.000			
	Employees consulted only	.000	2.808	2.328	3.386
	Employees active only	.000	2.336	2.028	2.692
	Both	.000	7.355	6.440	8.399
Model N= 17736, Nagelkerke R^2 = 0.192					
Management commitment, worker representation and employee involvement	None	.000			
	Low commitment, some representation, no involvement	.022	.746	.580	.958
	Low commitment, no representation, some involvement	.000	4.222	3.038	5.867
	Low commitment, some representation, some involvement	.000	3.084	2.413	3.942
	High commitment, no representation, no involvement	.000	2.170	1.600	2.943
	High commitment, some representation, no	.000	1.810	1.426	2.299

	involvement				
	High commitment, no representation, some involvement	.000	8.370	6.180	11.336
	High commitment, some representation, some involvement	.000	8.872	7.015	11.220

Table Ax1.34b: EU-27, effectiveness of psychosocial risk management – ER subset

		P	OR	CI	CI
Model N= 5179 Demographics only: Nagelkerke R^2 = 0.016 Demographics, approach, traditional risk management, approach to PS management: Nagelkerke R^2 = 0.137 Demographics, approach, traditional risk management, approach to PS management, worker representation and employee involvement Nagelkerke R^2 = 0.220					
Worker Representation	Both	.550	.916	.686	1.223
Employee involvement	Neither	.000			
	Employees consulted only	.000	2.752	1.923	3.940
	Employees active only	.000	2.311	1.739	3.070
	Both	.000	6.550	5.112	8.392
Model N= 5179, Nagelkerke R^2 = 0.199					
Management commitment, worker representation and employee involvement	Low commitment, one form of representation, no involvement	.000			
	Low commitment, both forms of representation, no involvement	.634	.851	.438	1.654
	Low commitment, one form of representation, some involvement	.000	4.073	1.902	8.719

	Low commitment, both forms of representation, some involvement	.000	3.963	2.112	7.436
	High commitment, one form of representation, no involvement	.029	2.222	1.086	4.545
	High commitment, both forms of representation, no involvement	.002	2.744	1.468	5.127
	High commitment, one form of representation, some involvement	.000	13.160	6.507	26.614
	High commitment, both forms of representation, some involvement	.000	11.323	6.206	20.660

Finally, factors associated with inhibitors to psychosocial risk management were considered for both the whole (EU-27) sample and the ER subset (Tables 35 and 36). Again there were some similar associations (Table Ax1.35):

- with citing lack of resources:
  - private services
  - low management commitment to health and safety
  - not carrying out regular workplace checks
- with citing lack of awareness:
  - low management commitment to health and safety
  - identifying traditional risks only or both traditional and psychosocial risks as of concern in the establishment
  - having a psychosocial risk procedure in place
- with citing both reasons:
  - private or public services
  - more older workers
  - low management commitment to health and safety
  - identifying traditional risks only, psychosocial risks only or both traditional and psychosocial risks as of concern in the establishment
  - not having a documented H&S policy
  - not carrying out regular workplace checks
  - employee involvement – both forms together.

Considering worker representation, management commitment and employee involvement together (Appendix 1, Table Apx1.39b.2, EU-27) showed no significant associations with any of the inhibitors to psychosocial risk management.

Table Ax1.35: Factors associated with inhibitors to psychosocial risk management

Whole sample (EU-27)	ER-subset (EU-27)
Lack of resources	
Private services	Private services
Low management commitment	Low management commitment
Identifying both traditional and psychosocial risks as of concern in the establishment	
	Not having a documented H&S policy
Not carrying out regular workplace checks	Not carrying out regular workplace checks
Worker representation – both forms together	
Employee involvement – each form separately and both forms together.	
Lack of awareness	
Multiple site (HQ)	
Larger workforces	
Fewer than 80% of the workforce being female	
20% or more of the workforce aged 50 or over	
Low management commitment	Low management commitment
Identifying traditional risks only or both traditional and psychosocial risks as of concern in an establishment	Identifying traditional risks only or both traditional and psychosocial risks as of concern in an establishment
Having a psychosocial risk procedure in place	Having a psychosocial risk procedure in place
Worker representation – each form separately and both forms together	
Employee involvement – consultation only and both forms together.	
Both reasons	
Multiple site (HQ)	
Larger workforces	
Private or public services	Private or public services
20% or more of the workforce aged 50 or over	20% or more of the workforce aged 50 or over
Low management commitment	Low management commitment
Identifying traditional risks only, psychosocial risks only or both risk types as of concern in the establishment	Identifying traditional risks only, psychosocial risks only or both risk types as of concern in the establishment
Not having a documented H&S policy	Not having a documented H&S policy
Not carrying out regular workplace checks	Not carrying out regular workplace checks
	Having carried out at least one action in response to psychosocial risk
Worker representation – specialist only and both forms together	
Employee involvement – not having both forms together.	Employee involvement – not having both forms together.

Robustness of the management data results – Conclusions

The management data analyses showed associations between worker representation and all three measures of the process and outcomes to OSH management. They also showed a strong association between management commitment to health and safety and each of these three measures which, in combination with worker representation, was also significantly associated with each measure. This suggested that OSH management measures are more likely to be effective in workplaces in which there is worker representation, and in particular where that is combined with high management commitment to health and safety. The pattern of results using the ER subset was broadly similar. In particular, the results confirmed the strong association with management commitment to health and safety. Associations with worker representation were less strong, which is likely to reflect both the smaller numbers of organisations included in the analyses and the fact that this was an employee representative subsample (and therefore one which could not be expected to show differences between workplaces with and without worker representation).

The management data analyses focusing on the process and outcomes to psychosocial risk management showed associations between employee involvement and effective psychosocial risk management, but suggested a less clear association with worker representation, with workplaces with both forms of representation in place less likely than those with neither form in place to report effective psychosocial risk management. Again, these analyses showed a strong association with high management commitment to health and safety, with the combination of high commitment and employee involvement most strongly associated with effective psychosocial risk management. Again the pattern of results using the ER subset was similar, with the associations with both management commitment to health and safety and employee involvement again very clear.

Similarly, the management data analyses of the inhibitors to OSH management of psychosocial risk showed varied factors associated with specific inhibitors, but a common association with low management commitment to health and safety. Again this pattern was also clear in the analyses of the ER subset.

Overall, therefore, the corroborative analyses described above suggest that the management data analyses are robust.

1.5.3 Stage 5: Differences between managers and employee representatives

This stage of the analyses focused on deriving variables that measure the level of agreement or disagreement between managers and employee representatives to identify where the responses of the ER questionnaire were 'better', 'worse' or similar to the equivalent question asked in the management questionnaire.

It was possible to measure agreement between managers and employee representatives in a number of areas (Tables 36a and b)[7]. On comparable measures of health and safety management there were high levels of agreement. Within the EU-27 respondents (using weighted data), 81% of managers and employees agreed on whether or not the establishment had a documented health and safety policy (made up of 77% agreeing that they had a policy and 4% agreeing that they did not),

[7] *It should be noted here that comparisons were not made on inhibitors to, for example, workplace checks, because of small numbers.*

89% on whether or not regular workplace checks were carried out (made up of 87% agreeing that they were and 2% that they were not) and 81% on whether any measures had been used to deal with psychosocial risks (made up of 79% agreeing that at least one had been taken and 2% agreeing that none had) (Table Ax1.36a). ER responses were worse (i.e. indicated that there was not a policy etc when management indicated that there was) in 10%, 7% and 11% of cases respectively and better (i.e. indicated that there was a policy etc when management indicated that there was not) in 9%, 4% and 8% of cases respectively. Similarly, on the comparable measure of the outcome of health and safety management, the level of impact of the documented health and safety policy in an organisation, agreement was high (85%, made up of 84% agreeing that it had some or a large impact and 1% agreeing that it had practically no impact), with 8% of ER responses worse and 7% better (Table Ax1.36a). On these measures, therefore, there was broad agreement but where managers and ERs disagreed, more of the ER responses were worse than those of their management counterparts. Each of these four measures were coded so that agreement was scored 0, and worse ER response was scored -1 and a better ER response was scored +1. In addition, these measures were then totalled to give a measure of overall agreement in which: a total score of 0 indicated agreement on all measures and/or a balance between better and worse scores; a total score of -1 or lower indicated an overall worse ER response; and a total score of +1 or higher indicated an overall better ER response. This showed that overall there was agreement among 68%, a worse ER response among 18% and a better ER response among 13%.

Comparisons were also made on other measures, including the types of psychosocial risk present, the frequency with which controversies arise between management and employee representatives and the degree of involvement of line managers and supervisors in health and safety management (Table Ax1.36a). Levels of agreement on these other measures were generally lower and, with the exception of discrimination (89%), ranged from 77% (degree of line managers' involvement) to 60% (having to deal with difficult clients) (Table Ax1.36a). Two further measures of overall agreement were calculated using all the measures in Table Ax1.36a: the first used a narrow definition (i.e. comparing total scores of -1 or lower, 0, and +1 or higher, as before); and the second used a broader definition (i.e. comparing total scores of -2 or lower, -1 to +1, and +2 or higher). These showed that overall there was agreement among 13% and 39% respectively.

Table Ax1.36b shows management and ER responses to questions on the types of risk that were of concern in their establishment. Again there was agreement in the majority of cases – 71%. The greatest levels of disagreement were apparent where one respondent identified both psychosocial and traditional risks as being of concern and the other identified only traditional risks (18%: made up of 10% in which the ER identified traditional risks only and 8% in which the ER identified both risk types).

Table Ax1.36a: Agreement between managers and employee representatives

WHOLE SAMPLE, UNWEIGHTED DATA				WHOLE SAMPLE, WEIGHTED DATA			
Worse N, %	**Similar N, %**	**Better N, %**	**Total N, %**	**Worse N, %**	**Similar N, %**	**Better N, %**	**Total N, %**
MM155 & ER200: Presence of a documented policy, established management system or action plan on health and safety							
493, 7.1	5902, 85.3	526, 7.6	6921, 100	463, 9.6	3915, 81.3	440, 9.1	4818, 100
MM156 & ER202: Level of impact of the documented policy, established management system or action plan on health and safety							
390, 7.1	4847, 88.0	270, 4.9	5507, 100	270, 7.6	3053, 85.6	246, 6.9	3569, 100
MM161 & ER207: Regular workplace checks for health and safety							
653, 9.2	6172, 87.0	273, 3.8	7098, 100	374, 7.5	4428, 88.6	195, 3.9	4997, 100
MM253 and MM259 & ER300 and ER303: Use of measures to deal with psychosocial risks[8]							
725, 10.0	6020, 83.3	481, 6.7	7226, 100	567, 11.1	4129, 81.2	390, 7.7	5086, 100
MM354 & ER107: Frequency with which controversies arise between management and employee representatives							
922, 15.7	3686, 63.0	1247, 21.3	5855, 100	520, 14.9	2158, 62.0	804, 23.1	3482, 100
MM159 & ER214: Degree of involvement of line managers and supervisors in health and safety management							
1047, 15.2	5078, 73.7	763, 11.1	6888, 100	556, 11.4	3731, 76.1	616, 12.6	4903, 100
MM202 & ER252: Psychosocial risks – Time pressure							
1402, 19.8	4416, 62.3	1269, 17.9	7087, 100	992, 20.0	3032, 61.0	943, 19.0	4967, 100
MM202 & ER252: Psychosocial risks – Poor communication between management and employees							
1623, 22.9	4238, 59.9	1216, 17.2	7077, 100	985, 19.8	3174, 63.8	814, 16.4	4974, 100
MM202 & ER252: Psychosocial risks – Poor co-operation amongst colleagues							
1179, 16.6	4573, 64.4	1351, 19.0	7103, 100	699, 14.0	3343, 66.9	956, 19.1	4997, 100
MM202 & ER252: Psychosocial risks – Lack of employee control in organising their work							
1372, 19.5	4599, 65.5	1050, 15.0	7021, 100	755, 15.2	3478, 70.1	728, 14.7	4961, 100
MM202 & ER252: Psychosocial risks – Job insecurity							
1354, 19.1	4605, 64.8	1145, 16.1	7104, 100	889, 17.8	3289, 65.9	810, 16.2	4989, 100
MM202 & ER252: Psychosocial risks – Having to deal with difficult customers etc							

[8] *In the management analyses this measure of action taken in response to psychosocial risks also included MM256 and MM260. They have been excluded here to allow direct comparison with the ER measures.*

1141, 16.3	4468, 64.0	1379, 19.7	6985, 100	873, 17.8	2955, 60.1	1089, 22.1	4917, 100
MM202 & ER252: Psychosocial risks – Problems in supervisor-employee relationships							
1332, 19.0	4614, 65.7	1073, 15.3	7019, 100	864, 17.4	3434, 69.2	666, 13.4	4965, 100
MM202 & ER252: Psychosocial risks – Long or irregular work hours							
1270, 17.9	4914, 69.1	926, 13.0	7110, 100	884, 17.7	3510, 70.3	602, 12.1	4996, 100
MM202 & ER252: Psychosocial risks – Unclear human resources policy							
1468, 21.0	4803, 68.9	703, 10.1	6974, 100	880, 17.8	3569, 72.2	493, 10.0	4942, 100
MM202 & ER252: Psychosocial risks – Discrimination							
597, 8.4	6143, 86.2	389, 5.5	7129, 100	305, 6.1	4432, 88.8	253, 5.1	4990, 100
Overall agreement on all variables above (N=16) – narrower definition							
1803, 48.5	493, 13.3	1420, 38.2	3716, 100	940, 44.7	290, 13.8	874, 41.6	2104, 100
Overall agreement on all variables above (N=16) – broader definition							
1351, 36.4	1405, 37.8	960, 25.8	3716, 100	693, 32.9	833, 39.6	579, 27.5	2104, 100
Overall agreement on management and outcome measures (N=4)							
969, 17.8	3845, 70.8	615, 11.3	5429, 100	649, 18.5	2396, 68.2	467, 13.3	3512, 100
EU-27, UNWEIGHTED DATA				**EU-27, WEIGHTED DATA**			
Worse N, %	**Similar N, %**	**Better N, %**	**Total N, %**	**Worse N, %**	**Similar N, %**	**Better N, %**	**Total N, %**
MM155 & ER200: Presence of a documented policy, established management system or action plan on health and safety							
446, 7.1	5390, 85.2	488, 7.7	6324, 100	440, 9.6	3733, 81.3	421, 9.2	4594, 100
MM156 & ER202: Level of impact of the documented policy, established management system or action plan on health and safety							
363, 7.2	4414, 87.7	256, 5.1	5033, 100	263, 7.7	2910, 85.3	240, 7.0	3412, 100
MM161 & ER207: Regular workplace checks for health and safety							
576, 8.9	5686, 87.6	231, 3.6	6493, 100	344, 7.2	4236, 89.0	179, 3.8	4759, 100
MM253 and MM259 & ER300 and ER303: Use of measures to deal with psychosocial risks[9]							
638, 9.7	5536, 83.9	428, 6.5	6602, 100	529, 10.9	3947, 81.4	371, 7.6	4846, 100
MM354 & ER107: Frequency with which controversies arise between management and employee representatives							
851, 15.9	3370, 62.9	1136, 21.2	5357, 100	496, 15.0	2054, 62.0	764, 23.1	3314, 100
MM159 & ER214: Degree of involvement of line managers and supervisors in health and safety management							

[9] *In the management analyses this measure of action taken in response to psychosocial risks also included MM256 and MM260. They have been excluded here to allow direct comparison with the ER measures.*

944, 15.0	4680, 74.3	679, 10.8	6303, 100	522, 11.1	3580, 76.5	577, 12.3	4678, 100
MM202 & ER252: Psychosocial risks – Time pressure							
1287, 19.9	4049, 62.6	1133, 17.5	6469, 100	947, 20.3	2894, 61.2	887, 18.8	4728, 100
MM202 & ER252: Psychosocial risks – Poor communication between management and employees							
1483, 22.9	3881, 60.0	1103, 17.1	6467, 100	933, 19.7	3030, 64.0	774, 16.3	4737, 100
MM202 & ER252: Psychosocial risks – Poor co-operation amongst colleagues							
1085, 16.7	4169, 64.3	1232, 19.0	6486, 100	659, 13.8	3190, 67.0	910, 19.1	4758, 100
MM202 & ER252: Psychosocial risks – Lack of employee control in organising their work							
1264, 19.7	4187, 65.3	960, 15.0	6411, 100	710, 15.0	3323, 70.3	692, 14.6	4724, 100
MM202 & ER252: Psychosocial risks – Job insecurity							
1264, 19.5	4191, 64.6	1034, 15.9	6489, 100	850, 17.9	3137, 66.0	763, 16.1	4750, 100
MM202 & ER252: Psychosocial risks – Having to deal with difficult customers etc							
1028, 16.1	4090, 64.1	1261, 19.8	6379, 100	817, 17.5	2820, 60.2	1045, 22.3	4682, 100
MM202 & ER252: Psychosocial risks – Problems in supervisor-employee relationships							
1250, 19.5	4161, 64.9	1002, 15.6	6413, 100	821, 17.4	3265, 69.0	644, 13.6	4729, 100
MM202 & ER252: Psychosocial risks – Long or irregular work hours							
1178, 18.1	4490, 69.2	825, 12.7	6493, 100	837, 17.6	3351, 70.4	570, 12.0	4758, 100
MM202 & ER252: Psychosocial risks – Unclear human resources policy							
1365, 21.4	4371, 68.6	632, 9.9	6368, 100	837, 17.8	3400, 72.3	468, 10.0	4705, 100
MM202 & ER252: Psychosocial risks – Discrimination							
548, 8.4	5618, 86.3	341, 5.2	6507, 100	283, 5.9	4234, 89.1	233, 4.9	4750, 100
Overall agreement on all variables above (N=16) – narrower definition							
1653, 48.8	436, 12.9	1300, 38.4	3389, 100	897, 44.8	268, 13.4	839, 41.9	2004, 100
Overall agreement on all variables above (N=16) – broader definition							
1240, 36.6	1263, 37.3	886, 26.1	3389, 100	657, 32.8	788, 39.3	558, 27.8	2004, 100
Overall agreement on management and outcome measures (N=4)							
871, 17.5	3544, 71.4	552, 11.1	4967, 100	617, 18.4	2295, 68.4	445, 13.2	3357, 100

Table Ax1.36b: Agreement between managers and employee representatives on risk types of concern in their establishment

	Whole sample		EU-27	
	Unweighted data	Weighted data	Unweighted data	Weighted data
MM200 & ER252: Issues of concern in the establishment	**N, %**	**N, %**	**N, %**	**N, %**
Both identify neither risk type	27, 0.4	30, 0.6	27, 0.4	30, 0.6
MM identifies neither, ER identifies traditional only	41, 0.6	38, 0.8	41, 0.6	38, 0.8
MM identifies neither, ER identifies psychosocial only	19, 0.3	8, 0.2	18, 0.3	7, 0.2
MM identifies neither, ER identifies both	96, 1.3	64, 1.3	89, 1.3	61, 1.3
MM identifies traditional only, ER identifies neither	71, 1.0	61, 1.2	67, 1.0	60, 1.2
Both identify traditional only	238, 3.3	177, 3.5	224, 3.4	173, 3.6
MM identifies traditional only, ER identifies psychosocial only	18, 0.2	17, 0.3	17, 0.3	16, 0.3
MM identifies traditional only, ER identifies both	572, 7.9	415, 8.2	536, 8.1	406, 8.4
MM identifies psychosocial only, ER identifies neither	19, 0.3	8, 0.2	18, 0.3	8, 0.2
MM identifies psychosocial only, ER identifies traditional only	20, 0.3	16, 0.3	20, 0.3	16, 0.3
Both identify psychosocial only	14, 0.2	7, 0.1	13, 0.2	7, 0.1
MM identifies psychosocial only, ER identifies both	127, 1.8	104, 2.1	115, 1.7	98, 2.0
MM identifies both, ER identifies neither	162, 2.2	161, 3.2	158, 2.4	160, 3.3
MM identifies both, ER identifies traditional only	683, 9.5	494, 9.7	639, 9.7	481, 9.9
MM identifies both, ER identifies psychosocial only	115, 1.6	76, 1.5	112, 1.7	74, 1.5
Both identify both	5004, 69.2	3409, 67.0	4508, 68.3	3211, 66.3
Total	7226, 100	5086, 100	6602, 100	4846, 100

Characteristics associated with management and ER agreement and disagreement

Further analyses were carried out to consider the characteristics associated with agreement and disagreement between managers and employee representatives. These focused on management and ER agreement and disagreement on the four measures of health and safety management and outcomes and the overall measure of these four variables (see section above). The characteristics incorporated into these analyses included workplace characteristics, the measure of management commitment to health and safety, and measures of employee representatives' role in OSH management and their resources and training in OSH issues. Multinomial logistic regression was used to assess the associations, comparing those with better and worse responses to those with similar responses.

In comparison with giving a similar response (Appendix 1, Table Apx1.40b, EU-27), a better ER response on the presence of a health and safety policy was associated with:

- Low management commitment to health and safety.

A worse ER response was associated with:

- Producing industries or private services
- H&S committee meeting 1 per year or less (or no H&S committee)
- Controversies between management and ER arising sometimes or often
- Not reporting difficulties in contacting employees about H&S issues
- Not receiving the necessary information from management
- Having had training for traditional risks only.

In comparison with giving a similar response (Appendix 1, Table Apx1.41b, EU-27), a better ER response on the impact of the H&S policy was associated with:

- Low management commitment to health and safety
- H&S committee meeting 1 per year or less (or no H&S committee)
- Receiving information from management on time and without having to ask for it.

A worse ER response was associated with:

- Reporting difficulties in contacting employees about H&S issues
- Not agreeing with all 3 statements about management commitment to health and safety
- Not describing management measures on psychosocial issues as sufficient.

In comparison with giving a similar response (Appendix 1, Table Apx1.42b, EU-27), a better ER response on the presence of regular workplace checks was associated with:

- Low management commitment to health and safety
- Reporting that management were willing to tackle psychosocial issues.

A worse ER response was associated with:

- Large workplaces
- Public services
- High management commitment to health and safety.

In comparison with giving a similar response (Appendix 1, Table Apx1.43b, EU-27), a better ER response on having used at least one measure to tackle psychosocial issues was associated with:

- Medium sized workplaces
- Public services
- Low management commitment to health and safety.

A worse ER response was associated with:

- Having received training on traditional risks only
- Not having been asked to deal with any psychosocial issues
- Describing management as unwilling to tackle psychosocial issues.

In comparison with giving a similar response (Table Ax1.37, Appendix 1, Table Apx1.44b, EU-27), a better ER response on all four management and outcome measures was associated with:

- Single site workplaces
- Low management commitment to health and safety
- H&S committee meetings less than once per year (or no H&S committee).

A worse ER response was associated with:

- Not receiving the necessary information from management
- Having received training on traditional risks only
- Not reporting that more training was needed
- Reporting that no workplace checks were carried out
- Not agreeing with all 3 statements on management commitment to health and safety.

These analyses suggest that a variety of workplace characteristics and employee representative role and training measures are associated with agreement and disagreement between manager and ER respondents. Low management commitment to health and safety was consistently associated with ER respondents' responses being better than those of their management counterparts. This perhaps reflects the kind of workplace context in which health and safety is primarily the responsibility of the employee representative and other specialised colleagues rather than management. High management commitment to health and safety was also associated with worse ER responses on the carrying out of regular workplace checks, which may be the result of the management commitment measure being taken from the management questionnaire. This possibility is supported by the association between worse ER response and the employee representative not agreeing with all of three statements in high management commitment to health and safety. In addition, there were relatively fewer associations between better ER responses and the ER role and resources measures, whereas measures such as problems with the receipt of information from management, more frequency controversies between management and ERs, ER perception of management unwillingness or insufficiency in relation to psychosocial issues and ER training limited to traditional risks only were all associated with worse ER responses on at least one measure.

Table Ax1.37: EU-27, Management and ER overall agreement on all 4 management and outcome measures – reference group = similar responses

			p	OR	CI	CI
Model N=865, Nagelkerke R^2 = 0.561						
Better	**Site**	Multiple site - HQ	.989	.995	.484	2.045
		Multiple site – subsidiary	.030	.388	.165	.915
		DK/missing	.	7.901E-9	7.901E-9	7.901E-9
	Size	20 to 49	.609	.810	.360	1.819
		50 to 249	.331	.672	.301	1.499
		250 to 499	.314	.592	.213	1.644
		500+	.065	.344	.111	1.070

	Sector	Producing industries	.619	.854	.459	1.590
		Private services	.954	.977	.440	2.169
	Gender	80% + female	.113	.463	.179	1.199
	Age	<20% aged 50+	.516	.832	.478	1.450
	Foreign workers	80% + foreign	.117	5.679	.649	49.697
	Management commitment	High	.000	.306	.161	.582
	H&S committee	Meets more than 1 per year	.029	.508	.277	.932
	Controversies between management and ER	Often or sometimes	.989	.996	.544	1.823
	ER time off for H&S duties	Yes, sufficient	.734	1.134	.549	2.345
	Difficulties contacting employees for H&S issues	At least one	.175	.640	.336	1.220
	Information from management	Not received on time and without having to ask	.624	1.222	.547	2.731
		Do not receive necessary information	.628	1.292	.458	3.644
	Regular information from management	On at least one of the 4	.155	.368	.093	1.458
	Training received	Psychosocial only	.313	.328	.038	2.864
		Traditional only	.336	1.317	.751	2.308
		None	.	.	.	.
	Training level	More needed	.141	.642	.356	1.158
	Role in workplace checks	Involved in decisions only	.939	.954	.286	3.180
		Involved in actions only	.309	.500	.132	1.897
		No say in workplace checks	.666	.657	.097	4.425
		No workplace checks	.450	1.722	.421	7.039
	Commitment statements	Agree with all 3	.826	1.069	.589	1.943
	Dealt with psychosocial issues	Asked to deal with at least 1	.674	1.133	.632	2.030
	Willingness of management to	Willing	.181	1.988	.727	5.436

	tackle psychosocial issues					
	Management measures on psychosocial issues	Sufficient	.937	1.031	.482	2.205
Worse	**Site**	Multiple site - HQ	.551	1.180	.685	2.030
		Multiple site – subsidiary	.566	.859	.510	1.445
		DK/missing	.522	.491	.056	4.326
	Size	20 to 49	.293	1.520	.697	3.315
		50 to 249	.897	.951	.446	2.028
		250 to 499	.704	1.179	.504	2.762
		500+	.442	.705	.289	1.719
	Sector	Producing industries	.794	1.067	.657	1.734
		Private services	.681	.876	.467	1.644
	Gender	80% + female	.910	.961	.482	1.917
	Age	<20% aged 50+	.421	1.200	.769	1.872
	Foreign workers	80% + foreign	.926	1.113	.118	10.496
	Management commitment	High	.909	1.035	.571	1.876
	H&S committee	Meets more than 1 per year	.645	1.130	.672	1.899
	Controversies between management and ER	Often or sometimes	.750	.927	.580	1.480
	ER time off for H&S duties	Yes, sufficient	.176	.711	.434	1.165
	Difficulties contacting employees for H&S issues	At least one	.409	1.218	.763	1.946
	Information from management	Not received on time and without having to ask	.255	1.387	.789	2.436
		Do not receive necessary information	.051	1.868	.998	3.498
	Regular information from management	On at least one of the 4	.795	1.145	.413	3.174
	Training received	Psychosocial only	.444	.615	.177	2.139
		Traditional only	.012	1.760	1.130	2.743

		None	.	.	.	.
	Training level	More needed	.045	.614	.381	.990
	Role in workplace checks	Involved in decisions only	.492	.719	.280	1.845
		Involved in actions only	.962	1.024	.391	2.681
		No say in workplace checks	.161	2.378	.708	7.982
		No workplace checks	.000	41.095	15.552	108.591
	Commitment statements	Agree with all 3	.027	.583	.362	.940
	Dealt with psychosocial issues	Asked to deal with at least 1	.526	.863	.547	1.362
	Willingness of management to tackle psychosocial issues	Willing	.361	.767	.434	1.355
	Management measures on psychosocial issues	Sufficient	.608	.866	.501	1.498

1.5.4 Stage 5: Associations between employee representatives' role and health and safety management and outcomes

Finally analyses were carried out to consider any associations between measures of health and safety management and the process and outcomes of such management and measures of employee representatives' role in OSH management and their resources and training in OSH issues. Logistic regression models were used again to control for workplace characteristics, management commitment to health and safety, worker representation and (for the psychosocial risk management and outcome variables) employee involvement in psychosocial risk management.

Reporting that the organisation had a documented health and safety policy in place (Appendix 1, Table Apx1.45b, EU-27) was associated with:

- Multiple site (subsidiary)
- Producing industries and private services
- High management commitment to health and safety
- Worker representation – both forms together
- ER reporting H&S committee meetings more often than 1 per year
- ER reporting that workplace checks were carried out – both with and without the ER having some say in any part of the process.

Reporting that the organisation had a documented health and safety policy in place as measured in the ER interview (Appendix 1, Table Apx1.46b, EU-27) was associated with:

- Multiple site (subsidiary)
- Producing industries and private services
- 80% or more women in the workforce
- 20% or more of the workforce aged 50 or over
- High management commitment to health and safety
- ER reporting H&S committee meetings more often than 1 per year

- ER reporting receiving information from management – both late and having to ask for it and, particularly, on time and without having to ask for it
- ER reporting receiving training for both traditional and psychosocial risks
- ER reporting that workplace checks were carried out – both with and without the ER having some say in any part of the process.

Reporting that the organisation collected sickness absence data (Appendix 1, Table Apx1.47b, EU-27) was associated with:

- Multiple site
- Larger workforce
- Producing industries and private services
- High management commitment to health and safety
- Worker representation – both forms together
- ER reporting H&S committee meetings more often than 1 per year
- ER reporting receiving training for both traditional and psychosocial risks
- ER reporting needing more training
- ER reporting that workplace checks were carried out – both with a say in decisions about when and where and without a say.

Reporting that the organisation carried out regular workplace checks (Appendix 1, Table Apx1.48b, EU-27) was associated with:

- Larger workforce
- Producing industries
- High management commitment to health and safety
- ER reporting that workplace checks were carried out – both with and without the ER having some say in any part of the process.

Reporting that the organisation carried out regular workplace checks as measured by the ER interview (Appendix 1, Table Apx1.49b, EU-27) was not possible to model because of small numbers reporting no regular workplace checks.

Reporting some or a large impact of the organisation's H&S policy (Appendix 1, Table Apx1.50b, EU-27) was associated with:

- Larger workforce
- Fewer than 80% foreign workers
- High management commitment to health and safety
- Worker representation – both forms
- ER reporting regular information from management on at least one of the four topics
- ER not reporting training for psychosocial risks only
- ER reporting that workplace checks were carried out – both with and without the ER having some say in any part of the process.

Reporting some or a large impact of the organisation's H&S policy as measured in the ER interview (Appendix 1, Table Apx1.51b, EU-27) was associated with:

- Public services and producing industries
- ER reporting H&S committee meetings more often than 1 per year
- ER reporting that controversies arise sometime or often between management and employee representatives
- ER reporting receiving information from management – both late and having to ask for it and, particularly, on time and without having to ask for it

- ER reporting having some say in either the actions taking following workplace checks or both these actions and the decisions on when and where the checks are carried out
- ER agreeing with all 3 statements about management commitment to health and safety
- ER reporting that management is willing to tackle psychosocial issues.

Reporting that the organisation provides support for employees returning from long-term sickness absence (Appendix 1, Table Apx1.52b, EU-27) was associated with:

- Multiple site
- High management commitment to health and safety
- ER agreeing with all 3 statements about management commitment to health and safety
- ER reporting having been asked to deal with at least one psychosocial risk issue.

Reporting that action is taken following workplace checks (Appendix 1, Table Apx1.53b, EU-27) was associated with:

- Larger workforce
- High management commitment to health and safety
- ER reporting H&S committee meetings more often than 1 per year
- ER reporting at least one difficulty in contacting employees about H&S issues
- ER not reporting training on psychosocial risks only
- ER reporting having been asked to deal with at least 1 psychosocial issue.

Reporting that the organisation has a psychosocial risk policy in place (Appendix 1, Table Apx1.54b, EU-27) was associated with:

- Multiple site
- Larger workforce
- Public services
- 20% or more of the workforce aged 50 or over
- High management commitment to health and safety
- Employee involvement – each form separately and (particularly) both forms together
- ER reporting getting sufficient time off normal duties
- ER reporting at least one difficulty in contacting employees about H&S issues
- ER not reporting receiving information from management on time and without asking for it
- ER reporting having received training on both psychosocial and traditional risks
- ER reporting having been asked to deal with at least 1 psychosocial issue.

Reporting that the organisation has carried out a measure to deal with psychosocial risk (Appendix 1, Table Apx1.55b, EU-27) was associated with:

- Employee involvement – each form separately and (particularly) both forms together
- ER reporting H&S committee meetings more often than 1 per year
- ER reporting that controversies between management and employee representatives practically never arise.

Reporting that the organisation has carried out a measure to deal with psychosocial risk (management variable re-worked to match the ER variable) (Appendix 1, Table Apx1.56b, EU-27) was associated with:

- 80% or more of the workforce being female
- Employee involvement – each form separately and (particularly) both forms together.

Reporting that the organisation has carried out a measure to deal with psychosocial risk (ER variable) (Appendix 1, Table Apx1.57b, EU-27) was associated with:

- Employee involvement – not encouragement to active participation only
- ER reporting information from management regularly on at least 1 of the 4 topics
- ER reporting having received training for both psychosocial and traditional risks
- ER reporting having been asked to deal with at least 1 psychosocial issue
- ER reporting that management is willing to tackle psychosocial issues
- ER reporting that management measures on psychosocial issues are sufficient.

Reporting that the organisation's management of psychosocial risks is quite or very effective (Appendix 1, Table Apx1.58b, EU-27) was associated with:

- Smaller workplaces
- Private services
- High management commitment to health and safety
- Employee involvement – each form separately and (particularly) both forms together
- ER reporting not getting enough time off normal duties
- ER not reporting any difficulties in contacting employees about H&S issues
- ER reporting receiving information from management on time and without having to ask for it.

Stage 5: Associations between employee representatives' role and health and safety management and outcomes - Conclusions

These findings are summarised in Table Ax1.38. They suggest that employee representatives' role and resources are associated with health and safety management and its outcomes, and that this is the case, after controlling for workplace characteristics and management commitment to health and safety, for the management and outcomes of both traditional and psychosocial risks. In particular, the regular and frequent meeting of a health and safety committee and employee representative training for both traditional and psychosocial risks were both associated with management and outcome measures. In addition, employee representatives reporting that workplace checks were regularly carried out was associated with the management and outcomes of traditional risks, with an active role of employee representatives in this process particularly associated with some or a large impact of the health and safety policy (as reported by the employee representative) and with the collection of sickness absence data. Furthermore, employee representatives reporting having been asked by workers to deal with at least one psychosocial issue was associated with positive outcomes of traditional risk management (both providing support for employees returning from long-term sickness absence and taking action following workplace checks) and with psychosocial risk management (both having a psychosocial risk policy and reporting

having used at least one psychosocial risk procedure (as reported by the employee representative)).

Overall, therefore, the findings suggest that, independent of other factors, health and safety management is more likely, and is more likely to be effective, in organisations which not only have an employee representative but which also provide that person with an appropriate context in which to work. This includes ensuring high levels of management commitment to health and safety, comprehensive employee representative training, the support system and mechanisms with which the employee representative can implement health and safety policy and practice and an active and recognised role in day-to-day health and safety management of both traditional and psychosocial risks.

Table Ax1.38: Summary of associations with H&S management and outcome variables

	Policy	Policy (ER)	Sickness absence data	Workplace checks	Policy impact	Policy impact (ER)	Support following sick leave	Action following workplace checks	Psycho social policy	Psycho social procedure (original)	Psycho social procedure (to match ER)	Psycho social procedure (ER)	Effectiveness of psychosocial risk management
Workplace characteristics and management commitment													
Site	Multiple (subsidiary)	Multiple (subsidiary)	Multiple				Multiple		Multiple				
Size			Larger	Larger	Larger			Larger	Larger				Smaller
Sector	Producing/private	Producing/private	Producing/private	Producing		Public/producing			Public				Private
Gender		80%+									80%+		
Age		20%+			<80%				20%+				
Foreign workers													
Management commitment	High	High	High	High	High		High	High	High				High
Worker representation	Both		Both		Both								
Employee involvement	NA								Each and (particularly) both	Each and (particularly) both	Each and (particularly) both	Not just participation only	Each and (particularly) both
ER role and resources													
H&S committee	Meets over 1/year	Meets over 1/year	Meets over 1/year			Meets over 1/year		Meets over 1/year		Meets over 1/year			

Controversies between management and ER						Sometimes or often				Practically never			
ER time off for H&S duties									Sufficient				Not sufficient
Difficulties contacting employees for H&S issues								At least 1	At least 1				None
Information from management		Received (particularly on time & automatic)				Received (particularly on time & automatic)			Late and having to ask for it or not at all				Received on time & automatic
Regular information from management					On at least 1							On at least 1	
Training received		Both	Both		Not PS only			Not PS only	Both			Both	
Training level			More needed										
Role in workplace checks	Checks carried out	Checks carried out	Checks carried out & say in decisions	Checks carried out	Checks carried out	Say in actions or both actions & decisions							
Commitment statements						Agreed	Agreed						
Dealt with psychosocial issues							At last 1	At least 1	At least 1			At least 1	
Willingness of						Willing						Willing	

management to tackle psychosocial issues													
Management measures on psychosocial issues												Sufficient	

2.0 Annex 2: full details of the country case study on the UK Workplace Employment Relations Survey (WERS) 2004

2.1 Introduction

The ESENER survey has provided a comparative picture of the nature of OSH management across European workplaces and the involvement of employees in this process. However, due to the nature of the data collection exercise underpinning ESENER, both in terms of the overall sample size and the complexity of collecting comparable cross country data, the survey is inevitably limited in terms of the level of detail that can be achieved with respondents. The ESENER data set only collects relatively limited information about the characteristics of the participating workplaces and is unable to go in to significant detail about the nature of employment relations at these workplaces. In this chapter we therefore undertake a detailed case study for the United Kingdom based upon the 2004 Workplace Employment Relations Survey.

The first of the Workplace Employment Relations Surveys (WERS) was conducted in 1980, followed by further surveys in 1984, 1990 and 1998. The latest in the series of WERS was conducted in 2004 with the aim of providing a nationally representative account of the state of employment relations and working life at British workplaces. Examples of topics covered in this survey are management of personnel and employment relations, recruitment and training, payment systems and workplace performance. The scope of the WERS 2004 Cross-Section extends to cover all workplaces with 5 or more employees, located in Great Britain (England, Scotland and Wales) and engaged in activities within Sections D (Manufacturing) to O (Other Community, Social and Personal Services) of the Standard Industrial Classification (2003). The survey covers both private and public sectors. A majority of information is collected via the main management interview: a face-to-face interview (average two hours) with the senior person at the workplace with day-to-day responsibility for industrial relations, employee relations or personnel matters. Prior to these interviews a four-page self-completion Employee Profile questionnaire is issued to the main management respondent about the composition of the workforce. Interviews are also conducted with employee representatives (face to face interviews averaging 45 minutes with a senior union representative and a senior non-union representative where present); employees (eight-page self-completion questionnaire distributed to a random selection of up to 25 employees in each workplace) and with the financial manager of the establishment (four-page self-completion questionnaire about the financial performance of the establishment). The 2004 survey conducted interviews with managers at approximately 2,300 workplaces.

2.2 Structure of Analysis

The WERS survey provides a rich source of data regarding worker representation, OSH management practices and the involvement of workers in these practices. The analysis of this chapter will follow the general methodological approach taken for the analysis of ESENER. Firstly, we will consider the nature of worker representation at the workplace. The analysis will distinguish between workplaces that have general and specific forms of worker representation. General forms of worker representation are defined as workplaces that have works councils, unions or other forms of representation. Workplaces with specific forms of representation are those establishments where there is a dedicated health and safety committee or

representative. The analysis then goes on to consider how the presence of these different forms of representation affect the nature of consultation that occurs within the establishment with respect to health and safety matters. Specifically, we consider how the presence of different types of representation affect whether management negotiates, consults, informs or does not inform representatives about issues of Health and Safety. Finally, WERS also asks managers to provide information about the incidence of workplace injuries and work related ill-health during the previous 12 months enabling rates of both workplace injury and work related ill-health to be estimated. The analysis concludes by exploring whether consultation at the workplace contributes to lower rates of occupational ill-health.

2.3 Worker Representation in the UK

The WERS survey provides a detailed picture of worker representation within the UK. It can be seen from Table Ax2.1 that unions are present within 31% of workplaces based upon weighted data. However, there is considerable variation in the nature of this union representation. Eight percent of workplaces have unions that managers regard as not being recognised for the purpose of negotiating pay and conditions for the workforce in that establishment. Within those establishments where unions are recognised, respondents are then asked whether the recognised unions with members at that workplace have any representatives or stewards. It can be seen that 15% of workplaces have recognised unions that are without any stewards or representatives. This represents almost two thirds of all workplaces within recognised unions. Finally, only 8% of workplaces are observed to have a recognised union with stewards or representatives.

In addition to the presence of unions at the workplace, WERS goes on to ask managers about other forms of representation at the workplace. Managers are asked whether there are any committees of managers and employees at the workplace that are primarily concerned with consultation, rather than negotiation. Within the UK, such committees can be typically referred to as joint consultative committees, works councils or representative forums. Based upon weighted data, it can be seen that 9% of workplace are reported as having such committees. It should be noted that whilst health and safety issues may be included in the remit of such committees, a large majority of these committees (91%) discuss a range of issues and will therefore not focus specifically on health and safety issues. Finally, respondents are also asked whether, apart from union representatives or stewards of recognised unions, there are any employees who act as representatives of other employees in their dealings with management, apart from any who are concerned exclusively with health and safety. It is estimated that 8% of establishments report that they have such representatives. As with the joint committees, these representatives may represent employees on issues of health and safety, although they do not focus specifically on health and safety issues.

Finally, the base of Table Ax2.1 reports the proportion of workplaces that have forms of representation that are specifically related to issues of health and safety. Respondents are first asked whether there is a committee at the workplace that is dedicated to issues of health and safety and that is separate and additional to any joint consultative committees that may be present at the workplace. Eight percent of workplaces report the presence of health and safety committees. Those workplaces with no such committees are additionally asked whether there any health and safety representatives at the workplace. Once again, the respondent is told by the interviewer that such representatives should be separate and additional to any other ‘general’ representatives at the workplace, such as stewards. A further 2% of workplaces report that they have such representatives. Combined with health and

safety committees, it is therefore estimated that 9% of workplaces have specific forms of representation that are dedicated to issues of health and safety.

Table Ax2.1: General and Specific Worker Representation

Form of Representation	Un-Weighted	Weighted
Coverage: Workplaces with 5+ workers		
Unionisation (total = 100%)		
Non unionised workplaces	41.0	68.8
Workplaces with non-recognised unions	11.9	8.0
Workplaces with recognised unions without a steward or representative	13.4	15.4
Workplaces with recognised unions with a steward or representative	33.7	7.8
Other forms of general representation		
Workplaces with committees of managers and employees concerned with consultation	35.9	8.7
Workplaces with non-union reps or representatives from non-recognised unions	18.4	7.6
Specific Representation		
Workplaces with a dedicated health and safety committee	30.5	7.7
Workplaces without a committee which have a dedicated health and safety representative	4.1	1.6
Either	34.6	9.3

In Table Ax2.2 we consider how the nature of union representation variables across establishments with different characteristics. Within specific types of workplace, the application of grossing factors has a relatively small effect on unionisation distributions. For ease, the analysis is based upon un-weighted data. It can be seen that unions are more likely to be present in larger establishments, those in the public sector (and relatedly those sectors of the economy dominated by public sector employment such as utilities, transport, education and health), foreign owned private sector organisations (compared to those owned in the UK), those that have been established for a longer period of time and those workplaces with a high proportion of employees who are non-white and who and with a high proportion of employees over the age of 50.

As noted in Table Ax2.1, approximately a quarter of unionised workplaces are characterised by the presence of recognised unions with representatives or stewards. As such, the presence of this form of representation is also associated with the characteristics outlined above. However, there are some interesting differences when considering the relative incidence of other forms of union representation. The presence of non-recognised unions increases according to establishment size. Whilst there appeared to be no clear relationship between unionisation and the number of establishments within the organisation, it can be seen that multi-site enterprises are more likely to be associated with the presence of recognised unions with no stewards or representatives. Similarly, there appeared to be no overall relationship between the degree of gender segregation at the workplace and union representation. However, the more detailed analysis reveals that workplaces where women

constitute more than 80% of the workforce are much more likely to be characterised by recognised unions where there are no stewards or representatives.

Table Ax2.2: Workplace Characteristics and Unionisation

	Non Unionised	Unions - Non Recognised	Unions - No Steward	Unions with Steward
Establishment Size				
5 to 9	76.7	6.0	15.1	2.2
10 to 24	67.4	7.1	20.7	4.9
25 to 49	48.1	12.0	23.4	16.5
50 to 99	46.6	13.0	11.7	28.7
100 to 249	25.3	17.9	10.7	46.2
250 to 499	14.9	17.6	7.7	59.9
500 to 999	14.9	16.1	5.4	63.7
1000+	11.5	7.0	2.5	79.1
Establishments in Organisation				
2 to 5	45.5	12.0	8.5	34.0
6 to 10	30.7	15.1	9.9	44.3
11 to 20	34.9	16.5	13.2	35.5
21 to 100	27.9	12.2	15.1	44.8
101+	33.2	11.4	21.4	34.0
Ownership				
Public	1.7	6.2	25.6	66.5
UK	56.6	13.8	10.0	19.7
Foreign	47.3	13.8	6.9	31.9
Years				
0 to 5	48.7	14.5	11.0	25.9
6 to 10	55.1	13.7	10.6	20.6
11 to 20	52.8	10.8	14.0	22.4
21 to 50	38.4	11.1	14.3	36.2
51 +	23.6	12.0	13.0	51.4
Industry				
Manufacturing	38.7	13.6	5.2	42.6
Electricity, gas & water	2.2	2.2	15.6	80.0
Construction	54.9	17.7	13.3	14.2
Wholesale & retail	67.0	14.3	5.9	12.8
Hotels & restaurants	89.2	6.3	1.8	2.7
Transport & communication	19.4	11.1	9.0	60.4
Financial services	34.2	4.1	31.7	30.1
Other business services	76.1	11.1	5.4	7.5
Public administration	0.7	0.7	21.2	77.4
Education	3.4	15.0	25.1	56.5

Health	24.8	15.3	19.9	40.1
Other community services	43.4	12.6	20.3	23.8
Age				
Less than 80% over 50	42.1	11.8	13.6	32.4
Over 80% over 50	18.3	13.5	7.7	60.6
Ethnicity				
Less than 80% non-white	42.2	11.7	14.0	32.1
More then 80% non-white	30.0	13.2	7.7	49.1
Gender				
Less than 80% women	41.8	11.3	10.2	36.7
More than 80% women	38.1	14.1	25.2	22.7
Total – Unweighted	41.0	11.9	13.4	33.7
Total - Weighted	68.8	8.0	15.4	7.8

Table Ax2.3 demonstrates how selected forms of general and specific worker representation vary according to range of establishment characteristics. Once again, the main body of the table is based upon un-weighted data. For general representation, we once again present the proportion of workplaces that have a recognised union that is accompanied by the presence of a steward or representative. Table Ax2.3 suggests that there is a significant degree of complementarity between this form of union representation and the presence of joint committees and other representatives. The presence of other representatives at the workplace can therefore not be regarded as a substitute for stewards and representatives from recognised unions.

In terms of how the nature of specific representation varies according to different establishment characteristics, it is observed that worker representation on matters of health and safety is greater within larger workplaces and workplaces within the public sector. It is also observed that those workplaces that are part of foreign owned organisations also exhibit higher levels of representation. In terms of variations by sector, workplaces within traditional heavy industries (manufacturing, utilities), transport and communication and public administration exhibit the highest levels of specific representation. Levels of representation are lowest within the construction and other business services sectors. As with general representation, levels of representation are higher in workplaces that have been established for longer. Levels of specific representation are lower in workplaces that are dominated by female employment, a pattern also observed in terms of the presence of union representatives or stewards. Specific representation is also higher within workplaces that are dominated by the employment of people from minority ethnic populations. Finally it is noted that, although considerably lower given the design of the WERS questionnaire, the pattern in the incidence of health and safety representatives closely follows that of health and safety committees. Representatives can therefore be considered only as an alternative to health and safety committees within those workplaces that are characterised by generally higher levels of specific representation. It is not the case that health and safety representatives predominate in those types of workplaces characterised by an absence of health and safety committees.

Table Ax2.3: Forms of General and Specific Worker Representation

	General			Specific	
	Works Council	**Union with Steward**	**Other Rep**	**Health and Safety Committee**	**Health and Safety Representative**
Establishment Size					
5 to 9	1.7	2.2	5.6	2.6	0.4
10 to 24	5.3	4.9	4.1	4.8	1.0
25 to 49	17.1	16.5	12.3	15.6	3.9
50 to 99	29.2	28.7	17.5	25.0	6.8
100 to 249	50.0	46.2	26.2	43.7	6.0
250 to 499	60.7	59.9	29.9	53.1	5.8
500 to 999	71.4	63.7	35.1	57.7	5.4
1000+	85.1	79.1	30.2	68.1	4.0
Establishments in Organisation					
2 to 5	41.5	34.0	18.1	36.0	1.8
6 to 10	45.9	44.3	23.7	45.4	6.2
11 to 20	47.4	35.5	23.0	36.2	5.3
21 to 100	42.3	44.8	19.7	37.3	5.3
101+	35.1	34.0	19.4	22.4	6.5
Ownership					
Public	54.2	66.5	15.6	43.1	5.1
UK	26.3	19.7	16.9	22.8	3.7
Foreign	40.4	31.9	27.7	36.4	4.0
Years					
0 to 5	30.8	25.9	16.0	29.7	2.3
6 to 10	26.6	20.6	16.1	22.3	3.1
11 to 20	27.6	22.4	15.7	20.0	4.3
21 to 50	36.8	36.2	18.7	31.7	4.7
51 +	51.2	51.4	24.5	44.7	4.9
Industry					
Manufacturing	49.0	42.6	31.3	54.8	4.5
Electricity, gas & water	60.0	80.0	15.6	48.9	6.7
Construction	15.9	14.2	7.1	12.4	3.5
Wholesale & retail	28.0	12.8	22.4	15.6	5.6
Hotels & restaurants	12.6	2.7	11.7	13.5	0.0
Transport & communication	47.9	60.4	20.1	37.5	7.6
Financial services	23.1	30.1	13.8	14.6	3.8

Other business services	18.6	7.5	15.4	12.9	2.1
Public administration	64.2	77.4	15.3	52.6	5.1
Education	49.0	56.5	23.1	41.3	6.7
Health	41.1	40.1	13.0	36.5	2.5
Other community services	25.2	23.8	14.0	23.1	1.4
Age					
Less than 80% over 50	34.9	32.4	18.5	29.7	4.0
Over 80% over 50	56.7	60.6	16.3	47.1	4.8
Ethnicity					
Less than 80% non-white	34.1	32.1	17.6	29.3	4.1
More then 80% non-white	52.5	49.1	26.2	41.6	3.2
Gender					
Less than 80% women	39.3	36.7	20.2	33.4	4.1
More than 80% women	23.1	22.7	11.8	19.6	3.7
Total – Unweighted	35.9	33.7	18.4	30.5	4.1
Total Weighted	8.7	7.8	7.6	7.7	1.6

To further consider the composition of representation at the workplace, Table Ax2.4 presents the incidence of workplaces that are covered by a) general representation b) specific representation and c) both. For the purposes of this analysis, general representation is defined as being the presence of a consultation committee, a trade union representative or some other form of representative. As noted above, consultation committees and other forms of representative represent workers on a range of issues, possibly including health and safety. In considering unionisation, we similarly focus on workplaces that have union representatives/stewards. Across all workplaces, based upon weighted data it is estimated that 17 percent of workplaces have some form of general representation which may, or may not, cover issues of health and safety. Nine percent of workplaces have some form of representation which is specifically dedicated to health and safety. Finally, approximately six percent of workplaces have both general and specific forms of representation indicating that these 2 forms of representation are complementary. Establishments with specific forms of representation can therefore be considered as a sub-set of establishments that have some form of general representation, with very few establishments reporting that they specific but not general forms of representation.

To investigate in further detail the relationship between workplace characteristics and the presence of representation at the workplace, multivariate statistical analysis was undertaken. The analysis of tables 2, 3 and 4 pointed towards variations in the incidence of representation across a number of workplace characteristics. However, it is not clear from such an analysis whether each of these characteristics has a

separate and additional effect upon the likelihood of worker representation being present at the establishment. For example, by variations in the incidence of representation by workplace size may simply reflect the distribution of industrial sectors among different sized workplaces rather than workplace size itself having a significant impact upon the presence of worker representation. To test these issues, multivariate logistic regression was undertaken to model what factors were associated with the presence of general and specific forms of worker representation. Full results from the analysis are presented in Table Apx2.1 in Appendix 2.

Table Ax2.4: Worker Representation: General and Specific Representation

	General	Specific	General and Specific
Establishment Size			
5 to 9	8.2	3.0	0.4
10 to 24	12.1	5.8	3.6
25 to 49	32.0	19.5	11.7
50 to 99	47.7	31.8	22.1
100 to 249	70.8	49.7	41.8
250 to 499	79.9	58.9	50.9
500 to 999	90.5	63.1	60.7
1000+	93.1	72.2	70.6
Number of Establishments in Organisation			
2 to 5	51.8	37.7	30.7
6 to 10	59.8	51.5	43.3
11 to 20	58.6	41.4	36.2
21 to 100	62.7	42.6	36.4
101+	51.2	29.0	25.5
Ownership			
Public	76.4	48.2	44.8
UK	37.1	26.5	20.7
Foreign	52.7	40.4	33.2
Years			
0 to 5	42.2	31.9	26.6
6 to 10	35.6	25.4	19.5
11 to 20	39.6	24.3	19.1
21 to 50	51.6	36.4	30.0
51 +	69.6	49.6	44.9
Industry			
Manufacturing	64.2	59.4	50.0
Electricity, gas & water	84.4	55.6	51.1
Construction	25.7	15.9	11.5
Wholesale & retail	37.1	21.2	18.7

Hotels & restaurants	15.3	13.5	6.3
Transport & communication	76.4	45.1	42.4
Financial services	42.3	18.5	16.9
Other business services	26.1	15.0	8.2
Public administration	86.1	57.7	52.6
Education	72.6	48.1	43.3
Health	52.1	39.1	33.4
Other community services	35.7	24.5	16.1
Age			
Less than 80% over 50	48.7	33.7	28.1
Over 80% over 50	74.0	51.9	50.0
Ethnicity			
Less than 80% non-white	47.7	33.5	27.8
More then 80% non-white	70.1	44.8	40.7
Gender			
Less than 80% women	53.5	37.5	32.1
More than 80% women	36.2	23.3	17.6
Total – Unweighted	49.8	34.6	29.1
Total - Weighted	17.0	9.2	5.8

The analysis confirms the importance of size of workplace, sector and industry in terms of understanding which workplaces are more likely to have some form of worker representation. Larger workplaces, those in the public sector and those in manufacturing, utilities and public administration were most likely to have some form of worker representation. Workplaces within the construction and services sectors were least likely to have some form of worker representation. Regional variations were generally found to be statistically insignificant, indicating that regional variations in rates of representation can generally be accounted for by other workplace characteristics. Finally, workplaces characterised by high levels of female employment and employment of ethnic minorities were estimated to be associated with lower levels of specific (ethnically concentrated workplaces) and general (female concentrated workplaces) representation.

2.4 Workplace Characteristics and Consultation

Within WERS, managers within establishments which either have members at the workplace or have no union members but still recognise a union are asked about the nature of consultation that occurs with unions with respect to health and safety matters. Some 55% of establishments provided responses to this question (n=1,258). Overall, approximately 40% of such workplaces (based upon weighted data) report that management consults with workers on issues of health and safety, with a further 13% reporting that they consult with workers. Table Ax2.5 shows how the nature of consultation varies according to different types of workplace. For ease of exposition, we will focus on the incidence of workplaces where managers report that there is no consultation between management and workers in respect of health and safety.

Levels of consultation are lower within smaller workplaces where almost a third of managers report that there is no consultation between themselves and employee

representatives. The absence of consultation is more likely to occur within private sector UK owned establishments and within those workplaces that have been established within the last 10 years. In terms of industrial sector, establishments within the construction, wholesale and other business services sectors are more likely to report low levels of consultation. Managers of workplaces characterised by a relatively high concentration of older workers and workers from ethnic minority backgrounds appear less likely to report that there is no consultation with representatives with respect to health and safety. In contrast, managers of workplaces characterised by a high concentration of women are more likely to report that there is no consultation with representatives in respect to health and safety.

Table Ax2.5 considers how the degree of consultation between management and employees varies according to available structures for consultation at the workplace. It is noted at the outset that questions relating to consultation on issues of health and safety are largely asked of workplaces where there are union members present. However, WERS also asks managers in workplaces where there are other types of employee representatives about the nature of consultation surrounding issues related to health and safety. As outlined above, these other representatives may be responsible for representing employees on issues of health and safety. However, these are not representatives that are specific to health and safety and they will represent employees on a variety of issues. Questions regarding the nature of consultation surrounding health and safety at the workplace are therefore asked of unionised establishments or establishments with other forms of representation. Whilst 18% of workplaces have such representatives (see Table Ax2.3), many of these workplaces are also unionised and therefore also provide information on the nature of health and safety consultation between management and unions. Given the relative preponderance of unionisation compared to the presence of other types of employee representatives, in these instances we assume that consultation with unions will represent the main form of consultation at the workplace surrounding issues of health and safety. In total, some 1,418 workplaces provide information on their consultation arrangements regarding health and safety.

Combined responses to these questions are presented in Table Ax2.6. The first part of Table Ax2.6 demonstrates how differences in the nature of union representation are associated with levels of consultation on issues surrounding health and safety. It can be seen that consultation is greatest within workplaces where unions are recognised and have a steward or representative. Eighty two percent of managers in such workplaces report that they either consult or negotiate with employees on issues of health and safety. This is compared to just 23% of managers at workplaces with non-recognised unions. Within non-unionised workplaces that have other representatives at the workplace, 48% of managers report that they negotiate or consult on matters of health and safety. However, these workplaces have only been included in the analysis through the inclusion of a small group of non-unionised workplaces that have some other types of employee representatives and will therefore not be characteristic of all non-unionised workplaces. It is also of interest to note that across all workplaces with non-union representatives, 67% of managers report that they either consult or negotiate with employees on issues of health and safety, approximately 20 percentage points higher than that in workplaces that only had non-union representatives. Levels of consultation within workplaces served only by non-union representatives are also lower than that which is observed in workplaces served by recognised unions, irrespective of whether or not such workplaces have a steward.

Finally, levels of consultation are also relatively high within workplaces where there is also a works council present, where 77% of managers report that they consult or

negotiate with staff on issues of health and safety. However, in Table Ax2.3 we also observed that the presence of such committees appeared to be correlated with the presence of union stewards. It is therefore not clear whether the presence of such committees' results in higher levels of consultation or whether it is other characteristics of such workplaces contribute to higher levels of consultation.

Table Ax2.5: Workplace Characteristics and Consultation

	Negotiates	Consults	Informs	None	Sample Size
Establishment Size					
5 to 9	11.3	45.3	13.2	30.2	53
10 to 24	12.2	37.4	19.5	30.9	123
25 to 49	13.2	42.8	20.1	23.9	159
50 to 99	18.9	37.8	17.6	25.7	148
100 to 249	14.8	48.8	20.7	15.6	256
250 to 499	5.2	66.7	15.5	12.6	174
500 to 999	12.0	68.4	7.5	12.0	133
1000+	15.1	72.2	9.9	2.8	212
Number of Establishments in Organisation					
2 to 5	12.2	55.8	12.2	19.8	172
6 to 10	12.2	52.9	19.5	15.5	123
11 to 20	10.0	63.3	10.0	16.7	90
21 to 100	14.0	55.1	19.2	11.7	214
101+	17.2	52.8	16.5	13.6	309
Ownership					
Public	18.9	60.9	13.0	7.1	560
UK	9.7	44.0	18.6	27.7	516
Foreign	5.1	60.8	17.1	17.1	176
Years					
0 to 5	14.1	55.4	7.4	23.1	121
6 to 10	10.9	43.5	18.1	27.5	138
11 to 20	14.5	50.5	17.7	17.2	186
21 to 50	12.3	55.0	17.5	15.2	389
51 +	12.5	57.3	15.7	14.4	375
Industry					
Manufacturing	5.7	59.7	15.9	18.8	176
Electricity, gas & water	7.0	67.4	23.3	2.3	43
Construction	7.5	40.0	20.0	32.5	40
Wholesale & retail	6.4	46.8	24.5	22.3	94
Hotels & restaurants	0.0	25.0	12.5	62.5	8
Transport & communication	19.8	53.2	17.1	9.9	111
Financial services	19.5	53.3	15.6	11.7	77
Other business services	6.9	43.1	17.2	32.8	58
Public administration	21.6	66.4	9.0	3.0	134

Education	11.5	50.8	17.3	20.4	191
Health	15.1	53.4	13.6	17.9	251
Other community services	17.3	50.7	13.3	18.7	75
Age					
Less than 80% over 50	13.2	53.1	16.0	17.7	1,178
Over 80% over 50	12.5	66.3	15.0	6.3	80
Ethnicity					
Less than 80% non-white	13.4	52.7	16.0	18.0	1,116
More then 80% non-white	11.3	64.1	15.5	9.2	142
Gender					
Less than 80% women	13.1	56.5	15.3	15.1	980
More than 80% women	13.3	45.0	18.0	23.7	278
Total - Unweighted	13.1	54.0	15.9	17.0	1,258
Total - Weighted	12.6	42.0	16.0	29.4	

In terms of specific measures, levels of consultation regarding health and safety where a health and safety committee is present are relatively high, being comparable to the levels of consultation that are observed among establishments with consultation committees and recognised unions with stewards. However, it must be recognised that the effect of specific forms of representation is being considered in the context of a sample of largely unionised establishments. The presence of health and safety representatives is associated with lower levels of consultation compared to health and safety committees. However, these responses relate to a particularly small group of workplaces who report that they do not have a committee dedicated to health and safety.

The lower half of Table Ax2.6 considers levels of consultation according to whether managers report the presence of general or specific mechanisms for consultation, irrespective of the form that these take. Following the analysis presented in Table Ax2.4, general representation at the workplace is assumed to constitute the presence of either a consultation committee, a union steward or some other type of employee representative. The presence of non-recognised unions and unions without a steward are not assumed to constitute forms of general representation. Specific representation refers to the presence of either a health and safety committee or representative. It can be seen that levels of consultation are lowest within those workplaces with no forms of both specific and general representation. These organisations are therefore those that only have non-recognised unions or recognised unions without any stewards or representatives. Thirty nine percent of managers in these workplaces report that they do not consult with employees on issues related to health and safety. Similarly, 37% of managers in workplaces that only have specific forms of representation report that they do not consult with employees. It can be seen that levels of consultation are higher within workplaces where mechanisms for general consultation (e.g. unions, employee representative, consultation committees) are complemented by specific forms of representation on issues related to health and safety. Within such workplaces, the proportion of managers who report that they either do not consult with staff on issues of health and safety or that they simply inform staff of these issues is 13 percentage points lower than that reported by managers in workplaces characterised only by general forms of representation.

Table Ax2.6: Representation Characteristics and Consultation on Health and Safety

	Negotiates	Consults	Informs	None	% of workplaces
Unionisation					
Non unionised workplaces but other non union rep present	11.2	36.5	19.4	32.9	11.9%
Workplaces with non-recognised unions	3.5	19.2	12.6	64.7	14.0%
Workplaces with recognised unions without a steward	14.1	43.5	22.1	20.3	20.5%
Workplace with recognised unions with a steward	15.3	67.1	14.5	3.2	53.6%
Other General					
Workplaces with non-union reps	9.9	57.1	16.9	16.1	19.3%
Workplaces with committees of managers and employees concerned with consultation	13.3	63.5	14.4	8.8	46.6%
Specific					
Workplaces with a dedicated health and safety committee	12.8	66.0	12.1	9.0	39.0%
Workplaces without a committee which have a dedicated health and safety representative	10.8	54.1	20.3	14.9	5.2%
General/Specific					
General Only	17.3	50.6	19.6	12.5	24.8%
Specific Only	8.6	37.1	17.1	37.1	9.9%
General and Specific	12.8	68.2	12.8	6.2	40.8%
No General and no Specific	10.3	32.2	18.7	38.8	24.5%
All unionised workplaces and workplaces with non-union representatives	12.9	51.9	16.4	18.8	100%

Finally, the WERS survey is also able to provide some evidence about the level of resource and commitment given by management to those staff who are engaged in specific forms of representation in the area of health and safety. In workplaces with health and safety committees or representatives, managers are asked whether the employee representatives acting in these roles are provided with any training in order to help them perform their duties. A large majority of workplaces with specific forms of representation report that the staff involved are provided with training. As such, it is difficult to make comparisons in the levels of consultation that exist between those workplaces that provide training and those who do not. Additional analysis (not presented here) does not appear to suggest that the provision of training to representatives is associated with varying levels of consultation.

2.5 Disentangling the Effects of Workplace Representation and Consultation

The previous analyses have demonstrated that the presence of workplace representation, both generally and specifically related to issues of health and safety, varies between establishments according to a variety of characteristics. Multivariate statistical analysis pointed in particular to the importance of workplace size, sector and industry as key characteristics that are associated with the presence of different forms of worker representation. Analysis has also revealed that levels of consultation also vary between workplaces, where once again levels of consultation within what are generally unionised workplaces has been shown to vary by workplace size, sector and industry. Finally, levels of consultation have been shown to vary according to the presence of different types of representation. The presence of a union steward or representative appears to be associated with higher levels of consultation, as is the presence of work councils and health and safety committees.

Observed differences in the levels of consultation on issues related to health and safety according to differences in workplace representation can however be confounded by a number of factors. For example, it has been observed that levels of both worker representation and consultation are higher within the public sector. It is not clear from simple comparisons of rates of consultation that the higher levels of consultation observed in the public sector are the direct result of the higher levels of workplace representation observed in this sector. These differences could be being driven by a number of other factors that are also likely to characterise workplaces within the public sector, such as the relative size of such establishments.

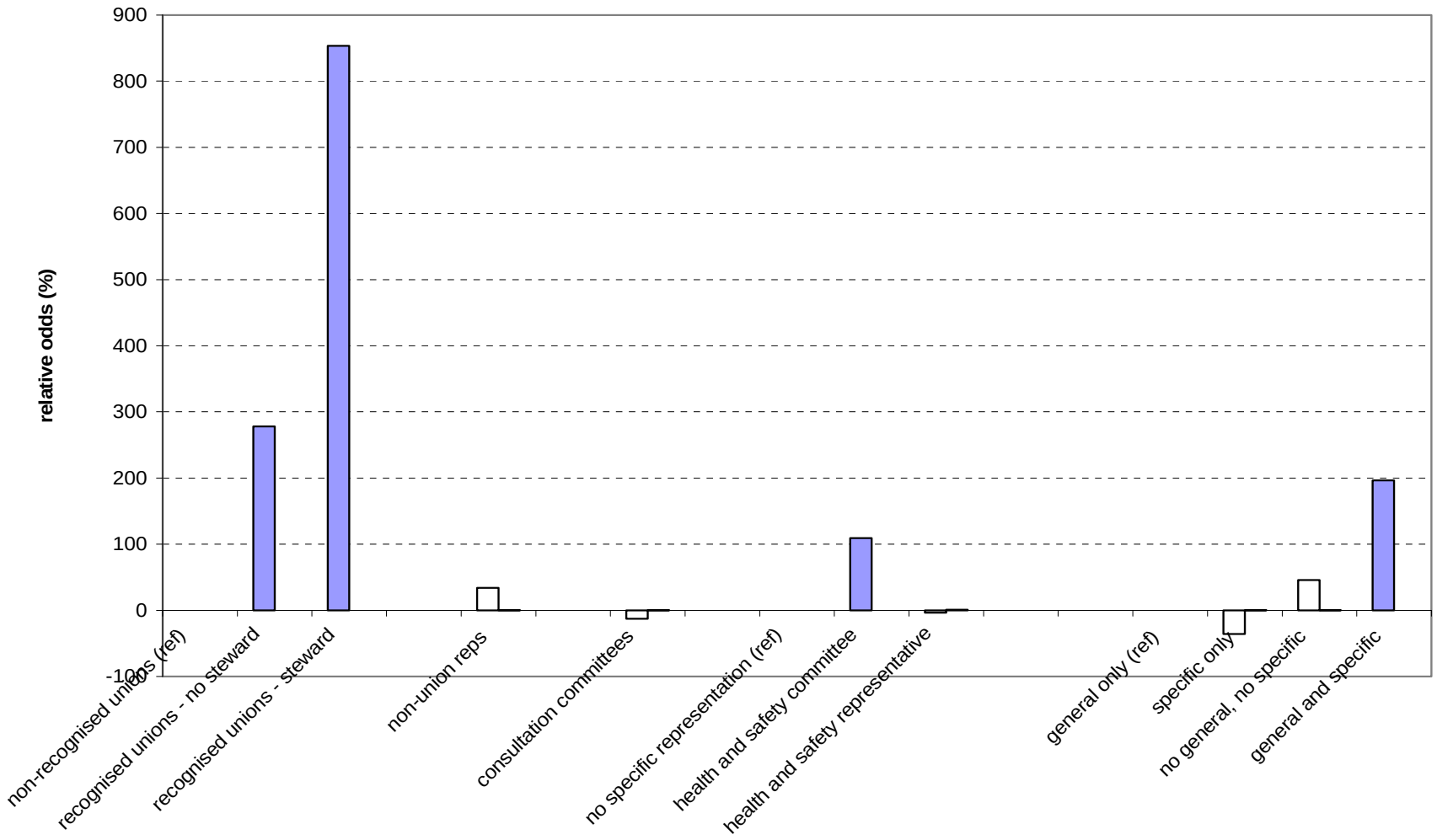
It is therefore important to establish whether, after controlling for all other observable characteristics of workplaces recorded by the WERS survey, levels of consultation vary between workplaces according to the nature of worker representation within these establishments. To consider these issues, multivariate statistical analysis was undertaken to identify the separate and additional effect of a variety of workplace characteristics upon the probability that managers within these workplaces reported that they either consulted or negotiated with staff representatives on issues of health and safety. The comparator group against which these effects are estimated are those workplaces where managers reported that the only informed representatives of issues related to health and safety or where no consultation took place at all.

The full results of the modelling exercise are presented in Table Apx2.2 in Appendix 2. The results derived from these statistical models that specifically relate to the effects of worker representation are summarised in Figure Ax2.1. Bars that are shaded in blue represent relationships that were estimated to be statistically significant at the 5% level. Figure Ax2.1 shows two sets of results derived from

separate models which control for worker representation in different ways. The bars are presented as sets of categories, representing different dimensions of representation. Within each group, one category is chosen to act as a reference category against which the effects of other categories upon consultation behaviour can be evaluated. For example, the left hand side of the chart demonstrates the effects of different types of unionisation on consultation. Within this set of categories, non-unionised workplaces are chosen to act as a reference category.

It is estimated that managers in those workplaces with a union steward are almost nine times more likely to report consultation taking place compared to those workplaces with non-recognised unions. By comparison, those workplaces with recognised unions but who do not have a steward are approximately three times more likely to report consultation taking place, underlining the association between both the recognition of unions and the representation of employees by stewards and consultation on issues of health and safety. After controlling for other workplace characteristics, including the nature of union representation, the presence of consultation committees and other non-union representatives was not found to be associated with increased levels of consultation. In terms of specific representation, the presence of a specific health and safety committee is associated with a 100% increased likelihood of consultation taking place compared to those workplaces where there is no such committee (alternatively, such workplaces are twice as likely to engage in negotiation or consultation). Finally, the results from the second statistical model on the right hand side of the chart point demonstrate how specific and general representation have a complementary effect in contributing to increased levels of consultation. The combination of general and specific representation is associated with a 200% increased likelihood of consultation taking place compared to workplaces that only have general representation.

Figure Ax2.1: Worker Representation and Involvement in Consultation Regarding Health and Safety



2.6 Representation, Consultation and Occupational Ill-Health

An important virtue of the WERS data is that addition to measures of OSH management practices, WERS also asks managers to provide information about the incidence of workplace injuries during the previous 12 months and whether any employees have suffered from any illnesses, disabilities or other physical problems that were caused or made worse by their work. Responses to these questions can be used to estimate rates of both workplace injury and work related ill-health. The effectiveness of OSH management practices on objective measures of workplace health and safety can therefore be considered. This stage of the research programme will build upon previous research (Nichols, et al, 2007, Walters and Nichols 2007 and Nichols and Walters 2009) which has found that rates of occupational ill-health are lower where trade unions have an input in to health and safety committees. The emphasis of the present analysis is to consider whether the involvement of employees in management of health and safety (as measured by the degree of consultation) can be demonstrated to have a positive influence on health and safety outcomes.

Table Ax2.7 presents estimates of rates of both work related ill-health and workplace injury derived from WERS. These rates are presented for the sub-set of organisations for which information on consultation between management and employees on issues related to health and safety was collected. As noted above, these rates therefore relate to workplaces that largely unionised. There are a number of concerns regarding the quality of occupational health data collected from via WERS. Most notably, unless managers who respond to the survey have information readily available, these rates of occupational health are derived from questions that require respondents to recall the number of cases of work related ill-health and injury over a 12 month period. Previous research has demonstrated problems of recall bias in the field of occupational health with respect to individual level data collected from the UK Labour Force Survey (Davies and Jones, 2005; Davies, Lloyd-Williams, Wadsworth, 2011). Recall bias may be expected to be lower in workplaces where consultation between employees and management on issues of health and safety are more formalised, contributing to an upward bias in rates of work related ill-health and injury in these

Table Ax2.7: Rates of Work Related Ill Health and Injury

	Injury	**Ill Health**
Consultation on Issues of Health and Safety		
Negotiates	0.3%	3.3%
Consults	0.6%	2.9%
Informs	0.8%	2.8%
Not Informs	0.2%	2.8%
Total	0.5%	2.9%

In addition to concerns regarding the quality of occupational health data collected from WERS, there are also methodological problems associated with attempting to demonstrate that worker involvement in health and safety is related to rates of work related ill-health and injury. Unions are more likely to be found within hazardous workplaces, whilst those employees whose occupational health is most at risk (or who already suffer from a work related ill-health condition) may be more likely to join a union. The presence of representation at the workplace may also be expected to

improve rates of reporting among employees with respect to injuries and ill-health. Therefore, whilst worker representation may be expected to improve occupational health at the workplace compared to what it would have been in the absence of such representation, the increased presence of representation in relatively hazardous sectors combined with improved levels of reporting among both employers and employees will make it difficult to demonstrate a positive effect of such arrangements of bottom line measures of work related ill-health.

Using the WERS data, we firstly consider how different forms of worker representation are related to rates of workplace injury. Following Fenn and Ashby (2004) and Nichols et al (2007), we have utilised a Poisson regression model. This multivariate statistical technique is suited to the analysis of establishment level rates of work related ill-health and injury from WERS, where many respondents record that nobody in their workplace had suffered from injury or ill-health during the previous 12 months. Whilst such responses may reflect recall bias, such 'null responses' will more often simply reflect low levels of exposure to risk within safe sectors or the relatively small size of many workplaces where it may be normal to expect that injuries or incidences of ill-health had occurred during the previous 12 months.

Our analysis is conducted in 2 stages. We firstly considered how the presence of different forms of worker representation is associated with the incidence of rates of occupational health. The analysis is conducted on the full WERS sample (in contrast to the analyses of consultation which has been based on a sub-set of the WERS sample). We estimate separate models for the production sector (manufacturing, construction, utilities), private services (wholesale & retail, hotels & restaurants, transport & communication, financial services, other business services) and public services (health, public administration, education, other community services). Splitting the sample in this way aims to improve the accuracy of the modelling process by enabling us to consider the effects of different forms of worker representation on occupational health among three groups of relatively homogeneous workplaces. Whilst this may partly overcome problems associated with the emergence of different forms of worker representation in response to workplace conditions (e.g. the relative concentration of unions within hazardous heavy industries), it is acknowledged that there remains significant heterogeneity in the characteristics of workplaces within these three broad sectors and problems surrounding direction of causality remain.

The results derived from these statistical models that specifically relate to the effects of worker representation on occupational health are summarised in Figure Ax2.2 for workplace injuries and Figure Ax2.3 for work related ill-health. Each panel of these charts presents the results derived from a single regression model. It is noted that these models also contain control variables for a variety of workplace characteristics. As such, the results in Figures Ax2.2 and Ax2.3 present the estimate separate and additional association between rates of occupational health and worker representation. Once again, the bars are presented as sets of categories, representing different dimensions of representation. Within each group, one category is chosen to act as a reference category against which the effects of other categories upon consultation behaviour can be evaluated. Bars that are shaded in blue represent relationships that were estimated to be statistically significant at the 5% level. To demonstrate the specification of the model, full results of an all sector regression are presented in Table Apx2.3 in Appendix 2.

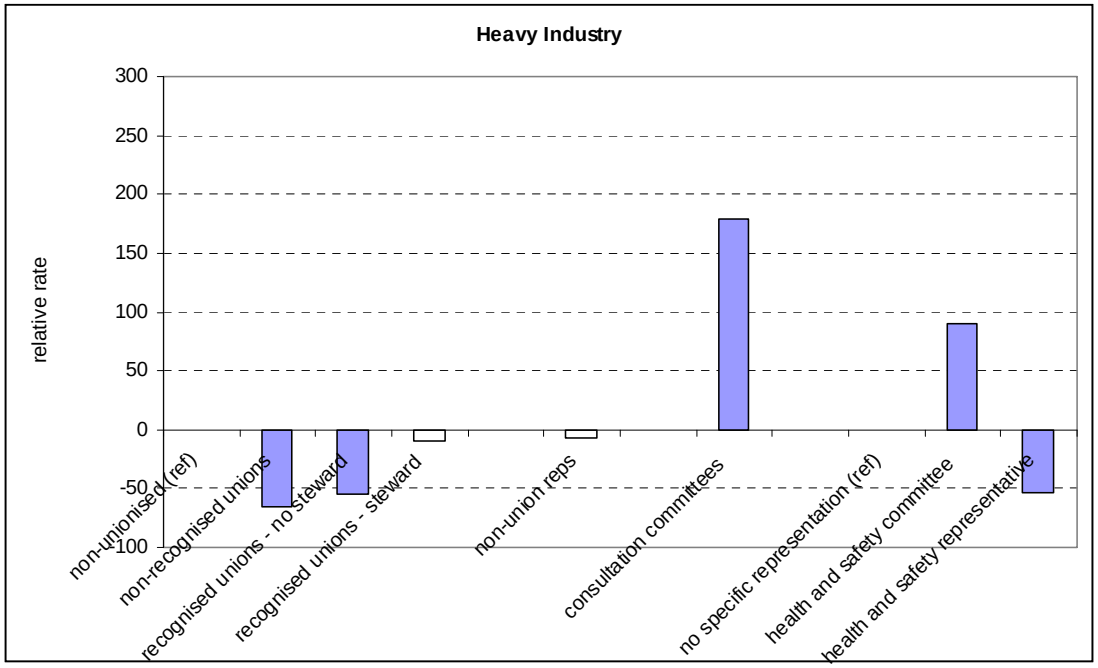
The results of the analysis of workplace injuries are mixed (Figure Ax2.2). Within the production sector, the presence of non-recognised unions and recognised unions without a steward are associated with lower rates of workplace injury (Figure Ax2.2,

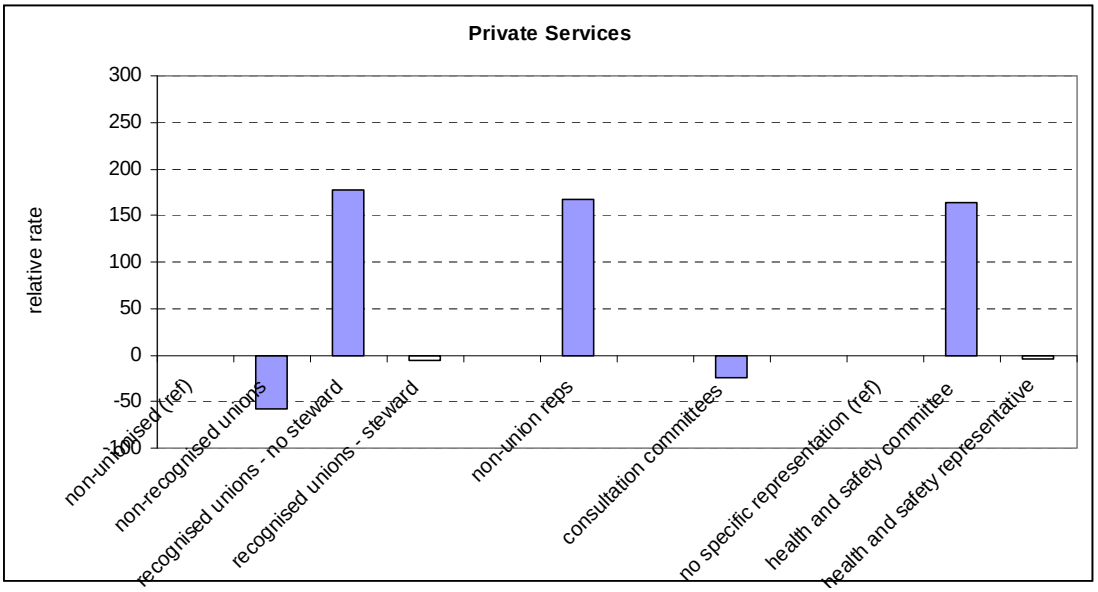
panel 1). In contrast, the presence of any form of union representation within the public services was associated with an increase in the relative incidence of workplace injuries of some 200% (Figure Ax2.2, panel 3). The most consistent picture that emerges across each of the three sectors is the higher incidence rate of workplace injuries in those workplaces with health and safety committees. In terms of work related ill-health, a much more consistent picture emerges across the three sectors, with the reported incidence of ill-health being higher across all unionised establishments. This differential is largest for unionised establishments where there is also a union steward present. This differential is most noticeable in the public services, where the incidence of ill-health is over a 1000% higher (or more than ten times higher) within unionised workplaces with a steward compared to non-unionised workplaces. The presence of health and safety committees or representatives has a relatively small effect, albeit negative, on the incidence of work related ill-health.

These findings underline the problems associated with attempting to demonstrate that employer representation can have a positive influence on workplace health and safety. Earlier analysis demonstrated that the presence of such forms of representation were also associated with the increased involvement of workers in consultation on issues related to health and safety. As such, it would therefore also be expected that rates of ill-health health and injury would also be higher in workplaces where managers reported that workers are negotiated with or consulted on issues of health and safety. This is confirmed to some degree in Table Ax2.7. Among those unionised establishments or establishments with non-union representatives, it is demonstrated that rates of work related ill-health are highest among those workplaces that negotiate with workers on issues of health and safety. In contrast, rates of workplace injury are relatively low among this group, potentially pointing towards the benefits associated with negotiation on occupational health outcomes. However, rates of injury are estimated to be lowest in workplaces where managers report that they simply inform of employees on issues of health and safety. This could reflect lower levels of reporting by employees and the recall of managers regarding rates of workplace injury.

To consider the effects of worker consultation more formally, Figure Ax2.4 presents results derived from our statistical models which specifically relate to the effects of worker consultation on occupational health. These results are based upon the same analyses that were presented in Figure Ax2.3 and control for a variety of workplace characteristics, including the nature of representation at these workplaces. Despite correlation between measures of consultation and representation, additional analysis (not shown) demonstrated that the estimated effect of consultation upon occupational health were not sensitive to the inclusion of representation measures. Each panel presents the results derived from a pair of regression models that in turn consider rates of injury and ill-health.

Figure Ax2.2: Worker Representation and Relative Rates of Workplace Injury





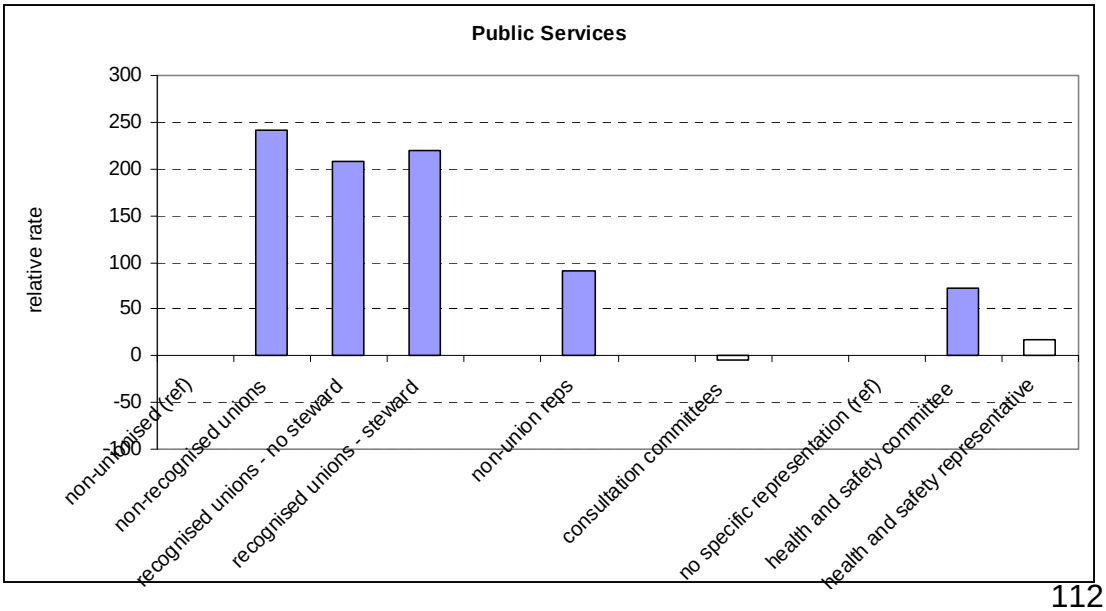
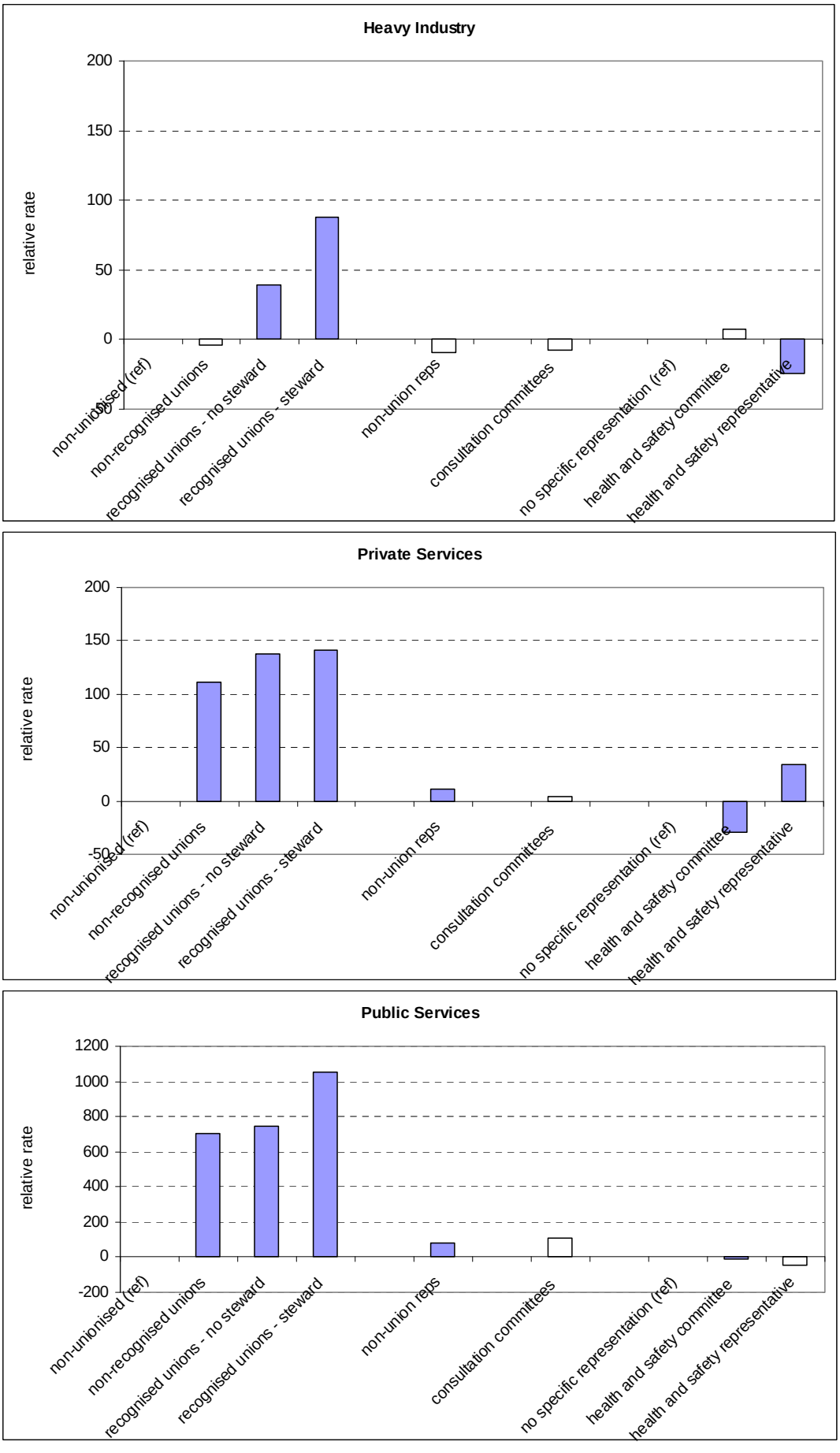


Figure Ax2.3: Worker Representation and Relative Rates of Ill-Health



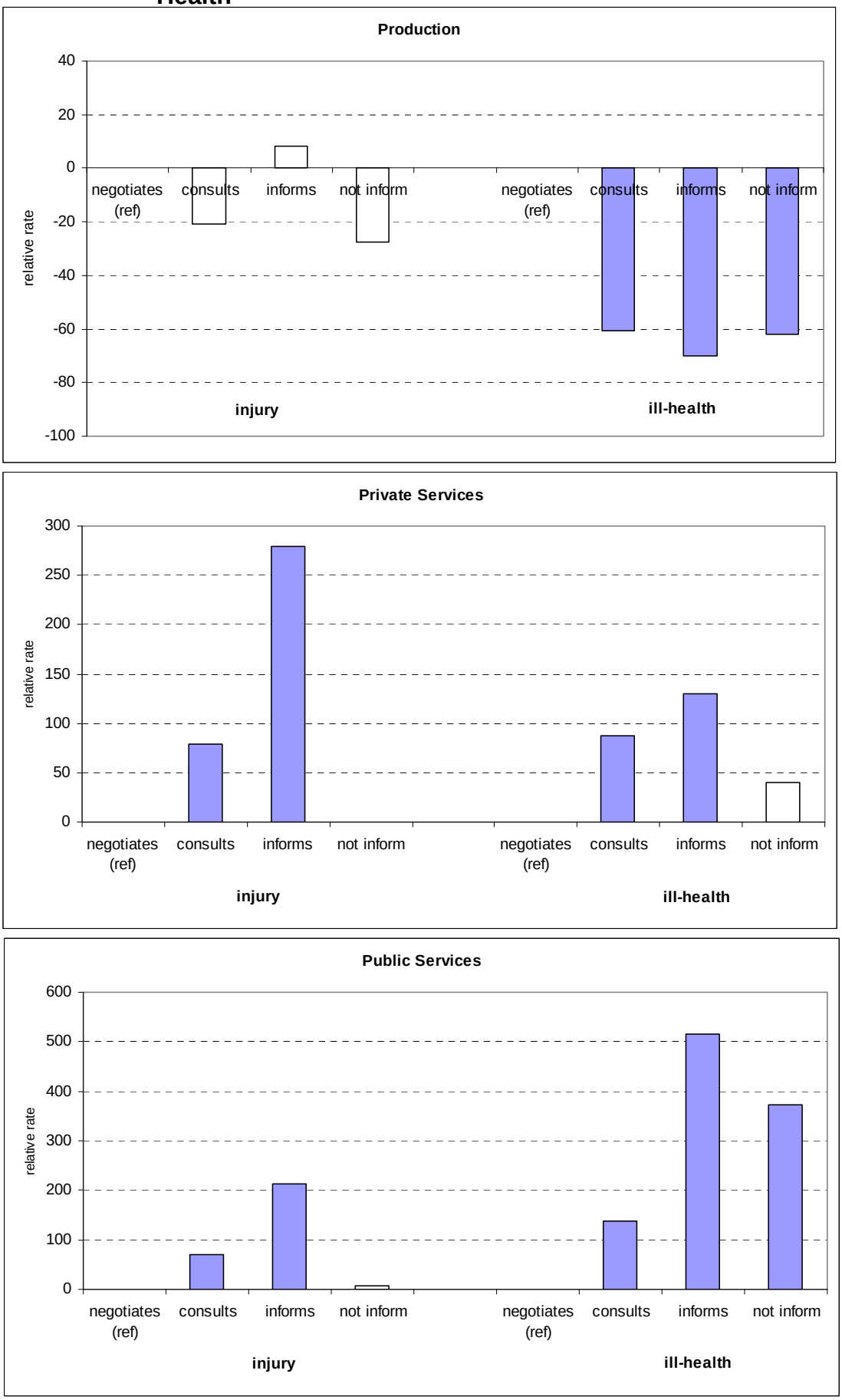
Within the production sector (Figure Ax2.4, panel 1), it can be seen that the incidence of workplace injuries at an establishment is not correlated with the degree of consultation between workers and managers on issues of health and safety. However, those workplaces where managers report that they negotiate with workers on issues related to health and safety report exhibit the highest incidence of work related ill-health; as demonstrated by the lower relative incidence of work related ill-health estimated to occur within workplaces that consult, inform or do nothing in terms of consultation with their employees. However, a very consistent picture emerges within both the private and public service sectors of the economy. In terms of both injuries and ill-health, those workplaces where managers negotiate with workers on issues of health and safety exhibit the lowest incidence of both injuries and ill-health. The relative incidence of injuries and ill-health is highest among those workplaces where managers report that they simply inform workers on issues surrounding health and safety.

The relationship between worker involvement in consultation on occupational health and the incidence of injuries and ill-health conditions at the workplace however is not monotonic. It is observed that those workplaces that neither negotiate, consult or inform workers on issues related to health and safety also exhibit a relatively low incidence of workplace injuries and work related ill-health conditions. This is particularly observed in terms of the relative incidence of workplace injuries which are estimated to be very similar in such workplaces to those that are reported by managers in workplaces that negotiate with workers on issues of health and safety. This finding could possibly relate to the relatively poor quality of occupational health data collected from such workplaces that do not engage with their employees on issues of health and safety (smaller establishments within the private service sector).

2.7 Conclusions

The analysis of this chapter has demonstrated the varying forms of worker representation in the UK and how these specifically relate to the involvement of workers by employers in consultations on issues related to health and safety. Union representation at the workplace is not a simple dichotomous distinction between those workplaces that are unionised and those which are not. The recognition of unions and the presence of stewards contribute to increased levels of consultation with employees on matters of health and safety. However, whilst the presence of consultation committees is correlated with higher levels of worker involvement in health and safety matters, multivariate analysis demonstrates that this mechanism is not estimated to have a separate and additional effect on worker involvement. The separate and additional effect of health and safety committees on worker involvement is also relatively small compared to the recognition of unions and the presence of stewards. It has not been possible to demonstrate a direct relationship between worker representation and rates of work related ill-health and injury. However, within the private and public services, workplaces that negotiate and consult with employees on issues of health and safety are demonstrated to have lower rates of injury and ill-health compared to those workplaces where workers are simply informed of issues related to health and safety.

Figure Ax2.4: Worker Consultation and Relative Rates of Injury and Ill-Health



3.0 Annex 3: full details of the further analysis of the comparable data from the European Working Conditions Surveys (EWCS) 2005 and 2010

Here we analyse data provided by the European Working Conditions Survey. Since its launch in 1990, the EWCS has provided an overview of working conditions in Europe. In each wave, the EWCS has been based on a random sample of workers, including both employees and the self-employed. The number of countries included in the EWCS sample has expanded over time to reflect European enlargements. This section utilises data from both the fourth and fifth waves of the EWCS. The fourth Wave of the EWCS was conducted in 2005 and included data from EU-27 countries plus Norway, Croatia, Turkey and Switzerland. Fieldwork for the fifth EWCS took place from January to June 2010, with almost 44,000 workers interviewed in the EU27, Norway, Croatia, the former Yugoslav Republic of Macedonia, Turkey, Albania, Montenegro and Kosovo.

The 2010 EWCS survey asks respondents to provide information about their employment status, working time duration and organisation, work organisation, learning and training, physical and psychosocial risk factors, health and safety, work-life balance, worker participation, earnings and financial security, as well as work and health. No information is collected directly about the nature of workers representation or involvement of workers on matters of health and safety. However, the survey provides comparative European data relating to the perceptions of workers regarding whether or not they feel that their jobs impact upon their health.

Specifically, respondents are asked:

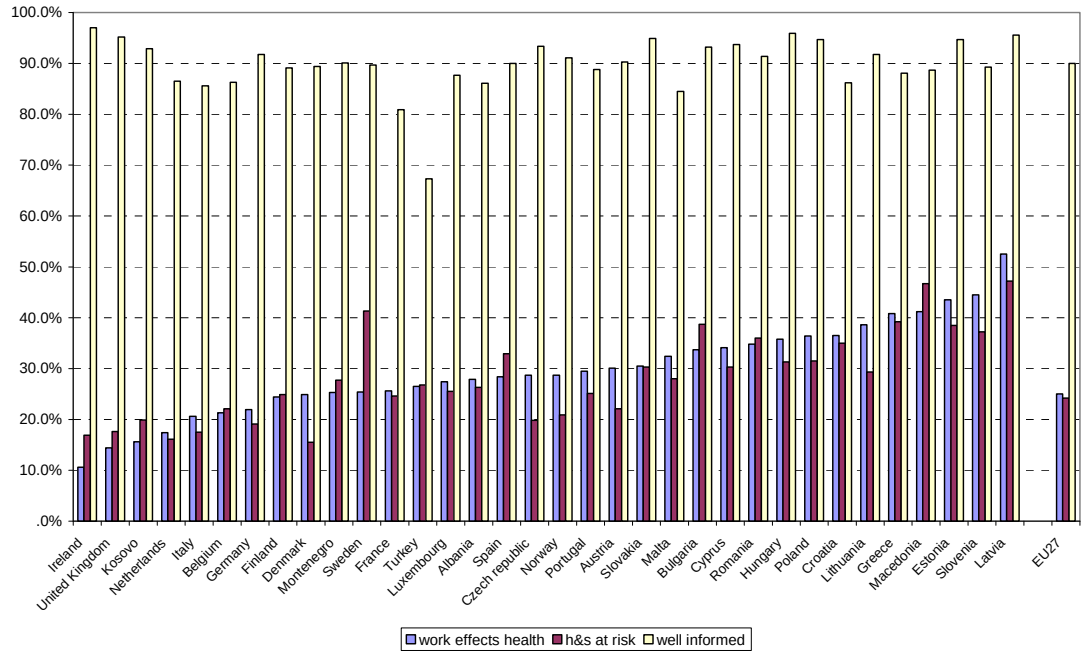
- Do you think your health and safety is at risk because of your job?
- Does your work effect your health?

Respondents are also asked about how well informed they are about the health and safety risks associated with their jobs. Whilst this question does not directly relate to issues of worker representation, it would seem appropriate to assume that workers who are more informed about health and safety risks are also more likely to be involved in, engaged with or informed of the results of negotiations or consultation on matters of health and safety. Even if employers do not negotiate or consult with workers on issues related to health and safety, the EWCS will identify those workers who are, at the very least, well informed about the risks associated with their work. Whilst workers can inform themselves about the risks associated with their work (e.g. via their own experience) or be informed informally via the experience of colleagues imparted via on-the-job training, it would also seem sensible to suggest that being well informed of issues of health and safety would be expected to be correlated with more formal mechanisms. In this section, we therefore consider whether those workers who report that they are well informed about the health and safety risks associated with their jobs are more or less likely to report that their jobs affect their occupational health.

Figure Ax3.1 provides a cross country comparison of the perceptions of respondents to the 2010 EWCS regarding how their jobs affect their occupational health and how well informed respondents are about the health and safety risks associated with their work. It can be seen that 24% of respondents across all EU-27 countries report that their health and safety is at risk as a result of their jobs. Furthermore, 25% report that their health has been negatively affected by their work (respondents to the EWCS are also able to report if their health is positively effected by their work). For both

measures, it is also observed that respondents living within Western European countries are less likely to perceive that their health has been affected by their work or that their health and safety is at risk. Finally, 90% report that they were well informed regarding the risks associated with their jobs (respondents can actually indicate whether they feel well or very well informed although this detail is not retained in published data from the 2010 EWCS). However, responses to this question were relatively comparable across countries. Those living in Ireland and the United Kingdom report being relatively well informed regarding the occupational health risks. Whilst respondents from Eastern Europe countries are generally more likely to report that their work adversely impacts upon their health and safety, several of these countries also exhibit high levels of awareness regarding the health and safety risks (Latvia, Estonia, Romania and Poland each exhibit levels of awareness that are several percentage points above the EU-27 average). Figure Ax3.1 clearly demonstrates that, at a national level, perceptions of how work effects health and/or safety cannot straightforwardly be related to levels of awareness surrounding health and safety risks.

Figure Ax3.1: Occupational Ill-Health and Awareness of Health and Safety Risk: Cross Country Comparisons: EWS 2010



These findings are also summarised in Table Ax3.1. For ease of exposition, countries participating in the EWCS are each classified to one of five country groups: Central Europe, Scandinavia, the British Isles, Southern Europe and the Former Eastern Block countries. Data from the 2010 EWCS is shown in the top panel of the table and confirms that risks of occupational ill-health are lowest within the British Isles and highest within the countries of Eastern Europe. Respondents within the British Isles are most likely to report that they are well informed about their risks associated with their work (96%), whilst those living in Southern Europe and the Former Eastern Block are least likely to report being well informed about the risks associated with their work (85%). Table Ax3.1 also includes equivalent data from the 2005 EQLS. No comparable question related to how work effects health was

available from the 2005 survey[10]. Across all country groups, the proportion of respondents who report that their health and safety is at risk from their work has fallen. Conversely, the proportion of respondents who report that they feel well informed has increased. The table also demonstrates that those respondents living within Southern Europe and within Former Eastern Block countries have exhibited both 1) the largest reductions in the proportions of respondents reporting that their health and safety is at risk (a reduction of 12 percentage points in Eastern European countries) and 2) the largest increases in the proportions of respondents who report that they are well informed about the health and safety risks associated with their jobs (an increase of 12 percentage points in Eastern European countries.

Table Ax3.1: Occupational Ill-Health and Awareness of Health and Safety Risk: Country Groupings: EWS 2005, 2010

	Does your work (negatively) affect your health, or not?	Do you think your health or safety is at risk because of your work?	Well informed about health and safety risks
2010			
Central EU	21.8%	19.1%	90.4%
Scandinavian	25.8%	28.1%	89.8%
British Isles	14.2%	17.6%	95.3%
Southern / Latin EU	26.0%	25.4%	85.5%
Former Eastern Block	37.3%	35.3%	85.2%
Total (EU-27)	25.0%	24.2%	90.0%
2005			
Central EU	n.a.	19.6%	88.5%
Scandinavian	n.a.	31.8%	89.0%
British Isles	n.a.	19.4%	90.7%
Southern / Latin EU	n.a.	30.4%	78.3%
Former Eastern Block	n.a.	47.7%	73.5%
Total (EU-27)		28.6%	85.2%
2010-2005			
Central EU		-0.5%	1.9%
Scandinavian		-3.7%	0.8%
British Isles		-1.8%	4.6%
Southern / Latin EU		-5.0%	7.2%
Former Eastern Block		-12.4%	11.7%
Change		-4.4%	4.8%

Source: Eurofound EWCS 2005, 2010 Survey Mapping Tool

Estimates for country groupings are based on weighted averages derived with employment data from the EU Labour Force Survey to take account of the different sizes of these countries.

[10] *Whilst this question was included in 2005, the 2005 survey did not allow respondents to distinguish those who reported that their job influenced their health in a positive way. This distinction is made in the coding of the 2010 survey.*

Comparisons made between counties indicate that levels of awareness regarding health and safety risks across countries are related to perceptions regarding risks of occupational health across countries. We explore this issue in more detail with data from the 2005 EWCS. At the time of writing, 2010 EWCS data was only available at an aggregate country level from an online tabulation tool developed by Eurofound (http://www.eurofound.europa.eu/surveys/smt/index.htm). In contrast, individual level data from the 2005 survey is available for download from the UK Data Archive. The availability of such detailed information provides greater flexibility in terms of how the data can be analysed. In Table Ax3.2, responses to questions regarding perceived risks to occupational health are tabulated against information collected from these same respondents regarding their awareness of health and safety risk. Based upon comparisons of incidence rates, it can be seen that across the first two available measures of occupational ill-health, those respondents who report being well informed are 25% less likely to report that their jobs affect their health and 30% less likely to report that their health and safety is at an increased risk. In addition, the 2005 survey also asked respondents about the number of days off that they had had from work as a result of accidents or health problems caused by their work (respondents to the 2010 survey were asked how many days they had had off in the past year due to ill-health in general and not from conditions specifically related to their work). Those who are well informed are 50% less likely than those who are not well informed to report that they had had an absence from work that was due to an accident or health problem caused by work.

Table Ax3.2: Occupational Ill-Health and Awareness of Health and Safety Risk: Country Groupings

	Regarding the health and safety risks related to performance of your job, how well informed would you say you are?			
	Not well informed	**Well informed**	**Overall**	**Differentials**
Does your work affect your health, or not?	41.8%	33.3%	34.8%	-25.4%
Do you think your health or safety is at risk because of your work?	34.6%	26.8%	28.1%	-29.4%
Absence due to health problems or accidents caused by work	11.2%	7.5%	8.2%	-49.4%

Source: EWCS 2005

Table Ax3.2 therefore indicates that overall, those respondents to the EWCS who report that they are well informed about the risks associated with their jobs are less likely to perceive that work has a detrimental effect upon their health. However, such an aggregate picture disguises more complex relationships that exists within particular workplace contexts. An example of such issues, again based on 2005 EWCS data, is provided in Table Ax3.3. Here, information provided by respondents regarding their perceptions of how their job affects their health is broken down according to whether or not these respondents have discussed work-related problems with their bosses over the last 12 months. Whilst discussing work related problems with a boss clearly signifies that a problem exists, feeling able to discuss such problems could also be regarded as a positive characteristic of such workplaces. Although the nature of the problems being discussed with their bosses is not identified within the EWCS data, it can be see from Table Ax3.3 that such

respondents are also more likely to indicate that they feel well informed about the health and safety risks associated with their work (85% among those who have discussed a work-related problem with their boss during the past 12 months compared to 80% among those who have had no such discussions). Furthermore, such respondents are also more likely to report that their work has a detrimental effect upon their health, that their health and safety is at risk and that they have had an absence in the last 12 months due to a health problem or accident caused by work. Therefore, it is possible to identify a group of workers who have discussed work related problems with their boss, for whom despite being better informed regarding health and safety risks also exhibit worse occupational health related outcomes, highlighting the complex and context specific nature of the relationship between being well informed of risks and occupational outcomes.

Table Ax3.3: Occupational Ill-Health and Awareness of Health and Safety Risk: Discussion of Work Related Problems

	Over the past 12 months have you discussed work-related problems with your boss?		
	No	**Yes**	**All**
% reporting well informed	80.4%	84.6%	82.8%
Outcome measures			
Does your work affect your health, or not?	27.2%	38.0%	33.4%
Do you think your health or safety is at risk because of your work?	21.7%	30.6%	26.8%
Absence due to health problems or accidents caused by work	6.8%	9.9%	8.6%

Source: EWCS 2005, coverage EU-27.

To more fully understand the effect of being well informed of occupational risks upon occupational health, we utilise multivariate statistical analysis. This analysis aims to estimate the effect of being well informed of occupational risks upon the likelihood that that respondent reports that their health has been affected in some way. The statistical modelling simultaneously controls for a variety of personal, job and workplace characteristics that could also influence occupational ill-health. Table Ax3.3 has, for example, demonstrated that those respondents who report that they have discussed work related problems with their boss are, overall, both more likely to report that their health and safety is at risk and are more likely to report that they are well informed of risks. However, it remains the case that among those workers who have raised a work related problem with their boss, those who are well informed about risks to their health and safety may actually be less likely to report that their health or health and safety has been affected by their jobs. The same relationship may also be observed among those workers who have not raised a work related problem with their boss. It is therefore important to determine whether being well informed has a separate and additional effect on risks of occupational ill-health after having simultaneously controlled for other personal, job and workplace characteristics to yield a more accurate measure of the effect of being well-informed of health and safety risks on occupational health related outcomes.

Results from the multivariate analyses are presented in Table Ax3.4. The results presented in the table are derived from a number of different statistical models. The results in the top row show how the three measures of occupational health (Does you

work affect your health, or not?, Do you think your health or safety is at risk because of your work? Have you been absent from work due to health problems or accidents caused by work?) are associated with whether or not a respondent reports being well-informed regarding risks to health and safety. The results of these analyses are similar. Respondents who are well informed are estimated to be 33% less likely to report that their jobs have effected their health, 35% less likely to report that their health and safety is at risk and 37% less likely to indicate that they had had time off due to ill-health or accidents that were caused by work.

Table Ax3.4: Quantifying the Association between Being Well Informed of Risks and Occupational Health Related Outcomes

Measures of Occupational Health	Does your work affect your health, or not?	Do you think your health or safety is at risk because of your work?	Absence due to health problems or accidents caused by work
Effect of being well informed on outcome measure (measured relative to not being well informed)			
Not well informed	(ref)	(ref)	(ref)
Well informed	-33.4%	-35.1%	-37.0%
Geographical differentials in outcome measures (measured relative to British Isles)			
Central EU	26.6%	10.8%	29.5%
Scandinavian	175.3%	40.4%	67.3%
British Isles	(ref)	(ref)	(ref)
Southern / Latin EU	148.2%	72.8%	-10.2%
Eastern Europe	164.9%	77.9%	1.4%
Effect of being well informed on outcome measure: by geographical area (measured relative to not being well informed in each case)			
Central EU	-50.7%	-52.5%	-43.7%
Scandinavian	-37.3%	-32.8%	-16.9%
British Isles	-38.7%	-41.1%	-45.2%
Southern / Latin EU	-22.6%	-33.5%	-25.7%
Eastern Europe	-20.8%	-23.5%	-45.1%

Source: EWCS 2005
Note: Figures in italics are not estimated to be statistically significant (evaluated at 5% level)

The second panel of Table Ax3.4 shows how the three measures of occupational ill-health vary across the five groups of countries. Differences in occupational health between countries will reflect a number of characteristics, such as differences in the industrial and occupational composition of employment, differences in the personal characteristics of those in work (e.g. the gender composition or age structure) or other characteristics about the nature of work, such as hours worked or contractual status. It is therefore of interest to consider whether, after controlling for such observable differences in the nature of work across countries, whether significant differences in the levels of occupational health remain. The estimated country differentials therefore reflect differences in the propensity of respondents to indicate that their occupational health has been affected in some way. This could be the outcome of differences in exposure to risk resulting from the relative effectiveness of the regulatory regime.

The results for country groupings are expressed in terms of percentage differentials relative to the British Isles which is chosen to act as the reference category. Analysis reveals that respondents within the British Isles (closely followed by Central Europe) are least likely to report that their job effects their health (readers should keep in mind the caveat that the 2005 EWCS did not allow respondents to distinguish between positive and negative effects of work on health) and are also least likely to report that their health and safety is at risk. Respondents from Southern and Easter Europe are approximately 2 ½ times as likely (or 150% more likely) to report that their health has been affected by their jobs and are 70 to 80% more likely to report that their health and safety is at risk than respondents from the British Isles. In terms of actual absence from work however, the picture is quite different. Despite the relatively high incidence of respondents who report that their health is effected by their work and the relatively high incidence who state that their health and safety is at risk, levels of absence due to ill-health or accidents caused by work are relatively low in the countries of Southern and Eastern Europe and are comparable to that estimated for the British Isles. Respondents from Scandinavia are most likely to report the occurrence of a work related absence during the previous 12 months. Whilst this result for Scandinavia could be related to the relatively high incidence with which those living in Scandinavia report that work effects their health, low levels of absenteeism in Southern and Eastern Europe clearly point to the importance of other factors such as legislation to protect workers rights, the structure of welfare benefits and entitlement to paid sick leave in influencing the decision to take time off work as a result of ill-health.

Finally, whilst being well informed of the risks associated with their jobs is demonstrated to be associated with lower perceived risks to occupational health and lower levels of absence from work, it is not necessarily the case that the nature of this relationship will be the same across different areas of Europe. The bottom panel of Table Ax3.4 therefore presents the estimated effects of being well informed of occupational risks based upon separate models for each of the five country groupings. So for each country grouping, the effects on each health related outcome measure of being well informed is evaluated. Analysis reveals that the negative relationship between being well informed of risks and reporting that their health is affected by their work is relatively small within the countries of Southern and Eastern Europe. A similar finding is observed in terms of perceived risks to health and safety, where being well informed has a relatively small negative effect on the perceptions of such risks within the countries of Eastern Europe. Therefore, particularly in the case of Eastern European countries, despite the relatively high likelihood of respondents in these countries reporting that work has a detrimental effect on occupational health related outcomes, being well-informed of these risks appears to have less of a beneficial effect on these outcomes. This could be indicative of a relatively weak regulatory environment or the relatively weak position of workers, where less may be done by employers to address occupational risk factors. In terms of absenteeism, no clear picture emerges. Being well informed of health and safety risks is associated with a 45% reduction in the likelihood that a respondent reports that they had time off during the previous 12 months due to work related ill-health or an accident with Central Europe (moderate absenteeism), the British Isles (low absenteeism, low risk) and Eastern Europe (low absenteeism, high risk). Being well informed is not estimated to have a statistically significant effect on absenteeism in Scandinavian countries, countries characterised by relatively high levels of absenteeism.