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How management behaviours associated with successful health and safety performance relate to those associated with success in other domains

Prepared by the **University of Birmingham**
for the Health and Safety Executive 2009

How management behaviours associated with successful health and safety performance relate to those associated with success in other domains

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This study was instigated by an approach by HSE in December 2007, who were seeking a Delphi study under the heading 'How Management Behaviours Associated with Successful Health and Safety Performance Relate to those Associated with Success in Other Domains' to inform HSE's approach to managing health and Safety. HSE had already carried out or commissioned systematic literature reviews and supplementary studies and had concluded that the research base was limited. They were now seeking 'to use a Delphi approach to gather informed views from key, expert, stakeholders.

HSE posed four main questions: (a) what are the management factors/characteristics (including activities, behaviours and skills) that are associated with successful and unsuccessful business management? (b) How do the factors identified in (a) read across to affect success or failure in managing health and safety? (c) What, if any, other management factors/characteristics are uniquely associated with success or failure in managing health and safety (ie are not associated with business management in general)? and (d) How important/effective are each of the factors identified in (a)–(c)? In addition, evidence was sought to allow comparison across different sectors of the economy'.

An Expert Delphi was employed for this study. Delphi is a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole to deal with a complex problem (Linstone and Turoff, 1975). Panel members for the study were selected from four constituencies, Academic, Business, Health and Safety Professionals and Regulators.

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Abstract

Introduction

This study was instigated by an approach by HSE in December 2007, who were seeking a Delphi study under the heading “How Management Behaviours Associated with Successful Health and Safety Performance Relate to those Associated with Success in Other Domains” to supplement other work on revising policy. HSE had already carried out or commissioned systematic literature reviews and supplementary studies and had concluded that the research base was limited. They were now seeking “to use a Delphi approach to gather informed views from key, expert, stakeholders and to share their judgements in a structured and documented way”.

HSE posed four main questions: (a) what are the management factors/characteristics (including activities, behaviours and skills) that are associated with successful and unsuccessful business management? (b) How do the factors identified in (a) read across to affect success or failure in managing health and safety? (c) What, if any, other management factors/characteristics are uniquely associated with success or failure in managing health and safety (i.e. are not associated with business management in general)? and (d) How important/effective are each of the factors identified in (a) – (c)? In addition, evidence was sought to allow comparison across different sectors of the economy”.

Although there are many different types of Delphi, probably the most frequently used are Futures Delphi, Expert Delphi, Consensus Delphi and Policy Delphi. A seminal book by Linstone and Turoff (1975) stated that “Delphi may be characterised as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem.” They added that “to accomplish this ‘structured communication’ there is provided: some feedback of individual contributions of information and knowledge; some assessment of the group judgement or view; some opportunity for individuals to revise views; and some degree of anonymity for the individual responses”.

Methodology

An Expert Delphi approach was employed for this study, using two questionnaire rounds seeking mainly information on the degree of impact that various factors/characteristics have on successful business performance and on successful health and safety outcomes. However, from the outset, it was recorded that the questions posed were very ambitious and also that within the scope of the study it would not be possible to obtain objective evidence to “allow comparison across different sectors”.

An Expert Panel, with an intended size of about 100, was recruited by the HSE, drawing from four broad constituencies: Academic; Business (ie those without a specific H&S remit); Regulators and H&S Practitioners. Each Panel Member was allocated a unique ID number.

Generation of the set of impact factors/characteristics to be included in the questionnaire started at two invited workshops in February 2008. The outcomes from the workshops were supplemented by an additional literature review and a number of meetings. Eventually a long list of 131 factors/characteristics was produced, which was subsequently reduced to a more manageable set of 52 ‘impact’ Factors supplemented by seven Statements relating to H&S v Business and to the effect of the type and size of organisations.

The 52 selected Factors were incorporated into the Round One questionnaire using a format which sought, for each Factor, assessment both of the direction (positive or negative) and of the strength (weak to very strong) of its impact on H&S performance and, separately, on Business performance. Panel members were asked whether they considered that the impact would apply in all types/sizes of organisation and were also invited to record their self-assessed degree of confidence in their responses. Panel members were asked to indicate their degree of Agreement/Disagreement with each of the seven Statements and to add specific and general comments.

After a pilot study, the finalised Round One questionnaire was dispatched to Panel Members by post and by email in early June 2008, with a reminder sent about two weeks later. Eventually 96 Round One questionnaires were returned.

Round Two questionnaires with a similar design, but with the addition of aggregate responses to each Factor and Statement from Round One, were dispatched to each panel member in late July 2008, accompanied by that panel member's individual responses to Round One in a sealed envelope to maintain confidentiality. Eventually, 66 Round Two questionnaires were received. 42 Panel members with outlying responses on one or more Factors or Statements were contacted to ask if they wished to give 'any information, explanation or other reasoning behind those responses'. Overall, 103 people took part in the Delphi survey.

Results and Discussion

Using a scoring system from -4 (Very Strong Negative Impact) to +4 (Very Strong Positive Impact) with 0 denoting no impact, the mean (average) assessment of the impact of Factors on H&S Performance ranged from -3.3 to +3.6, with only nine of the 52 Factors being judged, on average, as having no impact or less than 'weak' impact. For Business Performance the mean impact 'scores' range from -3.1 to +3.2, with 6 of the 52 Factors being judged, on average to have no or less than weak impact. When weighted by respondents' self-assessed degree of confidence, with very few exceptions there was a small increase in the mean impact score. The pattern of mean impact scores is rather complex by 'constituency'. However, for both H&S and Business performance, the Academic constituency recorded the lowest assessment of strength of impact and the Practitioner constituency the highest.

Whilst only four Factors were assessed, on average, as having impacts in different 'directions' on H&S performance and on Business performance (all judged to have positive impact on Business Performance and negative impact on H&S), there were statistically significant (but not always large) differences between the mean strength of impact on H&S performance and on Business performance for all but 15 of the 52 factors.

Analysis by broad grouping of Factors indicated that the 'Business Processes and Procedures' grouping has a high overall (averaged over the Factors in the grouping) strength of impact on both H&S and Business performance. In addition, on average the Factors in the 'Leadership' grouping are judged to have a high impact on H&S performance. On average, the Factors in the 'External Factors/Pressures' grouping were assessed as having the lowest strength of impact on both H&S and Business performance.

Whilst for some Factors there was a high degree of consensus in responses, a number of the mean impact scores and, in particular, many low mean scores 'conceal' a wide range of responses. Such large spreads or variations in response are important as they might be

reflecting differences in knowledge and information of panel members and/or differences in assessed impact in different sectors and types and size of organisations.

For every factor except one a majority of panel members consider that the impact would apply universally in all types and sizes of organization. Indeed for 33 of the 52 Factors more than 75% of respondents consider the impact assessment applies universally in respect of both H&S and Business performance. There were some inter-constituency differences with, on average, a lower percentage of the Academic constituency assessing impact as being universal. Looking at the broad groupings, on average, lower percentages of panel members judged the impact of Factors within the 'External Pressures/Factors' grouping to be universal in respect of both H&S and Business Performance.

Responses to the Statements indicate general agreement with the assertions that H&S and business/profitability work together but with more mixed responses on aspects relating to the implications of type and size of organization.

An important feature of a Delphi study is to allow panel members to reflect on the overall responses from earlier rounds and, if they wish, revise their own responses. Thus the Round Two responses were compared with those from Round One to detect any changes. Whilst the differences are small, with very few exceptions the absolute mean impact scores in Round Two are higher, ie the impact is considered stronger, than those in Round One. There was also a slightly stronger overall degree of agreement (or of disagreement) with the Statements in Round Two compared with Round One. Further, although this study did not aim to achieve consensus, with very few exceptions, the degree of spread or variation in responses is lower in Round Two than in Round One.

Conclusions

Whilst it is concluded that this Delphi study has yielded a wealth of information on panel member's judgements of the impact of the various Factors on H&S performance and on Business performance addressing the questions originally posed, the limitations of Delphi studies must be kept in mind when interpreting and using the findings. Delphi simply produces a synthesis of views of 'experts' on the topics in question – it cannot and does not claim to produce scientific evidence of the type resulting from, say, controlled or comparative studies.

Further although one of the aims of Delphi is to remove group pressure to conform which can exist, for example, in face-to-face meetings, there are suggestions that the tendency towards consensus in the Delphi approach could lead to a false or artificial consensus which might or might not be 'correct'. In addition, there is a risk that panel members might give politically acceptable responses or reflect accepted wisdom, for example whether or not what is 'good' for H&S success and performance is also good for Business success and performance, rather than giving the responses that their individual experience and expertise might suggest.

It is recommended that follow-ups to this study include further examination of Factors and Statements on which there is a wide spread or variation in responses. In addition, work is needed to disaggregate the different aspects of 'compound' Factors, especially where those factors are judged to have a strong impact or where there is a high variation in responses. Factors where relatively low percentages of respondents judged their impact to apply to all types and size of organization require special attention as there could be important implications for policy formulation.

1. INTRODUCTION

1.1 Background

This Delphi study was instigated by an approach from the HSE (Health and Safety Executive) in December 2007, who were seeking a Delphi study under the heading “How Management Behaviours Associated with Successful Health and Safety Performance Relate to those Associated with Success in Other Domains” to supplement other work on revising policy (see Appendix A).

HSE had already carried out or commissioned systematic literature reviews and supplementary studies and, as the specification notes, concluded that the “research base on the links between successful business management and managing for successful health and safety outcomes is limited and, as a result, open to interpretation”. Thus, the specification continued “we are now seeking to use a Delphi approach to gather informed views from key, expert, stakeholders and to share their judgements in a structured and documented way”.

The specification listed the aims and objectives of the research as being “to provide authoritative views on the links between successful business management in general and managing for successful health and safety outcomes (as part of a whole business approach). This should address the following questions:

- a) What are the management factors/characteristics (including activities, behaviours and skills) that are associated with successful and unsuccessful business management?
- b) How do the factors identified in (a) read across to affect success or failure in managing health and safety?
- c) What, if any, other management factors/characteristics are uniquely associated with success or failure in managing health and safety (i.e. are not associated with business management in general)?
- d) How important/effective are each of the factors identified in (a) – (c)? We need to identify the full range but also to distinguish those that are key to success and failure.”

The specification also sought “evidence [which], as far as possible, allows comparison across different sectors of the economy”.

1.2 What is Delphi?

A seminal book by Linstone and Turoff (1975) offered an ‘underlying’ definition of Delphi:

Delphi may be characterised as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem.

They added that “to accomplish this ‘structured communication’ there is provided: some feedback of individual contributions of information and knowledge; some assessment of the group judgement or view; some opportunity for individuals to revise views; and some degree of anonymity for the individual responses”.

Delphi usually involves sending a questionnaire, which may be structured or relatively unstructured, to the respondents, who are commonly termed an ‘Expert Panel’. The responses are collated and the original or a revised questionnaire is re-circulated, frequently accompanied by an anonymised summary of responses. Panellists are invited to confirm or to modify their previous response. This procedure is repeated for a pre-determined number of rounds or until some pre-determined criterion has been fulfilled. Panellists may also be asked to give an explanation or justification for their response. Thus, Delphi typically involves a number of

rounds, feedback of responses to participants between rounds, opportunity for participants to modify their responses, and anonymity of responses (Mullen, 2003).

Although there are many different types of Delphi, depending on the objectives, probably the most frequently used are Futures Delphi, Expert Delphi, Consensus Delphi and Policy Delphi. The former two almost invariably seek expert judgments drawing on the respondents' experience and professional knowledge, whilst the latter two may also or instead seek value judgments and personal views.

Whilst some Delphi studies, in particular Policy and Consensus Delphis, aim to achieve a consensus, in Futures and Expert Delphis identifying and exploration of variation and even polarisation in views is often considered more important. It must be stressed that such studies are not opinion polls and are not seeking majority votes – the minority or the outlier might be correct. Thus, since the pioneering Futures and Expert Delphis, it has been common for panellists, usually the 'outliers', to be asked to argue, justify and/or provide supporting evidence for their responses.

1.3 This Study

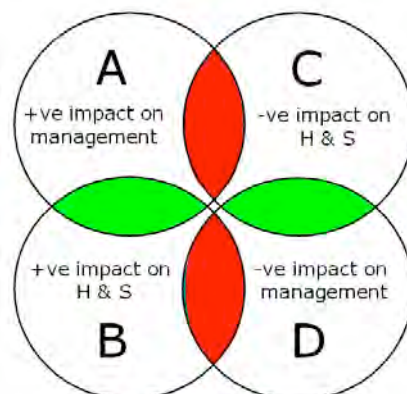
After discussion, it was agreed that a Delphi approach, more specifically an Expert Delphi, would be appropriate here using, as far as possible, a questionnaire seeking information on the degree of impact that the various factors/characteristics had on successful business performance and on successful health and safety outcomes.

However, from the outset, it was recorded that the questions listed in section one above were very ambitious. In particular, Question (a) is a major question for which many researchers and commentators have been seeking the answer for many years. It was noted that all the Delphi Study here could achieve is systematic elicitation and collation of the 'Experts' judgements/views on these questions.

It was also recorded that within the scope of the study it would not be possible either to obtain objective evidence to "allow comparison across different sectors" or to use large enough panels to obtain comparative responses from different sectors. It was noted that this aspect could only be addressed here by eliciting the Experts' judgements/views.

Questions (a), (b) and (c) were conceptualised as shown in Figure 1.1, with the shaded intersections AB, AC, CD & BD reflecting Question (b): green denoting impacts in the same direction for business and health and safety, red denoting impacts working in opposite directions.

Figure 1.1



With the model, and noting the caveats, the study proceeded as described in the following chapters. Part 2 describes the methodology of the Delphi study, Part 3, with its accompanying appendices presents the findings. Part 4 discusses the findings, draws conclusions and makes some recommendations.

2. METHODOLOGY

2.1 Adoption of the Delphi Approach

As explained in the Introduction, this research was commissioned to use a Delphi approach. Further, a Delphi approach appeared to be very appropriate, given the background and the objectives stated, so no alternative approaches were considered. However, as explained earlier, Delphi can take many forms. The study here is an Expert Delphi, which aims to elicit expert judgments to supplement knowledge gained from earlier literature reviews and past experience within HSE.

Anonymity, feedback to respondents and the opportunity to revise earlier responses are arguably defining features of Delphi. Anonymity (of responses) aims to remove effects of status, powerful personalities and group pressure, which can arise in meetings. However, whilst feedback to respondents and the opportunity to revise their responses can lead to consensus, that is not necessarily the objective, especially in an Expert Delphi. With this type of Delphi identifying polarisation of judgements and exploring the reasons for them is also valuable. Also, some Expert Delphi studies ask ‘experts’ to self-rate their expertise in the area or their confidence in their responses.

Explanation of, and justification for, the precise approach adopted here is given within the description of the methodology below.

2.2 Composition and Selection of the ‘Expert Panel’

There is controversy over exactly who constitutes an expert for the purposes of inclusion in an expert panel, with some assuming that expertise arises only from specific professional or scientific qualifications or from high status (Mullen, 2003). However, a number of studies have suggested an expert is someone with relevant knowledge and experience for the purposes of that particular study. Further, unlike, say, some policy Delphis, an Expert Delphi does not seek a ‘representative’ panel, selected using statistical sampling techniques, but aims to cover all aspects of relevant expertise.

There is also controversy over appropriate sizes for panels – with studies ranging from four panel members to several thousand panel members, with many Expert Delphis tending towards the lower end. Indeed, some advocates of large panels appear to be confusing a Delphi study with a conventional quantitative survey, which is not applicable here. It has also been observed that attrition rates between rounds increases with panels larger than 20.

For this study, the Expert Panel was drawn from four broad constituencies:

Academics (Management academics, primarily from business schools);

Business (managers and employers from various organisations, not having a specific health and safety remit);

Practitioners (employees and consultants working directly within health and safety or with a specific H&S remit);

Regulators (staff from government organisations with a remit for and/or particular interest in regulating aspects of business risks management, especially health and safety).

The initial intention was to recruit a panel of about 100 members with, if possible, a higher proportion from the Business ‘constituency’ than from the others.

Panel members were recruited by HSE using their contacts. Initially, potential panel members were sent a letter (Appendix B) explaining the project and inviting them to join the Expert Panel. Where possible the letters were followed up by a phone call to ascertain willingness to participate.

Each potential panel member was allocated a unique ID, which included their 'constituency', as initially defined. This ID remained with them throughout the study although, in a few cases, initial misallocation to a 'constituency' was corrected before analysis but the ID was not changed.

2.3 Confidentiality and Ethical Approval

The Delphi study was approved under the University of Birmingham Ethical Review Process. Consent to participate was assumed by agreement to join the Expert Panel and by completion of the questionnaires.

As this is a Delphi study which, by its nature, involves individualised feedback between rounds and also needs to permit the researcher to contact panel members about their responses, total anonymity is not appropriate. However, panel members were assured that their individual responses would be confidential to themselves and the researcher and that only aggregated and anonymised responses would be published (see various letters sent to panel members in Appendices B-F).

2.4 Identification and Selection of Factors

Two workshops were held (21 & 22 February 2008), under the auspices of HSE but at the University of Birmingham, to attempt to start to draw up a list of 'Factors/Characteristics' which meet or might meet the definitions in objectives (a) & (c) (ie "What are the management factors/characteristics (including activities, behaviours and skills) that are associated with successful and unsuccessful business management? "and "What, if any, other management factors/characteristics are uniquely associated with success or failure in managing health and safety (i.e. are not associated with business management in general)?"")

The findings from those workshops were analysed and discussed under the auspices of HSE. The original literature reviews and studies (Bell & Healey (2006); Cummings (2006a&b); Sugden and Healey (2007)) were also revisited and a brief additional review (Bull et al (2002); Flin & Yule (2004); Landsbergis (2003) Lundstrom et al (2002); Shannon et al (1997); Shannon et al (2001); Yang (2006)) was carried out. The factors thus found were grouped using an adaptation of a classification system from Sugden and Healey (2007).

The factors from the workshops and from the various literature reviews and related studies, were synthesised during March into a long list of 112 (which subsequently increased to 131) possible factors for inclusion in the questionnaire. During the process, it became clear that some 'factors', which were considered important, did not lend themselves to the 'Impact' type format being proposed. It was agreed to include these as Statements using a Likert Agree/Disagree scale. The term 'Factor' (with initial capitalisation) is used below to denote the impact factors/influences/characteristics used in the questionnaire. Similarly, 'Statement' is used to denote the agree/disagree statements.

To help reduce the long list to a manageable number (judged to be about 50 Factors), a meeting held on 4 April 2008 made a preliminary selection of Factors for inclusion.

Subsequently, following various consultations, a list of 51 Factors and 7 Statements was selected. It is worth noting that it was agreed that some factors or potential ‘influencers’ should be deliberately omitted in order to reduce the length of the questionnaire. These were factors which were judged to be generally accepted or for which there is a strong evidence-base e.g. 'having a clear corporate vision' and 'having a competitive, sustainable business strategy', and 'senior managers setting the example they wish to be followed'.

However, even with their omission, the difficulty in reducing the long list of 131 to a manageable number meant that some of the included Factors were ‘composite’ – containing more than one related aspect/element. Ideally these would have been separated out into different Factors or Statements. The resulting listing is shown in Table 2.1, together with some details of their derivation, their generic factor grouping and the facets they address. The seven ‘agree/disagree’ Statements are given in Table 2.2.

With the addition of one factor (see Section 2.6), these listings were used as a basis of the questionnaire for the pilot study.

Table 2.1 List of Factors for inclusion in pilot study

FACTORS SHAPING BUSINESS PERFORMANCE	FACETS OF PERFORMANCE	DERIVED INFLUENCERS/FACTORS = STATEMENTS
1. Leadership & Management	a. Clear 'vision'	1. A clearly communicated statement of the organization's values.
	b. Visible commitment	2. Senior management demonstrate commitment to health & safety through their involvement in back-to-the-floor activities (e.g. workplace tours, inspections).
		3. Responsibility for health & safety is delegated entirely to health & safety specialists/advisors
	c. Planning	4. Organization has eliminated duplication & overlap at all levels within systems including health & safety systems
	d. Clear goals, roles & responsibilities	5. Workers understand their own job, but not how it relates to the work of others.
	e. Supervision (including monitoring & control)	6. Organization ensures employees behave consistently with company rules, values, etc
	f. Job design & demand	7. Job design gives workers day-to-day discretion and control (autonomy) over their work.
	g. awareness/understanding of risks	8. Organization uses a standard approach to risk assessment.
		9. Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant.
i. Integrated thinking		
2. Business Processes & Procedures	a. Internal communication (medium & message)	
	b. Procedures & Standards: - Formal, informal, internal/corporate, external/industry-wide	10. Adoption of formal business management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems).
11. Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks.		

FACTORS SHAPING BUSINESS PERFORMANCE	FACETS OF PERFORMANCE	DERIVED INFLUENCERS/FACTORS = STATEMENTS
		12. A comprehensive formal system for managing maintenance (e.g. of plant, buildings).
	c. Reporting performance (internally and externally): - Production - Financial performance - Injuries & other incidents - Environmental	13. Performance assessment includes clear and measurable health & safety targets.
		14. Public reporting of the organization's health & safety performance.
	d. Organizational learning (continual improvement)	15. Formal procedures for actively capturing and retaining tacit knowledge (e.g. 'corporate memory').
		16. Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback).
		17. Organization discourages workers from doing more than the minimum to comply with rules and regulations.
	e. Investigating, measuring & Reviewing performance (proactive/leading, reactive/lagging)	18. Regular, structured, internal review and audit processes (including workplace inspections).
		19. Prompt feedback to workers from outcome of reviews, audits & inspections.
	3. Beliefs, Values, Attitudes & Behaviours (Culture)	a. Openness
b. Trust		21. The organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity (the "licensed busybody").
		22. "No blame" internal reporting of incidents (e.g. near misses, violations of procedures).
		23. Everyone has their own job and keeps their nose out of everybody else's business.
c. (Shared) values		24. The organization perceives health & safety outcomes as important to business success.
d. Support & encouragement		25. Rewards linked to meeting individual productivity/profitability targets.
e. Empowerment		
f. Participation & involvement		26. Workers, supervisors, middle & senior managers all involved & engaged in decision-making.
	27. Worker representatives involved in planning and implementing policies & procedures.	
g. Attitude to risk	28. Environment in which the priority is to get the work done, by whatever means necessary.	
	29. Workers permitted and feel able to refuse to do unsafe work or take unnecessary risks.	
4. Workforce Skills Workers with the right competence in the right jobs at all levels in the organization.	a. Selection & recruitment	
	b. Training	30. Training is focused solely on the immediate job requirements.
		31. Workers are trained & encouraged to identify & solve job-related problems.
	c. Competence	32. The Job requirements exceed worker competence (capabilities and training)
33. Use of agreed, cross-industry criteria to assess competence, with procedures in place to review and maintain standards.		

FACTORS SHAPING BUSINESS PERFORMANCE	FACETS OF PERFORMANCE	DERIVED INFLUENCERS/FACTORS = STATEMENTS	
	d. Access to relevant expertise	34. Employing people with the right specialist knowledge.	
5. Organizational Characteristics	a. Size		
	b. Structure/Complexity		
	c. Sector		
	d. Ownership type		
	e. Age (stability/history/maturity)	35. Major organizational change, such as downsizing, outsourcing and business restructuring.	
	f. Employment policies & patterns		36. Employment practices that promote employment flexibility and allow organizations to rapidly adjust employment in response to fluctuations in demand.
			37. Employment practices that promote work flexibility for employees & encourage workforce stability & commitment
			38. Supporting and encouraging staff (e.g. incentives such as time-off or vouchers) to engage in health and well-being activities.
	g. Occupational type(s)		
	h. Production philosophy	39. The adoption of high performance management philosophies such as 'lean production', 'just in time'.	
i. Resources	40. Investment in modern capital equipment (from office equipment to manufacturing plant)		
6. External Factors/Pressures	a. Competition	41. Organization operates in a market with intense competition from rivals	
		42. Organization benchmarks its performance against others.	
		43. Operating in a European market	
		44. Operating in a global market	
		45. External awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc).	
	b. Insurance		
	c. Regulatory requirements		46. Applying sanctions to CEOs/Directors for violation of legal duties and regulatory standards.
			47. Involvement of external specialists in assessing compliance with legal duties and regulatory standards.
	- Things the regulator(s) can facilitate /do		48. Regulators prescribe the process for managing risks.
			49. Regulators provide practical diagnostic tools and measures of performance on risk management.
			50. Regulators taking an active interest in how a business's culture affects its management of risk.
	d. Accountability		51. Having an individual in top management accountable for health & safety performance.
	e. Reputation management		
	f. Stakeholders		
g. Customers			

Table 2.2 List of Statements for inclusion in pilot study

52. Health and safety and productivity/profitability are competing requirements.
53. Occupational health and safety should be viewed as an integral part of productivity, competitiveness, and profitability.
54. The nature of the business (sector & complexity) significantly affects an organization's attitude and approach to health & safety.
55. The business benefits of health and safety justify the business costs
56. A positive health and safety culture is important to the overall success of an organization
57. The factors for business success are generally the same regardless of the size of a business
58. HSE should provide different advice for small/uncomplicated and large/complex organizations.

2.5 Questionnaire Design

A number of different aspects influenced the questionnaire design. As the main focus of the Delphi study was on seeking responses on 'Impact', a format was devised which would give more information (eg direction and strength) in a single response, than using simple scoring or Likert scale. The basic 'question' format is shown in Table 2.3 and in the questionnaires in Appendices D & E.

Table 2.3 Format of 'Impact' Questions

	Negative Impact				No Impact	Positive Impact			
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong
Factor or 'Influencer'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Consideration was given to whether there should be three or four levels of 'strength of impact', as there was concern about complexity. Thus the format was tested with participants at the February workshops and there was general agreement that four levels (as shown above) would not be too complex.

As the intention was to obtain information on the impact and strength of impact of each of the Factors both on successful H&S performance and on successful Business performance, there needed to be two separate questions for each Factor. However, to attempt to get some independence of responses, the questionnaire was designed in separate parts with part one asking about impact on H&S performance for the entire list of Factors, followed by part two asking about impact on Business Performance for the same list of Factors.

Respondents were invited to give a self-rating of their degree of confidence (Very, Fairly or Not Very) in their expertise in respect of each of the impact questions. In addition to allowing for the possibility of weighting responses by the self-assessed confidence, this aspect was added to try to ensure that feelings of lack of confidence/expertise were not reflected in the scoring of the strength of impact. The proposal to include the possibility to self-rate confidence was tested at the February workshops, which favoured its inclusion.

There was considerable discussion from the workshops onwards about how to capture the effect of type of organization, as it was considered that a number of Factors might have different impacts depending on the type of organization. Suggestions were forwarded for complex classifications, eg by public/private, size, risk, complexity etc. to be added to questions. However, after careful consideration it was decided this would be too complex and would make the questionnaires unmanageable. Therefore a simple Yes/No 'Universality' question "Please indicate whether or not you consider the impact of the factor is applicable to all types and sizes of organizations" was added to each impact question. It was recognised that there would need to be follow-up on those factors where 'Universality' was considered low.

Consideration was also given to asking which type of organization panel members came from or were answering in respect of. However, it was decided this would be too complex and it would be difficult to interpret the findings.

As noted above some topics, which were considered important, did not lend themselves to the 'Impact' type format described above. These were included in a separate part (Part 3) as Statements using a five-point Likert scale (Strongly Agree to Strongly Disagree). The middle, neutral point was included as it was considered that this could be a perfectly valid response to the Statements.

Whilst the majority of the questionnaire was structured, asking respondents to place crosses in the relevant boxes, respondents were also invited to comment on any of the Factors or Statements, to suggest additional Factors/Statements and to make general comments in a Part 4 at the end of the questionnaire.

The questionnaire was designed in two versions, paper-based and an electronic Word Document. The latter had provision to click on boxes to complete them and to type in comments beside each Factor/Statement and to type comments in Part 4. Consideration was given to use of a web-based questionnaire, but this was dismissed as impracticable, both because of potential access problems and the complex design of the questionnaire.

2.6 Pilot Study

With the inclusion of one additional Factor (Factor 10 in Table 2.4), consequential renumbering and some editing to ensure consistency of wording, the lists of Factors and Statements in Tables 2.1 & 2.2 were incorporated into the questionnaire and a draft cover sheet was designed. During late April 2008, a pre-pilot testing of the questionnaire was carried out by asking a small group of people within HSE to attempt to fill it in and to make comments on the questionnaire and proposed method of administration.

As a result of the feedback, a few amendments were made to the wording of the questionnaire and the instructions.

The pilot questionnaire was dispatched on 7 May 2008 to 13 contacts, covering all of the four 'constituencies', with a requested return date of 16 May 2008. The questionnaire was accompanied by a letter explaining the pilot study, a pro-forma (see Appendix C) requesting feedback on the questionnaire and aspects of its administration, plus a draft of the proposed cover letter for the main study. Both the paper-based version and the electronic version were

sent, the latter by email. Eleven completed questionnaire and pro-formas were returned, containing useful feedback on wording and on administration.

2.7 Conduct of Round One

Following feedback from the Pilot study, some changes were made to the wording and instructions. The revised questionnaire was sent to the Steering Group on 25 May 2008 and was approved with a few suggestions by 5 June 2008. The final questionnaire (electronic version) for Round One is shown in Appendix D2. The final list of Factors/Statements is shown in Table 2.4.

Table 2.4 Final List of Factors/Statements

Factors	
1	Organization has a clearly communicated statement of its values
2	Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)
3	Responsibility for health & safety is delegated entirely to health & safety specialists/advisors
4	Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems
5	Workers understand their own job, but not how it relates to the work of others
6	Organization ensures employees behave consistently with company rules
7	Jobs give workers day-to-day discretion and control (autonomy) over their work
8	Organization uses a consistent approach to risk assessment
9	Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant
10	Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)
11	Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)
12	Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks
13	Organization has a comprehensive formal system for managing maintenance (e.g. of plant, buildings)
14	Performance assessment includes clear and measurable health & safety targets
15	Public reporting of the organization's health & safety performance
16	Organization has formal procedures for actively capturing and retaining tacit knowledge (e.g. 'corporate memory')
17	Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)
18	Organization discourages workers from doing more than the minimum needed to comply with rules and regulations
19	Organization has regular, structured, internal review and audit processes which include health and safety (e.g. workplace inspections)
20	Organization gives prompt feedback to workers following reviews, audits and inspections
21	Everyone is encouraged to share and discuss issues openly and feels their views are valued
22	Organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity
23	Organization has "No blame" internal reporting of incidents (e.g. near misses, violations of procedures)
24	Everyone has their own job and keeps their nose out of everybody else's business
25	Organization perceives health & safety outcomes as important to business success

26	Organization gives rewards linked to meeting individual productivity/profitability targets
27	Workers, supervisors, middle and senior managers are all involved and engaged in decision-making
28	Worker representatives are involved in planning and implementing policies and procedures
29	Organization has environment in which the priority is to get the work done, by whatever means necessary
30	Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary
31	Training is focused solely on the immediate job requirements including relevant safe working practices
32	Workers are trained and encouraged to identify and solve job-related problems
33	The job requirements exceed worker competence (capabilities and training)
34	Use of agreed, cross-industry criteria to assess competence, with procedures in place to review and maintain standards
35	Organization employs people with the specialist knowledge it needs
36	Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring
37	Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand
38	Organization uses employment practices that promote work flexibility for employees and encourage workforce stability and commitment
39	Organization supports and encourages staff (e.g. by incentives such as time-off or vouchers) to engage in health and well-being activities
40	The adoption of management philosophies such as 'lean production', 'just in time'
41	Wise investment in modern capital equipment (from office equipment to manufacturing plant)
42	Organization operates in a market with intense competition from rivals
43	Organization benchmarks its performance against others
44	Organization operates in a European market
45	Organization operates in a global market
46	Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)
47	CEOs/directors liable to receive personal sanctions for violation of legal duties and regulatory standards
48	Involvement of external specialists in assessing compliance with legal duties and regulatory standards
49	Regulators prescribe the process for managing risks
50	Regulators provide practical diagnostic tools and measures of performance on risk management
51	Regulators taking an active interest in how a business's culture affects its management of risk
52	Organization has an individual in top management accountable for health & safety performance
Statements	
105	Health and safety and productivity/profitability are in competition with each other
106	Occupational health and safety should be viewed as an integral part of productivity, competitiveness and profitability
107	The nature of the business (sector and complexity) significantly influences an organization's attitude and approach to health & safety
108	The business benefits of health and safety justify the business costs
109	A positive health and safety culture is important to the overall success of an organization
110	The factors for business success are generally the same regardless of the size of a business
111	HSE should provide different advice on health and safety management for small/uncomplicated

Various methods of dispatch and return had been considered. However, drawing on the feedback from the pilot study, it was decided to send the paper-based version to all Panel members accompanied by a personalised cover letter which included that panel member's unique ID. All panel members were also sent, by email, an electronic version of the questionnaire, plus a non-personalised covering letter (see Appendix D1). The cover letters and the paper-based version of the questionnaire also gave details of the URL where the questionnaire could be downloaded. To maintain confidentiality, panel members were requested to return completed questionnaires directly to the University of Birmingham (using reply-paid labels or email).

The questionnaires were dispatched on 9 June 2008, with a request for return by 25 June. Reminders were sent by email and/or post to non-responders (apart from those who had subsequently indicated they did not wish to join the Panel) after 25th with a final return date of 7 July 2008.

Unfortunately it transpired that it had not proved possible, prior to the dispatch of Round One questionnaires, to ascertain from all those approached whether or not they were willing to join the panel. Thus questionnaires were sent not only to those who had indicated they were willing to join the panel, but also to those from whom no response had been received by that date.

In a small number of cases, those invited to be panel members passed their questionnaire on to be completed by a colleague. Whereas this would invalidate a conventional survey using random sampling, given the nature of an Expert Delphi panel discussed above this was not considered a major problem here. However, it did require some investigation to determine which 'constituency' the substitute panel members should be allocated to.

2.8 Response to Round One and Conduct of Round Two

Eventually 96 Round One questionnaires were returned; of those 79 completed questionnaires had been returned by 11 July. Whilst the results from all questionnaires were analysed subsequently, these 79 were analysed to form the feedback to panel members for Round Two. Participants in the pilot study who were also panel members were invited to complete the Round One questionnaire. However, if they did not wish to do so, they were informed that their pilot responses could be included in Round One as there had been only minimal changes to the questionnaire.

37% of questionnaires were completed electronically and returned by email. Of the remaining 63% returned on paper by post, one had been downloaded from the web and printed out.

Unfortunately a number of questionnaires (all paper) contained no ID or name. Whilst the majority of these were subsequently identified by various forms of detective work, three Round One questionnaires remained anonymous. Where anonymous questionnaires were subsequently identified, there was no suggestion that panel members had deliberately omitted their ID/name.

Although some suggestions were made for additional factors, it was decided not to make any changes to the list used in Round One. It was, however, agreed to omit the 'Confidence' question.

Generic feedback on the results from Round One was included on the Round Two questionnaires in the form of Mean scores (scaling the impact responses –4 to +4 from Very Strong Negative Impact to Very Strong Positive Impact), plus standard deviations and bar charts to indicate the spread of responses. A similar presentation was used for the Statements, at that stage using a 1–5 scale (Strongly Disagree to Strongly Agree). Responses on ‘Universality’ were reported as percentages Yes and No.

Because of the problem of anonymous returns, additional boxes for the ID and name were printed on the cover sheet of the paper-based version of the Round Two questionnaire and an additional reminder to fill these in was added at the end of the instructions. The final Round Two questionnaire (paper version) is shown in Appendix E2.

It had been hoped to give individualised Round One feedback actually on the Round Two questionnaires – possibly by marking that panel member’s responses on the bar charts. However, for a number of reasons, including logistic and maintenance of confidentiality, that proved impossible. Thus individualised feedback was printed on a separate sheet (Appendix E3) and placed in a sealed envelope labelled only with the panel member’s ID, for inclusion in the Round Two circulation.

Two versions of the cover letter were used: one for identified respondents to Round One; the other for anonymous or non-responders (excluding, of course, those who had indicated that they were unable or did not wish to join the panel) (Appendix E1 a&b).

Round Two questionnaires, together with the relevant cover letter and feedback envelope, were dispatched by post and email on 28 July 2008, with a request for return by 21 August. An email reminder was sent after that date, which also asked panel members to indicate if they did not wish to change their responses from Round One. In contrast with Round One, only a fifth of Round Two returns were by email.

2.9 Coding & Scaling of Responses

As indicated above, for the purposes of feedback and analysis, the impact responses were scaled –4 denoting ‘Very Strong Negative Impact’ to +4 denoting ‘Very Strong Positive Impact’, with 0 denoting ‘No Impact’. For the feedback in Round Two questionnaires, responses to the Statements in Part 3 were placed on a 1 to 5 scale (Strongly Disagree to Strongly Agree). However, for later presentation and analysis, a scale from –2, denoting ‘Strongly Disagree’, to +2, denoting ‘Strongly Agree’, with 0 denoting ‘Neither Agree nor Disagree’, was used. Responses on ‘Universality’ are reported as percentages ‘Yes’ and ‘No’. Responses on self-assessed degree of confidence (Round One Questionnaires only) were scored ‘Very Confident’ = 3, ‘Fairly Confident’ = 2, ‘Not Very Confident’ = 1 for the purpose of weighting.

2.10 Outliers

An initial analysis was conducted on all responses received by 11 September 2008. Outlying responses were identified for a number of Factors and Statements, mainly those where there was overall a high degree of consensus, but where a few responses were lying some distance from that ‘consensus’. Other than in those cases where panel members had explained their outlying response on their questionnaire, letters were sent to 42 panel members in respect of 120 outliers, accompanied by a sheet identifying their ‘outlying response(s), asking if they wished to give ‘any information, explanation or other reasoning behind those responses’ (See

letter and specimen 'identified outliers' in Appendix F). In general, where there was an overall very high spread of responses to a Factor or Statement, the most 'extreme' responses were not classified as outliers.

Twenty-four responses were received. Some outliers were identified as errors (and thus corrected in the database), and a range of responses were given in respect of other outliers.

2.11 Emerging Findings and Events

Findings from all responses received by 11 September were presented and discussed at two national events with invited audiences comprising panel members and others, in Lancaster (15 October 2008) and London (17 October 2008).

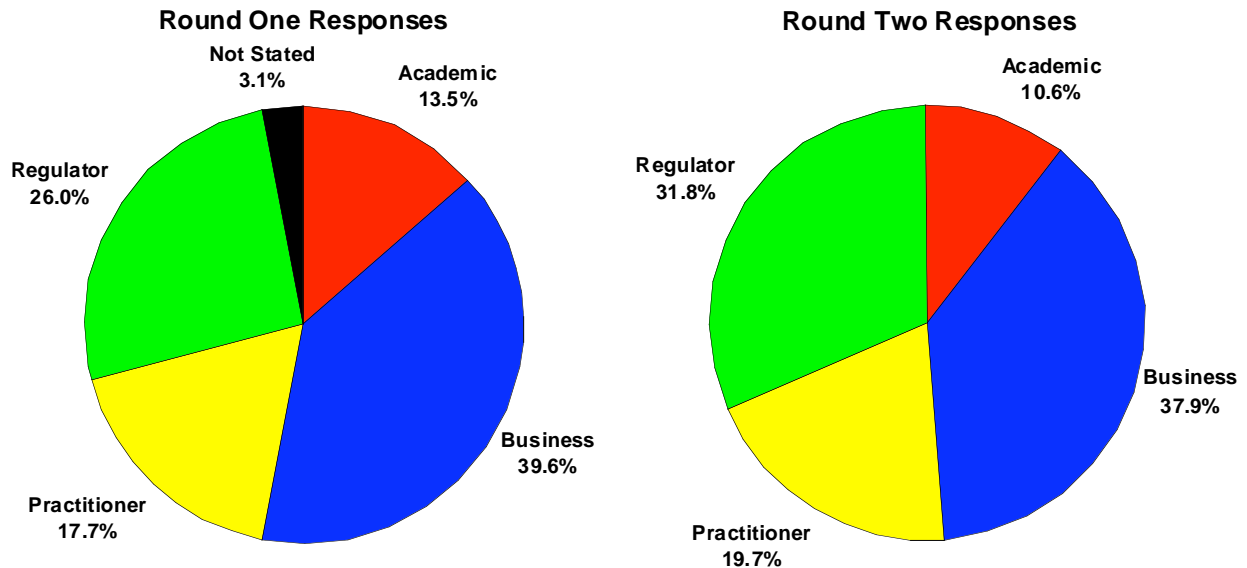
Final analysis was carried out, including two very late returns, and is presented in the following chapter.

3. RESULTS

3.1 Responses

Overall, 103 people took part in the Delphi survey, 96 returning Round One questionnaires, and 66 returning Round Two questionnaires. Fifty-nine panel members returned questionnaires for both rounds. The breakdown by constituency is shown below in Figure 3.1.

Figure 3.1: Responses by ‘Constituency’



As can be seen, the Academic and Business constituencies accounted for over half the respondents to Round One. However, the higher retention rate between rounds for the Practitioner and Regulator constituencies meant they accounted for just over half the respondents to Round Two. As explained earlier, the fluidity of the original panel means that it is not possible to calculate response rates either overall or for the individual constituencies.

3.2 Overall Findings

The findings from Round One were fed-back in the Round Two questionnaire), so the main focus here will be on the findings from the Round Two responses. The full Round One findings can be found in Appendix E2.

3.2.1 Impact of Factors on H&S and on Business Performance

Table 3.1 presents a comprehensive, if possibly intimidating, summary of the findings from Parts 1 & 2 of the Round Two questionnaire.

Each ‘Factor’ is listed with its Factor number (see Table 2.4). The two main headed sections summarise the results for ‘Impact on Health and Safety Performance’ and for ‘Impact on Business Performance’, respectively. The mean score for impact (on the scale –4 to +4) is shown in the first column under each main heading. In order to indicate the degree of spread of responses, the Standard Deviation (SD) of each of the impact scores is given, together with a bar chart indicating in the frequency of each response, in the second and third columns. The final column under each heading gives the percentage of ‘Yes’ responses to the question “Please indicate whether or not you consider the impact of the factors is applicable to all types and sizes of organizations” (Yes = All types, No = not all types).

Table 3.1: Summary of Findings from Round Two: Parts 1&2

Factors or 'Influencers'	Impact on Health and Safety Performance						Impact on Business Performance																	
	Impact Mean Score	Impact Standard Deviation	Negative Impact			Positive Impact			Universal?	Impact Mean Score	Impact Standard Deviation	Negative Impact			Positive Impact			Universal?						
			-4	-3	-2	-1	0	+1				+2	+3	+4	-4	-3	-2		-1	0	+1	+2	+3	+4
			Very Strong	Strong	Medium	Weak	No Impact	Weak				Medium	Strong	Very Strong	Very Strong	Strong	Medium		Weak	No Impact	Weak	Medium	Strong	Very Strong
1 Organization has a clearly communicated statement of its values	2.47	1.268								82%	2.64	1.146									81%			
2 Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)	3.56	.747								97%	2.75	.909									95%			
3 Responsibility for health & safety is delegated entirely to health & safety specialists/advisors	-2.68	1.361								83%	-1.46	1.501									84%			
4 Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems	0.98	1.638								69%	1.98	1.813									84%			
5 Workers understand their own job, but not how it relates to the work of others	-1.74	1.418								90%	-1.79	1.272									88%			
6 Organization ensures employees behave consistently with company rules	2.71	.760								97%	2.39	1.078									91%			
7 Jobs give workers day-to-day discretion and control (autonomy) over their work	1.85	1.278								68%	2.33	.861									86%			
8 Organization uses a consistent approach to risk assessment	2.68	1.205								95%	2.29	1.099									95%			
9 Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant	3.42	.658								95%	2.75	.909									95%			
10 Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)	-2.45	1.246								96%	-2.38	1.134									95%			
11 Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)	1.77	1.332								52%	1.88	1.279									55%			
12 Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks	2.82	.705								81%	2.70	.920									90%			
13 Organization has a comprehensive formal system for managing maintenance (e.g. of plant, buildings)	2.88	.713								76%	2.81	.794									79%			

Factors or 'Influencers'	Impact on Health and Safety Performance						Impact on Business Performance												
	Impact Mean Score	Impact Standard Deviation	Negative Impact			Positive Impact			Universal?	Impact Mean Score	Impact Standard Deviation	Negative Impact			Positive Impact			Universal?	
			-4	-3	-2	-1	0	+1				+2	+3	+4	-4	-3	-2		-1
Very Strong	Strong	Medium	Weak	No Impact	Weak	Medium	Strong	Very Strong	Very Strong	Strong	Medium	Weak	No Impact	Weak	Medium	Strong	Very Strong		
14 Performance assessment includes clear and measurable health & safety targets	2.86	1.223							81%	2.03	1.267								73%
15 Public reporting of the organization's health & safety performance	2.09	.972							41%	1.71	1.156								56%
16 Organization has formal procedures for actively capturing and retaining tacit knowledge (e.g. 'corporate memory')	2.82	.950							69%	2.68	.864								69%
17 Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)	3.52	.563							95%	3.23	.684								95%
18 Organization discourages workers from doing more than the minimum needed to comply with rules and regulations	-2.64	1.200							95%	-2.00	1.480								84%
19 Organization has regular, structured, internal review and audit processes which include health and safety (e.g. workplace inspections)	3.20	.769							76%	2.66	.840								66%
20 Organization gives prompt feedback to workers following reviews, audits and inspections	2.92	1.269							93%	2.71	.831								88%
21 Everyone is encouraged to share and discuss issues openly and feels their views are valued	3.41	.632							98%	3.08	.822								95%
22 Organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity	3.48	.793							98%	2.95	.805								97%
23 Organization has "No blame" internal reporting of incidents (e.g. near misses, violations of procedures)	3.06	1.065							97%	2.63	1.076								90%
24 Everyone has their own job and keeps their nose out of everybody else's business	-2.75	.952							93%	-2.36	.861								86%
25 Organization perceives health & safety outcomes as important to business success	3.43	.637							91%	2.54	1.105								79%
26 Organization gives rewards linked to meeting individual productivity/profitability targets	-0.47	2.128							83%	2.05	1.485								73%

Factors or 'Influencers'	Impact on Health and Safety Performance						Impact on Business Performance												
	Impact Mean Score	Impact Standard Deviation	Negative Impact			Positive Impact			Universal?	Impact Mean Score	Impact Standard Deviation	Negative Impact			Positive Impact			Universal?	
			-4	-3	-2	-1	0	+1				+2	+3	+4	-4	-3	-2		-1
Very Strong	Strong	Medium	Weak	No Impact	Weak	Medium	Strong	Very Strong	Very Strong	Strong	Medium	Weak	No Impact	Weak	Medium	Strong	Very Strong		
27 Workers, supervisors, middle and senior managers are all involved and engaged in decision-making	2.91	.924							88%	2.84	1.087								88%
28 Worker representatives are involved in planning and implementing policies and procedures	2.74	.871							74%	2.39	1.136								82%
29 Organization has environment in which the priority is to get the work done, by whatever means necessary	-3.29	.824							97%	-0.92	2.242								88%
30 Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary	2.98	1.102							97%	1.75	1.543								93%
31 Training is focused solely on the immediate job requirements including relevant safe working practices	-0.47	1.727							75%	-0.59	1.623								84%
32 Workers are trained and encouraged to identify and solve job-related problems	2.61	.926							95%	3.00	.816								95%
33 The job requirements exceed worker competence (capabilities and training)	-3.18	1.201							98%	-3.14	.870								98%
34 Use of agreed, cross-industry criteria to assess competence, with procedures in place to review and maintain standards	2.25	.867							78%	1.86	.931								61%
35 Organization employs people with the specialist knowledge it needs	2.69	.999							95%	2.95	.805								96%
36 Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring	-2.29	1.011							79%	-1.43	1.614								84%
37 Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand	-0.97	1.274							74%	1.77	1.561								79%
38 Organization uses employment practices that promote work flexibility for employees and encourage workforce stability and commitment	2.35	.799							91%	2.78	.983								97%
39 Organization supports and encourages staff (e.g. by incentives such as time-off or vouchers) to engage in health and well-being activities	2.11	1.097							78%	1.71	1.275								81%

Factors or 'Influencers'	Impact on Health and Safety Performance					Impact on Business Performance													
	Impact Mean Score	Impact Standard Deviation	Negative Impact			Positive Impact			Universal?	Impact Mean Score	Impact Standard Deviation	Negative Impact			Positive Impact			Universal?	
			-4	-3	-2	-1	0	+1				+2	+3	+4	-4	-3	-2		-1
Very Strong	Strong	Medium	Weak	No Impact	Weak	Medium	Strong	Very Strong	Very Strong	Strong	Medium	Weak	No Impact	Weak	Medium	Strong	Very Strong		
40 The adoption of management philosophies such as 'lean production', 'just in time'	-0.43	1.610							57%	1.84	1.625								67%
41 Wise investment in modern capital equipment (from office equipment to manufacturing plant)	2.30	.944							97%	2.97	.816								97%
42 Organization operates in a market with intense competition from rivals	-0.51	1.564							76%	0.92	2.181								76%
43 Organization benchmarks its performance against others	2.20	1.202							72%	2.40	1.086								77%
44 Organization operates in a European market	0.19	.753							58%	0.64	1.170								58%
45 Organization operates in a global market	0.02	.787							55%	0.66	1.237								56%
46 Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)	2.00	1.159							72%	1.55	1.210								73%
47 CEOs/directors liable to receive personal sanctions for violation of legal duties and regulatory standards	2.44	1.349							88%	1.69	1.468								74%
48 Involvement of external specialists in assessing compliance with legal duties and regulatory standards	1.79	1.089							73%	1.56	1.104								77%
49 Regulators prescribe the process for managing risks	0.71	1.656							62%	0.25	1.722								70%
50 Regulators provide practical diagnostic tools and measures of performance on risk management	2.08	1.094							79%	1.58	1.282								83%
51 Regulators taking an active interest in how a business's culture affects its management of risk	2.42	1.216							84%	1.87	1.100								82%
52 Organization has an individual in top management accountable for health & safety performance	2.97	.944							88%	2.00	1.391								88%

Appendix G supplements Table 3.1 by giving full details of each factor and statement, including written-in comments from panel members in Rounds One and Two.

Figure 3.2 shows, for each factor, the mean score of the impact on H&S Performance, ranked from highest negative impact (-3.3) to highest positive impact.(+3.6). As can be seen, only nine factors had mean impact 'scores' between -1 and +1 (weak negative to weak positive impact). Thirty-nine Factors had mean impact scores outside the range -2 to +2 (ie stronger than medium negative or medium positive impact) with 10 of those having mean impact scores outside the range -3 to +3, (ie between strong and very strong impact). Of course, in interpreting the sign of impact scores, full account must be taken of the precise wording of the Factors – a Factor presented with negative wording which yields a negative mean impact could mean that that Factor is judged to have a positive effect, and vice versa.

Figure 3.2: Factors Ranked by Mean Impact Score on H&S

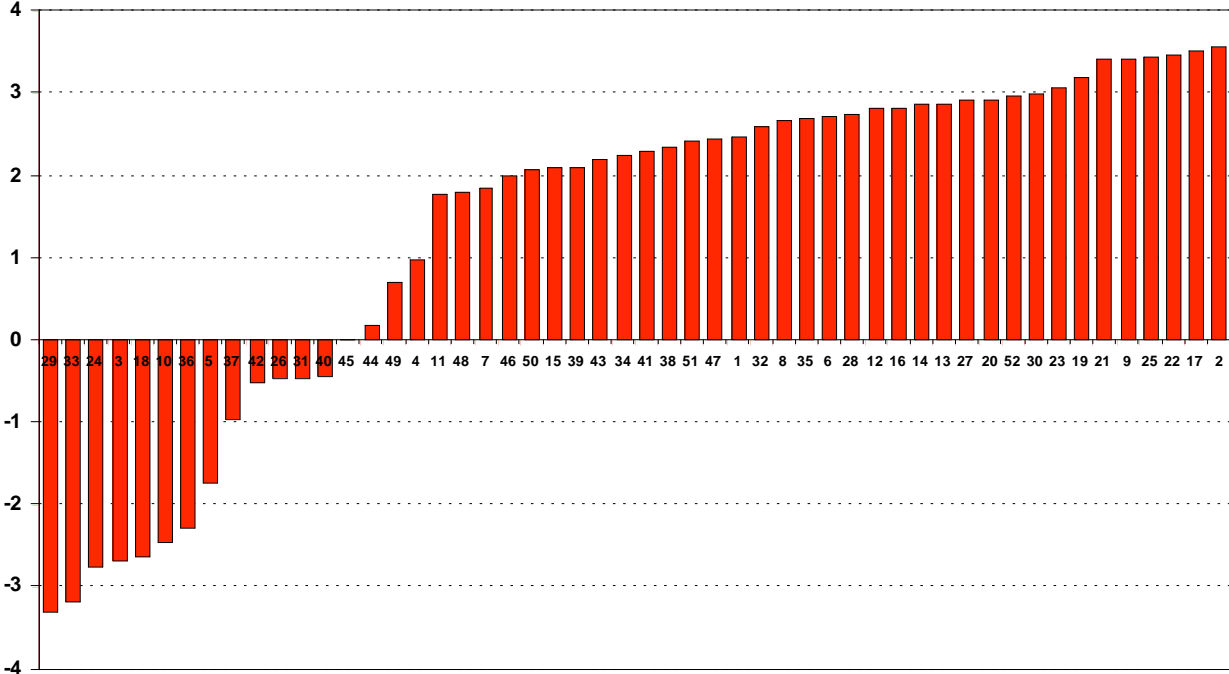
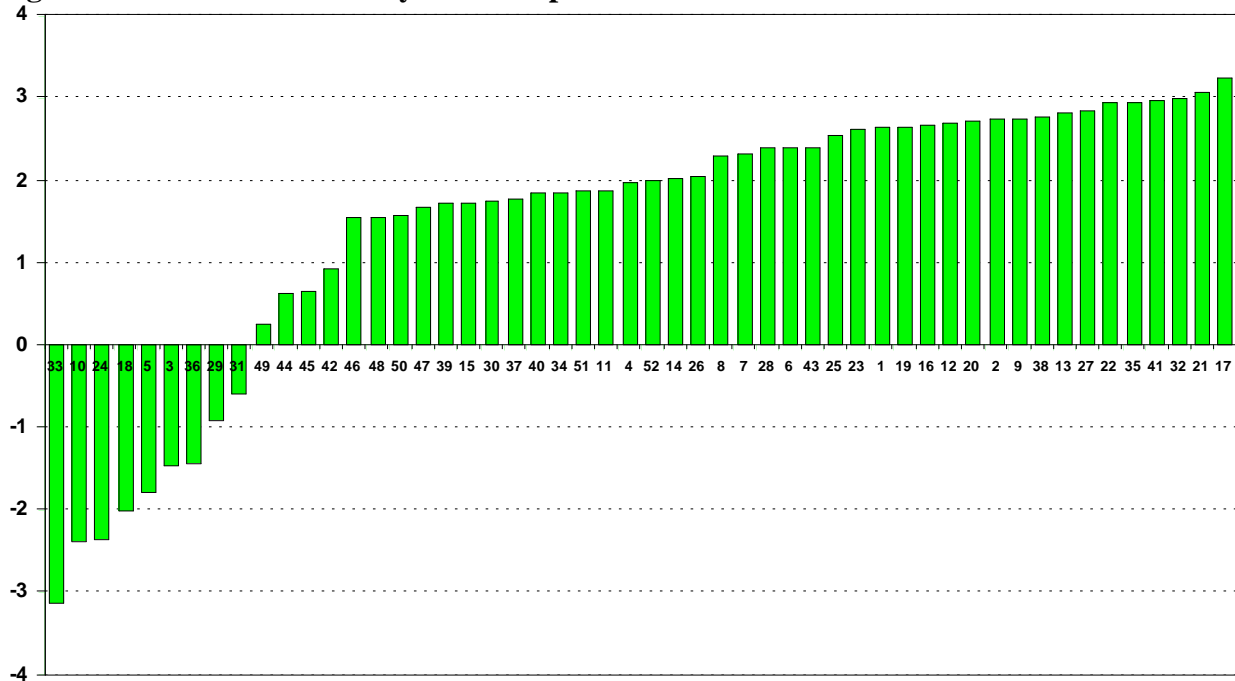


Figure 3.3 shows, for each factor, the mean score of the impact on Business performance ranked from highest negative impact (-3.1) to highest positive impact. (+3.2). Whilst the overall range is smaller than that for the impact on H&S, only six factors had mean impact 'scores' between -1 and +1. Again in contrast to the judged impact on H&S performance, 30 Factors had mean impact scores outside the range -2 to +2 (ie stronger than medium negative or medium positive impact), with only three of those having mean impact scores outside the range -3 to +3, (ie between strong and very strong impact).

Figure 3.3: Factors Ranked by Mean Impact Score on Business



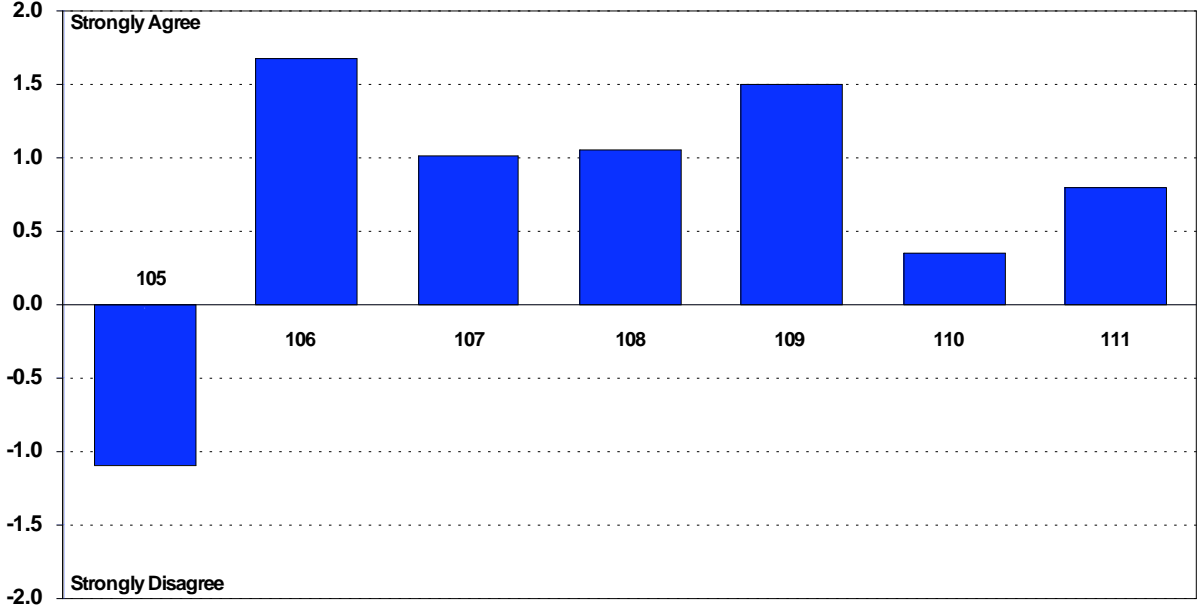
3.2.2 Agreement/Disagreement with Statements in Part 3

Table 3.2 and Figure 3.4 show the mean agreement/disagreement scores with the seven statements in Part 3 of the questionnaire – with a score of 0 denoting ‘Neither Agree/Disagree’. As with Table 3.1 the spread of responses to each statement is indicated both by the standard deviation and by a bar chart of responses.

Table 3.2: Summary of Findings from Round Two: Part3

	Part 3 ‘Statements’	Mean	Standard Deviation	Strongly Disagree	Disagree	Neither Agree/Disagree	Agree	Strongly Agree
				-2	-1	0	+1	+2
105	Health and safety and productivity/profitability are in competition with each other	-1.09	.968	█	█	█	█	█
106	Occupational health and safety should be viewed as an integral part of productivity, competitiveness and profitability	1.68	.494			█	█	█
107	The nature of the business (sector & complexity) significantly influences an organization’s attitude and approach to health & safety	1.02	.900	█	█	█	█	█
108	The business benefits of health and safety justify the business costs	1.06	.710	█	█	█	█	█
109	A positive health and safety culture is important to the overall success of an organization	1.50	.671		█	█	█	█
110	The factors for business success are generally the same regardless of the size of a business	0.35	1.067	█	█	█	█	█
111	HSE should provide different advice for small/uncomplicated and for large/complex organizations	0.80	.982	█	█	█	█	█

Figure 3.4: Mean Agreement/Disagreement Scores with Part 3 Statements

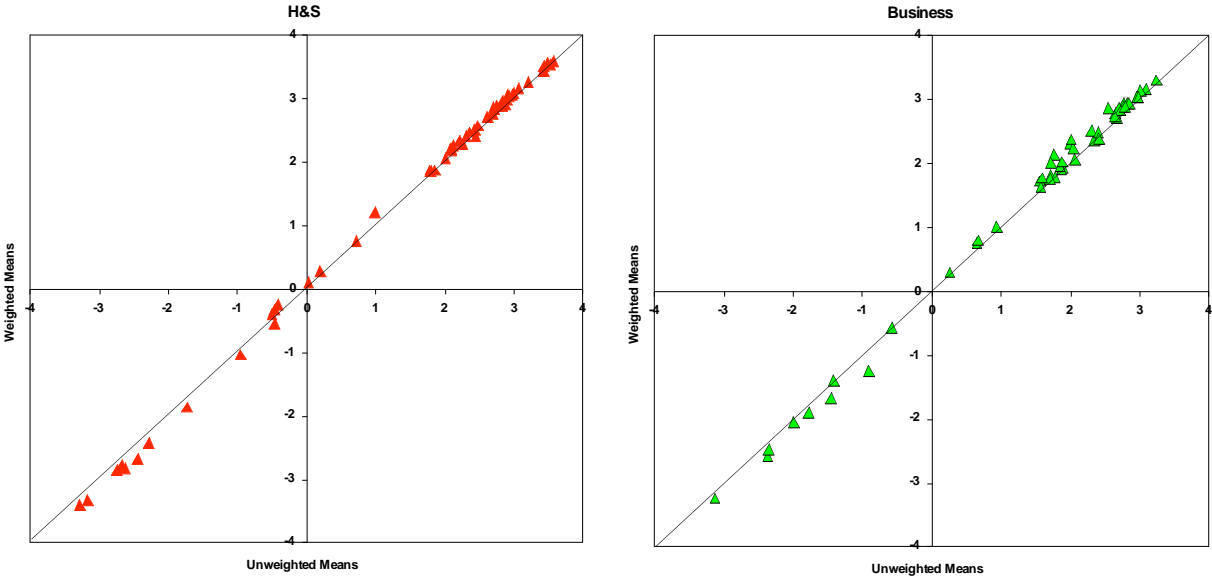


As with the mean impact scores, the precise wording of the statement must be taken into account when interpreting the agreement/disagreement score.

3.2.3 Effect of Self-Assessed Degree of Confidence in Responses

In Round One, panel members were invited to indicate their degree of confidence in their responses in respect of the impact of the Factors on H&S and on Business performance. In order to obtain an estimate of the effect of this confidence, the impact scores were weighted by the self-assessed degree of confidence. Figure 3.5 plots the resulting weighted means from Round Two against the Unweighted Means from Round Two. It can be observed that, whilst there is little difference, the weighted means with very few exceptions show slightly higher absolute values (stronger impact) than the unweighted means – with this slightly being more marked in respect of impact on Business performance. This suggests either that those who felt more confident judged impact to be higher and/or those feeling less confidence reflected that in giving lower impact scores.

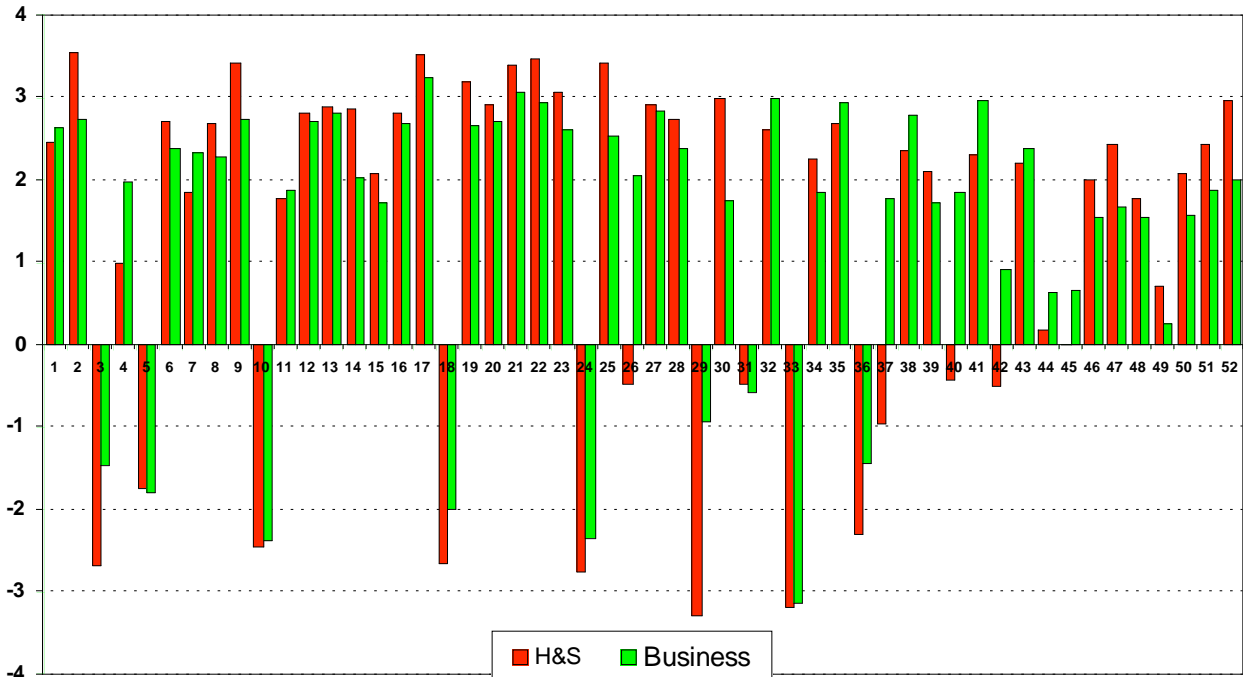
Figure 3.5: Mean Impact Scores Weighted by Degree of Confidence v Unweighted Means



3.3 Comparison of Impact on H&S and Impact on Business Performance

Figure 3.6 compares the mean scores for impact on Health & Safety performance (red) and impact on Business performance (Green) for each of the 52 'Factors'.

Figure 3.6: Mean scores for impact on Health & Safety Performance and on Business Performance

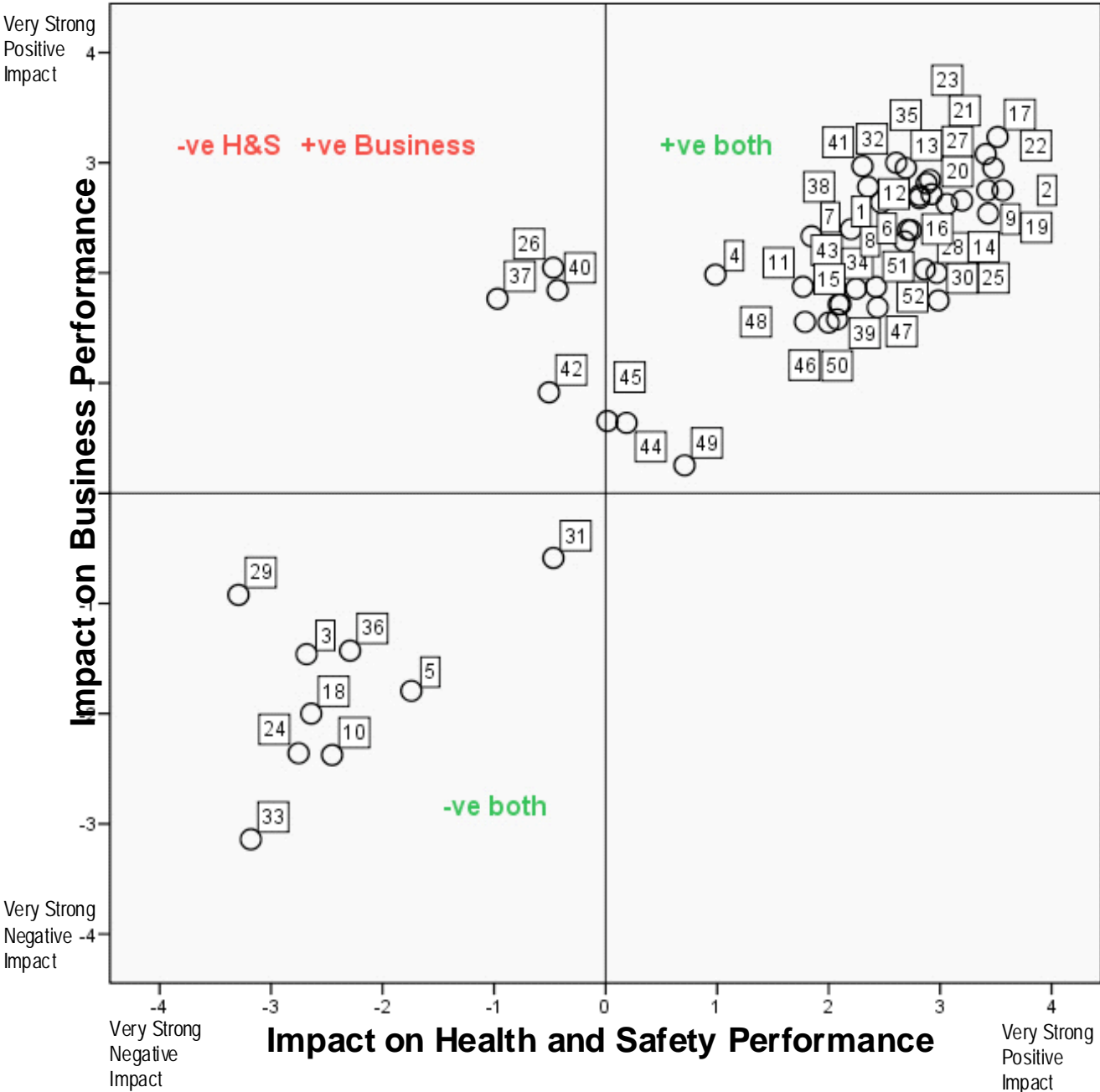


Whilst for many of the factors, the scores appear similar in respect of impact on H&S and on Business performance, there are some strong differences, which are explored in greater detail below.

Figure 3.7 plots the mean scores for the impact on Business Performance against the mean scores for impact on H&S Performance. Factors in the top right-hand (RH) quadrant – by far the majority – have been judged to have a positive impact on both H&S and Business performance, whilst those in the bottom left-hand (LH) quadrant have been judged to have a negative impact on both.

The four Factors (28, 37, 40 & 42) lying in the top LH quadrant are judged to have a positive impact on Business performance but a negative impact on H&S performance. As such, they are clearly identifiable in some subsequent Tables (eg 3.8a&b, 3.9a & 3.12) and figure in a number of analyses. However, again, in interpreting the findings, careful consideration needs to be given to the precise wording of each Factor. However, of course, any effect resulting from positive or negative wording should be the same for impact on both H&S and on Business performance.

Figure 3.7: Mean scores for impact on Health & Safety Performance v Impact on Business Performance



Key to Factors in Top Left-Hand Quadrant (a key to all Factors can be found in Table 3.1)	
26	Organization gives rewards linked to meeting individual productivity/profitability targets
37	Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand
40	The adoption of management philosophies such as 'lean production', 'just in time'
42	Organization operates in a market with intense competition from rivals

Figure 3.8a plots the mean scores for impact on Health & Safety performance and on Business performance, which were shown in Figure 3.5, here ordered by impact on H&S performance.

Figure 3.8a: Mean scores for impact on Health & Safety Performance and on Business Performance ranked by impact on H&S Performance

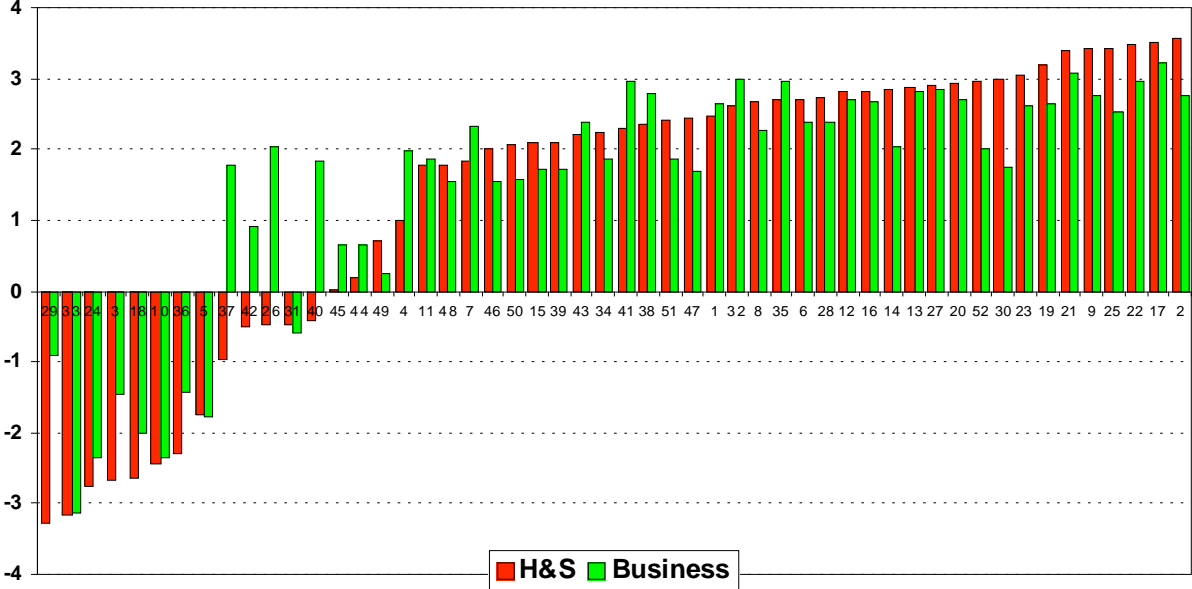


Figure 3.8b allows more detail to be seen as it shows only the Factors judged to have a negative impact on H&S performance, plus the 10 judged to have the highest positive impact. This identifies clearly some factors with very different impacts on H&S and on Business. Such differences are examined further below. These findings are supplemented by Table H1 (Appendix H), which gives fuller details of the 10 factors with the highest negative impact on H&S performance, and by Table H2, which lists the 10 factors judged to have the highest positive impact on H&S.

Figure 3.8b: Strongest Negative and Positive Impacts on Health & Safety Performance

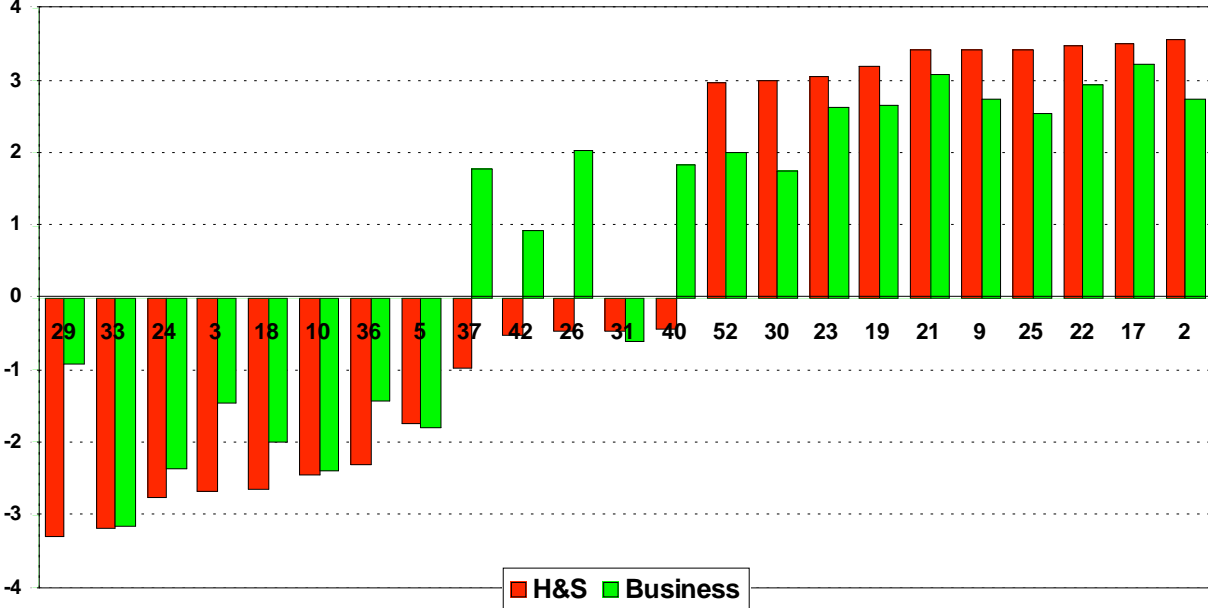


Figure 3.9a again shows the mean impact scores for both H&S and Business, but here ordered by impact on Business performance.

Figure 3.9a: Mean scores for impact on Health & Safety Performance and on Business Performance ranked by impact on Business Performance

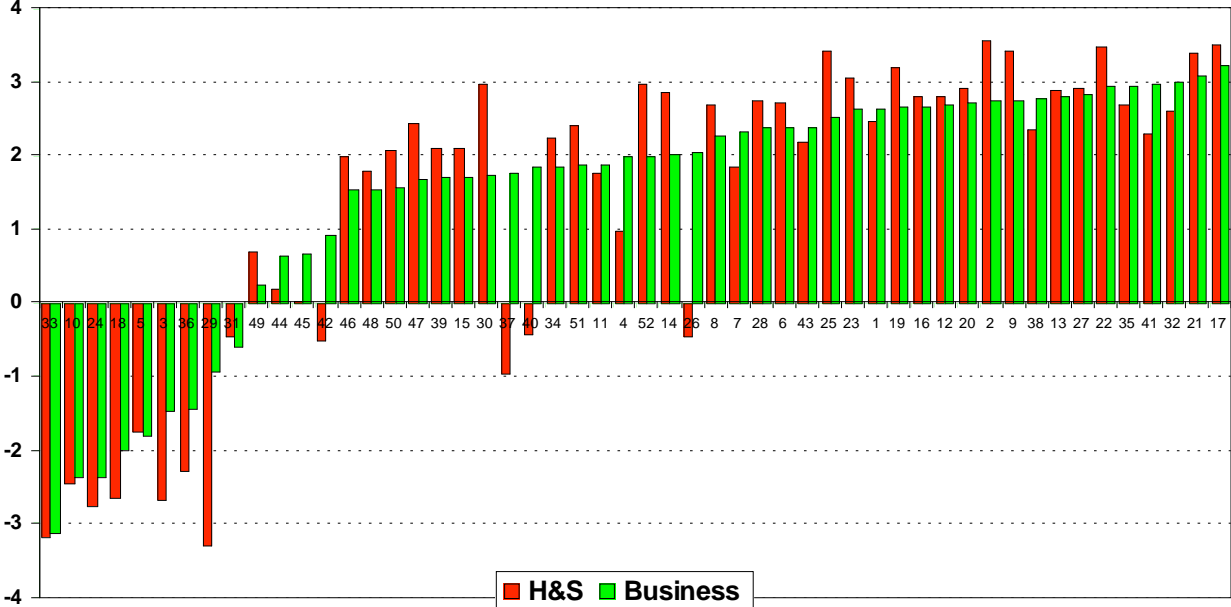
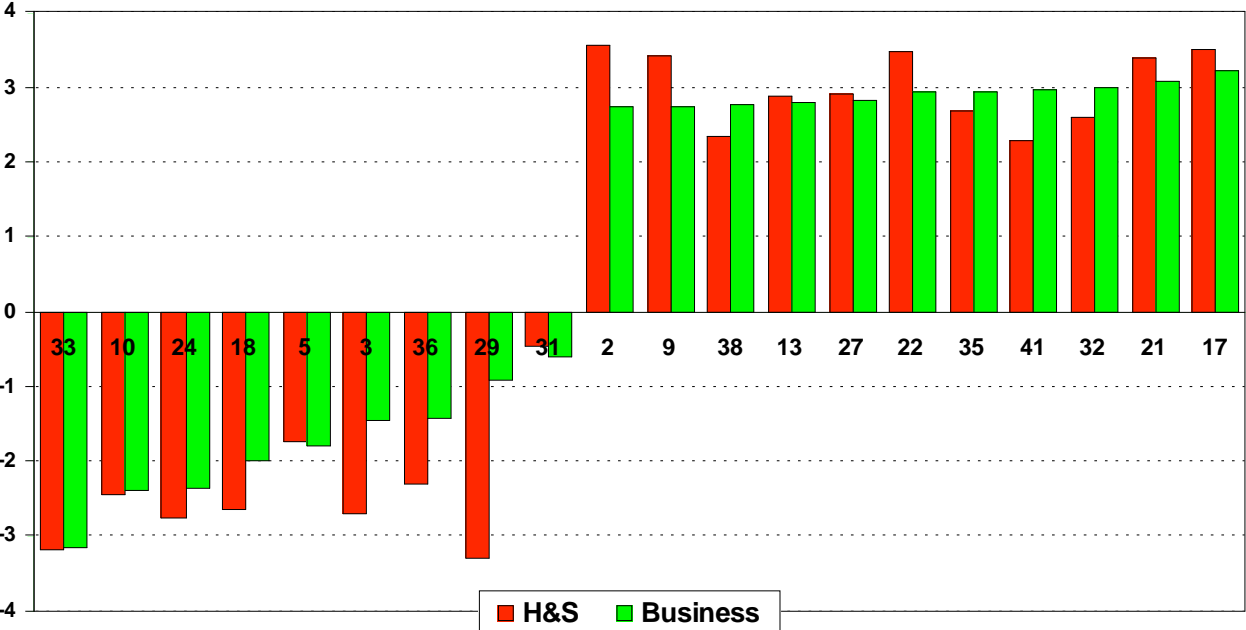


Figure 3.9b shows only those factors judged to have a negative impact on Business plus those judged to have the strongest positive impact. Again, these findings are supplemented by fuller details in Tables H3 and H4 in Appendix H.

Figure 3.9b: Strongest Negative and Positive Impacts on Business Performance



The differences between the mean impact of each Factor on Health and Safety performance and on Business performance are shown in Figures 3.10 & 3.11. Figure 3.10 shows the absolute difference between the mean impact scores for each factor, which range from almost three (on the ‘-4 to +4 ‘strength of impact’ scale) to effectively zero. Full details are shown in Table H5 (Appendix H). As can be seen from Figure 3.10, whilst most differences are less than one, the majority of differences are statistically significant ($p < 0.05$).

Figure 3.10: Ranked Absolute Differences in Impact Scores

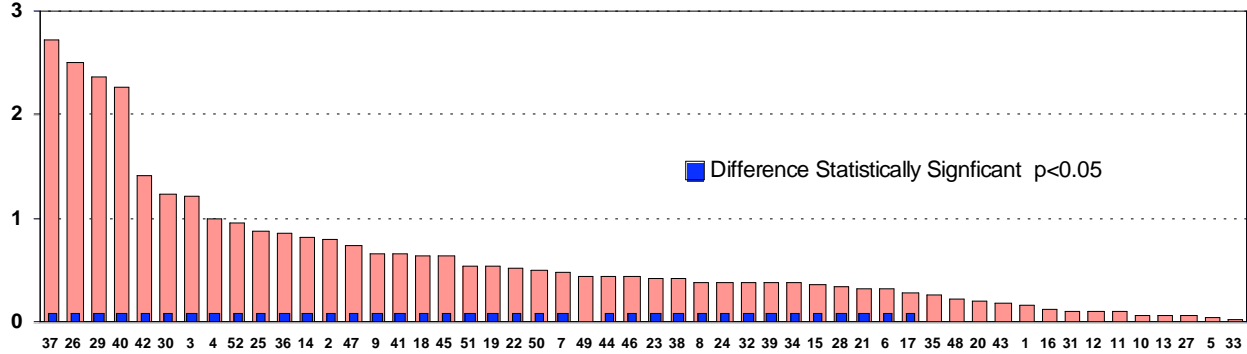


Figure 3.11 shows the differences between the mean impact of each Factor on Health and Safety performance and on Business performance but retaining the sign. Negative differences identify Factors where the impact of the Factor on Health and Safety performance is judged to be more strongly negative or less strongly positive than its impact on Business performance – positive differences identify the opposite. As can be seen, with one exception, the differences greater in size than one (1) are all negative, meaning they are judged to be ‘better’ for Business. Fuller details are shown in Table H6 (Appendix H).

Figure 3.11: Ranked Differences in Impact Scores

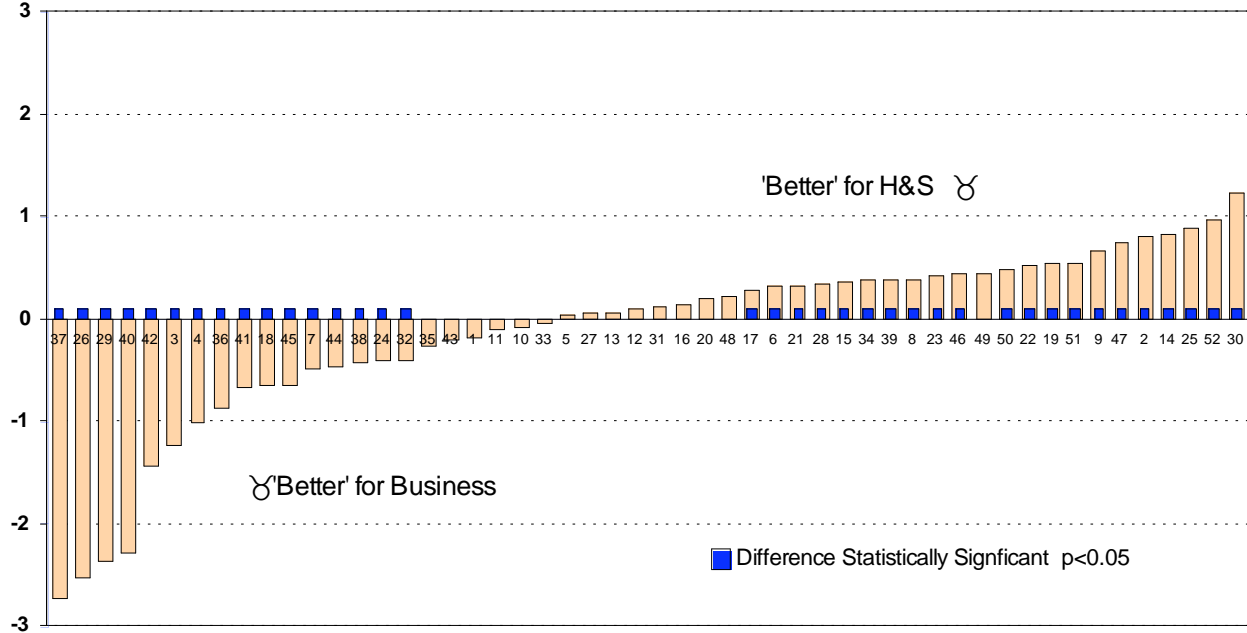
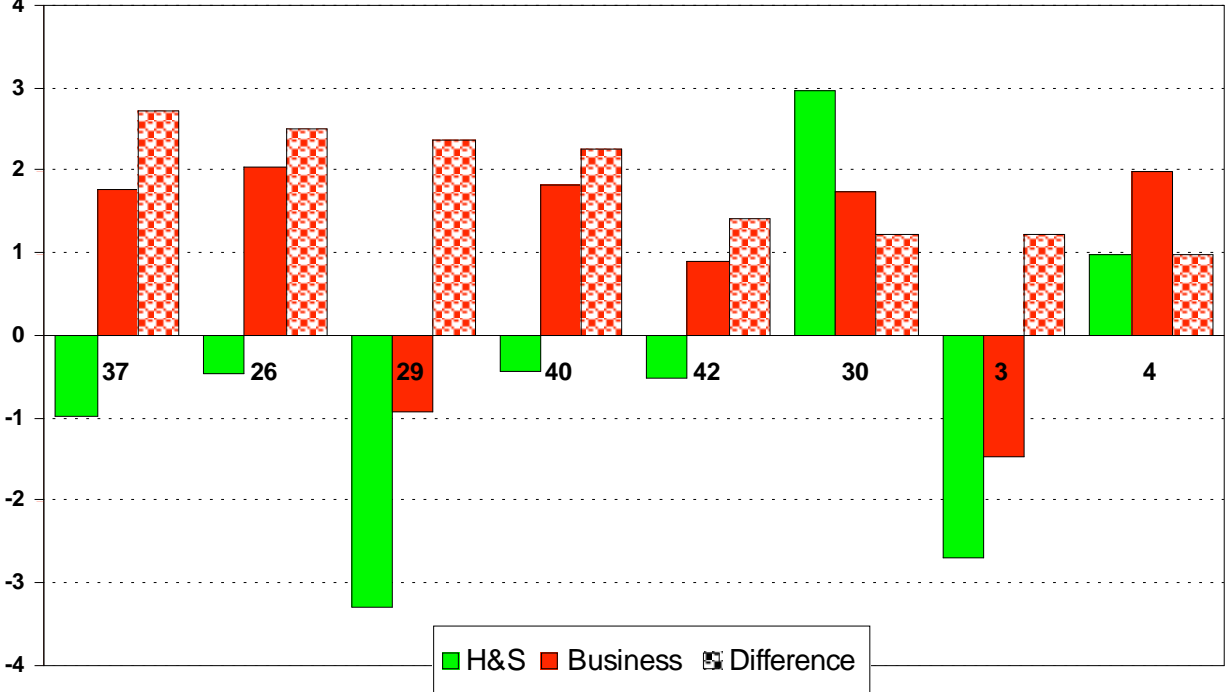


Figure 3.12 gives details of the mean impact scores on both H&S and Business Performance, plus the difference between them, for the eight Factors where the absolute mean difference is one (1) or greater.

Figure 3.12: Factors with Largest Difference in ‘Strength of Impact’



As noted above, the majority of differences between the mean impacts are statistically significant, meaning that they are unlikely to have occurred by chance. Differences, whether positive or negative, which are not statistically significant – and most of which are very small (<0.26) – should be interpreted as ‘no difference’. However, the difference in mean impact for Factor 49 “Regulators prescribe the process for managing risks” stands out as it is relatively large (0.45) but is not statistically significant. The reason for this is the very high spread or variation in responses in respect of the impact of this Factor both on H&S and on Business Performance. This is addressed further in the next section.

3.4 Degree of Spread or Variation in Responses

Interpretation of any mean impact score needs to take account of the degree of spread in responses. Two Factors judged to have the same mean impact score on H&S or on Business performance might have very different policy implications depending on that spread. A low spread indicates a high degree of consensus among panel members; whilst a large spread or variation indicates that the single mean value is made up of widely different views. Tables 3.1 & 3.2 above presented the spread or variation for each Factor (Table 3.1) and each Statement (Table 3.2) in the form of a bar chart and the standard deviation.

Appendix H Figures H2 (for H&S) & H3 (for Business) show the standard deviation of responses for each Factor, ranked from the lowest to the highest, superimposed on the absolute mean impact score for that factor. As can be seen in Figure H1 in respect of impact on H&S performance, with a few exceptions, low absolute mean impact scores are associated with large standard deviations and, to a large extent, the small standard deviations are associated with high absolute mean impact scores. A similar picture is seen in Figure H2 in

respect of impact on Business performance. However, here there is a more consistent association between high absolute mean impact scores and lower standard deviations, with a less consistent pattern in respect of the larger standard deviations. It should of course be noted, that the range (-4 to +4) of the scoring system means there is little scope for large standard deviations where there are high absolute mean impact scores (ie high mean impact scores can only arise where there is a fairly high degree of consensus). Nevertheless, for both H&S and Business, Factors with low absolute mean impact scores and high standard deviations warrant special attention as there is a danger of their potential importance being overlooked because of their low mean impact.

In order to explore the degree of variation further, Table 3.3 gives full details (extracted from Table 3.1) of those Factors with a high Standard Deviation (> 1.5) in respect of assessed impact on H&S and/or on Business performance. All these warrant careful consideration as their mean impact scores are concealing a wide variation in responses. This will be pursued further in the discussion. However, in the meantime, attention is drawn to Factor 49, mentioned above, which shows a similar wide spread of responses in respect of impact both on H&S and on Business performance. It is also noted that Factor 31 “Training is focused solely on the immediate job requirements including relevant safe working practices” exhibits a similar pattern of responses.

As can be seen in Table 3.2, presented earlier, there is also variation in responses to the Statements in Part 3. This ranges from Statement 106 “Occupational health and safety should be viewed as an integral part of productivity, competitiveness and profitability” which exhibits a high degree of consensus of ($SD < 0.5$) to Statement 110 “The factors for business success are generally the same regardless of the size of a business” with a standard deviation greater than one and a bimodal distribution. However, in interpreting the standard deviations here, it should be noted that the scale for the Statements runs from -2 to +2, which limits the possible absolute magnitude of their standard deviations.

As noted earlier, where Factors and Statements had a high degree of consensus but with a few outliers in Round Two, panel members with those ‘outlier’ responses were asked if they wished to give any further information supporting their response. Whilst a few panel members replied that their ‘outlier’ response was an error and corrected it, many others gave their reasoning, which is reported, by Factor, in Appendix G.

Table 3.3 Factors with High Standard Deviation and/or Coefficient of Variation

Factors or 'Influencers'	Impact on Health and Safety Performance						Impact on Business Performance												
	Impact Mean Score	Impact Standard Deviation	Negative Impact			Positive Impact			Universal?	Impact Mean Score	Impact Standard Deviation	Negative Impact			Positive Impact			Universal?	
			-4	-3	-2	-1	0	+1				+2	+3	+4	-4	-3	-2		-1
Very Strong	Strong	Medium	Weak	No Impact	Weak	Medium	Strong	Very Strong	Very Strong	Strong	Medium	Weak	No Impact	Weak	Medium	Strong	Very Strong		
3 Responsibility for health & safety is delegated entirely to health & safety specialists/advisors	-2.68	1.361	■	■	■	■	■	■	83%	-1.46	1.501	■	■	■	■	■	■	■	84%
4 Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems	0.98	1.638		■	■	■	■	■	69%	1.98	1.813						■	■	84%
26 Organization gives rewards linked to meeting individual productivity/profitability targets	-0.47	2.128	■	■	■	■	■	■	83%	2.05	1.485						■	■	73%
29 Organization has environment in which the priority is to get the work done, by whatever means necessary	-3.29	.824	■	■	■				97%	-0.92	2.242	■	■	■	■	■	■	■	88%
30 Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary	2.98	1.102						■	97%	1.75	1.543					■	■	93%	
31 Training is focused solely on the immediate job requirements including relevant safe working practices	-0.47	1.727		■	■	■	■	■	75%	-0.59	1.623		■	■	■	■	■	■	84%
36 Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring	-2.29	1.011	■	■	■	■	■	■	79%	-1.43	1.614	■	■	■	■	■	■	■	84%
37 Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand	-0.97	1.274		■	■	■	■	■	74%	1.77	1.561					■	■	79%	
40 The adoption of management philosophies such as 'lean production', 'just in time'	-0.43	1.610		■	■	■	■	■	57%	1.84	1.625					■	■	67%	
42 Organization operates in a market with intense competition from rivals	-0.51	1.564		■	■	■	■	■	76%	0.92	2.181					■	■	76%	
49 Regulators prescribe the process for managing risks	0.71	1.656			■	■	■	■	62%	0.25	1.722				■	■	■	70%	

Shaded if SD>1.50

3.5 Universal Applicability – Is the impact of the factor applicable to all types and sizes of organizations?

Panel members were asked to indicate, in respect of each Factor, whether or not (Yes/No) they considered the impact of the Factor on H&S and then on Business performance would be applicable to all types and sizes of organisations. The responses in respect of H&S performance are shown in Figure 3.13 and for Business performance in Figure 3.14.

Figure 3.13: Is the impact of Factor Universally Applicable to H&S Performance?

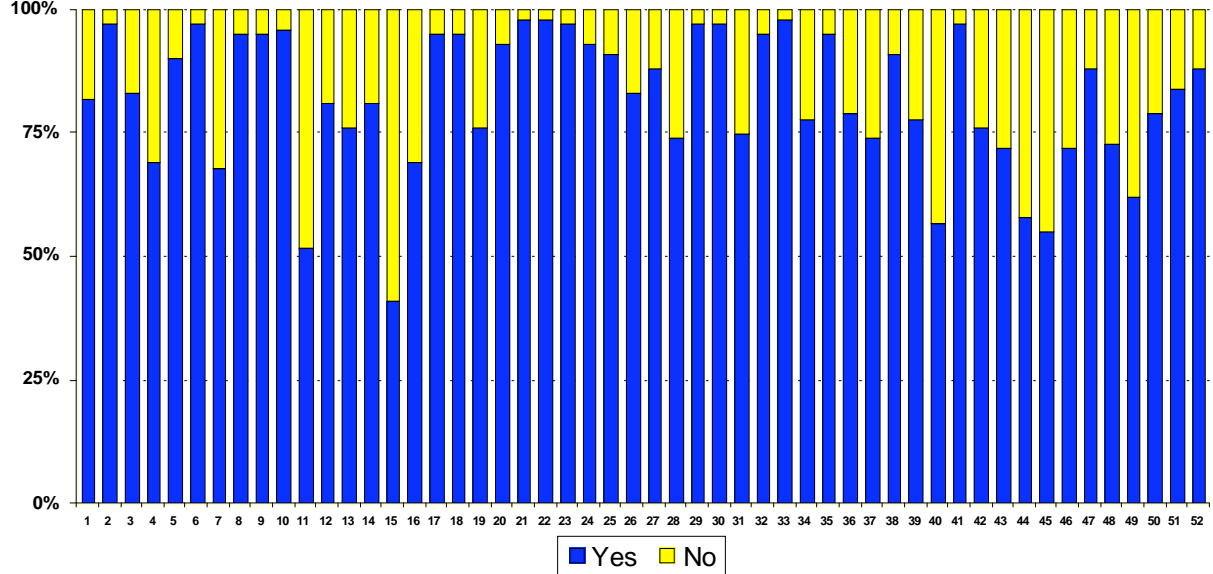


Figure 3.14: Is the impact of Factor Universally Applicable to Business Performance?

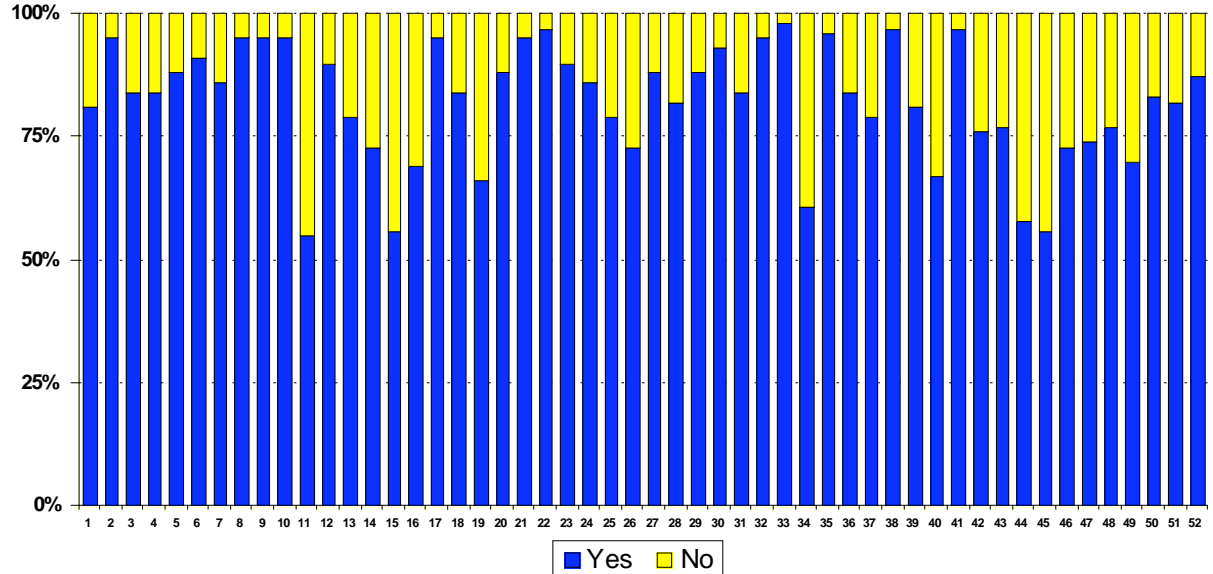


Figure 3.15a shows the responses for universality of impact on H&S and on Business performance side by side for each factor.

Figure 3.15a: Universally Applicable to H&S and to Business Performance?

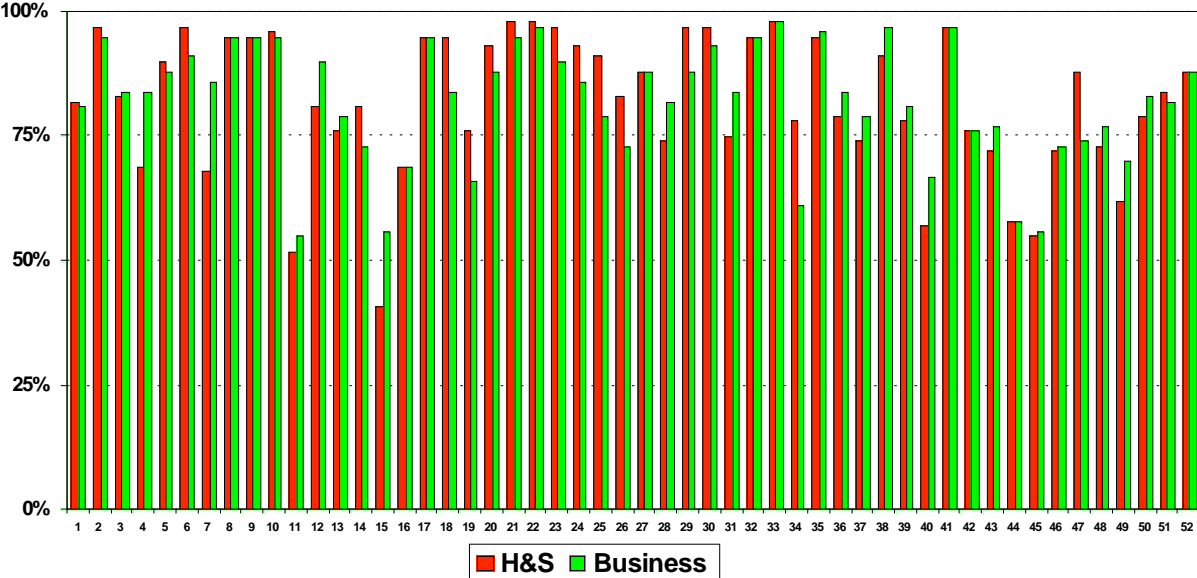
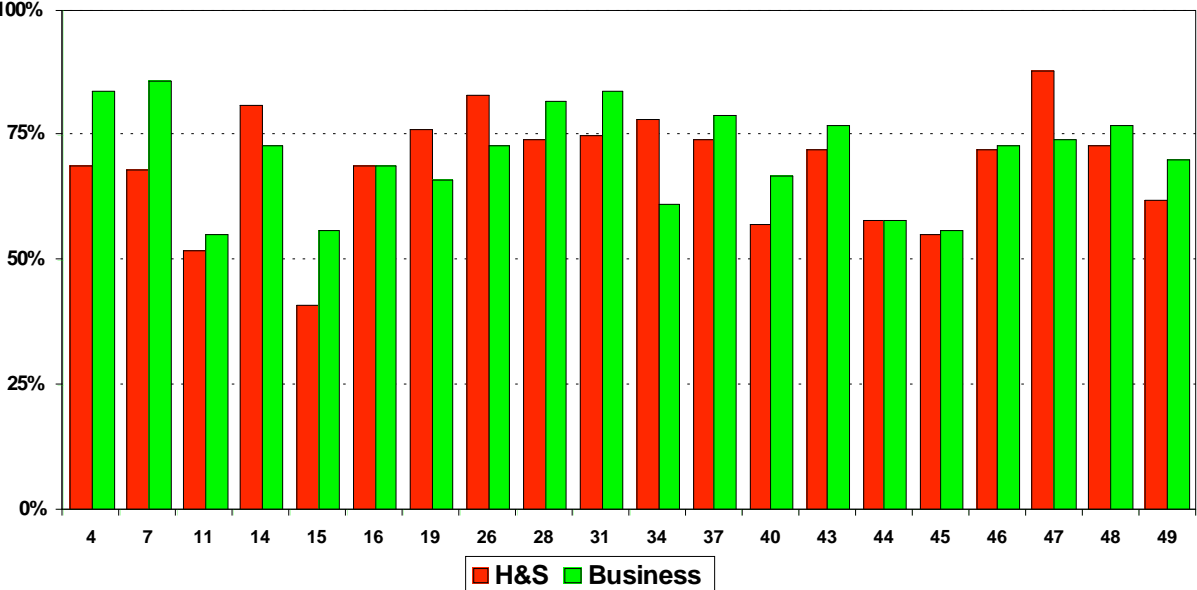


Figure 3.15b shows only those factors from Figure 3.15a where either the impact on H&S performance and/or the impact on Business performance is judged to apply to all types and size of organisation by 75% of respondents or fewer. It must be stressed that there is no particular policy implication of the choice of a 75% cut-off – it was selected as a compromise between inclusion and visual clarity.

During the discussion in Chapter 4 ‘Universal Applicability’ will be explored within broad groupings of Factors to attempt to determine if any patterns are emerging (Section 4.2.2).

Figure 3.15b: Factors Judged Universally Applicable to H&S and/or to Business Performance by ≤75% respondents?



3.6 Differences between ‘Constituencies’

3.6.1 Differences in Mean Impact Scores by ‘Constituency’

As explained earlier, panel members were classified into four main ‘constituencies, briefly: Academic; Business; H&S Practitioner and H&S Regulator. Figure 3.16 gives the overall mean of the mean Factor impact scores by constituency. As can be seen, on average, the Academic Constituency has the lowest assessment of the absolute impact of the Factors on both H&S and Business Performance, with the Practitioner constituency having the highest.

Table H7 (Appendix H) gives full details, for each Factor, of the mean scores for impact on both H&S and Business performance for each ‘constituency’.

Figure 3.16 Overall Mean of Absolute Mean Impact Scores by Constituency

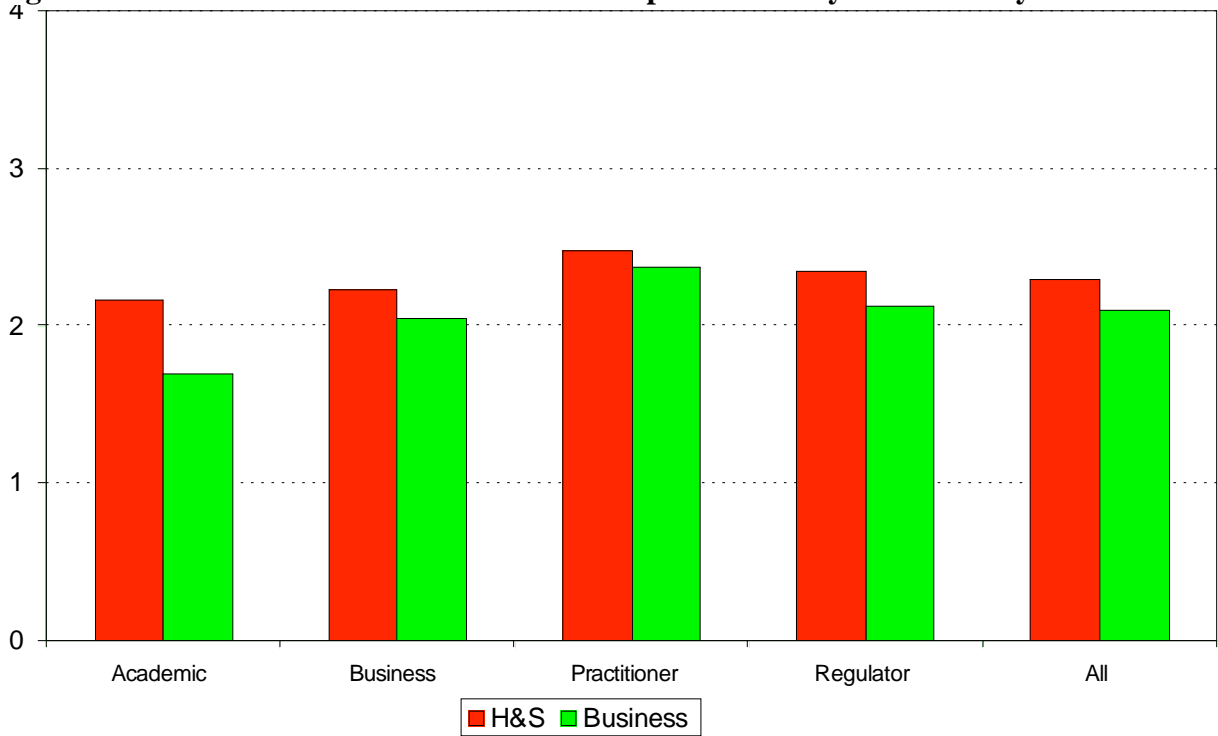


Figure H2a (Appendix H) gives the mean scores for impact of each constituency on H&S performance from the four ‘constituencies’. To allow more detail to be seen, Figure 3.17a and Table H8 show those factors with the largest variations between mean responses from the different ‘constituencies’. Figure H3 (Appendix H) gives full details of the spread of responses for each of those factors for each ‘constituency’.

Similarly, Figure H2b gives full details of the mean scores for impact on Business performance from the four ‘constituencies’. Again, to allow more detail to be seen, Figure 3.17.b and Table H9 show those factors with the largest variations between mean responses from the different ‘constituencies’. Figure H4 (Appendix H) gives complete details of the spread of responses for those factors for each ‘constituency’.

Figure 3.17a: Factors with Largest Variations in Mean Scores for Impact on H&S Performance by ‘Constituency’

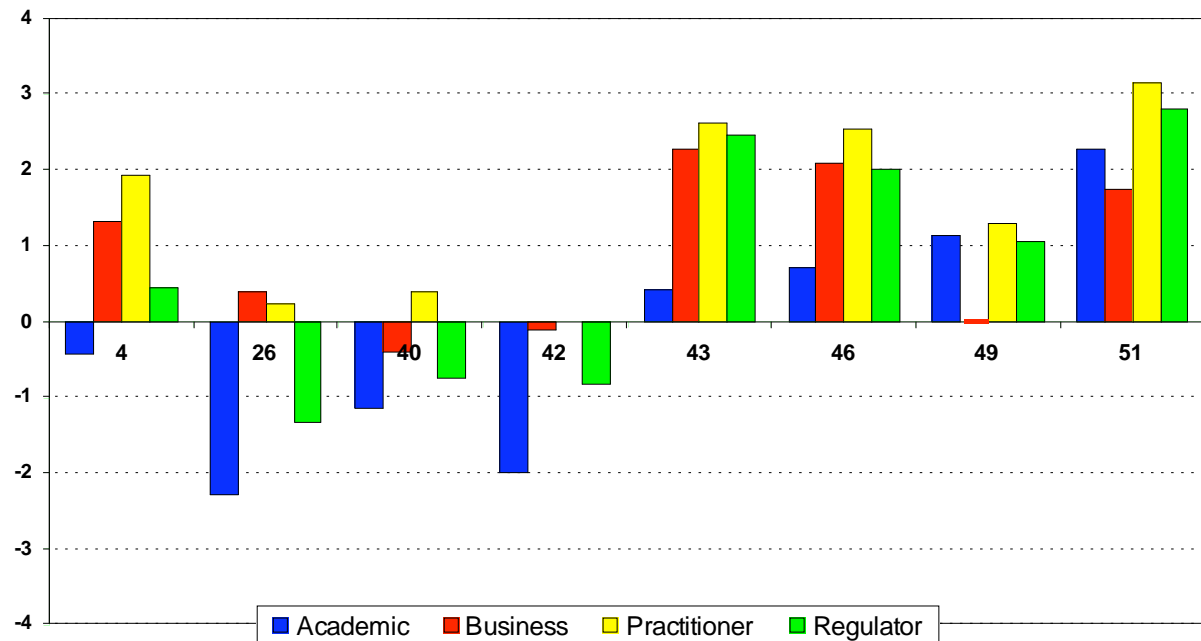
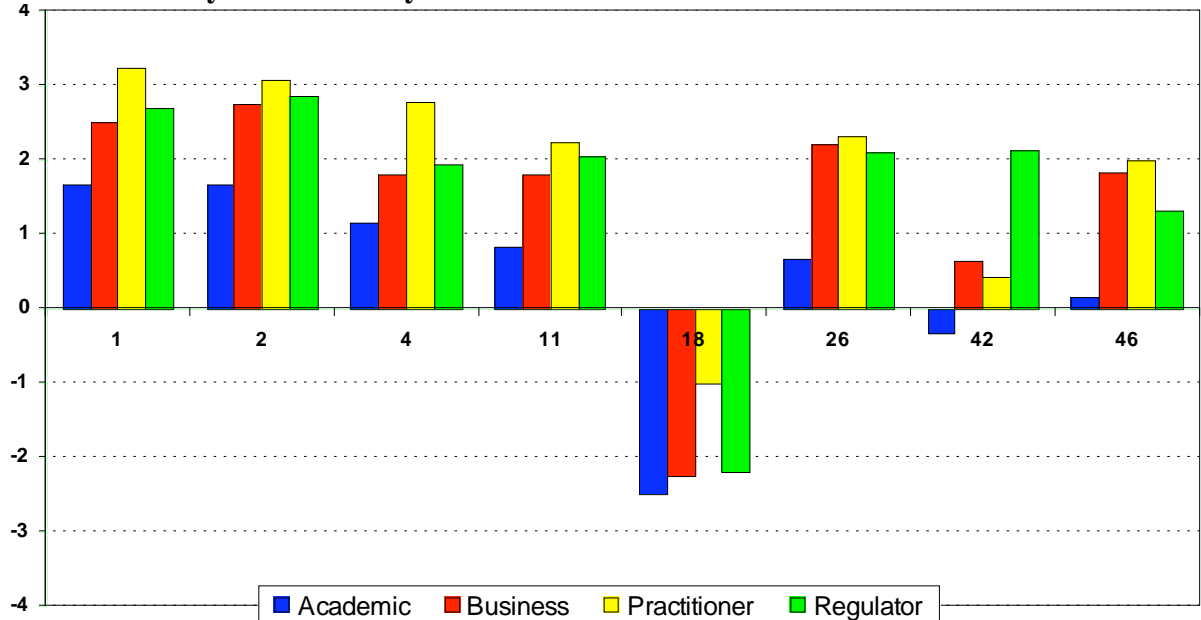


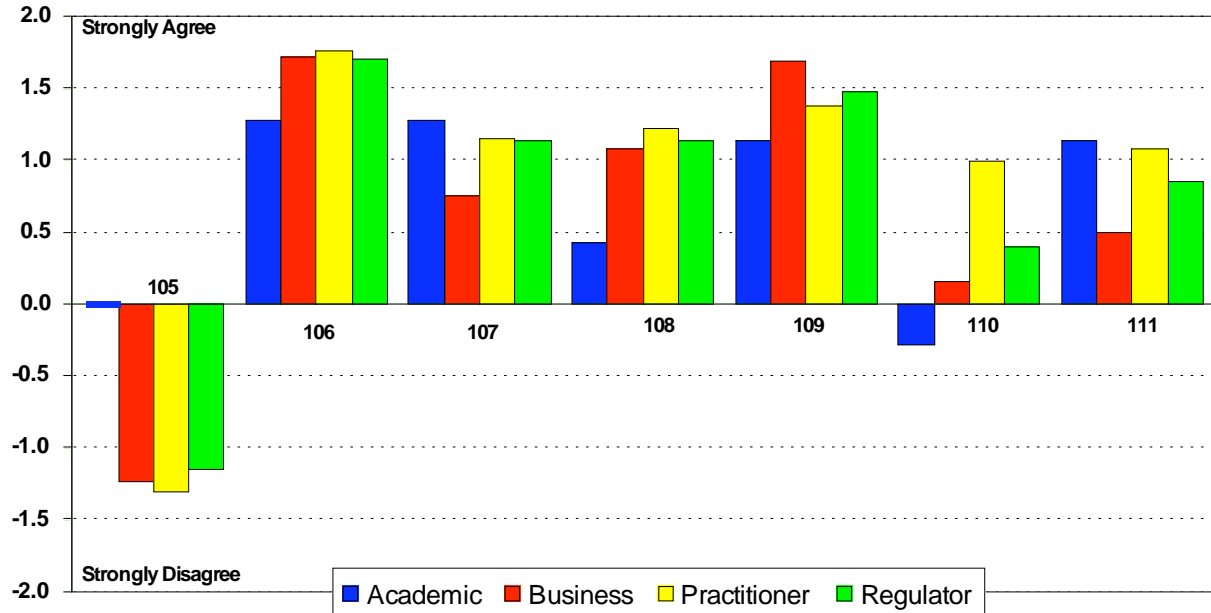
Figure 3.17b: Factors with Largest Variations in Mean Scores for Impact on Business Performance by ‘Constituency’



3.6.2 Differences in Agreement/Disagreement Scores by ‘Constituency’

Figure 3.18 and Table H10 (Appendix H) compare the mean scores for agreement/disagreement with the statements in Part 3 from each ‘constituency’.

Figure 3.18: Mean Agreement/Disagreement to Part 3 Statements by ‘Constituency’



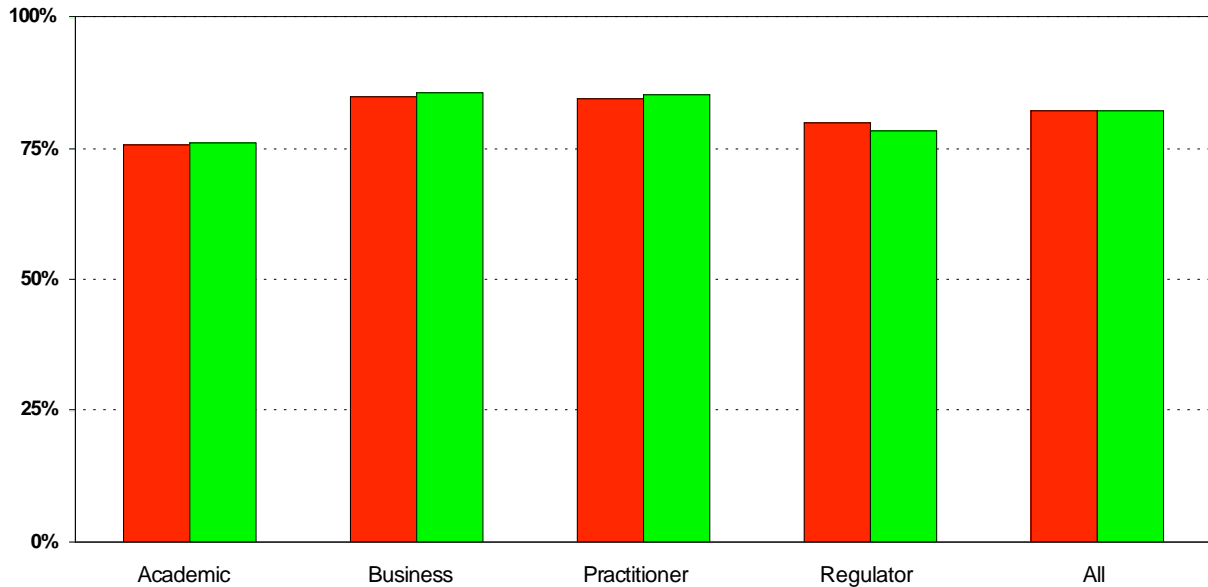
Key	
105	Health and safety and productivity/profitability are in competition with each other
106	Occupational health and safety should be viewed as an integral part of productivity, competitiveness and profitability
107	The nature of the business (sector & complexity) significantly influences an organization's attitude and approach to health & safety
108	The business benefits of health and safety justify the business costs
109	A positive health and safety culture is important to the overall success of an organization
110	The factors for business success are generally the same regardless of the size of a business
111	HSE should provide different advice for small/uncomplicated and for large/complex organizations

Figure H5 (Appendix H) gives full details of the spread of responses for each constituency for the two statements (105 & 110) which have the highest variations in means response by constituency.

3.6.3 Differences in responses on Universal Applicability by ‘Constituency’

Figure 3.19 shows the mean overall responses by each of the four ‘constituencies’ on universal applicability by type/size of organization in respect of impact on H&S and on Business performance. As can be seen, overall, the Academic ‘constituency’ records the lowest percentages for universal applicability, followed by the Regulators.

Figure 3.19: Mean Percentage ‘Scores’ on Universality by Constituency



Details of the responses on Universal Applicability to impact on H&S Performance for each Factor by ‘constituency’ are shown in Figure H6. Figure 3.20 gives details of the Factors showing the highest inter-constituency variation in responses on universal applicability to impact on H&S Performance. As would be expected from Figure 3.19, the Academic constituency has the lowest percentage of respondents judging applicability to be universal on all but two [4 & 7] of the selected Factors.

Figure 3.20: Responses on Universal Applicability to H&S Performance by ‘Constituency’: Factors with highest inter-constituency variation

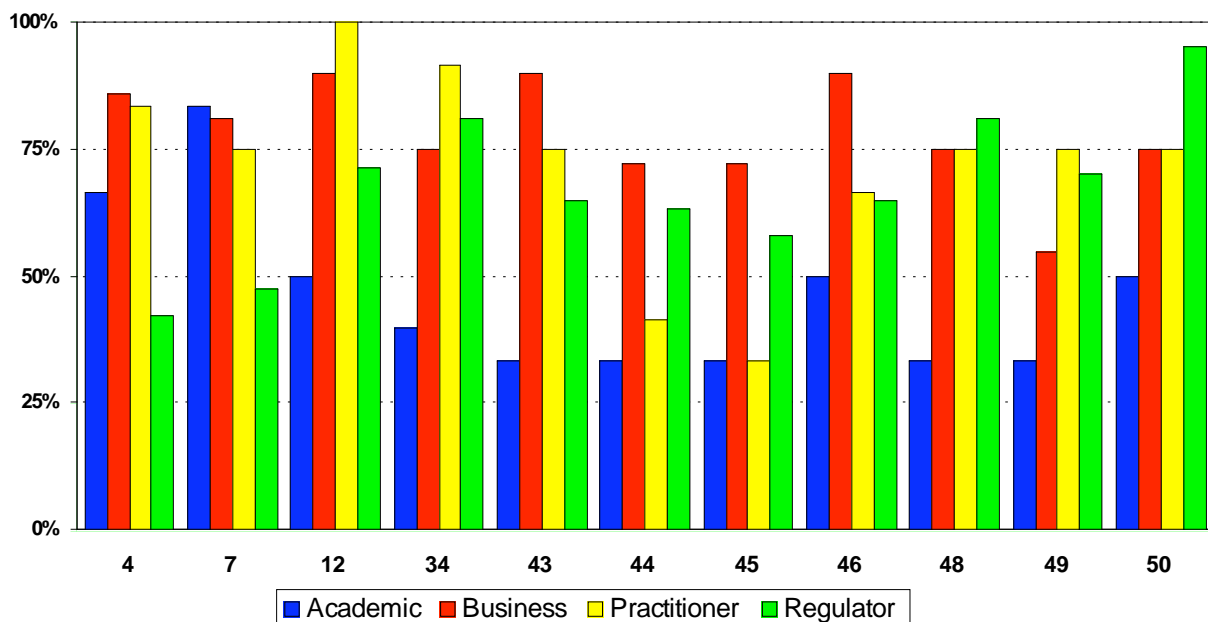
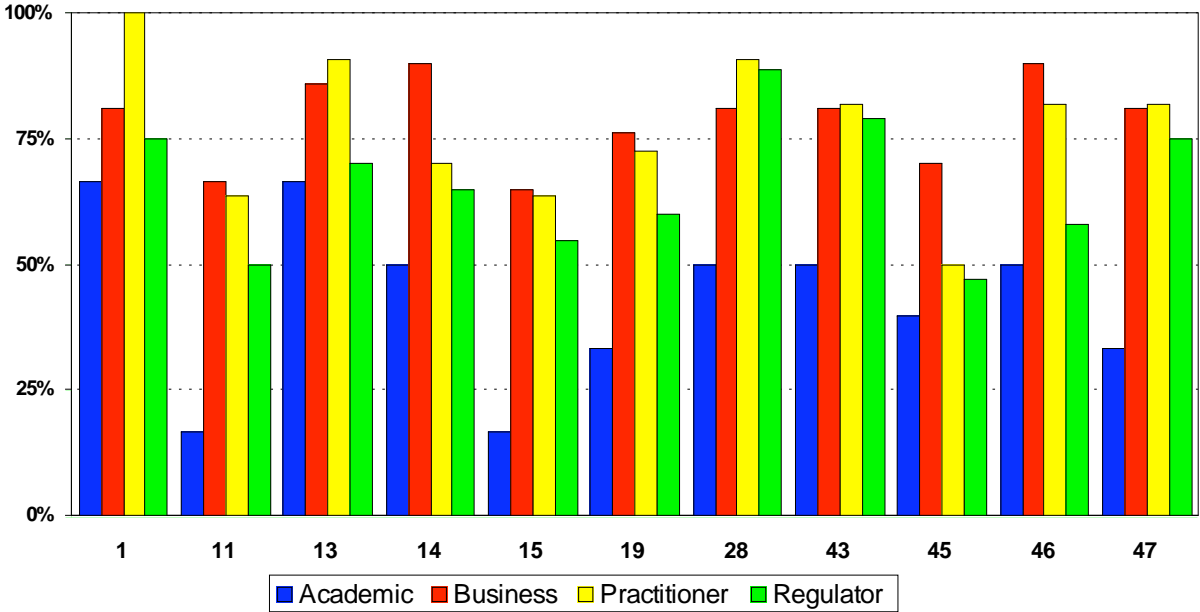


Figure H7 gives details of the responses on Universal Applicability to impact on Business performance for each Factor by ‘constituency’. Following the pattern of Figure 3.20, Figure 3.21 selects and gives details of the Factors showing the highest inter-constituency variation in responses on universal applicability to impact on Business performance. Here it is observed that respondents from the Academic constituency again have the lowest percentage of those judging applicability to be universal, this time in respect of all the Factors. The Regulators have the second lowest figures, also for all the selected Factors.

Figure 3.21: Responses on Universal Applicability to Business Performance by ‘Constituency’: Factors with highest inter-constituency variation



3.6.4 Effect of different numbers of respondents from the four different ‘constituencies

As explained earlier, there had been no attempt or intention to secure similar numbers of panel members from each of the four constituencies – indeed from the outset it was intended to have a higher number of panel members from the Business constituency than from any other. As can be seen in Figure 3.1, this was achieved. However, given the differences in responses by the different constituencies, presented above, analysis was carried out to determine whether the overall responses would have been substantially different had there been similar numbers of panel members in each constituency. Figure 3.22 plots the mean of the constituency mean scores (which, in effect, gives equal weight to each constituency or, put another way, is the equivalent to having the same number of respondents from each constituency) against the overall mean score.

Figure 3.23 compares the means of the ‘constituency’ mean scores (which effectively gives each constituency the same weight) with the overall mean agreement/disagreement scores for the Statements in Part 3.

Figure 3.22: Means of Constituency Means (= equal numbers) v Overall Impact Means

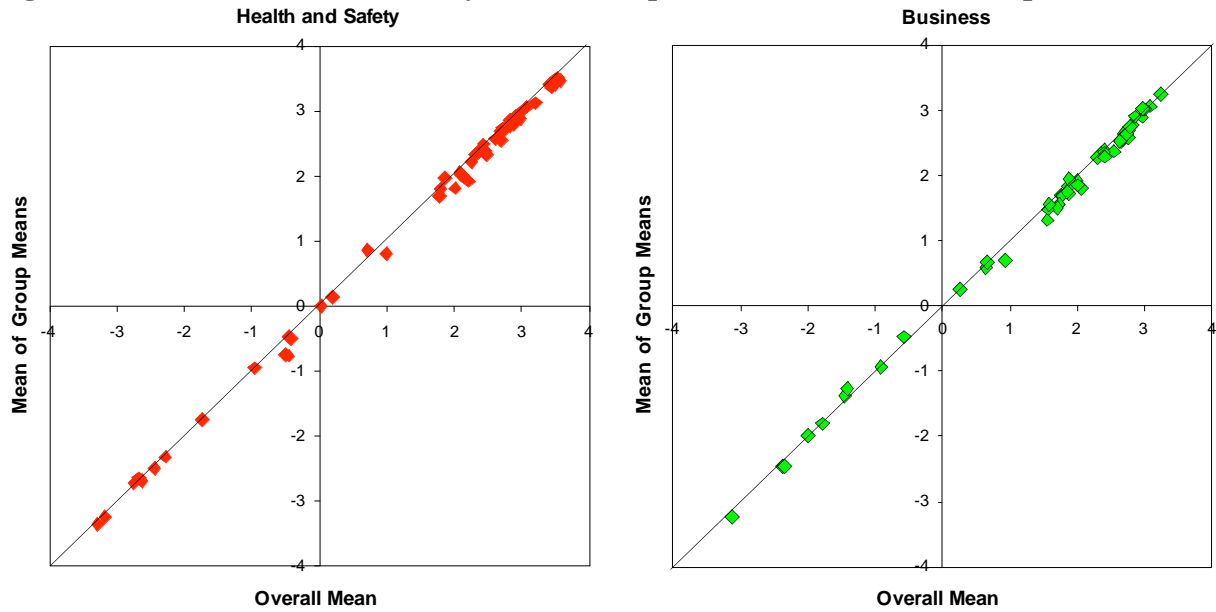
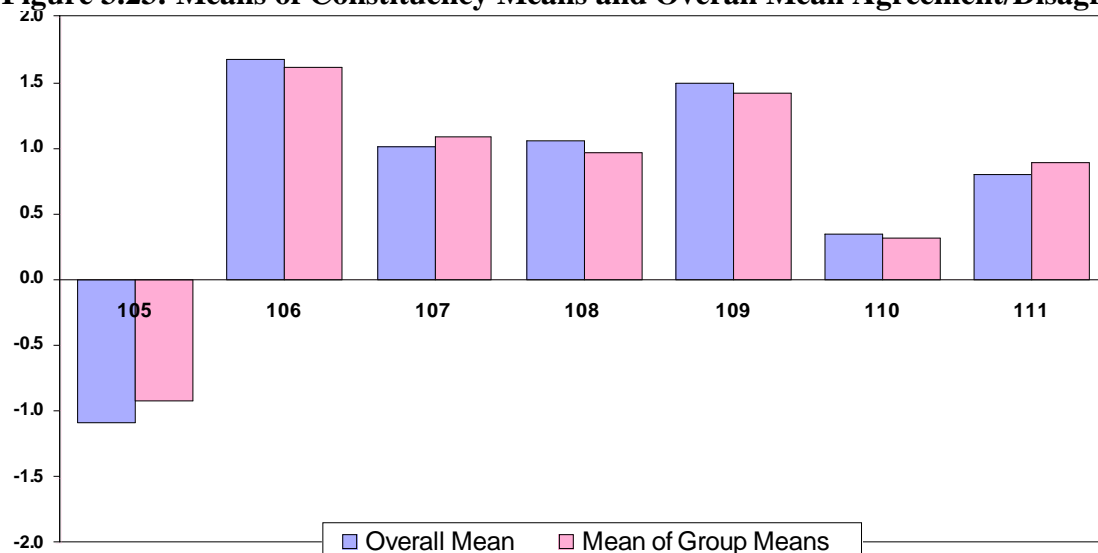


Figure 3.23: Means of Constituency Means and Overall Mean Agreement/Disagreement



As both Figures 3.22 and 3.23 indicate, there is very little difference between the original means and the means weighted to give each ‘constituency’ equal weight.

3.7 Changes between Round One and Round Two

As pointed out earlier, an important feature of a Delphi study is to allow panel members to reflect on the overall responses from earlier rounds and, if they wish, revise their own responses. In order to examine the changes between the two rounds here, Figure 3.24 plots the Round Two mean impact scores against the Round One scores. Whilst the changes are small, it can be seen that there is a fairly consistent pattern of higher absolute mean impact scores in Round Two, compared with those in Round One. The mean of the absolute mean impact scores increased from 2.18 in Round One to 2.3 in Round Two. However, the increase in mean impact score was statistically significant at the $p < 0.05$ level for only two Factors (and at the $p < 0.01$ level for a further four) in respect of impact on H&S or Business or both.

Figure 3.24: Comparison of Round Two with Round One Mean Impact Scores

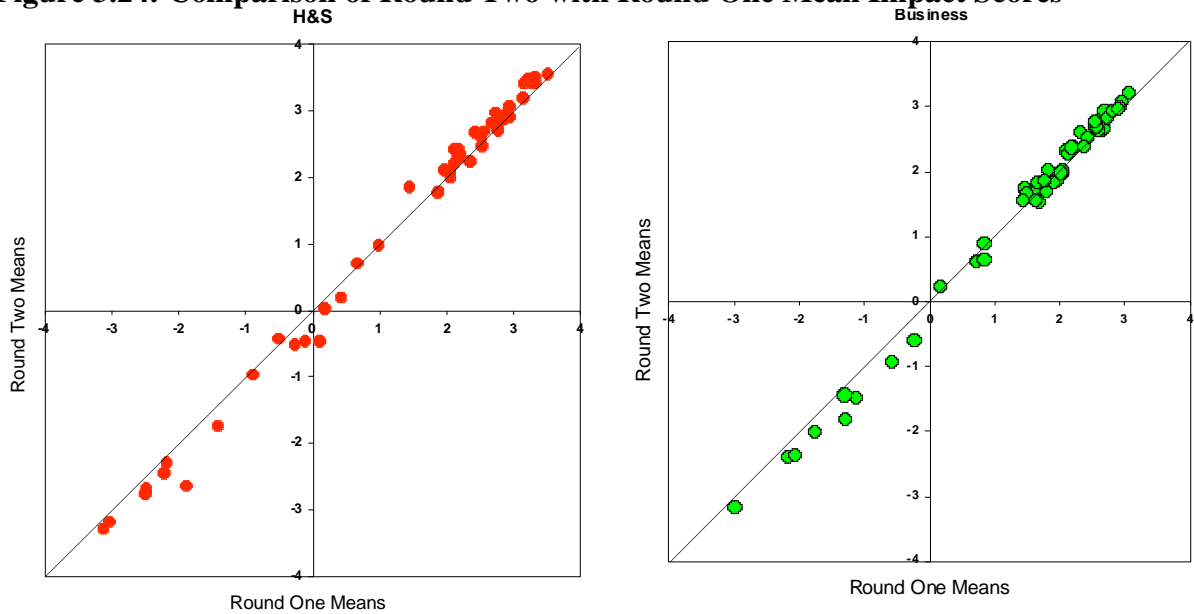


Figure 3.25 plots the standard deviations from Round Two against those for Round One. As can be seen, with a very few exceptions, the Round Two SDs are lower than those in Round One, which could indicate some moved towards consensus. Overall the mean of the Standard Deviations decreased from 1.25 in Round One to 1.09 in Round 2. For 13 Factors the decrease in the standard deviation was statistically significant ($p < 0.05$) in respect of impact on H&S or Business or both.

Figure 3.25: Comparison of Round Two with Round One Standard Deviations

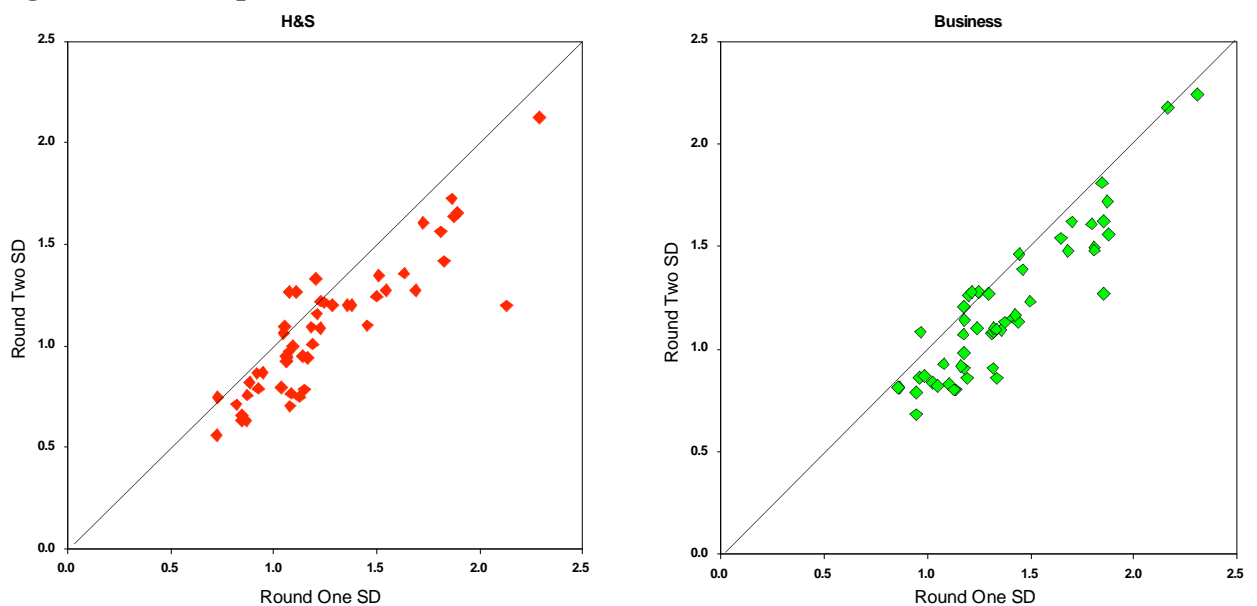
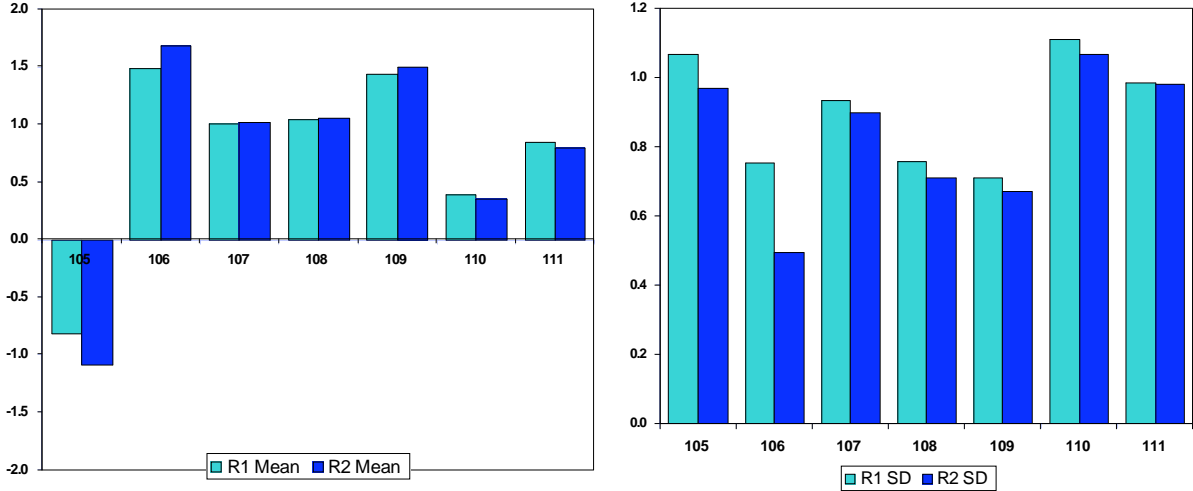


Figure 3.26 compares the responses to the Part 3 Statements from Round Two with those from Round One. As can be seen, with the exception of two statements, Round Two mean responses were 'stronger' (higher agreement or disagreement) than those in Round One.

Whilst none of the increases is statistically significant at the $p < 0.05$ level, for Statement 106 it is significant at the $p < 0.10$ level. For all statements, the standard deviations are smaller in Round Two than in Round One, again suggesting increased consensus. The reduction is statistically significant ($p < 0.05$) in respect of Statement 106.

Figure 3.26: Comparison of Round Two with Round One Responses for Part 3 Statements



3.8 Written in Responses – General

Panel members were invited to write-in comments, both on the individual questions and in general. In addition, they were specifically asked to suggest any additional factors which they felt were missing from the questionnaire.

Comments on individual Factors and Statements are presented in Appendix G. A full unedited list of general comments is shown in Appendix I and a selection of those comments (selected by theme) is tabulated here and in Appendix H.¹ Comments are presented in the form received, with minimal editing to correct obvious typographical errors or to clarify cross-references.²

Table 3.4 lists suggestions for additional Factors and topics which respondents considered were missing from the questionnaire. Table 3.5 reports comments which relate to the type, size and complexity of organisations and the effects (if any) on H&S and Business performance.

Table H11 covers general comments relating to Health and Safety and Business performance, whilst Table H12 reports comments and suggestions on the question set, the questionnaire design and the overall study process.

There has been no attempt at further analysis of the comments beyond the grouping into the four tables presented here.

¹ The numbers before each comment are unique to each panel member – ie the same number refers to the same panel member. Please note these are not the panel member IDs used in the study and only the researcher has the key to link these numbers to individual panel members.

² It is possible there are transcription errors, especially with hand-written comments.

Table 3.4: Suggestions for Additional Factors/Topics

[5] A few suggestions, bearing in mind the wording may need amending:

- (i) Organisations use in-house expertise in preference to use of external consultants (positive impact)
- (ii) Organisation subject to period inspection by regulator (positive impact) (universal=yes)
- (iii) Availability of some free, confidential H&S advice to SMEs (positive impact) (University = No) – Alleviates work of Workplace Health Connect + HWL
- (iv) Organisation given earned autonomy on H&S matters & not subject to regulator interventions (Negative impact H&S/Positive for business)

[9] If I may suggest another factor that has not been discussed explicitly it would be the concept of uncertainty, i.e. new risks that have not been anticipated before. That could cover "new" diseases like BSE or "new" technical risks related to the introduction of new tools like virtual reality "caves" for design applications in car industry, architecture and work place design. Even GMM and GMO may contain unknown risks. In my opinion due to the acceleration of technical development we need business cultures that are capable of detecting these "new" risks at an early stage that do not fit into the risk inventories we know today.

[18] I miss as influence the coordinating and motivating role of good safety staff is a strong influence on performance in medium to large companies. The role of well designed work places & equipment is also poorly represented.

[25] There is little in the question set about measuring H&S performance and what is necessary to do it well.

[32] I think the two qualities that make all the difference are Leadership and Ownership and I'm not sure they are really captured in the questions. Hope they are subliminally there at least!

[34] The feedback omits the important of WIFME – individuals at all levels need a personal motivation/understanding of value to them as individuals (ie as opposed to company) of positive H&S progress.

[36] Additional Factor: Managers and Supervisors have all completed a Health & Safety Risk assessment course/programme. Question relevant to both Part 1 & Part 2. My view (positive impact) (Confidence very) and is universal.

[51] Most important building block of H&S is senior management support and ownership of safety responsibility by direct line management. Having established the management side, the next step improvement is bottom up safety with consultation, safety reps and worker involvement.

[64] Other influencers might be

- Clarity about organisational roles/accountabilities of interfaces
- ability to recognise/monitor declining performance – 'organisational draft'
- ensuring clearly defined competences in H&S
- recognising the difference between industrial safety (AFR) and process safety
- having in place an effective, structured oversight process.

[73] It would be relevant to draw attention to other related issues such as corporate responsibility, corporate governance and the influential and complementary activities of business assurance, corporate audit committee, independent variations and the importance of non-executive directors (particularly for plc's and global corporations) (Round 2)

[81] Missing topics: one of the defining features of hi-reliability or generative organisations is an expectation that things will go wrong (chronic unease; feral vigilance) and train staff to detect and recover their inevitable errors. They also brain storm novel ways in which the organisational defences and barriers could fail.

Table 3.5: Comments relating to (effect of) type of Organisation

[14] Size and complexity of organisation relevant to many questions, as is severity of hazard.

[14] Q1-Q52 There are many questions where SMEs can be different and will not necessarily benefit from the formal measures described. Values of owners more important & achieve same ends – Applies to all questions not universal except Q4 (Round 2).

[18] Where NO is answered for 'Universal' the reasons are related to organisation size (SME vs large) and/or to the nature of the work (routine, expert, supervisory, direct operation) and/or industrial relations climate.

[19] As a regulator HSE cannot be seen to be applying different standards, in legal compliance, to organisations of differing size and complexity. But advice could and should be made available in a briefer and less complex version for smaller and less complicated organisations. (Round 2).

[26] Re Universal, where I have said [appears to be something missing] I'm primarily thinking of the differences between smaller and large businesses. Some of the factors will have a stronger impact, whether positive or negative for smaller businesses. [Comments in respect of Part 1]

[50] The position of SMEs is totally different to large firms. SMEs need a very different approach. Organisational change and downsizing can have short term adverse effect but a long term good effect on H&S.

[60] It might be useful to identify of organisational characteristics that are important to consider when a factor is not universal. e.g., high reliability, customer service, construction etc.

[66] Given the variation in sectors and size of organizations, very few of the factors are likely to have a universal impact. "Universal also implies 'worldwide' which is also almost never likely to apply. So my "universality" implies – likely to apply to most organisations in the UK, leaving aside very small workplaces. (Round 2).

4. DISCUSSION AND CONCLUSIONS

4.1 Limitations

4.1.1 Inherent Limitations of Delphi

The limitations of Delphi studies, mentioned above, must be kept in mind when interpreting and using the findings. Delphi simply produces a synthesis of views of ‘experts’ on the topics in question – it cannot and does not claim to produce scientific evidence of the type resulting from, say, controlled or comparative studies.

In addition, it must be noted that it is not a vote, ‘popularity’ poll or ‘representative’ survey, from which findings can be generalised to the entire target population. Further, unlike many policy Delphis, where the aim is often to achieve a group consensus on what **ought** to be (‘normative’, ie values), an expert Delphi, such as the one here, is more often concerned with what **is** (‘positive’, ie potentially provable facts). Whether or not a consensus should even be sought in an expert Delphi is arguable, since the aim is often to find the ‘correct’ answer, whether or not it is an outlier, rather than a unanimously agreed wrong answer. Hence the importance of exploring disagreements as the outlier(s) might be correct. At the same time it is interesting to recall that, when weighted by ‘self-assessed’ confidence, the impact score increased for nearly every Factor.

Although one of the features of Delphi is that it aims to remove the effect of group pressure to conform, which can exist for example in face-to-face meetings, there are still suggestions that the tendency towards consensus in the Delphi approach (even when that is not the purpose of the particular study) could lead to a false or artificial consensus as dissenters drop out or conform (Mullen, 2003). It is noted that in this study there was a degree of convergence, with lower standard deviations in Round Two. Nevertheless, for a number of Factors there remains a very wide spread or variation in responses (see Table 3.3). It is essential that the reasons for such variation are explored as it could reveal, for example, important inter-sectoral differences or could indicate the need for further research on that Factor.

At the same time, there is a risk that panel members might give politically acceptable responses or reflect accepted wisdom, rather than giving the responses that their individual experience and expertise might suggest. At the October 2008 Events, there were suggestions that this could be occurring in respect of the issue of whether there is a conflict between what is ‘good’ for H&S success and performance and what is good for Business success and performance. This is explored in the next section.

4.1.2 Limitations of Study

In addition to the limitations inherent in Delphi, a number of specific limitations became apparent during the conduct of the study.

Ideally, responses on whether or not they were willing to join the panel would have been received from all potential panel members prior to the dispatch of the Round One questionnaire. This would probably have secured greater commitment from those agreeing and would have given a baseline for computing response rates, as well as saving resources.

Had it proved possible, it would have been preferable to use the same (probably impact) format for all questions. In addition, it is regretted that the need to limit the length of the

questionnaire meant that a number of ‘compound’ Factors were included, as it is not possible to determine which aspect or aspects panel members are focusing on in their responses.

As explained above, the aim was for respondents to rate the impact of Factors on H&S performance separately from their rating of impact on Business performance. It had been hoped that the separation into two different Parts would achieve this, but there was evidence that some respondents were cross-checking their responses. In response to Round Two a panel member suggested it would have been better to randomise the order of Factors to limit such cross checking. Whilst implementing this suggestion might have proved impossible for logistic reasons, it certainly would have been considered seriously had it been thought of or suggested earlier.

Although it was tried and proved impossible, there remains regret that individualised Round One responses could not be printed on the Round Two questionnaires, as had originally been hoped.

Finally, although there is no evidence that any panel member was deliberately intending to make an anonymous return, as reported above, a number of (paper-based) questionnaires were returned without any indication of the panel member’s ID or name. The additional boxes and note on this in the Round Two questionnaire probably reduced the problem (only on anonymous return to Round Two) and thus should have been adopted in Round One. However, although this problem did not arise with questionnaires returned electronically, this should not be used as a reason for dispensing with the paper-based format. As reported above, somewhat against expectations there proved to be a clear preference for the paper-based format.

4.2 Discussion

4.2.1 H&S v Business?

As noted above, there was some concern about ‘group think’ and/or politically acceptable responses, especially in respect of whether H&S and Business work together or are in opposition. Table 4.1 gives details of the responses to the four Statements which relate to this issue.

Table 4.1 Responses to Statements relating to the H&S and Business ‘relationship’

	Statements relating to ‘H&S v Business’	Mean	Standard Deviation	Strongly Disagree	Disagree	Neither Agree/Disagree	Agree	Strongly Agree
				-2	-1	0	+1	+2
105	Health and safety and productivity/profitability are in competition with each other	-1.09	.968	■	■	■	■	■
106	Occupational health and safety should be viewed as an integral part of productivity, competitiveness and profitability	1.68	.494			■	■	■
108	The business benefits of health and safety justify the business costs	1.06	.710	■	■	■	■	■
109	A positive health and safety culture is important to the overall success of an organization	1.50	.671		■	■	■	■

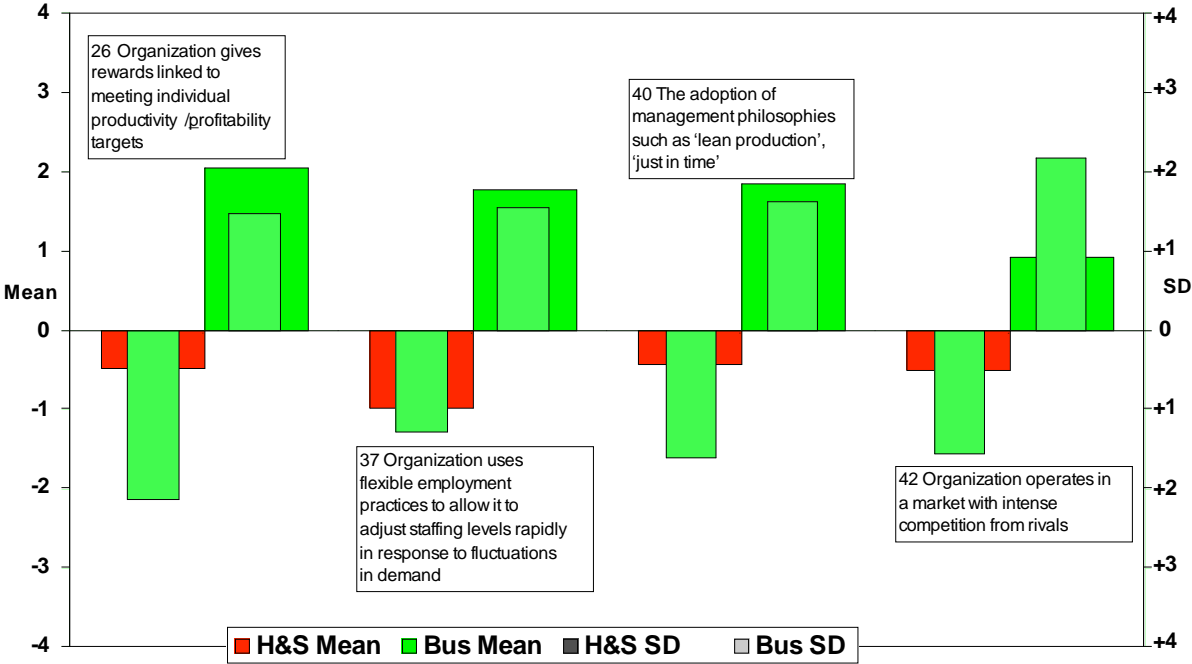
As can be seen, there is a fairly high degree of consensus, with all absolute mean scores between ‘Agree’ and ‘Strongly Agree’. However, there are some outliers – the reasoning for some of these can be found in Appendix G.

Further research is probably needed to determine whether the relationships are as positive as suggested by the findings, or whether there is some degree of repeating the ‘Mantra’, as suggested by some participants at the October Events.

Comparing the mean scores for each Factor in respect of its impact on H&S and its impact on Business explores this relationship from a different direction.

As shown in Figure 3.7, only four Factors (26, 37, 40 & 42) had mean impact scores which changed sign between impact on H&S performance and impact on Business performance (ie fell into the Red intersections in Figure 1.1). Further exploration of these four factors (see Figure 4.1) shows that all have high standard deviations (ie there is considerable disagreement about their impact). These are all worthy of further study and there would appear to be potentially important policy implications.

Figure 4.1 Mean Impact Scores and Standard Deviations for Factors in the ‘Red’ Intersections in Figure 1.1



Even where the impacts on H&S and on Business performance were judged to be in the same direction (ie in the Green intersections in Figure 1.1), the differences in the strength of impact between H&S and Business were statistically significant for all but 15 Factors. However, whilst this warrants further study, probably the focus should be on the eight factors (which include the four in Figure 4.1) where the difference between the means is greater than one (see Figure 3.10 & 3.11).

4.2.2 Relative Impacts of Factors by Grouping

To illustrate how Factors might be grouped for analysis, Table 4.2 shows a broad grouping of Factors and Statements, developed from the original derivations shown in Table 2.1.

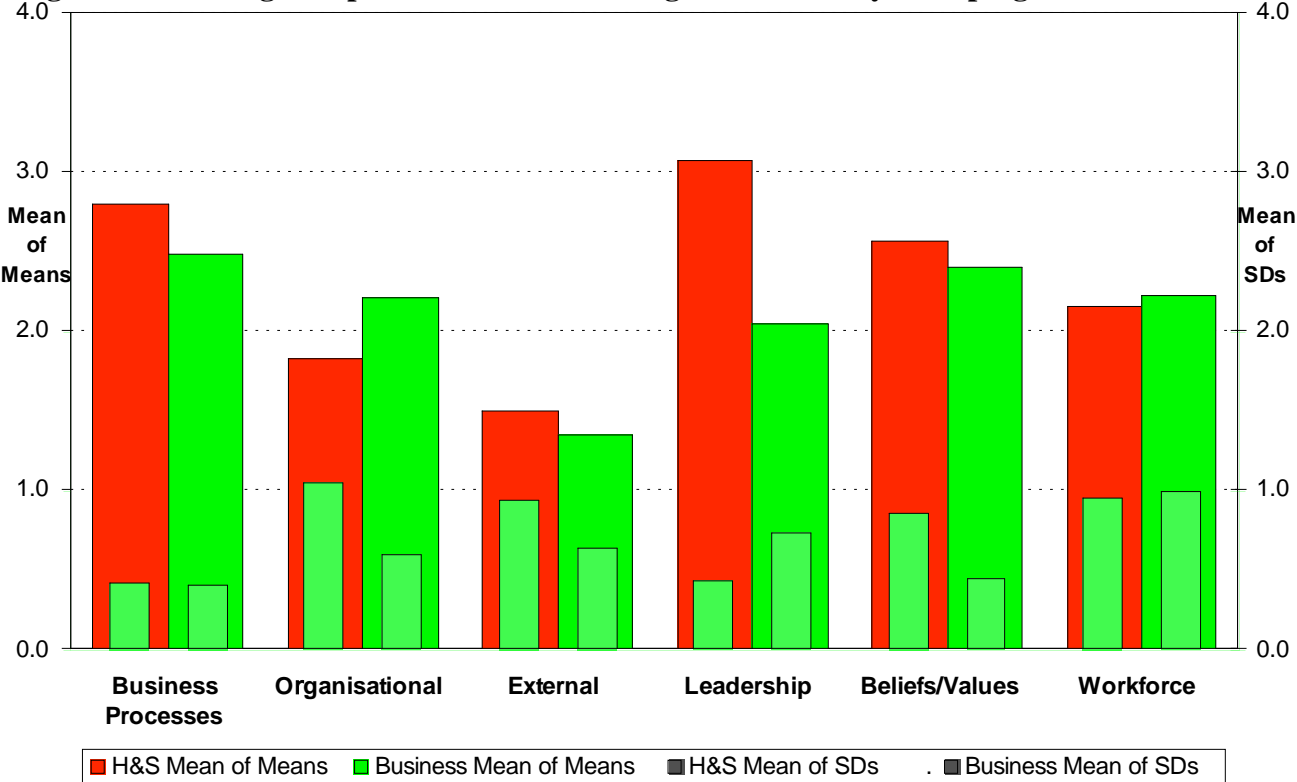
Table 4.2 Grouping of Factors

GROUPING	FACTORS & STATEMENTS
1. Leadership	1 Organization has a clearly communicated statement of its values
	2 Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)
	3 Responsibility for health & safety is delegated entirely to health & safety specialists/advisors
	25 Organization perceives health & safety outcomes as important to business success
	29 Organization has environment in which the priority is to get the work done, by whatever means necessary
	52 Organization has an individual in top management accountable for health & safety performance
	105 Health and safety and productivity/profitability are in competition with each other
	106 Occupational health and safety should be viewed as an integral part of productivity, competitiveness and profitability
	108 The business benefits of health and safety justify the business costs
	109 A positive health and safety culture is important to the overall success of an organization
2. Business Processes & Procedures	6 Organization ensures employees behave consistently with company rules
	8 Organization uses a consistent approach to risk assessment
	11 Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)
	12 Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks
	13 Organization has a comprehensive formal system for managing maintenance (e.g. of plant, buildings)
	14 Performance assessment includes clear and measurable health & safety targets
	16 Organization has formal procedures for actively capturing and retaining tacit knowledge (e.g. 'corporate memory')
	17 Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)
	18 Organization discourages workers from doing more than the minimum needed to comply with rules and regulations
	19 Organization has regular, structured, internal review and audit processes which include health and safety (e.g. workplace inspections)
20 Organization gives prompt feedback to workers following reviews, audits and inspections	
3. Beliefs, Values, Attitudes & Behaviours (Culture)	7 Jobs give workers day-to-day discretion and control (autonomy) over their work
	10 Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)
	21 Everyone is encouraged to share and discuss issues openly and feels their views are valued
	22 Organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity
	23 Organization has "No blame" internal reporting of incidents (e.g. near misses, violations of procedures)
	24 Everyone has their own job and keeps their nose out of everybody else's business
	26 Organization gives rewards linked to meeting individual productivity/profitability targets
	27 Workers, supervisors, middle and senior managers are all involved and engaged in decision-making
	28 Worker representatives are involved in planning and implementing policies and procedures
	39 Organization supports and encourages staff (e.g. by incentives such as time-off or vouchers) to engage in health and well-being activities
30 Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary	

GROUPING	FACTORS & STATEMENTS
4. Workforce Skills	5 Workers understand their own job, but not how it relates to the work of others
	12 Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks
	31 Training is focused solely on the immediate job requirements including relevant safe working practices
	32 Workers are trained and encouraged to identify and solve job-related problems
	33 The job requirements exceed worker competence (capabilities and training)
5a. Organizational Characteristics (Type/Size)	34 Use of agreed, cross-industry criteria to assess competence, with procedures in place to review and maintain standards
	35 Organization employs people with the specialist knowledge it needs
	110 The factors for business success are generally the same regardless of the size of a business
5b. Organizational Characteristics (Change/Development)	111 HSE should provide different advice for small/uncomplicated and for large/complex organizations
	107 The nature of the business (sector & complexity) significantly influences an organization's attitude and approach to health & safety
6. External Factors/Pressures	4 Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems
	9 Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant
	36 Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring
	37 Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand
	38 Organization uses employment practices that promote work flexibility for employees and encourage workforce stability and commitment
	40 The adoption of management philosophies such as 'lean production', 'just in time'
	41 Wise investment in modern capital equipment (from office equipment to manufacturing plant)
15 Public reporting of the organization's health & safety performance	
42 Organization operates in a market with intense competition from rivals	
43 Organization benchmarks its performance against others	
44 Organization operates in a European market	
45 Organization operates in a global market	
46 Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)	
47 CEOs/directors liable to receive personal sanctions for violation of legal duties and regulatory standards	
48 Involvement of external specialists in assessing compliance with legal duties and regulatory standards	
49 Regulators prescribe the process for managing risks	
50 Regulators provide practical diagnostic tools and measures of performance on risk management	
51 Regulators taking an active interest in how a business's culture affects its management of risk	

To give a crude idea of the degree of Impact of each Grouping Figure 4.2 shows ‘average’ impact scores of each of the groupings (calculated as the mean of the absolute mean impact scores within that grouping). Superimposed on those bars are the ‘average variation’ in responses in respect of the impact of each factor (calculated as the mean of the standard deviations of the impact scores within that grouping), to give a crude indication of the overall degree of consensus within that grouping (calculated as the mean of the standard deviations of the impact scores within that grouping).

Figure 4.2 ‘Average’ Impact Scores and ‘Average Variation’ by Grouping



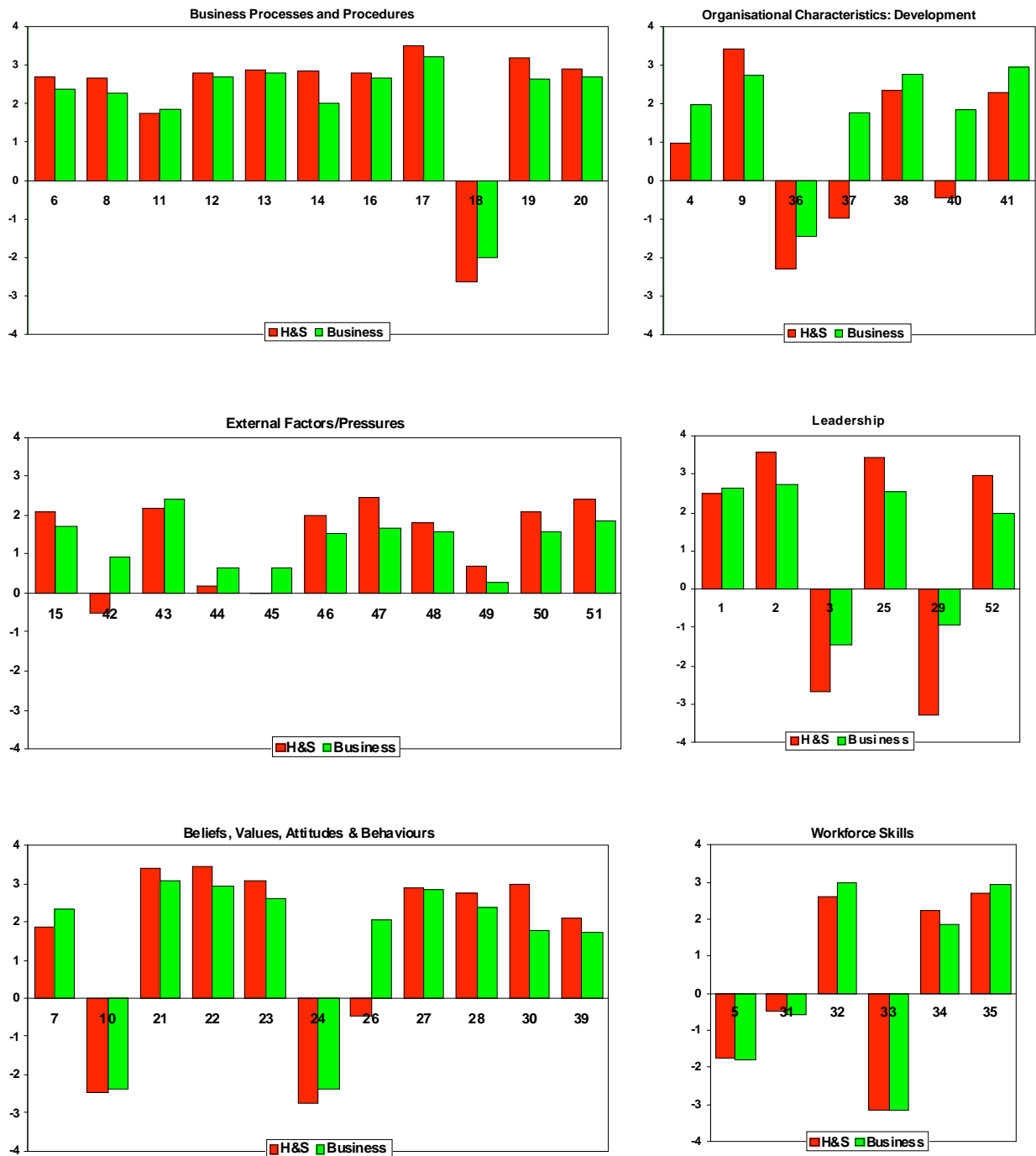
It can be seen that Factors in the Business Processes grouping, on average, have a high overall impact on both H&S and Business performance, with also high degree of consensus. A similar pattern is found for Factors in the Leadership grouping in respect of impact on H&S. Lower ‘average’ impacts with less consensus are observed for Factors within the External Factors/Pressures grouping and, in respect of H&S only, for Factors within the Organisational Characteristics (Change/Development) grouping.

Figure 4.3 gives the mean Impact scores (retaining the sign) for each factor by broad Grouping to give more detail of the information behind the overall means shown in Figure 4.2. As noted above, the precise wording needs to be taken into account, especially when it is negative.

The vertical scales on all the individual figures have been kept the same to allow easy visual comparison of the direction and strength of impacts within and across groupings. Thus, for example, it can be seen that the low overall mean impact in respect of the External Factors/Pressures grouping is generally reflected in all Factors within that grouping. Similarly the relatively high overall mean impacts in the Business Processes & Procedures, the Beliefs, Values, Attitudes & Behaviour groupings and also the Leadership grouping in respect of

impact on H&S, are largely reflected in high assessed impact of the individual Factors within those groupings. However, the Workforce Skills and the Organisational Characteristics: Development groupings contain a mix of high and low impact Factors.

Figure 4.3 Mean Impact Scores for Each Factor by broad Grouping



4.2.3 Spread of Responses

As emphasised a number of times above, it is essential to take account of the spread or variation in responses. Thus any interpretation of the mean impacts shown in the previous section must take account of the spread or dispersion ‘concealed’ by those means.

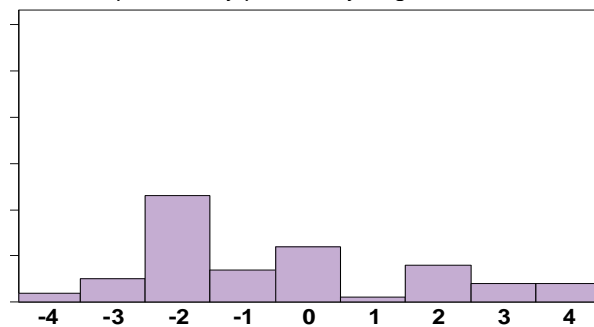
This can be especially important in respect of Factors which have low impact means – means close to zero – which would appear to imply that those Factors have no or very weak impact. There is a risk of summarily disregarding the policy implications of such Factors as being unimportant. However, as suggested earlier, a large spread or variation in responses can be ‘concealing’ important differences in, for example, impact within different sectors or types of organisation or differences between constituencies or can be indicating an area where the knowledge base is contested, thus warranting further investigation.

Figure 4.4 gives the distribution of responses for each of the Factors which have a mean impact score of less than 0.5, using the same vertical scale for each Factor. From this it can be seen that the low scores ‘conceal’ for some Factors almost complete consensus (Factors 44 & 45 – but even there with some outliers) and very large overall variations (disagreement) in responses in respect of the other Factors. It would not be appropriate to dismiss the latter Factors as being unimportant because of their low mean impact scores without considerable further investigation and research into the reasons for the wide dispersion of responses.

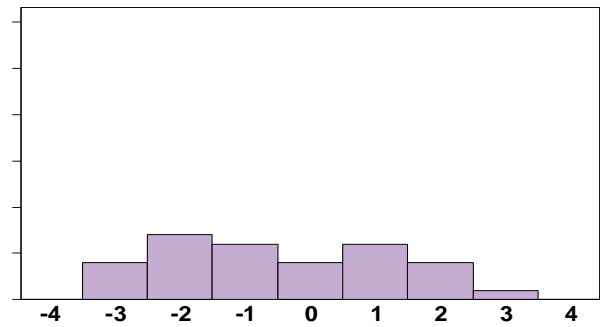
Figure 4.4: Similar Low Means (< 0.5 = less than ‘half’ Weak Impact) but Different Distributions

(a) High Standard Deviations

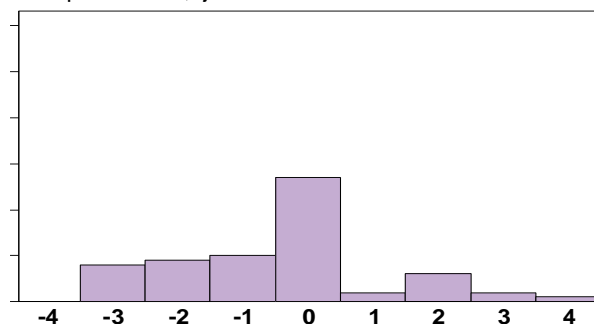
Factor 26 (H&S) Mean = -0.47 SD=2.128
 Organization gives rewards linked to meeting individual productivity/profitability targets



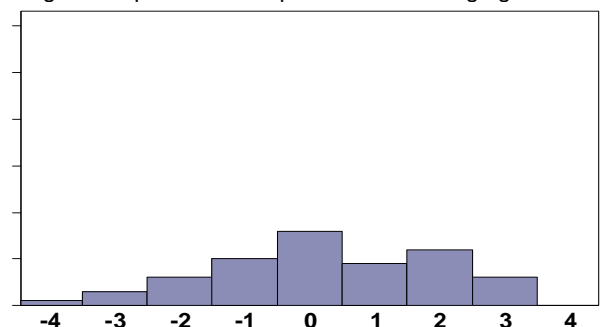
Factor 31 (H&S) Mean = -0.47 SD=1.727
 Training is focused solely on the immediate job requirements including relevant safe working practices



Factor 40 (H&S) Mean = -0.43 SD=1.610
 The adoption of management philosophies such as ‘lean production’, ‘just in time’

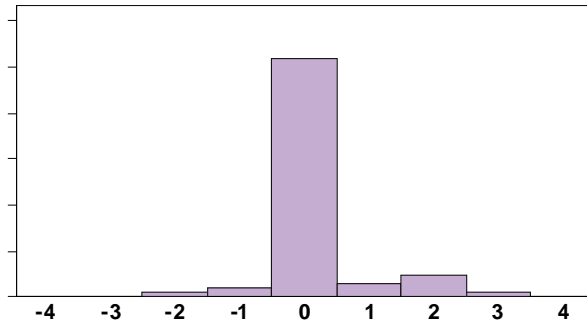


Factor 49 (Business) Mean = 0.25 SD=1.722
 Regulators prescribe the process for managing risks

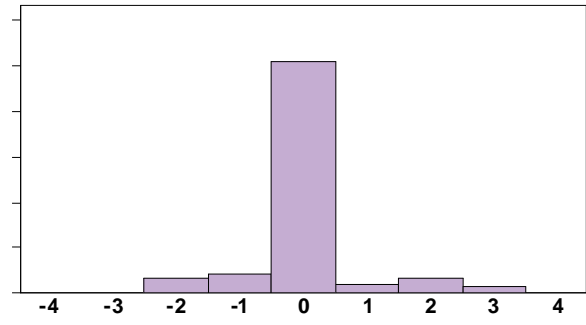


(b) Low Standard Deviations

Factor 44 (H&S) Mean = 0.19 SD=0.753
 Organization operates in a European market



Factor 45 (H&S) Mean = 0.02 SD=0.787
 Organization operates in a global market

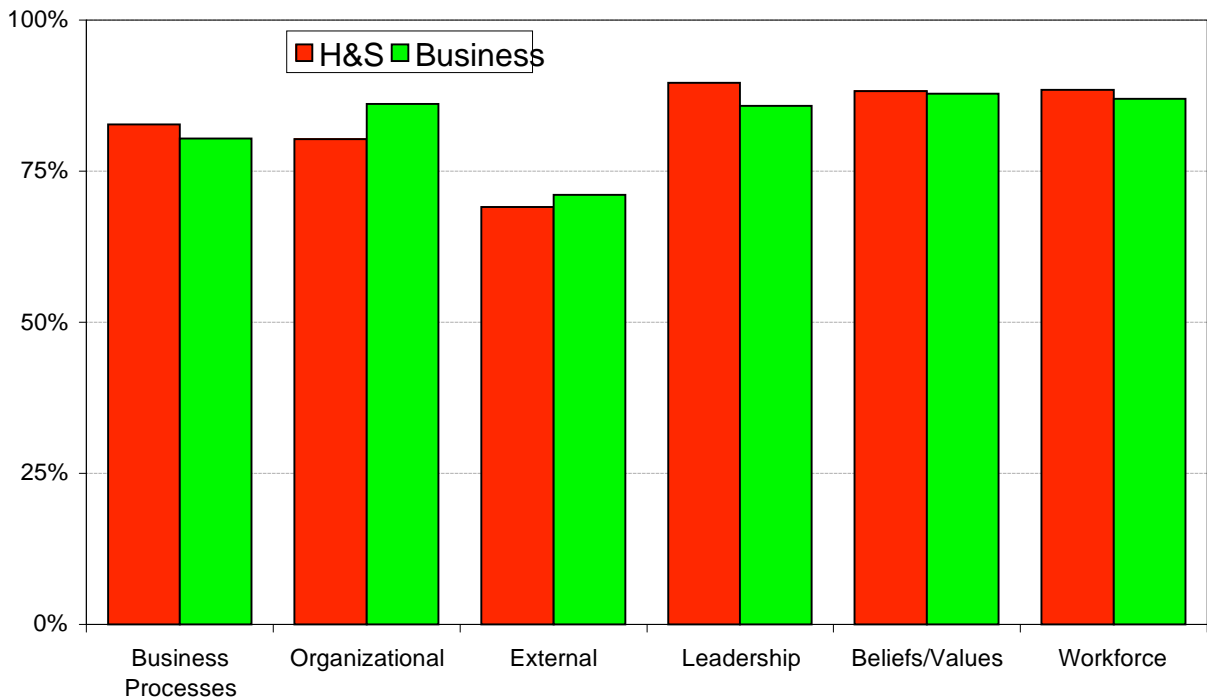


4.2.4 Effect of Type, Size etc of Organization

As discussed earlier, there was considerable interest in whether Factors would impact differently on different types of organizations (by type, size, public/private, degree of risk, complexity etc) and also whether or not different policies would be needed by type of organization.

Responses to the question on Universality of impact are shown in Chapter 3.4. They show that, for the majority of Factors, over 75% of respondents consider that the impact would apply to all types of organizations. To get a general picture by type of Factor, Figure 4.5 shows the mean percentage responding Yes to the Universality question by broad Grouping (as in Table 4.2).

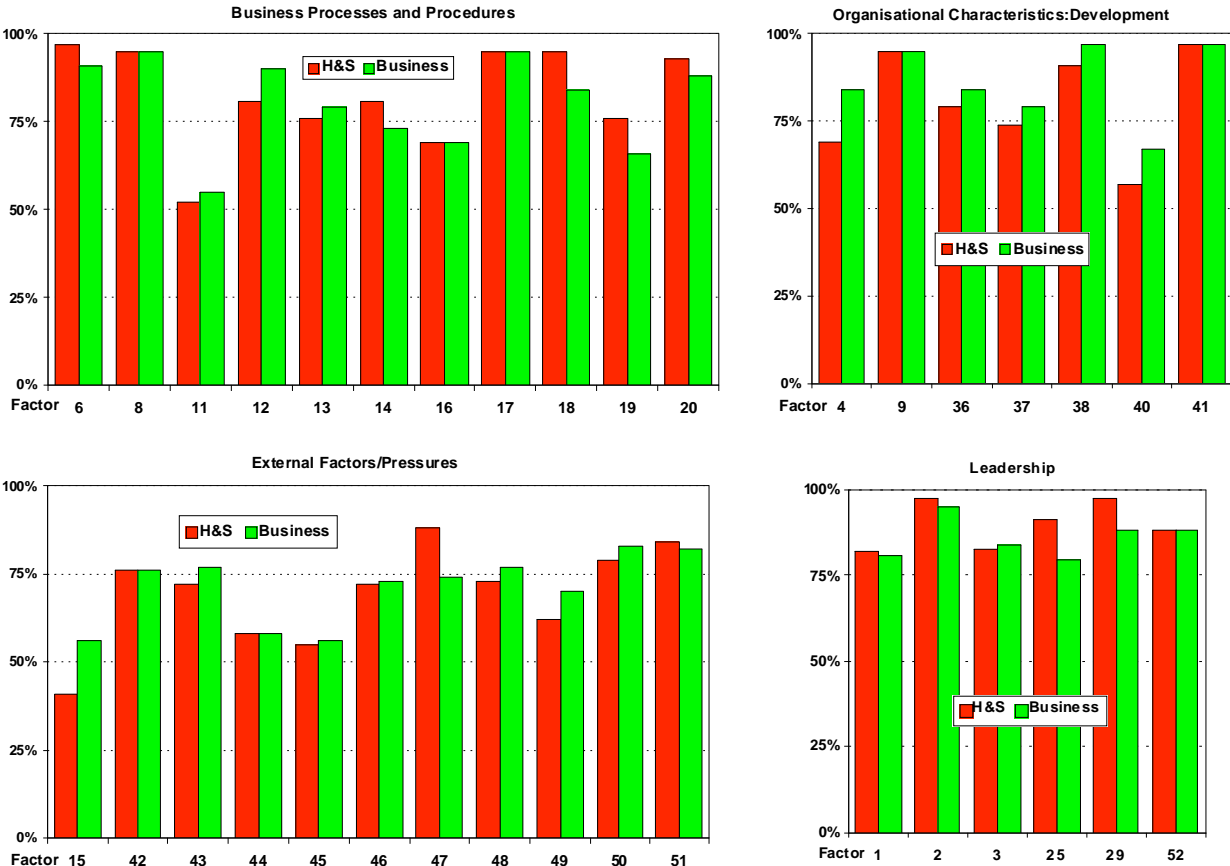
Figure 4.5 Mean Percentage ‘Universally Applicable by broad Grouping

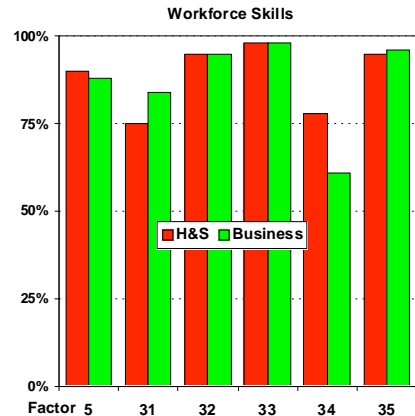
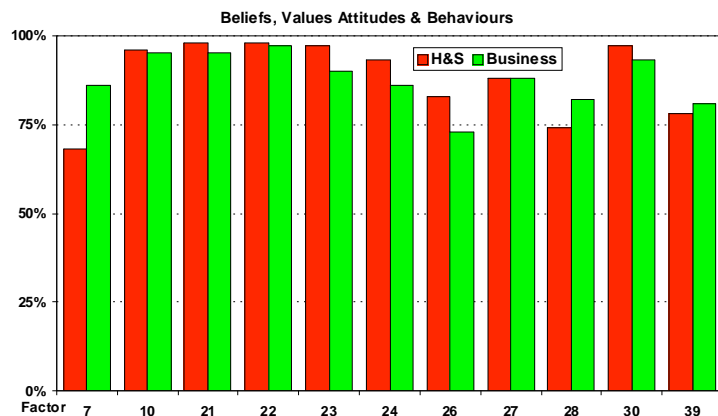


From Figure 4.5 it can be seen that, on average, the impact of Factors in the grouping ‘External Factors/Pressures’ is considered universally applicable by a far lower percentage of respondents than for other groupings. Factors in the groupings Leadership, Beliefs & Values and Workforce Skills, are judged, on average, to have universal applicability by a slightly higher number of respondents than for other groupings. However, it must be noted that these means can conceal variations in percentages between Factors within the same grouping.

However, as is seen in Figure 4.6, there are different degrees of variation within each grouping, with the impact of Factors within the Leadership group consistently being regarded as applying ‘universally’ by a high percentage of respondents. However, with very few exceptions, fewer than 75% of respondents consider the impact of Factors within the External Factors/Pressures grouping apply universally to all types and sizes of organization.

Figure 4.6 Percentage ‘Universality for Each Factor by Broad Grouping





Three of the Part 3 Statements explicitly address issues relating to the type and size of organization. Details of the responses to these Statements are shown in Table 4.3. From this it can be seen that there is a mean score of about one (1) (Agree) with Statement 107 “The nature of the business (sector & complexity) significantly influences an organization’s attitude and approach to health & safety”. However, there are a number of outliers and some reasons given for not agreeing with this Statement can be found in Appendix G.

Table 4.3 Responses to Statements relating to the Type/Size of Organization

	Statements relating to Type/Size of Organisation	Mean	Standard Deviation	Strongly Disagree	Disagree	Neither Agree/Disagree	Agree	Strongly Agree
				-2	-1	0	+1	+2
107	The nature of the business (sector & complexity) significantly influences an organization’s attitude and approach to health & safety	1.02	.900	—	—	—	■	■
110	The factors for business success are generally the same regardless of the size of a business	0.35	1.067	—	■	—	■	■
111	HSE should provide different advice for small/uncomplicated and for large/complex organizations	0.80	.982	—	■	—	■	■

Although the mean response to Statement 110 “The factors for business success are generally the same regardless of the size of a business” is only slightly to the ‘Agree’ side of neutral, the distribution can be seen to be bimodal, with a large number of panel members responding ‘Agree’ and only slightly fewer responding ‘Disagree’. This suggests scope for further investigation and research if this issue has implications for H&S policy.

Whilst Statement 111 “HSE should provide different advice for small/uncomplicated and for large/complex organizations” on average has a score just below ‘Agree’, the comments reporting in Appendix G indicate a fairly widespread degree of misgiving about the implications of, or even the message conveyed by, giving such different advice. Again this would appear to be an area warranting further study.

4.3 Conclusions and Recommendations

As shown in the results chapter, the Delphi study has yielded a wealth of information on panel member’s judgements of the impact of the various Factors on H&S performance and on Business performance and thus addressing, within the caveats outlined, the original questions set out in Section 1.1 above.

It will be recalled that, from the outset, it was recorded that those questions were very ambitious and that all the Delphi Study here could achieve is systematic elicitation and collation of the ‘Experts’ judgements/views on these questions. In particular, it was noted that Question (a) “What are the management factors/characteristics (including activities, behaviours and skills) that are associated with successful and unsuccessful business management?” is a major question for which many researchers and commentators have been seeking the answer for many years. Judging the extent to which it has been addressed or even answered here depends on how comprehensive the list of factors and statements selected for the Delphi study is considered to be. The only objective judgement that can be passed here is that very few additional factors or characteristics were identified by respondents to the study or by participants of the October Events. This applies also to Question (c) “What, if any, other management factors/characteristics are uniquely associated with success or failure in managing health and safety (i.e. are not associated with business management in general)?”

The study has obtained Expert views which directly address Question (b) “How do the factors identified in (a) read across to affect success or failure in managing health and safety?” and Question (d) “How important/effective are each of the factors identified in (a) – (c)?”, by eliciting and synthesising the Expert Panel’s assessment of the direction of impact (positive or negative, ie promoting success or failure) and the degree of impact (importance/effectiveness) of all the factors/characteristics selected for the study.

Also, as noted above, it was recorded from outset that it would not be possible either to obtain objective evidence to “allow comparison across different sectors” or to use large enough panels to obtain comparative responses from different sectors. It was noted that this aspect could only be addressed here by eliciting the Experts’ judgements/views. This has been addressed within the scope of the study by seeking the Experts’ agreement/disagreement with a number of Statements relating to this question and also by seeking judgements in respect of all Factors as to whether the assessed impact would apply to all types and sizes of organization. Thus the study findings form the basis for further study on this aspect.

Nevertheless, despite the wealth of information obtained in this study, the findings of a Delphi study must be interpreted and treated with caution. A Delphi study, and in particular an Expert Delphi, is not a majority vote or popularity poll and thus mean responses should be treated with care.

Thus, even where Factors appear, on average, to be judged to have no or weak impact, the existence of a wide spread or variation in responses means that those Factors warrant further examination. Such variation could be reflecting real differences in impact and importance of those Factors within different sectors and in different types and size of organization. Alternatively, they might be indicating Factors with a contested research or knowledge base. The danger of discounting a Factor merely because it has a low mean impact score, without taking any variation in responses into account, cannot be overestimated.

Wherever there is a wide spread or variation in responses and especially where there is a bimodal distribution, special investigation is required, even for Factors where the mean impact score is not low.. Bimodal distributions, such as those observed for Factor 29 “Organization has environment in which the priority is to get the work done, by whatever means necessary” in respect of assessed impact on Business performance, Statement 110 “The factors for business success are generally the same regardless of the size of a business”

and, to a lesser extent, Factor 26 “Organization gives rewards linked to meeting individual productivity/profitability targets” in respect of assessed impact on H&S performance, warrant special attention as they indicate a degree of polarisation of views. It is essential that the minority view is not overlooked or disregarded – the minority might be right or might be reflecting different experiences or knowledge.

In those cases where a Factor is judged, on average, to have a strong impact, whether positive or negative, the existence of any outliers should be noted and, where reasons are given, these should be studied with care and not dismissed as being ‘only a single response’. One effect of allowing respondents in Round Two to reconsider their own responses in the light of the aggregate responses from Round One is to reduce the risk of the accidental or unintentional outlying responses. Given this opportunity to reconsider their responses in a Delphi study, those persisting with outlying responses might be correct, especially if there is any suggestion that there is group pressure to conform to ‘accepted wisdom’. At the very least, those persistent outliers might be in possession of knowledge or information not yet widely available. Following similar arguments, written-in comments on the various Factors and general comments should be studied with care and some of the suggestions made followed up.

It is recommended that follow-ups to this study include further examination of Factors and Statements on which there is a wide spread (high dispersion) of responses. In addition, work is needed to disaggregate the different aspects of ‘compound’ Factors, especially where those factors have been judged to have a strong impact or where they recorded a high dispersion of responses. Factors whose impact was judged to apply to all types and size of organization by relatively low percentages of respondents require special attention as there could be important implications for policy formulation

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How Management Behaviours Associated with Successful Health and Safety Performance Relate to those Associated with Success in Other Domains – Revised Research Proposal using Delphi Techniques

Background

1. HSE has developed a “model” of and guidance on managing health and safety – HS(G)65 “Successful health and safety management” (ISBN: 0717612767, available from www.hsebooks.com) first published in 1991. However, the UK business landscape has changed, even since the last edition of HS(G)65 was published (in 1997). In particular, experience suggests that health and safety is managed more effectively when it is an integral part of mainstream management rather than a matter solely for health & safety practitioners.
2. HSC’s “Strategy for workplace health and safety in Great Britain to 2010 and beyond” lists four strategic themes. These include: “Helping people to benefit from effective health and safety management and a sensible health and safety culture.” The HSE Board has commissioned work: *“To review and refresh the principles of good health and safety management [by dutyholders], ensure relevant guidance and standards that adhere to these principles are in place and develop a strategy for a coherent HSE/LA approach to dutyholders.”* The HSE Board also said: *“The philosophy underlying our approach [to health and safety management] should be to improve duty holders’ ability to ‘manage’ their activities with particular reference to health and safety rather than to address a special function of ‘health and safety management’.”*
3. HSE’s Operational Policy & Support Division (OPSD) are leading the work to review the existing HSE “model”, guidance and regulatory approach. The intention is to update, amend or supplement the model, etc. as appropriate, reflecting the needs of the modern economy and being relevant to as wide a variety of organizations as possible.
4. The research base on the links between successful business management and managing for successful health and safety outcomes is limited and, as a result, open to interpretation. We are now seeking to use a Delphi approach to gather informed views from key, expert, stakeholders and to share their judgements in a structured and documented way.

Aims and objectives of the research

5. The aim is to provide authoritative views on the links between successful business management in general and managing for successful health and safety outcomes (as part of a whole business approach). This should address the following questions:
 - a. What are the management factors/characteristics (including activities, behaviours and skills) that are associated with successful and unsuccessful business management?

- b. How do the factors identified in (a) read across to affect success or failure in managing health and safety?
- c. What, if any, other management factors/characteristics are uniquely associated with success or failure in managing health and safety (i.e. are not associated with business management in general)?
- d. How important/effective are each of the factors identified in (a) – (c)? We need to identify the full range but also to distinguish those that are key to success and failure.

Scope

6. The work should focus on those practices relevant to work in UK and needs to consider business management, and organizational behaviour:
 - a. in a wide variety of organizations and, as far as possible, all main business sectors and sizes/types of organizations present in the UK.
[NB. if it becomes evident that this is not feasible, e.g. because there are clear differences between particular categories of organization, then we need this to be flagged up, explaining what is possible and why] and
 - b. that impacts upon "health" and not just "safety" outcomes, including where there are differences and how these are addressed and
 - c. that can be influenced or changed through guidance and/or regulation in the UK.

Proposed Approach

7 We propose to use a systematic method for gathering informed opinion and insights and, where experts disagree, explanations of diverging views. This is likely to involve three stages:

- Brainstorming workshop(s) involving experts/opinion-formers drawn from business schools, 'business' and other regulators;
- Delphi Survey;
- Review event - feedback on findings to experts/opinion-formers.

Brainstorming workshop(s)

Outcomes are expected to be:

- shared understanding of the important issues that need to be explored;
- development of the minimum set of questions to be used;
- stakeholder support for approach;
- list of possible participants in the Delphi survey, able to represent informed judgement across key sectors of the UK economy and different perspectives (including business schools, other regulators, etc).

Delphi survey

Outcomes:

- the best available evidence, derived using a common set of metrics to probe the areas identified in the aims & objectives for this research;
- evidence, as far as possible, allows comparison across different sectors of the economy;

- experts able to provide more detailed information on the issues, for example, where particular management behaviours are seen as critical to success.

Feedback

Outcomes:

- areas of consensus and divergence identified;
- evidence leads to a refreshing of the HSE model of health & safety management;
- stakeholder support for next steps.

Outputs expected from the Contractor

8. These are expected to include:

- a. A management plan for the work package
- b. Design and delivery of the results of a Delphi survey on experts' understandings of the issues identified in the aims and objectives for this research (para 5 above)
- c. A report compiling the findings of the work to help the project team develop a model (or models) of effective management for successful health and safety performance in the UK

9. The workshop(s) and review event will be organised by HSE but the contractor is expected to contribute to both events. Participants in the Delphi survey and who/what are key stakeholders/sectors for this research will be agreed with HSE.

1	Title	Review of Expert Judgement: How management behaviours associated with successful health and safety performance relate to those associated with success in other domains.
2	Purpose	Seek authoritative views on the following: <ul style="list-style-type: none"> a. What, briefly, are the management factors/characteristics (including activities, behaviours and skills) that are associated with successful and unsuccessful business management? b. How do the factors identified in (a) read across to affect success or failure in managing health and safety? c. What, if any, other management factors/characteristics are uniquely associated with success or failure in managing health and safety (i.e. are not associated with business management in general)? d. How important/effective are each of the factors identified in (a) – (c)? We need to identify the full range but also to distinguish those that are key to success and failure. <p>NB. The discussion should focus on those practices relevant to work in UK.</p>
3	Composition	A document summarising expert evidence to help the project team develop a model (or models) of effective management for successful health and safety performance in the UK, including: <ul style="list-style-type: none"> - Areas of consensus and divergence - Question set. - References.
4	Derivation	<ul style="list-style-type: none"> - HSE research specification. - Detailed proposal agreed with Supplier.
5	Quality Criteria	<ul style="list-style-type: none"> - The findings and conclusions are presented in a form that is clear and easily digestible. - The status of the evidence upon which the conclusions are based is clear.
6	Quality Method	Acceptance by HSE steering group for this project.

Dear

**MANAGING FOR SUCCESSFUL HEALTH & SAFETY PERFORMANCE -
A DELPHI STUDY**

The performance of businesses in managing the health and safety aspects of their undertakings is a key concern of HSE and its Local Authority partners, as well as of employer and worker representatives. This has been highlighted most recently in the joint Institute of Directors and HSE publication for directors and board members “Leading health and safety at work” and by initiatives such as HSE’s national conference on leadership and process safety in the major hazards industries, held on 29 April. To help inform forthcoming work to develop an up-to-date and authoritative approach to improving health and safety management, Birmingham University is conducting an important study on HSE’s behalf. This aims to identify the relative impact of different business-related factors in influencing health and safety outcomes and overall business success, using a Delphi approach (further details of which are attached).

As someone with the relevant expertise and knowledge to provide a valuable contribution to this work, I am writing to invite you to join the Expert Panel for this Delphi study. Members of the Panel will be asked to take part in two rounds – expected to take approximately one hour each. There could be individual follow-up, but only if necessary to seek clarification of a specific response.

We expect Birmingham University's first round questionnaire to be distributed in the second week of June (with a two week deadline for responses), the second round questionnaire following about six weeks later. HSE also plans to present the study findings at a meeting this autumn and we will invite all Expert Panel members to this.

Input such as yours is crucial to the success of this project and I hope you would be willing to join this Expert Panel. If you are, no further action is required until you receive the questionnaire. However, if for any reason you are unable to participate – or if you have any further questions – I would be grateful if you could contact Steve Newman (e-mail steve.newman@hse.gsi.gov.uk or telephone 0151 951 3397).

Yours sincerely



GEOFFREY PODGER
Chief Executive HSE

Appendix C

Heath & Safety Management Delphi Pilot Study Feedback Pro-forma

1. How long did it take you to complete the questionnaire?
2. Do you have any comments on the cover letter?
3. Do you have any comments on the instructions on completing the questionnaire? Did you find those instructions clear?
4. Do you think it is a good idea to give the option to complete an electronic version of the questionnaire? If so would you prefer to receive it by e-mail, USB memory stick, download from URL or other?
5. Did you try to complete the electronic version of the questionnaire? If yes, do you have any comments/observations on this?

6. Do you have any comments or views on the use of the term 'Organization'? If yes, do you have any suggestions for an alternative generic term?

7. Do you have any comments/observations on any of the individual 'factors' or 'statements' which you did not make on the questionnaire itself?

8. Do you have any other comments or observations on the administration, letter or questionnaire?

Draft letter to accompany Round 1

Dear

MANAGING FOR SUCCESSFUL HEALTH & SAFETY PERFORMANCE – A DELPHI SURVEY

Thank you very much for agreeing to join the Expert Panel for the above Delphi study.

As explained earlier, this study is concerned with identifying the relative impact of different business factors in influencing health and safety outcomes and overall business success. The results will be used to inform a key HSE project which aims to develop a refreshed, authoritative approach to improving duty holder health and safety management that both draws upon and forms a coherent part of effective business management.

As this is an Expert Delphi the participants (Panel Members) do not constitute a random or representative sample, but are selected as 'experts' in all or some aspects of the fields of Health and Safety and Business Performance.

This is planned as a two-round Delphi study. Responses from the enclosed questionnaire will be collated and fed back to all panel members, together with details of their own individual responses. Panel members will be invited to confirm or change their initial responses, using the same or a slightly revised questionnaire.

In the inter-round feedback, no panel member's responses will be identifiable by anyone other than that panel member – aggregated responses will be distributed, thus assuring anonymity. However, as it is necessary for the researcher to ensure feedback to the correct respondent, the questionnaires themselves contain provision for an identifying number and your name – to facilitate cross-checking. All completed questionnaires will be stored securely. To ensure confidentiality, no individual panel member's response will be identifiable in the final report.

The study has been approved under both the University of Birmingham's Ethical Review procedure and HSE's procedure for extramural projects.

We recognise that, because of the nature of the study, the attached questionnaire is rather long but should take no longer than one hour to complete. We are thus extremely grateful for your cooperation in completing it. As indicated above, your responses will be invaluable to the work of HSE. If you have any queries, please do not hesitate to contact Steve Newman at HSE (steve.newman@hse.gsi.gov.uk) or the researcher (p.m.mullen@bham.ac.uk).

We are working to a fairly tight timescale and thus would be very grateful if you could return the completed questionnaire by **date**.

Yours sincerely

Xxxxx
HSE

Penelope Mullen
University of Birmingham



UNIVERSITY OF
BIRMINGHAM

**Questionnaire
on
Effective Management
for
Successful Health and Safety
Performance**

ELECTRONIC VERSION OF QUESTIONNAIRE

In addition to this paper-based version, an electronic version (Word) of this questionnaire is being sent to you by email and may also be downloaded from <http://www.hsmc.bham.ac.uk/HSE.doc>

That version can be completed electronically and returned either by email (to p.m.mullen@bham.ac.uk) or can be printed out and returned using the reply-paid label.

Panel Member No:

Panel Member Name:

Questionnaire on Effective Management for Successful Health and Safety Performance

Structure of Questionnaire This questionnaire is divided into four parts:

Part 1 seeks your judgement on the impact of various factors or 'influencers' on Successful Health and Safety (H&S) Performance

Part 2 seeks your judgement on the impact of those same factors or 'influencers' on Successful Overall Business Performance

Part 3 asks you to indicate your agreement/disagreement with a number of statements

Part 4 invites you to add any comments you wish, including suggesting additional factors or 'influencers'

General Guidance on Completion of Questionnaire

Panel Member details: Please enter name and panel member number (from the covering letter) in the boxes above.

Boxes: Please place a cross **X** in your chosen box. If you change your mind, please simply strike out the unwanted **X**.

Comments: Comments are invited in Part 4. In addition comments may be made on any individual factor by adding your comment beside that factor or at the foot of the page.

Non-response: If you do not wish to respond to an item, please simply go on to the next item.

Specific Guidance on Completion of Parts 1 & 2

The same factors are listed in Parts 1 and 2, but please complete the parts separately. You might find it worth taking a break between completing Parts 1 and 2. You are asked to respond on three aspects for each factor.

Impact: You are asked to give your judgement on the impact of various factors or 'influencers' on H&S (Part 1) and Business (Part 2) success, in respect of organizations to which that factor applies, i.e. don't score the impact lower simply because the factor is not universally applicable (see **Universal?** below).

For each factor, you are invited:

- To decide **first** whether or not you judge that factor to have any impact at all. If you judge that it has **no impact** please select the box in the middle shaded column.
- If you consider it would have a **positive** impact (i.e. that the factor would contribute positively to H&S (Part 1) or Business (Part 2) success), please indicate the degree of positive impact you judge it would have on the positive (RH) side.
- Similarly, if you consider it would have a **negative** impact (i.e. that the factor would be detrimental to H&S (Part 1) or Business (Part 2) success), please indicate the degree of negative impact you judge it would have on the negative (LH) side.

Confidence: Panel members have been selected as 'Experts' in all or some aspects of the fields of Health and Safety and Business Performance. However, it is recognised that not all panel members may feel equally confident of their expertise in respect of every factor. Thus, it would be very helpful if you could indicate your degree of confidence in the appropriate box. But please don't let any feeling of lack of confidence be reflected in your scoring of impact.

Universal? Please indicate whether or not you consider the impact of the factors is applicable to all types and sizes of organizations. If it should happen that you consider a factor would have opposite effects (i.e. negative for some and positive for others), please make a note on the page or in Part 4.

t 1 Impact on Successful Health and Safety Performance

Part 1 Impact on Successful Health and Safety Performance

Please place an **X** in your chosen box

Factor or 'Influencer'

	Negative Impact				No Impact	Positive Impact				Confidence			Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	Not very	Fairly	Very	YES	NO
1 Organization has a clearly communicated statement of its values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Responsibility for health & safety is delegated entirely to health & safety specialists/advisors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Workers understand their own job, but not how it relates to the work of others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Organization ensures employees behave consistently with company rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Jobs give workers day-to-day discretion and control (autonomy) over their work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Organization uses a consistent approach to risk assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please add any comments here

Part 1 Impact on Successful Health and Safety Performance

Please place an X in your chosen box

Factor or 'Influencer'

	Negative Impact				No Impact	Positive Impact					Confidence			Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong		Not very	Fairly	Very	YES	NO
12 Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 Organization has a comprehensive formal system for managing maintenance (e.g. of plant, buildings)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 Performance assessment includes clear and measurable health & safety targets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 Public reporting of the organization's health & safety performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16 Organization has formal procedures for actively capturing and retaining tacit knowledge (e.g. 'corporate memory')	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17 Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18 Organization discourages workers from doing more than the minimum needed to comply with rules and regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19 Organization has regular, structured, internal review and audit processes which include health and safety (e.g. workplace inspections)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20 Organization gives prompt feedback to workers following reviews, audits and inspections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21 Everyone is encouraged to share and discuss issues openly and feels their views are valued	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22 Organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please add any comments here

Part 1 Impact on Successful Health and Safety Performance

Please place an X in your chosen box

Factor or 'Influencer'

	Negative Impact				No Impact	Positive Impact				Confidence			Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	Not very	Fairly	Very	YES	NO
23 Organization has "No blame" internal reporting of incidents (e.g. near misses, violations of procedures)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24 Everyone has their own job and keeps their nose out of everybody else's business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25 Organization perceives health & safety outcomes as important to business success	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26 Organization gives rewards linked to meeting individual productivity/profitability targets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27 Workers, supervisors, middle and senior managers are all involved and engaged in decision-making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28 Worker representatives are involved in planning and implementing policies and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29 Organization has environment in which the priority is to get the work done, by whatever means necessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30 Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31 Training is focused solely on the immediate job requirements including relevant safe working practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32 Workers are trained and encouraged to identify and solve job-related problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33 The job requirements exceed worker competence (capabilities and training)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Part 1 Impact on Successful Health and Safety Performance

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Factor or 'Influencer'

	Negative Impact				No Impact	Positive Impact					Confidence			Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong		Not very	Fairly	Very	YES	NO
34 Use of agreed, cross-industry criteria to assess competence, with procedures in place to review and maintain standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35 Organization employs people with the specialist knowledge it needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36 Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37 Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38 Organization uses employment practices that promote work flexibility for employees and encourage workforce stability and commitment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39 Organization supports and encourages staff (e.g. by incentives such as time-off or vouchers) to engage in health and well-being activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40 The adoption of management philosophies such as 'lean production', 'just in time'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41 Wise investment in modern capital equipment (from office equipment to manufacturing plant)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42 Organization operates in a market with intense competition from rivals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43 Organization benchmarks its performance against others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44 Organization operates in a European market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please add any comments here

Part 1 Impact on Successful Health and Safety Performance

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Factor or 'Influencer'

	Negative Impact				No Impact	Positive Impact				Confidence			Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	Not very	Fairly	Very	YES	NO
45 Organization operates in a global market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46 Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47 CEOs/directors liable to receive personal sanctions for violation of legal duties and regulatory standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48 Involvement of external specialists in assessing compliance with legal duties and regulatory standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49 Regulators prescribe the process for managing risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50 Regulators provide practical diagnostic tools and measures of performance on risk management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51 Regulators taking an active interest in how a business's culture affects its management of risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52 Organization has an individual in top management accountable for health & safety performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please add any comments here

Part 2 Impact on Successful Overall Business Performance

Part 2 Impact on Successful Overall Business Performance

Please place an X in your chosen box

Factor or 'Influencer'

	Negative Impact				No Impact	Positive Impact					Confidence			Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong		Not very	Fairly	Very	YES	NO
53 Organization has a clearly communicated statement of its values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54 Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55 Responsibility for health & safety is delegated entirely to health & safety specialists/advisors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56 Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57 Workers understand their own job, but not how it relates to the work of others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58 Organization ensures employees behave consistently with company rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59 Jobs give workers day-to-day discretion and control (autonomy) over their work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60 Organization uses a consistent approach to risk assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61 Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong		Not very	Fairly	Very	YES	NO	
62 Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
63 Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
64 Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
65 Organization has a comprehensive formal system for managing maintenance (e.g. of plant, buildings)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
66 Performance assessment includes clear and measurable health & safety targets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
67 Public reporting of the organization's health & safety performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
68 Organization has formal procedures for actively capturing and retaining tacit knowledge (e.g. 'corporate memory')	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
69 Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
70 Organization discourages workers from doing more than the minimum needed to comply with rules and regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
71 Organization has regular, structured, internal review and audit processes which include health and safety (e.g. workplace inspections)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
72 Organization gives prompt feedback to workers following reviews, audits and inspections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Please add any comments here

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	Negative Impact				No Impact	Positive Impact					Confidence			Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong		Not very	Fairly	Very	YES	NO
73 Everyone is encouraged to share and discuss issues openly and feels their views are valued	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
74 Organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
75 Organization has "No blame" internal reporting of incidents (e.g. near misses, violations of procedures)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
76 Everyone has their own job and keeps their nose out of everybody else's business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
77 Organization perceives health & safety outcomes as important to business success	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
78 Organization gives rewards linked to meeting individual productivity/profitability targets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
79 Workers, supervisors, middle and senior managers are all involved and engaged in decision-making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
80 Worker representatives are involved in planning and implementing policies and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
81 Organization has environment in which the priority is to get the work done, by whatever means necessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
82 Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
83 Training is focused solely on the immediate job requirements including relevant safe working practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please add any comments here

Part 2 Impact on Successful Overall Business Performance

Please place an **X** in your chosen box

Factor or 'Influencer'

	Negative Impact				No Impact	Positive Impact				Confidence			Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	Not very	Fairly	Very	YES	NO
84 Workers are trained and encouraged to identify and solve job-related problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
85 The job requirements exceed worker competence (capabilities and training)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
86 Use of agreed, cross-industry criteria to assess competence, with procedures in place to review and maintain standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
87 Organization employs people with the specialist knowledge it needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
88 Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
89 Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
90 Organization uses employment practices that promote work flexibility for employees and encourage workforce stability and commitment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
91 Organization supports and encourages staff (e.g. by incentives such as time-off or vouchers) to engage in health and well-being activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
92 The adoption of management philosophies such as 'lean production', 'just in time'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
93 Wise investment in modern capital equipment (from office equipment to manufacturing plant)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
94 Organization operates in a market with intense competition from rivals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please add any comments here

Part 2 Impact on Successful Overall Business Performance

Please place an **X** in your chosen box

Factor or 'Influencer'

	Negative Impact				No Impact	Positive Impact				Confidence			Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	Not very	Fairly	Very	YES	NO
95 Organization benchmarks its performance against others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
96 Organization operates in a European market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
97 Organization operates in a global market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
98 Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
99 CEOs/directors liable to receive personal sanctions for violation of legal duties and regulatory standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
100 Involvement of external specialists in assessing compliance with legal duties and regulatory standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
101 Regulators prescribe the process for managing risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
102 Regulators provide practical diagnostic tools and measures of performance on risk management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
103 Regulators taking an active interest in how a business's culture affects its management of risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
104 Organization has an individual in top management accountable for health & safety performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please add any comments here

Part 3 Please indicate your agreement or disagreement with each of the following statements

Please place a **X** in your chosen box

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
105 Health and safety and productivity/profitability are in competition with each other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
106 Occupational health and safety should be viewed as an integral part of productivity, competitiveness and profitability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
107 The nature of the business (sector and complexity) significantly influences an organization's attitude and approach to health & safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
108 The business benefits of health and safety justify the business costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
109 A positive health and safety culture is important to the overall success of an organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
110 The factors for business success are generally the same regardless of the size of a business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
111 HSE should provide different advice on health and safety management for small/uncomplicated and for large/complex organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part 4 Please add any comments you may have. If you chose not to respond to any statement, it would be useful if you could indicate why. If you are commenting on individual factors/statements included in the questionnaire, please give the item number. If you have any suggestions for factors that should have been included, please give details including, as far as possible, a) why you believe it is important to business success/health & safety outcomes; and b) what kind of impact (positive/negative) you believe it might have. [Please note that some factors or potential 'influencers' – those which were judged to be generally accepted or for which there is a strong evidence-base e.g. 'having a clear corporate vision' and 'having a competitive, sustainable business strategy', plus 'senior managers setting the example they wish to be followed' – had been intentionally omitted in order to reduce the length of the questionnaire.] Please continue on separate sheets, if necessary.

Thank you very much for your assistance in joining the Expert Panel and completing this questionnaire.

Please return the completed questionnaire, using the reply-paid label, to Penelope Mullen, Health Services Management Centre, University of Birmingham, 40, Edgbaston Park Road, Birmingham B15 2RT, to arrive on or before **Wednesday 25 June 2008**.

Dear

MANAGING FOR SUCCESSFUL HEALTH & SAFETY PERFORMANCE - A DELPHI STUDY

ROUND TWO

Thank you very much for responding to Round One of this study.

As outlined earlier, this has been planned as a two-round Delphi study. Aggregate responses from the Round One questionnaire have been collated and are now being fed back to all Panel Members on the enclosed Round Two questionnaire.

In addition, in the enclosed sealed envelope, you will find details of your own individual responses to Round One. (All data has been double checked, but we apologise for, and would be grateful to be informed of, any errors.)

For Round Two, having considered the aggregated responses, Panel Members are invited to confirm or change their initial responses by completing the enclosed Round Two questionnaire. Please note, there is no pressure in any direction to change your initial responses – your choice and response should reflect your own expert judgement. However, whether or not you wish to confirm or change your initial response, please do indicate your choice by marking the relevant box. If you prefer to complete the questionnaire electronically, a Word version is being e-mailed to Panel Members where we have current e-addresses or can be downloaded from: <http://www.hsmc.bham.ac.uk/HSE2.doc>

As in Round One, the questionnaire contains provision for an identifying number (which is shown again at the top of this letter) and your name – to facilitate crosschecking. Please do enter this information on your questionnaire. All completed questionnaires are being stored securely and, to ensure confidentiality, no individual panel member's response will be identifiable in the final report.

We recognise that, because of the nature of the study, the questionnaire is again rather long, but it should take no longer than one hour to complete. We are extremely grateful for your cooperation in completing it. Your participation and responses are invaluable to the work of HSE. We very much hope that you will remain in the study and complete the Round Two questionnaire. However, Panel Members have the opportunity to withdraw at any stage and it would be helpful to let us know if you no longer wish to participate.

If you have any queries, please do not hesitate to contact Sheila Rees at HSE (phone; 0151 951 4543 or e-mail; sheila.rees@hse.gsi.gov.uk)or me at Birmingham University (p.m.mullen@bham.ac.uk).

We apologise for any problems arising from sending out this questionnaire during the holiday season. Whilst we should be very grateful if you could return the completed questionnaire to arrive by Thursday 21 August 2008, if you anticipate difficulties with that deadline, please contact Sheila Rees at HSE.

Yours sincerely

Penelope Mullen
Senior Lecturer

Dear

MANAGING FOR SUCCESSFUL HEALTH & SAFETY PERFORMANCE - A DELPHI STUDY

ROUND TWO

Thank you very much to those who responded to Round One of this study. Unfortunately, as some of the responses we received were anonymous, it is not possible to identify exactly which Panel Members did respond. Thus, we are sending the Round Two questionnaire to all Panel Members, unless they have specifically indicated they wish to withdraw. We should be very grateful if you would participate in Round Two, whether or not you were able to respond to Round One.*

As outlined earlier, this has been planned as a two-round Delphi study. Aggregate responses from the Round One questionnaire have been collated and are now being fed back to all Panel Members on the enclosed Round Two questionnaire.

For Round Two, having considered the aggregated responses, Panel Members are invited to complete the enclosed questionnaire according to their own expert judgement. If you prefer to complete the questionnaire electronically, a Word version is being emailed to Panel Members where we have current e-addresses or can be downloaded from: <http://www.hsmc.bham.ac.uk/HSE2.doc>

As in Round One, the questionnaire contains provision for an identifying number (which is shown again at the top of this letter) and your name – to facilitate crosschecking. Please do enter this information on your questionnaire. All completed questionnaires are being stored securely and, to ensure confidentiality, no individual panel member's response will be identifiable in the final report.

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If you have any queries, please do not hesitate to contact Sheila Rees at HSE (phone; 0151 951 4543 or e-mail; sheila.rees@hse.gsi.gov.uk) or me at Birmingham University (p.m.mullen@bham.ac.uk).

We apologise for any problems arising from sending out this questionnaire during the holiday season. Whilst we should be very grateful if you could return the completed questionnaire to arrive by Thursday 21 August 2008, if you anticipate difficulties with that deadline, please contact Sheila Rees at HSE.

Yours sincerely

Penelope Mullen
Senior Lecturer

* If you did respond to Round One, it would be very useful if you could mention that when you return your Round Two questionnaire,

Appendix E2

Panel Member No:

Name of Panel Member:

Questionnaire on Effective Management for Successful Health and Safety Performance – Round 2

Structure of Questionnaire As in Round 1 this questionnaire is divided into four parts:

Part 1 seeks your judgement on the impact of various factors or ‘influencers’ on Successful Health and Safety (H&S) Performance

Part 2 seeks your judgement on the impact of those same factors or ‘influencers’ on Successful Overall Business Performance

Part 3 asks you to indicate your agreement/disagreement with a number of statements

Part 4 invites you to add any comments you wish, including any comments you wish to give on specific judgements or responses.

Feedback on Round 1

Aggregated results from Round 1 are shown to the right of each factor or statement. For Parts 1 & 2, the mean Impact ‘score’ is given, along with a mini-bar chart showing the relative frequency and spread of responses. Responses on Universality are shown as percentage responses Yes and No. In Part 3, mean agreement ‘scores’ are shown, alongside a mini-bar chart.

General Guidance on Completion of Questionnaire (as in Round 1)

Panel Member details: Please enter name and panel member number (from the covering letter) in the boxes above.

Boxes: Please click on your chosen box (if completing on-screen) or place a cross **X** in it (if you have printed out the questionnaire). If you change your mind, please click on the box again (on screen) or strike out the unwanted **X** (on paper).

Comments: Comments may be made on any individual factor by clicking on the wording of that factor and typing in your comment (there might be a small delay before the text appears on screen) or by adding your comment beside the factor or at the foot of the page (paper version). In addition, comments are invited in Part 4.

Non-response: If you do not wish to respond to an item, please simply go on to the next item.

Specific Guidance on Completion of Parts 1 & 2

The same factors are listed in Parts 1 and 2, but please complete the parts separately. You might find it worth taking a break between completing Parts 1 and 2. You are asked to respond on three aspects for each factor.

Impact: You are asked to give your judgement on the impact of various factors or ‘influencers’ on H&S (Part 1) and Business (Part 2) success, in respect of organizations to which that factor applies, i.e. don’t score the impact lower simply because the factor is not universally applicable (see **Universal?** below).



For each factor, you are invited:

- To decide **first** whether or not you judge that factor to have any impact at all. If you judge that it has **no impact** please select the box in the middle shaded column.
- If you consider it would have a **positive** impact (i.e. that the factor would contribute positively to H&S (Part 1) or Business (Part 2) success), please indicate the degree of positive impact you judge it would have on the positive (RH) side.
- Similarly, if you consider it would have a **negative** impact (i.e. that the factor would be detrimental to H&S (Part 1) or Business (Part 2) success), please indicate the degree of negative impact you judge it would have on the negative (LH) side.

Universal? Please indicate whether or not you consider the impact of the factors is applicable to all types and sizes of organizations. If it should happen that you consider a factor would have opposite effects (i.e. negative for some and positive for others), please make a note on the page or in Part 4.

Part 1 Impact on Successful Health and Safety Performance

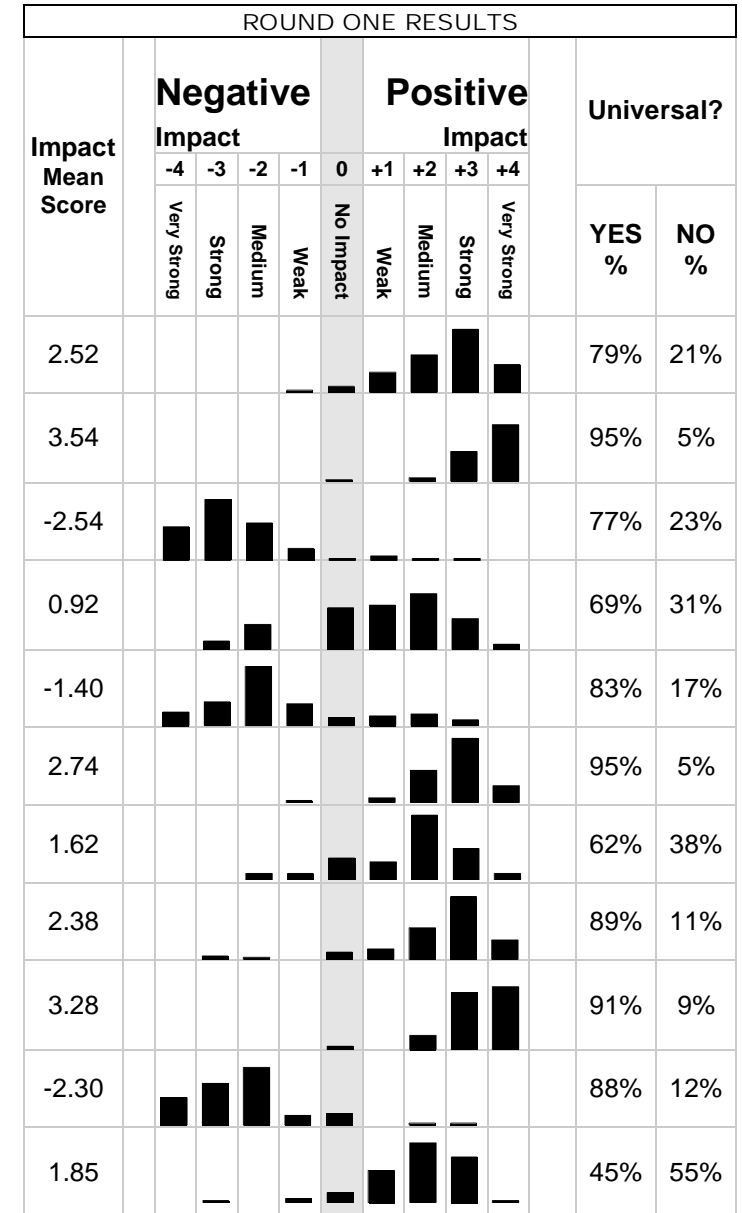
Part 1 Impact on Successful Health and Safety Performance

Please click or place a X in your chosen box

[To add comments, please click on text below and type at cursor]

Factor or 'Influencer'

Factor or 'Influencer'	Negative Impact				No Impact	Positive Impact				Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	YES	NO
1 Organization has a clearly communicated statement of its values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Responsibility for health & safety is delegated entirely to health & safety specialists/advisors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Workers understand their own job, but not how it relates to the work of others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Organization ensures employees behave consistently with company rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Jobs give workers day-to-day discretion and control (autonomy) over their work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Organization uses a consistent approach to risk assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



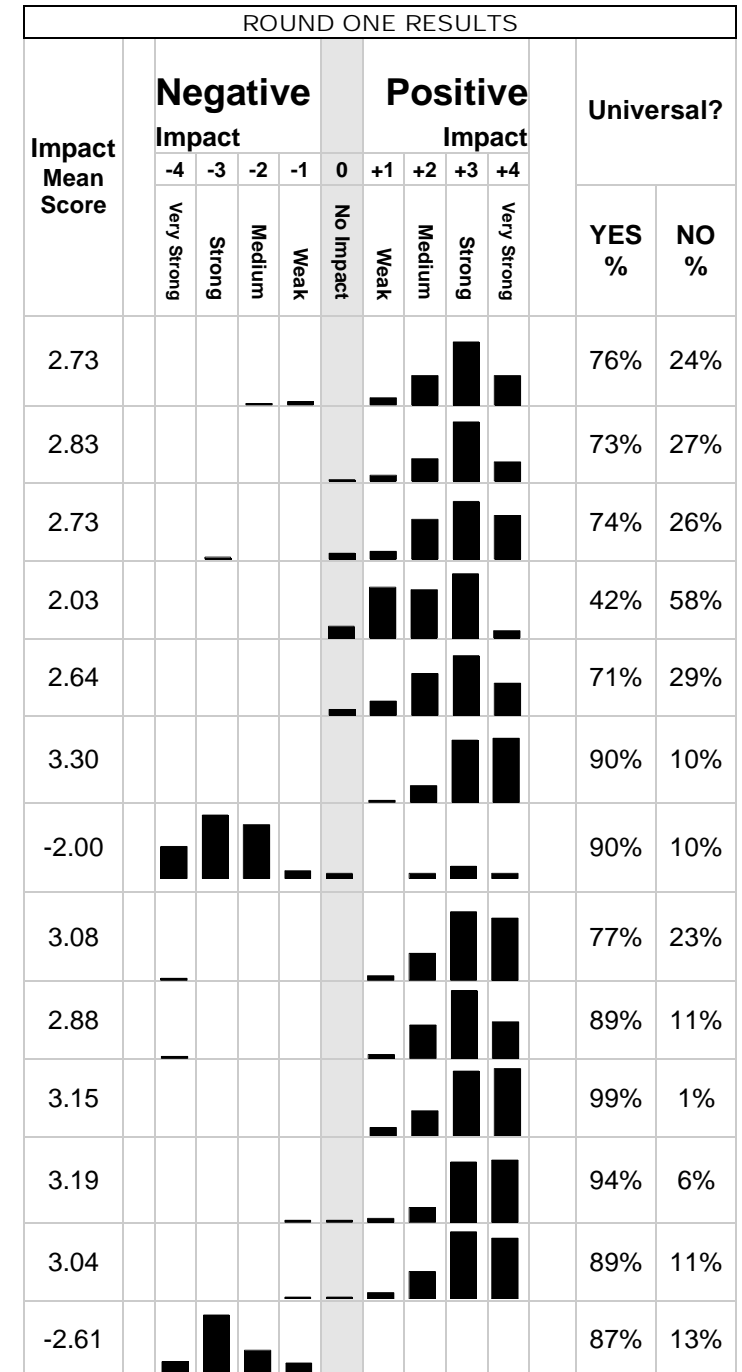
Part 1 Impact on Successful Health and Safety Performance

Please click or place a X in your chosen box

[To add comments, please click on text below and type at cursor]

Factor or 'Influencer'

	Negative Impact				No Impact	Positive Impact				Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	YES	NO
12 Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 Organization has a comprehensive formal system for managing maintenance (e.g. of plant, buildings)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 Performance assessment includes clear and measurable health & safety targets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 Public reporting of the organization's health & safety performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16 Organization has formal procedures for actively capturing and retaining tacit knowledge (e.g. 'corporate memory')	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17 Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18 Organization discourages workers from doing more than the minimum needed to comply with rules and regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19 Organization has regular, structured, internal review and audit processes which include health and safety (e.g. workplace inspections)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20 Organization gives prompt feedback to workers following reviews, audits and inspections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21 Everyone is encouraged to share and discuss issues openly and feels their views are valued	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22 Organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23 Organization has "No blame" internal reporting of incidents (e.g. near misses, violations of procedures)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24 Everyone has their own job and keeps their nose out of everybody else's business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



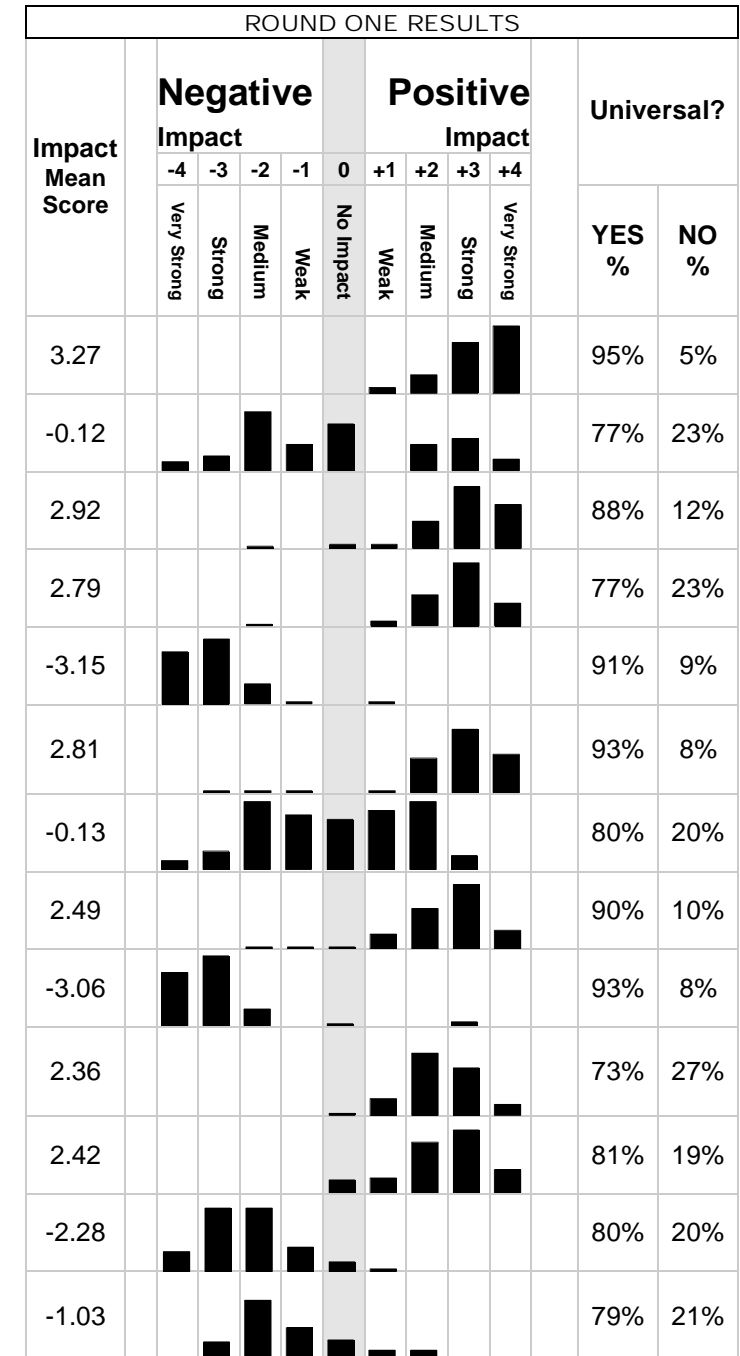
Part 1 Impact on Successful Health and Safety Performance

Please click or place a X in your chosen box

[To add comments, please click on text below and type at cursor]

Factor or 'Influencer'

Factor or 'Influencer'	Negative Impact				No Impact	Positive Impact				Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	YES	NO
	25 Organization perceives health & safety outcomes as important to business success	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26 Organization gives rewards linked to meeting individual productivity/profitability targets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27 Workers, supervisors, middle and senior managers are all involved and engaged in decision-making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28 Worker representatives are involved in planning and implementing policies and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29 Organization has environment in which the priority is to get the work done, by whatever means necessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30 Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31 Training is focused solely on the immediate job requirements including relevant safe working practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32 Workers are trained and encouraged to identify and solve job-related problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33 The job requirements exceed worker competence (capabilities and training)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34 Use of agreed, cross-industry criteria to assess competence, with procedures in place to review and maintain standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35 Organization employs people with the specialist knowledge it needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36 Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37 Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



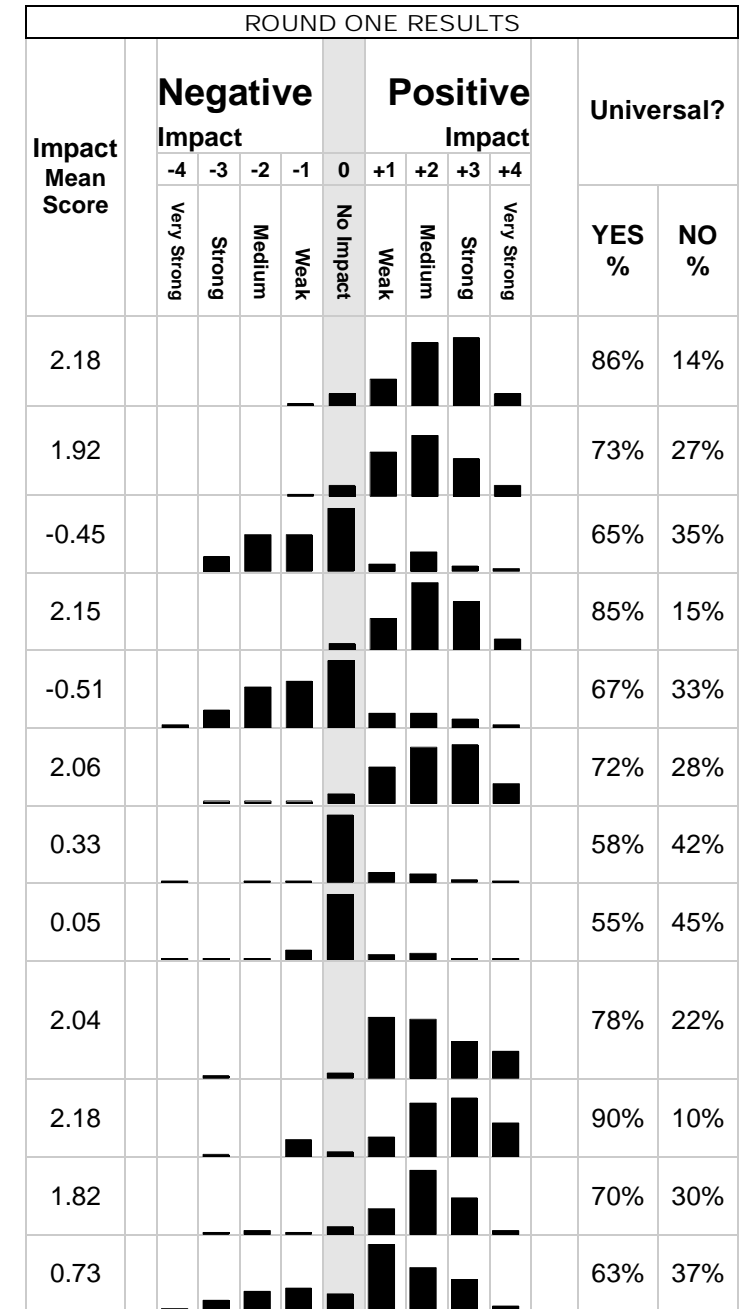
Part 1 Impact on Successful Health and Safety Performance

Please click or place a X in your chosen box

[To add comments, please click on text below and type at cursor]

Factor or 'Influencer'

Factor or 'Influencer'	Negative Impact				No Impact	Positive Impact				Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	YES	NO
	38 Organization uses employment practices that promote work flexibility for employees and encourage workforce stability and commitment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39 Organization supports and encourages staff (e.g. by incentives such as time-off or vouchers) to engage in health and well-being activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40 The adoption of management philosophies such as 'lean production', 'just in time'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41 Wise investment in modern capital equipment (from office equipment to manufacturing plant)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42 Organization operates in a market with intense competition from rivals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43 Organization benchmarks its performance against others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44 Organization operates in a European market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45 Organization operates in a global market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46 Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47 CEOs/directors liable to receive personal sanctions for violation of legal duties and regulatory standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48 Involvement of external specialists in assessing compliance with legal duties and regulatory standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49 Regulators prescribe the process for managing risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



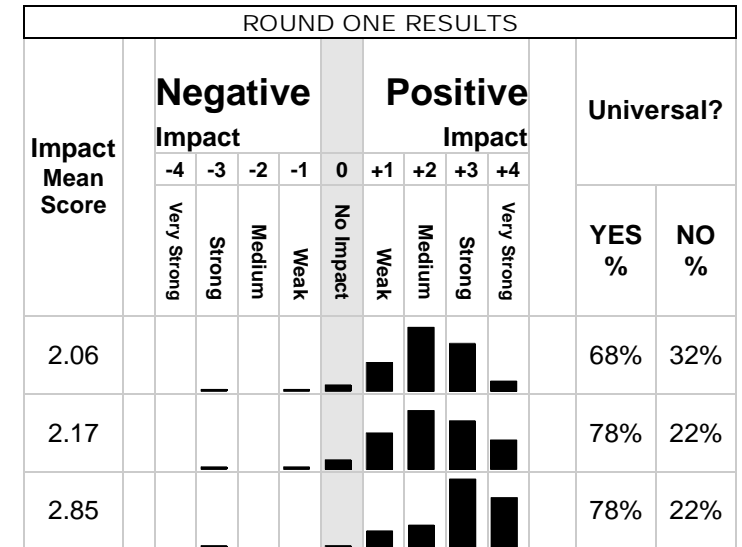
Part 1 Impact on Successful Health and Safety Performance

Please click or place a X in your chosen box

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Factor or 'Influencer'

Factor or 'Influencer'	Negative Impact				No Impact	Positive Impact				Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	YES	NO
50 Regulators provide practical diagnostic tools and measures of performance on risk management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51 Regulators taking an active interest in how a business's culture affects its management of risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52 Organization has an individual in top management accountable for health & safety performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Part 2 Impact on Successful Overall Business Performance

Part 2 Impact on Successful Overall Business Performance

Please click or place a X in your chosen box

[To add comments, please click on text below and type at cursor]

Factor or 'Influencer'

Factor or 'Influencer'	Negative Impact				No Impact	Positive Impact				Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	YES	NO
53 Organization has a clearly communicated statement of its values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54 Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55 Responsibility for health & safety is delegated entirely to health & safety specialists/advisors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56 Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57 Workers understand their own job, but not how it relates to the work of others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58 Organization ensures employees behave consistently with company rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59 Jobs give workers day-to-day discretion and control (autonomy) over their work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60 Organization uses a consistent approach to risk assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61 Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62 Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63 Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ROUND ONE RESULTS												
Impact Mean Score	Negative Impact				0 No Impact	Positive Impact				Universal? YES % NO %		
	-4	-3	-2	-1		+1	+2	+3	+4			
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong			
2.63											88%	12%
2.51											77%	23%
-1.14											91%	9%
2.04											93%	8%
-1.32											80%	20%
2.16											90%	10%
2.14											93%	8%
1.95											73%	27%
2.50											81%	19%
-2.30											80%	20%
1.88											79%	21%

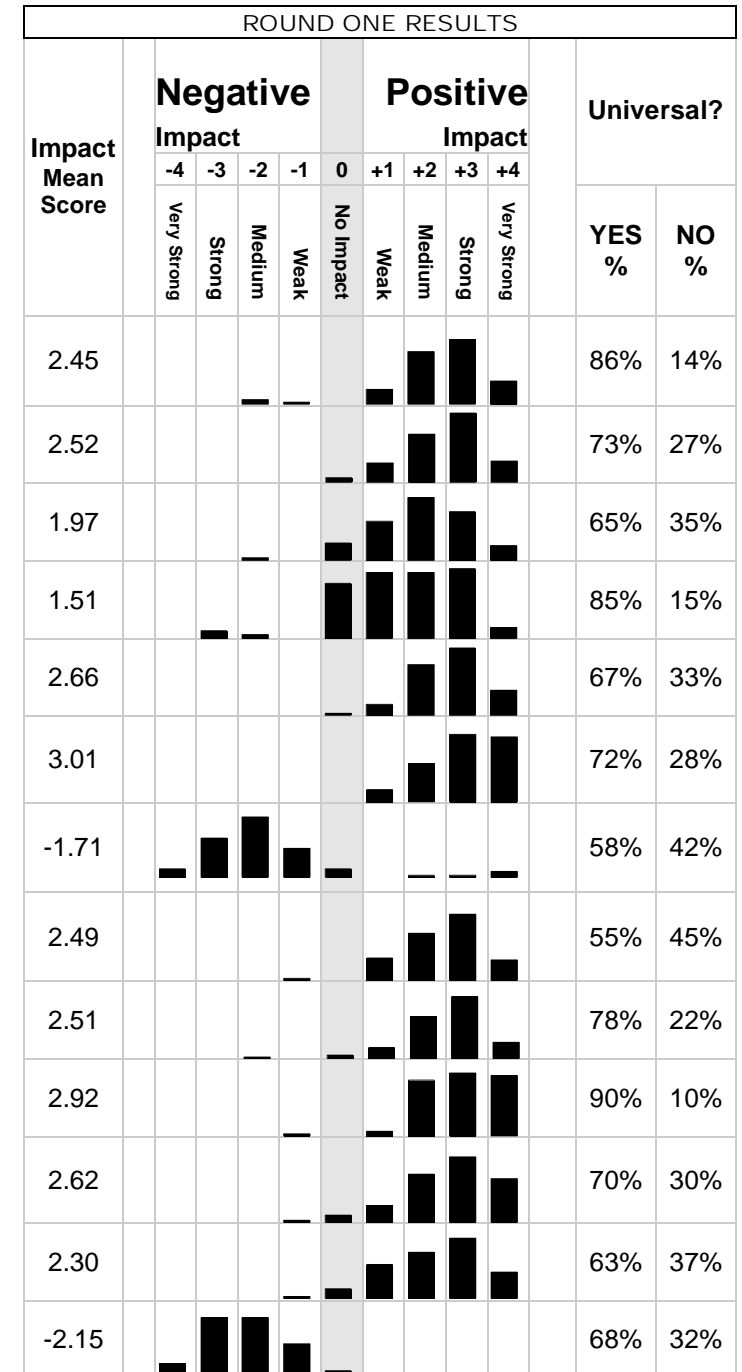
Part 2 Impact on Successful Overall Business Performance

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Factor or 'Influencer'

	Negative Impact				No Impact	Positive Impact			Universal? (Applicable to all types of organization?)		
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	YES	NO
64 Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65 Organization has a comprehensive formal system for managing maintenance (e.g. of plant, buildings)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
66 Performance assessment includes clear and measurable health & safety targets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
67 Public reporting of the organization's health & safety performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
68 Organization has formal procedures for actively capturing and retaining tacit knowledge (e.g. 'corporate memory')	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
69 Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70 Organization discourages workers from doing more than the minimum needed to comply with rules and regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
71 Organization has regular, structured, internal review and audit processes which include health and safety (e.g. workplace inspections)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
72 Organization gives prompt feedback to workers following reviews, audits and inspections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
73 Everyone is encouraged to share and discuss issues openly and feels their views are valued	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
74 Organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
75 Organization has "No blame" internal reporting of incidents (e.g. near misses, violations of procedures)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
76 Everyone has their own job and keeps their nose out of everybody else's business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



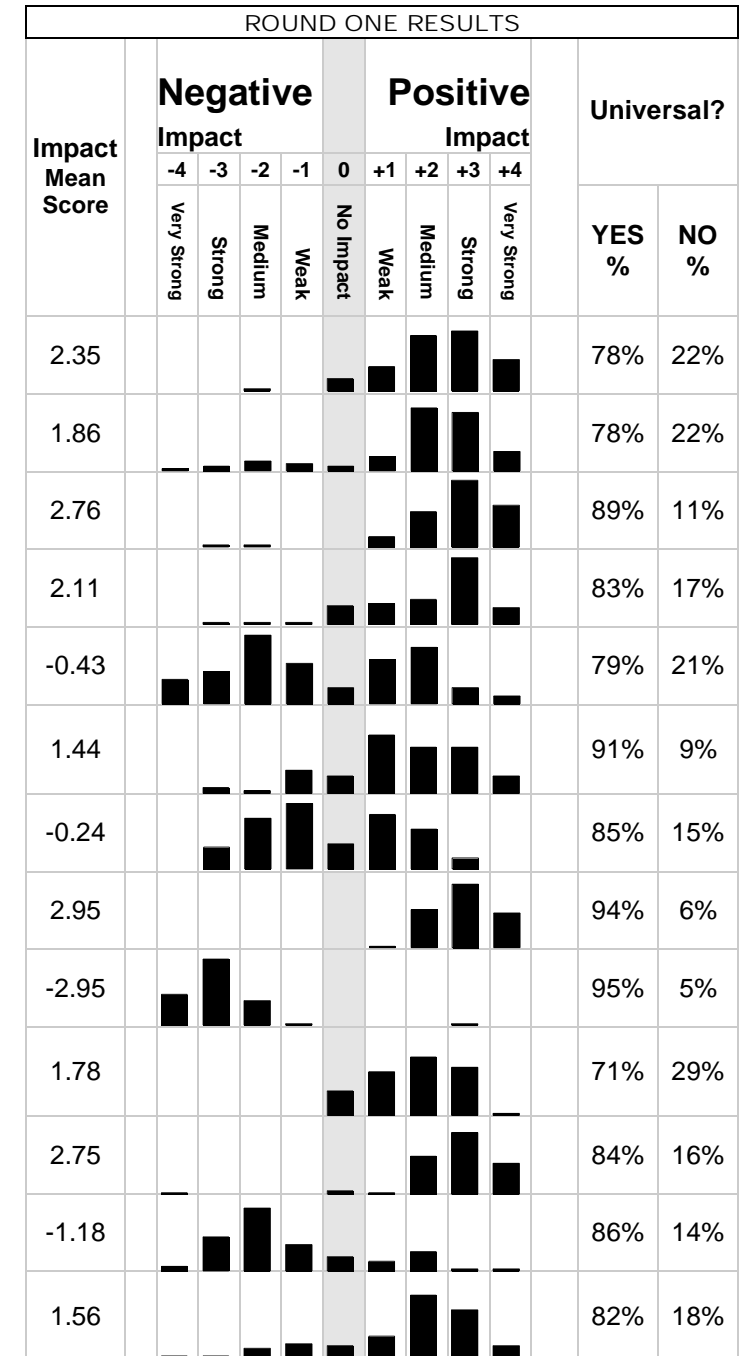
Part 2 Impact on Successful Overall Business Performance

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Factor or 'Influencer'

Factor or 'Influencer'	Negative Impact				No Impact	Positive Impact				Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	YES	NO
	77 Organization perceives health & safety outcomes as important to business success	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
78 Organization gives rewards linked to meeting individual productivity/profitability targets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
79 Workers, supervisors, middle and senior managers are all involved and engaged in decision-making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
80 Worker representatives are involved in planning and implementing policies and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
81 Organization has environment in which the priority is to get the work done, by whatever means necessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
82 Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
83 Training is focused solely on the immediate job requirements including relevant safe working practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
84 Workers are trained and encouraged to identify and solve job-related problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
85 The job requirements exceed worker competence (capabilities and training)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
86 Use of agreed, cross-industry criteria to assess competence, with procedures in place to review and maintain standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
87 Organization employs people with the specialist knowledge it needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
88 Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
89 Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



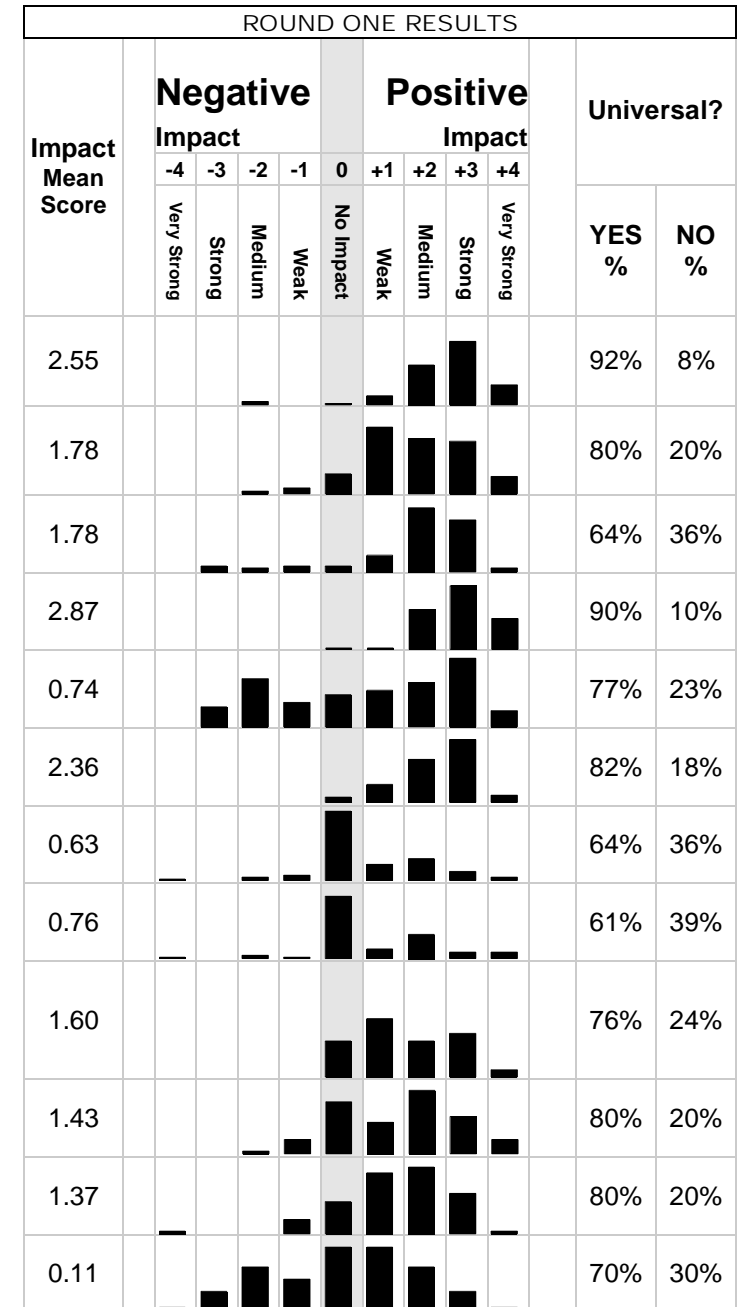
Part 2 Impact on Successful Overall Business Performance

Please click or place a X in your chosen box

[To add comments, please click on text below and type at cursor]

Factor or 'Influencer'

	Negative Impact				No Impact	Positive Impact				Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	YES	NO
90 Organization uses employment practices that promote work flexibility for employees and encourage workforce stability and commitment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
91 Organization supports and encourages staff (e.g. by incentives such as time-off or vouchers) to engage in health and well-being activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
92 The adoption of management philosophies such as 'lean production', 'just in time'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
93 Wise investment in modern capital equipment (from office equipment to manufacturing plant)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
94 Organization operates in a market with intense competition from rivals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
95 Organization benchmarks its performance against others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
96 Organization operates in a European market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
97 Organization operates in a global market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
98 Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
99 CEOs/directors liable to receive personal sanctions for violation of legal duties and regulatory standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
100 Involvement of external specialists in assessing compliance with legal duties and regulatory standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
101 Regulators prescribe the process for managing risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



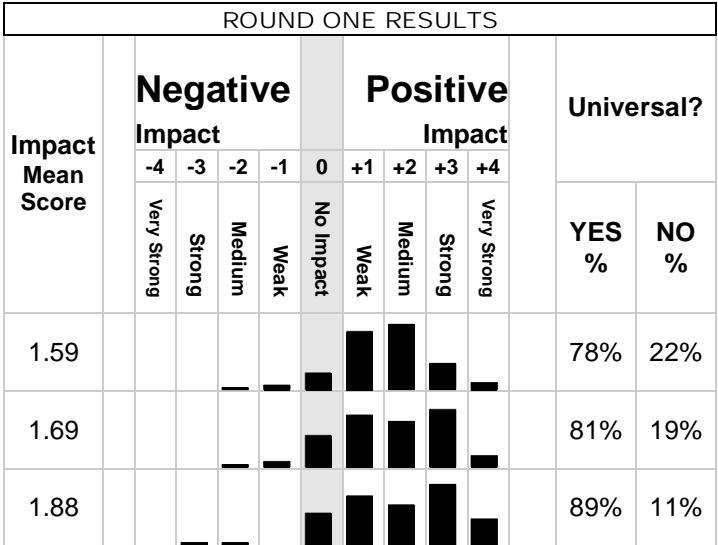
Part 2 Impact on Successful Overall Business Performance

Please click or place a X in your chosen box

[To add comments, please click on text below and type at cursor]

Factor or 'Influencer'

	Negative Impact				No Impact	Positive Impact				Universal? (Applicable to all types of organization?)	
	Very Strong	Strong	Medium	Weak		Weak	Medium	Strong	Very Strong	YES	NO
102 Regulators provide practical diagnostic tools and measures of performance on risk management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
103 Regulators taking an active interest in how a business's culture affects its management of risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
104 Organization has an individual in top management accountable for health & safety performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Part 3 Please indicate your agreement or disagreement with each of the following statements

Please click or place a X in your chosen box. [To add comments, please click on text below and type at cursor]		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
105	Health and safety and productivity/profitability are in competition with each other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
106	Occupational health and safety should be viewed as an integral part of productivity, competitiveness and profitability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
107	The nature of the business (sector and complexity) significantly influences an organization's attitude and approach to health & safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
108	The business benefits of health and safety justify the business costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
109	A positive health and safety culture is important to the overall success of an organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
110	The factors for business success are generally the same regardless of the size of a business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
111	HSE should provide different advice on health and safety management for small/uncomplicated and for large/complex organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ROUND ONE RESULTS					
Mean	1	2	3	4	5
	Strongly Disagree	Disagree	Neither Agree/Disagree	Agree	Strongly Agree
2.11					
4.53					
3.99					
4.03					
4.38					
3.27					
3.79					

Part 4 Please add any comments you may have including, if you wish, your reasons for your judgement on any particular factor or statement. If you chose not to respond to any statement, it would be useful if you could indicate why. When you are commenting on individual factors/statements included in the questionnaire, please give the item number.

To add comments, please click here

Thank you very much for your assistance on the Expert Panel and completing this questionnaire.

Please return the completed questionnaire, using the reply-paid label, to Penelope Mullen, Health Services Management Centre, University of Birmingham, 40, Edgbaston Park Road, Birmingham B15 2RT, or by email to p.m.mullen@bham.ac.uk to arrive on or before **Thursday 21 August 2008.**

New University Headed Paper

ID:

Dear

Delphi Study on “Effective Management for Successful Health and Safety Performance”

Thank you very much for your responses to Round 2 of this study. They will be very valuable for the study and the overall project.

As you may be aware, in an Expert Delphi Study, while we are looking for areas of agreement, aspects on which there is disagreement between the panel members are of great interest.

In particular, responses which remain ‘outliers’ after successive rounds, especially where there is general agreement among other respondents, can be of special interest. Such ‘outlier’ responses can result from the fact that the respondent has particular knowledge, experience and/or expertise in that area.

Therefore, in order to attempt to tap into that special knowledge and expertise, and in line with frequent practice in Delphi studies, I am approaching respondents who have ‘outlier’ responses on one or more factors/statements to ask if they wish to give any information, explanation or other reasoning behind those responses.

Accordingly I attach a sheet showing the range of Round 2 responses for each of the relevant factors/statements identifying your individual response (red arrow). I should be very grateful if you could send me (mail or email: p.m.mullen@bham.ac.uk) any information or other reasoning supporting your ‘outlier’ response to these factors. Details of respondents will be kept confidential to me. However, if you are happy for your name to be associated with your response in the final report, where that is relevant, please let me know.

All data has been triple checked but I apologise if any errors remain. If you do not wish to respond or if an error has been made, it would be helpful if you would let me know.

I look forward to hearing from you.

Yours sincerely,

Penelope Mullen
Senior Lecturer

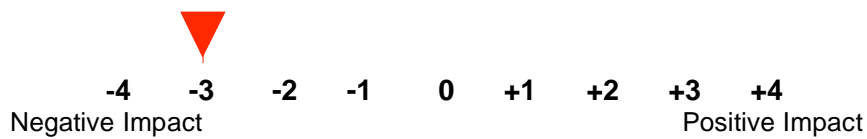
Specimen Example

Panel Member ID

Part 1

Impact on Health and Safety Performance

- 46 Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)



Part 2

Impact on Business Performance

- 78 Organization gives rewards linked to meeting individual productivity/profitability targets



Part 3

Agreement/Disagreement with Statements



- 108 The business benefits of health and safety justify the business costs





Appendix G



Parts 1& 2 Impact Factors

(Please Note: The numbers before each comment are unique to each panel member – ie the same number refers to the same panel. Please note these are not the panel member IDs used in the study and only the researcher has the key to link these numbers to individual panel members)

1 Organization has a clearly communicated statement of its values							
Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.47	1.268		82%	2.64	1.146		81%
<p>Comments on Impact on Health and Safety Performance:</p> <p>[9] In my experience a clearly communicated statement of values serves as a common ground especially in global and multinational companies or companies with a wide range of different activities. However, when it comes to proof, i.e. during internal audits only the employees of those divisions can name values that have transformed these general values into specific values tied to their area of activity.</p> <p>[20] On its own it is weak.</p> <p>[45] Although important, actions speak louder than words</p> <p>[53] honesty?</p> <p>Comments on Impact on Business Performance:</p> <p>[9] Code of conduct may have a small influence on investors and share holders.</p>							

2 Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)							
Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
3.56	.747		97%	2.75	.909		95%
<p>Comments on Impact on Health and Safety Performance:</p> <p>[9] Employees usually try to mirror or at least take into account their superiors' attitudes. Otherwise leadership would not work. That applies also to health & safety commitment.</p> <p>[30] I think in theory this should have a strong positive impact, but in reality is subject to high levels of employee cynicism</p> <p>[44] This depends on their followup actions which could result in outcomes at either end of the spectrum.</p> <p>[46] This is much more important for organisations where H&S is a vital component of an organisation's operations</p> <p>Comments on Impact on Business Performance:</p> <p>[9] Visibility of management increases performance in all areas.</p> <p>[29] In general most things that are bad for h and s are bad for business and vice versa,,,,</p>							

3 Responsibility for health & safety is delegated entirely to health & safety specialists/advisors

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-2.68	1.361		83%	-1.46	1.501		84%

Comments on Impact on Health and Safety Performance:

[9] Management should feel and demonstrate a clear responsibility for health and safety issues. Expert advice may be useful and crucial in some instances but can not replace management commitment and expertise.(Round 1)

[9] It is helpful to have expert advice but that is not sufficient for implementation of health & safety. However, I appreciate mandatory education or courses for health & safety advisors which are supervised by the government, an agency or a Health and Safety Board (similar to German system) (Round 2)

[29] Health and safety must be a line management function with the professionals providing the professional advice

[46] Everybody has a role to play

[55] Small businesses can still have a successful health & safety system without large amounts of paperwork & systems. Re Q3 Tend to find that the business does not then understand H&S not its responsibilities,

Responses in respect of Outliers (H&S) Factor 3:

[47].{Score = +3} Within an enforcement organisation which is populated by personnel with expertise the focus on a specific aspect such as a health and safety specialism is respected as bringing a high degree of concentration within the organisation and, as such, considered to have a positive impact.

4 Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
0.98	1.638		69%	1.98	1.813		84%

Comments on Impact on Health and Safety Performance:

[9] In large and complex organisation a certain excess of resources in health and safety staff is necessary to ensure back-up and continuity as issues may arise unexpectedly. A certain overlap is necessary in order to maintain an interface between health and safety staff and contact persons within the organisation. Processes should be designed in such a way that they support and do not hinder health and safety activities. Sometimes administration tends to develop into a self-sufficient enterprise instead of serving the larger organization. (Round 1)

[9] A certain redundancy is necessary to cover for staff on leave and to ensure an interface between health & safety personnel and other departments. (Round 2)

[14] not sure what is meant

[29] Question needs more clarification in terms of what is meant. Simplifying can be beneficial. But too much stripping out of redundancy can lead to problems e.g. if expert is away etc.

[30] I feel this would have a very strong positive impact, but in reality - is this ever achievable?!

[67] Circled Organization eliminated and 'at all levels" ???

[104] Silo mentality within business is not a healthy approach to business or to Risk Management within business. Within RM there are many 'specialisms' such as H&S, Information Security, Operational Risk, Business Continuity, Compliance, Audit etc. However, working in silos affects all specialisms in a negative way, in terms of sharing information, providing a consolidated view to the business etc.

Comments on Impact on Business Performance:

[9] Lean is not necessarily healthy

Responses in respect of Outliers (H&S) Factor 4:

[18] {Score = -2} Where I judge the removal of duplication and overlap to be negative for safety. In this I follow the increasing evidence from what has come to be called Resilience engineering (see the work of Hollnagel, Woods, Cook, Wreathall, Nemeth and others). Organisations which are particularly vulnerable to major disruption and disaster are those which have eliminated the necessary redundancy to react flexibly to unexpected circumstances. The High Reliability Organisation literature also shows that deliberate overlapping of tasks, so that each is also the other's minder, is also an excellent way of picking up incipient errors and deviations and correcting them before they get too far to produce harm. This does not mean that there should be confusion about whose primary responsibility a task is, simply that back-up is a big safety feature. I therefore maintain my judgement on this item - and would rather make it more extreme than move towards the consensus, which I see as being based on a wrong conception of risk control, based on a wrong and overoptimistic interpretation of notions of efficiency.

[28] {Score = -3} High reliability organizations accept redundancy in resources and processes as a means of double checking on assumptions about safe operation

[94] {Score = -2} I scored this as a negative impact because many organisations do not have a clear idea of where they need defence in depth (redundancy and diversity) with regard to skills and resources. Hence, they reduce what is perceived to be duplication without a full understanding or knowing when and why to stop. It is well established in engineering systems design that achievement of high reliability demands

redundancy and diversity. The same concept can be applied to organisational system design. It should be a considered decision to have some measure of redundancy/diversity of skills and resources as opposed to simply being overstaffed.

Responses in respect of Outliers (Business) Factor 56:


[16] {Score = -4} I am concerned whenever I see an organisation that is too efficient. H&S is too important to rely on a single line of responsibility. There should be duplication and overlap to ensure certainty of cover – the slogan used to be “health and safety is everyone’s business”.

[23] {Score = -2} I [just] think no overlap and duplication could leave an organisation vulnerable to loss of key staff or expertise

[42] {Score = -1} The positive side would be clarity about roles, responsibilities & accountability, but I saw the negative aspect as taking things to the limit (“eliminated”) by removing all redundancy in the mgt system. The real world is never entirely tidy (mine isn't for sure!), and if we're trying to get people to take shared responsibility for risk mgt and promote ownership, then anything that could hint at a silo mentality could be counter-productive.

[89] {Score = -3} I am not sure that elimination of **all** duplication could be shown to be unequivocally linked to business performance; indeed, without any redundancy (i.e. slack) in systems it could on occasion prove negative.

5 Workers understand their own job, but not how it relates to the work of others

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-1.74	1.418		90%	-1.79	1.272		88%

Comments on Impact on Health and Safety Performance:

[9] Accidents and incidents often occur at interfaces between different functions in the same organization or when workers from different companies share the same work place (e.g. construction sites).

[21] something missing (in wording?)

[29] Big picture often important in explaining to workforce why their job is so important. Means they are more likely to do it conscientiously... But this will depend on job etc

[104] As with item 4, this promotes further the silo approach which is against good business and business performance.



Comments on Impact on Business Performance:

[30] this is dependant on job design - some jobs may not require

Responses in respect of Outliers (H&S) Factor 5:

[34] {Score = +1} The nature of the population I work with has some particular cultural and unique characteristics. My out lying response is prompted by some of the characteristics referred to above my organisation has some very diverse working populations, but the largest are the 140,000 or more whose role involves walking up paths to reach the UK's 28million addresses each day, and driving the 1.8million miles we cover each day - and this is where our principal safety performance issues arise - slips/ trips and falls or road accidents mainly. To all intensive purposes these are peripatetic lone workers and hence have to understand their own jobs and its risks, but they have little interaction or need to understand other workers jobs - which have little or no impact on their risks or risk control when they work effectively as autonomous singletons. I could answer this question differently for different parts of the organisation - I probably would align more closely to the norm for workers for example in one of our "factory" processing centres but as I have more workers in the role described above then. my response here driven by characteristics of largely a workforce working as single workers

6 Organization ensures employees behave consistently with company rules

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.71	.760		97%	2.39	1.078		91%

Comments on Impact on Health and Safety Performance:

[16] Some organisations (airlines, railways, nuclear plants) depend on adherence to rule, but all also benefit from flexibility and creativity.

[28] If rules = procedures, then there is a +ve impact. If rules refers only to behavioural safety, much less impact.

[29] Positive so long as rules are ok!!!

[44] provided the rules are mutually accepted

[45] Depends if they are good or bad rules

[59] As long as they are perceived as appropriate.

[62] As long as rules fair and subject to workforce consultation, drafting and legitimate "Buy-IN" If imported – forget it.

[87] This might be extremely difficult to achieve in larger more diverse organisations with multiple outlets and remote workers so my response is idealised. For this to have a positive impact, company rules must be sensible

[94] but it depends on adequacy of rules!

Comments on Impact on Business Performance:

[16] Some organisations (airlines, railways, nuclear plants) depend on adherence to rule, but all also benefit from flexibility and creativity.

[30] I think there is a role for innovation in successful business performance

[64] This can sometimes slow work but is necessary for H&S

7 Jobs give workers day-to-day discretion and control (autonomy) over their work

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
1.85	1.278		68%	2.33	.861		86%

Comments on Impact on Health and Safety Performance:

[6] Only positive is workers are very competent and have strong safety culture

[9] Depends upon risk scenario, i.e. not feasible for COMAH/SEVESO plants (Round 1)

[9] That is not applicable in all areas: Seveso sites, nuclear power plants and even health services/hospitals are restricted to following certain procedures. However where appropriate a free choice increases workers' satisfaction. (Round 2)

[16] Some organisations (airlines, railways, nuclear plants) depend on adherence to rule, but all also benefit from flexibility and creativity.

[29] Can be positive - less stress etc. But could encourage potentially risky shortcuts etc. So depends on training and framework within which discretion is given

[44] provided they are involved in designing their work process



[62] As long as consequences of failure are understood.

[87] There are cases when this would enhance H & S performance but others when the individuals judgement may be flawed and thus have a detrimental affect

Responses in respect of Outliers (H&S) Factor 7:

[57] {Score = -1} In my experience when workers have autonomy there is a slightly higher chance that health and safety will be overlooked with other job factors having higher priority. For example such autonomy gives workers authority to overcome problems and find solutions to get on with the job, the primary objective being to complete the work. This can result in health and safety being inadvertently overlooked, or risks not being as robustly assessed, resulting in a slight negative impact on health and safety performance. To put this in to context my current company gives workers a high degree of autonomy and I have found that, at times, this can have an adverse impact on healthy and safety. This can be compared to workers who have little autonomy and carry out work as instructed and in accordance with well established safe working procedures. It is perhaps when the work undertaken has not been done before and carries an element of risk and has been inadequately risk assessed (if at all). However, I do personally accept this slightly higher risk as the overall benefits and employee motivation are higher.

8 Organization uses a consistent approach to risk assessment

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.68	1.205		95%	2.29	1.099		95%

Comments on Impact on Health and Safety Performance:

[9] Different approaches may lead to weak links and gaps in the general safety level.

[13] I have not responded to Q8 + Q60 (ie 'organisation uses consistent approach to risk assessment'). The organisation approach can be consistently good/bad/or indifferent (ie +v, -ve, or no impact). The test required in law is whether Risk Assessments are 'sufficient + suitable'.

[20] Answer is 'strong' if assessments are suitable and sufficient. Depends on the suitability + sufficiency of the assessment.

[29] Can be positive - less stress etc. But could encourage potentially risky shortcuts etc. So depends on training and framework within which discretion is given

[45] Try to use same approach for every hazard and it doesn't work

[53] Good or bad?

[62] As long as the RA processes is robust

[87] More important for larger concerns where there is less personal contact

[94] Again depends on scope/adequacy



Comments on Impact on Business Performance:

[13] I have not responded to Q8 + Q60 (ie 'organisation uses consistent approach to risk assessment'). The organisation approach can be consistently good/bad/or indifferent (ie +v, -ve, or no impact). The test required in law is whether Risk Assessments are 'sufficient + suitable'.

[20] Answer is 'strong' if assessments are suitable and sufficient. Depends on the suitability + sufficiency of the assessment.

[25] 60 & 63 are difficult to answer well eg ISO 9001 may be an essential to compete in one industry – whereas 18001 may be irrelevant to business advantage.

9 Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
3.42	.658		95%	2.75	.909		95%

Comments on Impact on Health and Safety Performance:

[9] In times of rapid change and flexible organizations management of change becomes increasingly important.

[20] Comments as above - Answer is 'strong' if assessments are suitable and sufficient. Depends on the suitability + sufficiency of the assessment.

[29] Generally necessary but importance variable



[62] Only needed in high risk/high hazard plants. In lower risk plants – only when a high risk situation changes. People want to see appropriate resource usage.

Comments on Impact on Business Performance:

[20] Comments as above - Answer is 'strong' if assessments are suitable and sufficient. Depends on the suitability + sufficiency of the assessment.

[64] Doing this minimises longer-term risks but may slow work in short-term.

10 Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-2.45	1.246		96%	-2.38	1.134		95%

Comments on Impact on Health and Safety Performance:



[9] Different cultures of handling issues develop. General risk level increases if communication channels are not established

[29] Stifles creativity and likely to lead to stress and consequential errors

Responses in respect of Outliers (Business) Factor 62:

[63] {Score = +1} Whilst there are benefits to informal communication between staff, I believe that if not limited this can lead to...

11 Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
1.77	1.332		52%	1.88	1.279		55%

Comments on Impact on Health and Safety Performance:

[9] Any kind of formal documentation contributes to a systematic description but if it is not kept up-to-date or if it is designed by (external) experts and not implemented in the procedures of the organization it will not support the health and safety management system.

[25] Some questions (e.g. No.11) invite respondees to interpret them too much – which affects the response. I replied positively to Q11 – though if the targets were about not exceeding an accident quota my answer would have been more negative.

[29] Help to specify controls and monitoring etc. But not the only method or nec. the most cost effective

[62] I have prosecuted several organisations who slavishly follow a SMS structure because the SMS structure is itself inadequately structured.

[94] The culture behind their application is more important

Comments on Impact on Business Performance:

[25] 60 & 63 are difficult to answer well eg ISO 9001 may be an essential to compete in one industry – whereas 18001 may be irrelevant to business advantage.



[27] It puts all depot/region on the same playing field

[29] selling point

Responses in respect of Outliers (H&S) Factor 11:

[11] 11 {Score = -2} Contrary to what is the general belief I have seen and heard in companies a negative impact on Health and Safety performance. The reasons are as follows: 1) These management systems do not target safety and health performance, but in general quality. Also managers reported to me that if these systems have to be implemented, the task in general goes to the HSE manager, taking valuable resources away from health and safety activities. Furthermore being able to keep the certificate has then become a more important goal then actually improving health and safety performance, since these are in general not indicators of the certified system, again taking away valuable resources. Therefore I stand by my opinion that these systems have a negative impact.

12 Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.82	.705		81%	2.70	.920		90%

Comments on Impact on Health and Safety Performance:

[16] Targets can become a substitute for the real goal. – compare with Q4– method statements do not suppress creativity.

[20] Stress on ‘well-designed’



[29] Ok but creativity shouldn’t be lost ... good to couple with system for feedback of good ideas for improving work method, Not set in stone

[45] Can be carried too far - procedures for everything rather than workers who know what to do

Responses in respect of Outliers (H&S) Factor 12:

[31] 12 {Score = 0} My rationale is that there is more to life that procedures and standards. I think people need to be competent, know how to do the job, recognise the hazards but I am wary of pinning this on procedures - because historically when people have focused on this they forget about experience, competence, training and supervision.

13 Organization has a comprehensive formal system for managing maintenance (e.g. of plant, buildings)

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.88	.713		76%	2.81	.794		79%

Comments on Impact on Health and Safety Performance:



[29] Especially important in preventing risks such as legionella but also important re routine tasks such as access to heights

[87] More important for larger organisations

Comments on Impact on Business Performance:

[87] More important for larger concerns

14 Performance assessment includes clear and measurable health & safety targets

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.86	1.223		81%	2.03	1.267		73%

Comments on Impact on Health and Safety Performance:

[6] Prefer 'indicators' rather than actual 'targets'. Targets can produce wrong mind of behaviour.

[20] Depends on 'quality' of targets.

[29] Yes but I hate HPAs!!!

[30] merely the process of identifying/defining targets can help focus peoples attention and produce improvements etc

[46] May again be more applicable to some organisations than others



[87] Often fudged and encourages under - reporting

[94] but depends on scope and adequacy

Comments on Impact on Business Performance:

[30] merely the process of identifying/defining targets can help focus peoples attention etc

15 Public reporting of the organization's health & safety performance

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.09	.972		41%	1.71	1.156		56%

Comments on Impact on Health and Safety Performance:

[9] Especially companies active in the same branch may use these indicators as benchmarks. (Round 1)

[9] That can be useful for benchmarking and also attract ethical investors (Round 2)

[28] Reporting injury stats can drive perverse behaviour

[29] Smaller organisations less likely to be bothered

[30] organisations value their reputations. It is easy for organisations to claim anything, but public reporting should be more transparent etc

[87] Too remote from the sharp end to have significant impact

[94] Depends what they are reporting eg BP/Texas City - misleading

Comments on Impact on Business Performance:

[9] That might act as an incentive for investors and competitors.



[27] Depends is a positive/negative H&S performance

[30] (due to consistency between approaches to all aspects of business)

[53] good if good/bad if bad

[64] Not so relevant for small organisations

16 Organization has formal procedures for actively capturing and retaining tacit knowledge (e.g. 'corporate memory')

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.82	.950		69%	2.68	.864		69%

Comments on Impact on Health and Safety Performance:

[9] Personally, I myself have more experienced the lack of that

[87] The concepts of "Tacit Knowledge" and "Corporate Memory" are too tenuous for me to comment upon



Comments on Impact on Business Performance:

[30] (not sure how this could work in practice)

[64] Not so relevant for small organisations

[87] The concepts of "Tacit Knowledge" and "Corporate Memory" are too tenuous for me to comment upon

17 Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
3.52	.563		95%	3.23	.684		95%

Comments on Impact on Health and Safety Performance:

[9] Knowledge is often gathered but actions are often delayed or omitted for different reasons.

[29] Really important and not done frequently enough - especially between organisations. We could do much more of pabnig example relating to fatals. Near miss learning culture also very important

[104] This item mentions 'lessons learned' which should have some kind of warning when conducting this. We will typically run a lessons learned exercise on completion of a project and after an incident or near miss, however we often, both in our personal life and in business do not learn - continuing to make the same mistakes. Also practice doesn't always make perfect, except maybe practicing at making the same mistakes time and again. It is what we do with the knowledge that is key - action v exercise. Yes do the exercise, but make sure it is followed up with action, and the right action.

Comments on Impact on Business Performance:

[104] This item mentions 'lessons learned' which should have some kind of warning when conducting this. We will typically run a lessons learned exercise on completion of a project and after an incident or near miss, however we often, both in our personal life and in business do not learn - continuing to make the same mistakes. Also practice doesn't always make perfect, except maybe practicing at making the same mistakes time and again. It is what we do with the knowledge that is key - action v exercise. Yes do the exercise, but make sure it is followed up with action, and the right action.

18 Organization discourages workers from doing more than the minimum needed to comply with rules and regulations

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-2.64	1.200		95%	-2.00	1.480		84%

Comments on Impact on Health and Safety Performance:

[9] That leads to a "why should I bother?" attitude.

[29] Question needs more clarification... Sometimes doing more without adequate knowledge can be detrimental. But conversely only doing the minimum in terms of their rules etc. not conducive to best practice

[77] Don't really understand That factor often leads to accidents and incidents

Comments on Impact on Business Performance:

[37] Just achieving compliance is a dangerous tactic that may provide short term benefit or may be a disaster.

19 Organization has regular, structured, internal review and audit processes which include health and safety (e.g. workplace inspections)

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
3.20	.769		76%	2.66	.840		66%

Comments on Impact on Health and Safety Performance:

[9] That increases also sharing of knowledge and good practice. It also provides incentives to management to take care of health and safety issues. It also raises the visibility of health & safety staff within top management.

[20] Only 'strong' if they are 'qualitative' too.

[29] Interesting questions here re cost effectiveness. Line management monitoring probably more important

[45] Workplace inspections are not the same as audits

Comments on Impact on Business Performance:

[30] don't feel this necessarily affects employee behaviours - people just get better at faking it. Needs to be linked to other practices.

[64] Not so relevant for small organisations



[104] Health warning in terms of Internal Audit approach - as can have a negative impact if the approach taken by Audit is not one of constructive / working together. Audit can demand to look at evidence, but if perceived negatively they will loose co-operation and therefore less likely to be provided with anything over and above what they request (something they don't know about).

20 Organization gives prompt feedback to workers following reviews, audits and inspections							
Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.92	1.269		93%	2.71	.831		88%
<p>Comments on Impact on Health and Safety Performance:</p> <p>[44] Feeding back results of the inspection etc followed by inaction yields a negative impact</p> <p>[94] Needs to be open "warts & All"</p> <p>Comments on Impact on Business Performance:</p> <p>[30] builds trust between employers/organisation</p>							

21 Everyone is encouraged to share and discuss issues openly and feels their views are valued							
Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
3.41	.632		98%	3.08	.822		95%
<p>Comments on Impact on Health and Safety Performance:</p> <p>[45] Even if encouragement is stated, employees often don't believe it</p>							

22 Organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity							
Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
3.48	.793		98%	2.95	.805		97%
<p>Responses in respect of Outliers (H&S) Factor 22:</p> <p>[47].{Score = 0} The "Don't walk by" culture is not applied within the organisation and consequently neither seen to be positive or negative. I have no doubt that should this or a similar system prevail then no management animosity would accrue and the impact would be positive.</p>							

23 Organization has “No blame” internal reporting of incidents (e.g. near misses, violations of procedures)

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
3.06	1.065		97%	2.63	1.076		90%

Comments on Impact on Health and Safety Performance:

[2] to an extent but if a serious violation or repeat then a discipline process is required

[6] ‘Just blame’ not ‘no blame’ culture works best

[15] ‘No blame’ does not exist. Substitute ‘Fair Blame’ Near miss reporting should not attract discipline.

[77] I note the question(s) on “no blame”. This is a concept that is complex and has so many different outcomes. Would suggest a discussion of “Just culture” better.

[81] In the items relating to 'no blame' reporting, I have assumed that you mean no blame for 'honest' errors. In short, I am assuming the existence of a just culture where truly egregious unsafe acts are sanctioned.

[87] Pros and cons probable balance one another

Comments on Impact on Business Performance:



[2] subject to seriousness of incident



[77] I note the question(s) on “no blame”. This is a concept that is complex and has so many different outcomes. Would suggest a discussion of “Just culture” better.

[81] In the items relating to 'no blame' reporting, I have assumed that you mean no blame for 'honest' errors. In short, I am assuming the existence of a just culture where truly egregious unsafe acts are sanctioned.



Responses in respect of Outliers (H&S) Factor 23:

[6] {Score = -1} ‘Just blame’ not ‘no blame’ culture works best

24 Everyone has their own job and keeps their nose out of everybody else's business							
Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-2.75	.952		93%	-2.36	.861		86%
Comments on Impact on Health and Safety Performance:							
[45] Biased question							
[55] Colleagues and departments need to effectively communicate with each other. Eg procurement of equipment in order to 'design in' effective health and safety procedures.							
Responses in respect of Outliers (H&S) Factor 24:							
[47].24 {Score = +2} The positive impact arises from a recognition that within the compartmentalised professional expertise personnel are motivated to work to highest standards which, in the absence of intrusion is an expression of confidence in delegated responsibility with attendant positive influence.							

25 Organization perceives health & safety outcomes as important to business success							
Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
3.43	.637		91%	2.54	1.105		79%
Comments on Impact on Health and Safety Performance:							
[14] SMEs can achieve good H&S for other reasons – moral fear of enforcement							
[28] See Q.15 Reporting injury stats can drive perverse behaviour							
[46] For some more than others							
Comments on Impact on Business Performance:							
[29] Becoming more important with increased monitoring by those that commission services							
[46] Some more than others							

26 Organization gives rewards linked to meeting individual productivity/profitability targets

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-0.47	2.128		83%	2.05	1.485		73%

Comments on Impact on Health and Safety Performance:

[6] Need similar for H&S

[9] Can have a positive impact if health & safety goals are covered as well.

[16] Sensible targets do no harm, and good if they include H&S in productivity, dumb targets are harmful.

[29] May or may not have an impact on 'shortcutting and risk taking' depending on how it's applied. May be more negative than I've indicated or if properly applied could be positive

[44] if health and safety is intrinsic to these targets then....

[64] Depends on whether there is a balancing H&S component. Rewards should not be "perverse" to H&S.

[67] Depends how it is done

[94] Needs to be balanced with rewards for H&S.

Comments on Impact on Business Performance:

[27] Depends on how far you push

[59] Depends on industry involved.



[104] Caution in this area, as can sometimes promote bonus over quality and individual over corporate benefits. Again it can promote silo mentality and unhealthy internal business competition.

Responses in respect of Outliers (Business) Factor 78:

[19] {Score = -2} I'm afraid I can't produce real evidence to justify my negative score and I would, no doubt, have reduced my "confidence" indicator down from "Fairly" to "Not Very" - had there been an opportunity to do so. But justification for my negative position would have been as follows;

1. whilst I have often seen the negative impact of rewards for productivity on H&S, I have seen the effects of this approach on business performance as an employee where, in my limited experience (mainly as a civil servant) it has tended to undermine overall team performance.
2. I am happy to have been indoctrinated with the (HSE) policy that, "Good H&S is good business" - so having seen a negative impact on H&S it is logical for me to assume a similar impact on business performance.
3. it is my impression that the rewarding of individual success is now generally considered to be a bit "1980s" and that it has been displaced in business management practice, where possible, with schemes which reward team success.

27 Workers, supervisors, middle and senior managers are all involved and engaged in decision-making

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.91	.924		88%	2.84	1.087		88%

Comments on Impact on Health and Safety Performance:

[29] Depends of course on the decisions to be made - but generally involving staff is essential.

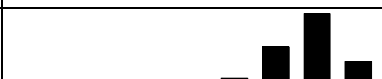

[45] depends on the kind of decision-making

[87] The "committee process" can cause delays when quick decisions are needed

Responses in respect of Outliers (Business) Factor 79:

[11] {Score = -3} Involvement of workers supervisors etc. in decision making I think this is a matter of debate and personal style. I do not believe it has a positive impact on business performance, a company is not a democracy where everybody gets an equal vote or there is equal representation. If it's the case then I think there is a negative impact. Eg the former Eastern European companies who were simply not viable due to their Socialist structure.

28 Worker representatives are involved in planning and implementing policies and procedures

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.74	.871		74%	2.39	1.136		82%

Comments on Impact on Health and Safety Performance:



[29] As above [ie 'Depends of course on the decisions to be made - but generally involving staff is essential'] benefits do assume (generally correctly) responsible committed reps.,

[45] can be negative or positive depending on the relationship and motivations

Comments on Impact on Business Performance:

[45] Depends on motivation of parties

29 Organization has environment in which the priority is to get the work done, by whatever means necessary

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-3.29	.824		97%	-0.92	2.242		88%



Comments on Impact on Health and Safety Performance:

[29] Almost by definition question suggests excessive risk taking

Comments on Impact on Business Performance:

[29] As with many of the questions and as outlined in h and s section depends on exact circumstances. Can do culture generally positive - total disregard for everything but getting the job done very negative

30 Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.98	1.102		97%	1.75	1.543		93%

Comments on Impact on Health and Safety Performance:

[2] if agreed after a risk assessment

[29] Generally good but can present problems - uninformed workforce getting things out of context etc
Certainly essential though that they feel able to - and do- raise their concerns

[30] I agree with this in theory- but appreciate the difficulties in implementing this in practice (employees need to feel confident that they are able to make that judgement etc)

[46] This could be beneficial in orgs where management are lax over H&S but perhaps not so where orgs take it seriously.



[104] Not sure if there were two separate items in this text, making the item more difficult to answer.

Comments on Impact on Business Performance:

[2] if confirmed following a risk assessment

[94] Potential negative to short term business performance

31 Training is focused solely on the immediate job requirements including relevant safe working practices

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-0.47	1.727		75%	-0.59	1.623		84%

Comments on Impact on Health and Safety Performance:

[9] Risk of losing motivated employees who could contribute to develop better working practices.

[19] whether statement 31/83 is a positive or negative influence will be highly dependent on the nature of the job and worker concerned

[27] agreed in principal but long term & future training is a must



[29] Importance depends on job ... doesn't allow any leeway for dealing with the unexpected in a safe and appropriate way

[45] Problem with question is the word solely - just in time training is the most effective but not the only training

Comments on Impact on Business Performance:

[19] Whether statement 31/83 is a positive or negative influence will be highly dependent on the nature of the job and worker concerned

32 Workers are trained and encouraged to identify and solve job-related problems

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.61	.926		95%	3.00	.816		95%

Comments on Impact on Health and Safety Performance:

[29] Again depends on situation. Could encourage introduction of risky procedures and solutions. But within limits and depending on knowledge of those involved could be positive

[87] Risk in larger organisations of unsafe solutions going unchecked

[94] Provided problems encompass H&S issues not just production



Responses in respect of Outliers (H&S) Factor 32:

[57] {Score = -1} This question is very closely related to ...7.... and hence my response is the same, i.e. "In my experience when workers have autonomy there is a slightly higher chance that health and safety will be overlooked with other job factors having higher priority. For example such autonomy gives workers authority to overcome problems and find solutions to get on with the job, the primary objective being to complete the work. This can result in health and safety being inadvertently overlooked, or risks not being as robustly assessed, resulting in a slight negative impact on health and safety performance.

"To put this in to context my current company gives workers a high degree of autonomy and I have found that, at times, this can have an adverse impact on healthy and safety. This can be compared to workers who have little autonomy and carry out work as instructed and in accordance with well established safe working procedures. It is perhaps when the work undertaken has not been done before and carries an element of risk and has been inadequately risk assessed (if at all). However, I do personally accept this slightly higher risk as the overall benefits and employee motivation are higher."

[11] {Score = -1} I can not name the references, but I have read and heard from sources within industry that there is indeed a negative impact on health and safety performance, the reason being that workers start doing jobs for which they have not being trained eg an operator trying to resolve a technical problem of a machine and then getting involved in an incident, because it was a job for maintenance staff. In fact in general **most** of the accidents happen because workers were doing activities outside their core job, eg secretary's falling from heights and killing themselves or breaking things. (this happens because they put a chair on a table to exchange a lightbulb or try to decorate the room because of a birthday!) etc.



33 The job requirements exceed worker competence (capabilities and training)

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-3.18	1.201		98%	-3.14	.870		98%

Comments on Impact on Health and Safety Performance:

[9] Major cause for work related accidents and incidents, even work related diseases.

34 Use of agreed, cross-industry criteria to assess competence, with procedures in place to review and maintain standards

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.25	.867		78%	1.86	.931		61%

Comments on Impact on Health and Safety Performance:

[30] I think this is ultimately the only way to make organisations' H&S performance transparent/comparable (and therefore noteworthy).

[41] Requirements for differing sectors definition of competence means that cross industry comparatives are not always appropriate in all cases but in others can be extremely useful.

[64] Not clear what this question implies



[67] Agreed with whom?

[94] Depends on adequacy. Beware "one size fits all"

Comments on Impact on Business Performance:

[41] Requirements for differing sectors definition of competence means that cross industry comparatives are not always appropriate in all cases but in others can be extremely useful.

35 Organization employs people with the specialist knowledge it needs

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.69	.999		95%	2.95	.805		96%

Comments on Impact on Health and Safety Performance:

[6] In-house awareness 'intelligent customer' but not necessary for specialist to be directly employed. Question is confusing.

[14] Assume employ means that, not engage as contractors

[29] Direct employment of such individuals not the only method of getting the expertise

[64] Partly depends on whether there is a good management of organisation change system.

[67] employs or sources competent advisors



Comments on Impact on Business Performance:

[29] Does this mean employs in broadest sense (including buying in expertise) in which case more positive than indicated

[45] Don't necessarily need to be employees

[104] Could be confusing text as may suggest simply employing those with the necessary knowledge, rather than also taking the approach of training existing staff.

36 Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-2.29	1.011		79%	-1.43	1.614		84%



Comments on Impact on Health and Safety Performance:

- [6] Can't rate. Situation is an opportunity for good or bad impacts depending on how it is managed.
- [9] leads often to organizational and individual stress which may increase the number of work place accidents and sick leave.
- [20] Depends on how well change is managed
- [29] Introduces potential risks but these can be controlled
- [62] General true but in well managed company detrimental effects can be overcome. I have an example.
- [84] Some Questions e.g. 36/38 & 37/89 were difficult to judge i.e. depending on the management of the "major change" or "flexible employment" the impact could be negative or positive Impacts.
- [94] Depends on adequacy of change management
- [104] I had concerns over this item for two reasons. If this is marked down (as it is by others), it could suggest or lead business to reject major change even if it is required for the business. Also, major change, outsourcing or business restructuring is not bad for H&S performance, unless? it is badly managed. This is the key - how well change is managed, not that change itself is bad.

Comments on Impact on Business Performance:

- [4] Change could lead to negative, positive or no impact – will vary
- [9] That could have either positive or negative impact, depending on the situation in the organization and its environment
- [20] Depends on how well change is managed
- [29] May be highly beneficial once it's done,,, but doing it likely to be disruptive
- [44] depends on the reason.
I have chosen not to answer question 88 as it has it is not a clear indicator of business success or failure. e.g downsizing in business terms could mean decreasing turnover on the whole, but an increase in profitability. In most instances, the perception created by downsizing is negative - suggesting that the business is failing. The same is true for companies on an acquisition trail - but that is subject to method of funding the acquisition,
- [62] It really does depend on what is being done and how.
- [64] Depends if change is a +ve response to business environment
- [84] Some Questions e.g. 36/38 & 37/89 were difficult to judge i.e. depending on the management of the "major change" or "flexible employment" the impact could be negative or positive Impacts.
- [104] As with corresponding item earlier, depends on how well managed.

37 Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-0.97	1.274		74%	1.77	1.561		79%

Comments on Impact on Health and Safety Performance:

[9] depends on overall working conditions

[14] Depends on the practices – can be OK often isn't

[20] Depends on how competence of the employees is managed

[29] Again depends on how they do it. Are new staff trained etc. And job uncertainties likely to lead to problems

[84] Some Questions e.g. 36/38 & 37/89 were difficult to judge i.e. depending on the management of the "major change" or "flexible employment" the impact could be negative or positive Impacts.

[94] Production vs. Safety to consider

[104] Again I disagree with the general trend of negativity to this item (as a rule). Take, for example a crisis scenario – if we loose our premises due to a fire, we will need to obtain suitable temporary offices very quickly (in addition to our current recovery site) and will need to employ temporary, but good, additional help in the premises and technology areas to do this. I have included a large sum in extra cost of working insurance to cover this sizable extra expenditure, including hotel accommodation for the workers etc. There are times when business may need to do this increase and as with item 36, while it is an increased risk, the key is in how well it is prepared for and managed if or when it occurs and not simply that it happens.

Comments on Impact on Business Performance:

[20] Depends on how competence of the employees is managed

[59] Low job security can have negative impact on individuals but flexibility in employment can also reduce costs and in low risk industries the negatives business impact might not outweigh the 'business risk'.

[84] Some Questions e.g. 36/38 & 37/89 were difficult to judge i.e. depending on the management of the "major change" or "flexible employment" the impact could be negative or positive Impacts.

Responses in respect of Outliers (H&S) Factor 37:

[65] {Score = +2} For companies to remain competitive they require staff that can move between activities. This initiative reduces costs, increases productivity and allows staff to display to customers a broader range of abilities. It is imperative however that the company ensure that staff are competent and work safely and are compliant.

38 Organization uses employment practices that promote work flexibility for employees and encourage workforce stability and commitment

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.35	.799		91%	2.78	.983		97%

Comments on Impact on Health and Safety Performance:

- [6] Could use long term partnering contracts as well
- [9] risk for burn out with flexible work conditions if not supervised closely
- [28] I want to answer differently to the first and last part of this Q

Comments on Impact on Business Performance:

[29] This question and one above seem mutually exclusive - but I guess it depends on business type Getting rid of your expertise when times are tough may make it impossible to recruit equivalent when times get better.,

39 Organization supports and encourages staff (e.g. by incentives such as time-off or vouchers) to engage in health and well-being activities

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.11	1.097		78%	1.71	1.275		81%

Comments on Impact on Health and Safety Performance:

- [94] Should be part of the culture encouraged but no depending on incentives



Comments on Impact on Business Performance:

- [29] Good occ health provision makes business sense

Responses in respect of Outliers (Business) Factor 91:

[18] {Score = -1} I think I judged the effect on safety performance to be more negative than on business performance. That may have dragged my judgement on the latter to the negative side too much. My concern is that the incentives mentioned in the parenthesis are typically extrinsic ones, rather than intrinsic, and therefore may have only a limited effect, and a rebound if they are discontinued. When I compounded that with the question whether engaging in health and well-being activities actually improves business performance, I felt that the resultant was slightly negative. However, I am not so familiar with the literature on the relation between H&W activities and business performance, and my lack of knowledge may hide the proof from me. In summary, I am more inclined here to move towards the consensus, since I assume the others questioned know more than me.

40 The adoption of management philosophies such as 'lean production', 'just in time'

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-0.43	1.610		57%	1.84	1.625		67%

Comments on Impact on Health and Safety Performance:

[9] Production goals are ranked number one priority.

[9] The effect upon health & safety depends on whether H&S aspects are considered during implementation of these strategies (R2)

[20] Depends on how it is managed.

[29] Again depends on how it's done. Can introduce problems and stress

[37] Lean production/just in time/Competition may have an effect, but in by experience it depends on the organisation. It's not a university truth.

[46] As long as H&S is accommodated in this.

[62] Generally true in UK managed firms, but not in Japanese. I can discuss.

[62] If done well, eg some Japanese firms OK, but most "Western" companies make a mess of it. (R2)

[64] Again depends on whether H&S is adequately covered & there is commitment to its improvement etc.

[67] Can still be done safely

[94] Depends on the safety culture

[104] This could impact on quality - it is a risk that needs to be managed.

Comments on Impact on Business Performance:

[29] Again depends on circumstances. Business risks - but many advantages such as not tying up capital

[30] dependant on nature of business



[59] Balanced with other positive practices, having systems and processes that reduce waste and or 'make sense' to the workers can be positive.

Responses in respect of Outliers (Business) Factor 92:

[89] {Score = -1} similar reason to [those for 56, ie "I am not sure that elimination of **all** duplication could be shown to be unequivocally linked to business performance; indeed, without any redundancy (i.e. slack) in systems it could on occasion prove negative"].

[47].{Score = -1} The "Right first time" philosophy in the approach to enforcement of Regulations is paramount and any pressure artificially generated by the "just in time" etc. approach adds an unnecessary risk of error in haste which I consider to be a negative impact.

41 Wise investment in modern capital equipment (from office equipment to manufacturing plant)

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.30	.944		97%	2.97	.816		97%

Comments on Impact on Health and Safety Performance:

[6] Especially if good ergonomic design is a criteria for purchase.



[9] Important factor for remaining competitive.

[29] Especially introduction of 'win win' equipment that benefits business and h&s

[45] Can be negative (introduction of new hazards) or positive (hazards better addressed in newer equipment)

[67] Assumes modern = safer

42 Organization operates in a market with intense competition from rivals

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
-0.51	1.564		76%	0.92	2.181		76%



Comments on Impact on Health and Safety Performance:

- [9] Competition for staff may well lead to an increase of health and safety level to attract new employees but it could also lead to neglecting employees health. Depends upon branch
- [19] the extent to which statement 42 is negative will depend upon the nature of the business
- [20] Depends on ethos of business – can be a negative or positive influence ‘medium’
- [29] Having a better h and s record should help, Cost cutting in the wrong areas won't
- [35] I have experience of this being both a strong positive and strong negative driver depends upon the nature and state of the business
- [44] providing it is looking for ethical means of differentiation.
- [46] Not sure if this would have a detrimental or positive impact on H&S
- [62] Depends on other “hygiene” factors. I can discuss, eg Jaguar v.good. But generally bad effects
- [64] Depends if competition enhances or detracts from H&S – not a clear question.
- [94] Depends on the safety culture
- [104] In this environment there would often be increased pressure to cut corners. However the increased competition could also force quality levels up to meet a standard or to differentiate yourself against your competition.

Comments on Impact on Business Performance:

- [9] That could have either positive or negative impact, depending on the situation in the organization and its environment
- [39] Positive for some, negative for others.
- [41] Could be argued in both extremes, intense competition can either lead to rapid adoption of best practice and continual improvement or lead to cost cutting and descent in to chaos.
- [64] Depends on circumstances! For business –sector etc

43 Organization benchmarks its performance against others

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.20	1.202		72%	2.40	1.086		77%

Comments on Impact on Health and Safety Performance:

[9] Could lead to improvement but not necessarily so.

[14] can be +ve or -ve,

[29] Good in theory but lots of practical problems

[45] Depends whether benchmarking is done to justify poor performance or to identify areas to improve performance

[94] Depends on the benchmarks



Comments on Impact on Business Performance:

[87] Not always possible for smaller concerns

Responses in respect of Outliers (H&S) Factor 43:

[28] {Score = -3} Benchmarking often leads to counterproductive efforts to “manage the measure”, rather than managing the risk. It can also lead to destructive cost cutting

44 Organization operates in a European market

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
0.19	.753		58%	0.64	1.170		58%

Comments on Impact on Health and Safety Performance:

[9] May have positive or negative impact

[13] I have not given responses to the 'Market Related' questions (44, 45, & 96, 97) because I have send that they can have +ve and -ve impacts on H&S and Overall Business Performance.

[35] I have not seen these have any effect on H&S performance. However, companies who wish to attract ethical investors have a strong driver in having to report their H&S performance on indices such as ETI or FB4 good. They are usually operating in the international market.

[62] Depends on sector, competition, ethos of the sector, regulator impact elsewhere, consequence of failure.

[94] Depends on the safety culture

Comments on Impact on Business Performance:

[13] I have not given responses to the 'Market Related' questions (44, 45, & 96, 97) because I have send that they can have +ve and -ve impacts on H&S and Overall Business Performance.



[26] – not a clue, quite political

[29] Presumably negative at present in terms of weakness of £ and strength of Euro. But overly simplistic ... big market opportunities etc.,

[64] Depends on circumstances! For business –sector etc

[87] larger concerns only

45 Organization operates in a global market

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
0.02	.787		55%	0.66	1.237		56%

Comments on Impact on Health and Safety Performance:

[9] May have positive or negative impact

[13] I have not given responses to the 'Market Related' questions (44, 45, & 96, 97) because I have send that they can have +ve and -ve impacts on H&S and Overall Business Performance.

[35] I have not seen these have any effect on H&S performance. However, companies who wish to attract ethical investors have a strong driver in having to report their H&S performance on indices such as ETI or FB4 good. They are usually operating in the international market.

[62] Depends on sector, competition, ethos of the sector, regulator impact elsewhere, consequence of failure.

[94] Depends on the safety culture

Comments on Impact on Business Performance:

[13] I have not given responses to the 'Market Related' questions (44, 45, & 96, 97) because I have send that they can have +ve and -ve impacts on H&S and Overall Business Performance.

[26] – not a clue, quite political

[64] Depends on circumstances! For business –sector etc



[87] larger concerns only

Responses in respect of Outliers (H&S) Factor 97:

[86] {Score = -1} I cannot claim any special expertise, but my reason for choosing a slightly negative response for organisations operating in a global market is that the added pressures of global markets and the widely differing standards & regulation of H&S mean that it can influence H&S performance of some companies, smaller ones in particular.

Large global companies are usually able to apply consistent H&S standards world-wide regardless of the country in which they operate. Some smaller companies face greater competition and pressures when tendering which leave them exposed and susceptible to lower standards.

46 Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.00	1.159		72%	1.55	1.210		73%

Comments on Impact on Health and Safety Performance:

[9] difficult to measure performance

[9] difficult to assess and compare (R2)

[20] Depends on the quality elements of the award.

28] Rewarding injury performance is a bad thing

[29] insurance can also work t'other way - become prohibitive for very poor performers



[94] Depends on basis of award – beware conventional safety performance vs major hazards

Comments on Impact on Business Performance:

[29] Low insurance may be critical. Insurance became prohibitive in one multinational,,,,,

[104] 98. Depends on the industry.

47 CEOs/directors liable to receive personal sanctions for violation of legal duties and regulatory standards

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.44	1.349		88%	1.69	1.468		74%

Comments on Impact on Health and Safety Performance:

[9] In my experience a personal liability increases the awareness of the person(s) in charge. If the company pays the bill it does not hurt the own wallet and reputation that hard



[9] In my experience personal liability raises the awareness towards health & safety issues at an earlier stage, i.e. during surveillance and enforcement of HSE inspections. In Germany, pretty much of the responsibility is made clear at an early stage, i.e. when inspection reports are sent out directed to a CEO/director. In Sweden, personal responsibility is often ruled out as late as in a court decision. Responsibility and correspondence is often addressed to a juridical person, i.e. the company. Therefore, individual responsibility is not perceived that strong since you might get away from it. (R2)

[94] More focussed on financial regs than H&S

Responses in respect of Outliers (H&S) Factor 47:

[65] 47 {Score = -1} I believe that people perform better in a positive and constructive environment. Cultures that lead with sanctions can drive misdemeanours underground which, for individuals and businesses, is wholly unwanted and detrimental. If any person including CEO's/Directors knowingly break the rules, sanctions must apply and as such, I believe that penalties to have a place in a culturally positive environment.

48 Involvement of external specialists in assessing compliance with legal duties and regulatory standards

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
1.79	1.089		73%	1.56	1.104		77%

Comments on Impact on Health and Safety Performance:

[14] Not sure what is meant by external specialist

[20] All depends on the business ethos



[29] Not essential but independent audit helps of BUPA

[45] Depends on internal expertise

Responses in respect of Outliers (H&S) Factor 48:

[11] {Score = -2} It is our belief that in general this sort of activities should be performed by own staff, so that there is organisational learning, I do not believe this has a positive effect on health and safety, at most it is neutral.

49 Regulators prescribe the process for managing risks

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
0.71	1.656		62%	0.25	1.722		70%

Comments on Impact on Health and Safety Performance:

[6] For smaller/less sophisticated companies where regulators knows risks 'yes' – other 'no'.

[7] Potential benefits for SMEs

[9] In my experience, regulation may inhibit development of new techniques, methods or progress in the field of managing risks. Working life is far to complex to prescribe a distinct model for managing risks. However, thinking of SMEs it may be helpful for them to stick to a given process for managing their risks. Also when it comes to goods and products like pressure vessels or elevators a common process could facilitate maintaining the safety level required.

[9] That hinders development of new methods in risk management. But it would be helpful if the regulators define specific requirements that such a process had to fulfil. In addition, it would be difficult to cover the great variety of trade and industry with one common process (R2)

[14] not sure what is meant

[20] All depends on the business ethos

[29] Not sure what's implied here. Setting out the basic process important but organisations need to work out the detail Grouping together eg. all Wales trusts to agree standards beneficial

[30] - this may be what dutyholders 'ask' for, but if regulators prescribe the process for managing risks, this allows dutyholders to remain ignorant about things not specifically mentioned - believe dutyholders need a holistic awareness of the process (including its implications) to effect a positive impact on H&S performance

[45] Usually end up with one-size-fits all paperwork exercise

[46] (Could have positive and negative effects)

[55] Small business would prefer a standard 'tell-do' approach to simplify the process. However, larger businesses should have the knowledge to 'risk assess & implement' themselves.

[62] I am confident if the regulator is not seen on a site, the "fear" of a regulator rapidly decreases. "Organisations have no memory" – Trevor Kletz

[64] This is useful to small organisation but not large – if ALARP is excluded (ALARP is important & +ve)

[67] Duty holders must own the risks they create, not regulators

[70] Although a prescriptive approach can help achieve performance (H&S and business) better than no attempt to manage risk at all; a goal-setting, risk-based approach has the potential to achieve even better performance, providing the organisations concerned are capable of assessing and controlling their risks adequately. Some small firms find this process difficult and would prefer a more prescriptive approach; but larger firms are comfortable with the flexibility that the risk-based approach gives. On reflection, for this reason, I've scored both questions '0'; however, I do believe there will be an impact, but, depending on the situation, it could be positive or negative.

[94] Advise instead, companies need to "own" process

[104] I was concerned as to what this was suggesting. Is it that H&S regulators were going to tell business the process for managing all risks. Not their place to do so, but can endorse a general standard such as BS31100 or the IOD work etc. For me, working in the Finance sector, we have seen 'prescription' by the regulators, [104] particularly in the US as stifling business. There should be a balance between regulators promoting good practice and prescribing what must be done. It should also be conducted for the right

reasons (hopefully) and not simply to comply with a regulator.

Comments on Impact on Business Performance:

[62] Impact of food & drug admin & medicines (MHRA) in UK disproportionate. The can close does your market. ∴ regulator effect variable.

[64] Depends on risks being managed

[70] Although a prescriptive approach can help achieve performance (H&S and business) better than no attempt to manage risk at all; a goal-setting, risk-based approach has the potential to achieve even better performance, providing the organisations concerned are capable of assessing and controlling their risks adequately. Some small firms find this process difficult and would prefer a more prescriptive approach; but larger firms are comfortable with the flexibility that the risk-based approach gives.

On reflection, for this reason, I've scored both questions '0'; however, I do believe there will be an impact, but, depending on the situation, it could be positive or negative.

Responses in respect of Outliers (H&S) Factor 49:

[12] {Score = -4} The organisation.... that I represent is a charity which provides residential and nursing accommodation and care for 79 people with learning, physical and other disabilities. We have 14 homes and a head office, with approximately 250 staff and an annual turnover in excess of £5 million.

As providers of care, all homes are heavily regulated, receiving visits, both announced and unannounced, from Care Standards Commission Inspectorate, local Environmental Health and for the nursing homes Health and Safety Executive. In addition the homes also receive visits from the local authorities that are purchasing the service that we provide. The homes also used to receive visits from the local Fire Brigade but these have ceased in the last few years due to the change in legislation.

We also have our own internal reporting and visiting system. Each home is visited on alternate months and as part of this report its health and safety procedures are checked and reported. In addition we also employ an external Health and Safety Practitioner to provide advice whenever required and who also undertakes an annual audit. Each location has a trained Health and Safety representative who is responsible for carrying out a health and safety audit on a monthly basis. The Trust's Trustees also undertake a visit to a home once a month.

Standard 38 of the National Minimum Standards published by the Health Secretary requires all care homes to comply in full with all aspects of Health and Safety law.

In 2005 a national "Risk and Safety in Social Care Project Board" was set up to "promote sensible risk management in the social-care sector, which strikes the right balance between enabling adults who use care services to lead independent and dignified lives, and their need to avoid and prevent unnecessary harm to them and their carers"



As a care home we are endeavouring to provide a "home" for the people that live there. If the residents lived in their own homes they could take risks and would not expect someone from outside to tell them how to do things. The home is also a workplace for the staff and therefore health and safety needs to be implemented. When considering risks the home staff have to consider the resident's wishes and abilities. A resident may be able to make themselves a drink, undertake ironing or any other household chore either under supervision or not, and prohibition of this would limit their experience of life and would see their life skills diminish. It would be impossible for any of the care home regulators/inspection bodies to introduce a process which would cover all aspects of all types of care homes.

Many care home proprietors feel they are regulated enough without being told how to undertake processes by an outside body who cannot be aware of all the resident's attitudes or abilities. I understand some work is being done by some local Environmental Health Officers to try and understand the resident's abilities and risks before they undertake an audit, but this is a very recent and small improvement to their attitude when inspecting a home.

Health and Safety attitude in this organisation is from top down and bottom up. The staff respond to health and safety procedures by being able to discuss and understand the need for the procedures from local and head office staff. They strongly feel that anyone from outside the organisation do not appreciate the problems they experience and how they overcome them.

[42] {Score = -3} The key word here is "prescribe", and the context and meaning behind it. It's right that the regulator provides the framework, and where appropriate the hierarchy of controls supported by guidance on good practice. This is commonly done in consultation with trade organisations & TUs. It enables a dutyholder to compare what they are doing with what they should be doing, and the regulator to assess any risk gap in forming a view about the extent of compliance. The negative marking that I gave was a reaction to a prescriptive approach going beyond that line into the realm of detailed & inflexible requirements that would be contrary to Robens' principles.

50 Regulators provide practical diagnostic tools and measures of performance on risk management

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.08	1.094		79%	1.58	1.282		83%

Comments on Impact on Health and Safety Performance:

- [6] Tools 'yes' but performance measures 'no'
- [9] That could make it easier to benchmark against others or the average.
- [20] All depends on the business ethos
- [27] People will 'switch off' to this method
- [62] I am confident if the regulator is not seen on a site, the "fear" of a regulator rapidly decreases. "Organisations have no memory" – Trevor Kletz
- [67] Duty holders must own the risks they create, not regulators
- [94] Advise instead, companies need to "own" process



Comments on Impact on Business Performance:

- [30] likely to encourage similar approach in other business areas
- [62] Impact of food & drug admin & medicines (MHRA) in UK disproportionate. The can close does your market. ∴ regulator effect variable.
- [64] Depends on risks being managed

Responses in respect of Outliers (Business) Factor 102:

[94] {Score = -1} Duty holders need to understand and own their risks and adopt analysis and management processes to suit. Health and safety risks should be integrated into management of business risks. None of this precludes regulators providing diagnostic tools of course, but the potential downside is to separate H&S risk management from other business risks and instil a culture of only needing to do/use what the regulator says/provides. Therefore, on balance, I scored this as a negative impact.

51 Regulators taking an active interest in how a business's culture affects its management of risk

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.42	1.216		84%	1.87	1.100		82%

Comments on Impact on Health and Safety Performance:

[9] Very difficult to assess as every company tries to give a good impression of their health and safety performance. The problem for regulators would be to distinguish between good performance and A good performance (in the sense of acting on a stage).

[20] All depends on the business ethos

[26] I haven't answered Qs 51 & 103 because I don't really understand the question. What does "Regulators taking an active interest" actually mean? I didn't get past this, although I'm still 100% sure I fully understand what 'business culture' means either.

[30] - this may be what dutyholders 'ask' for, but if regulators prescribe the process for managing risks, this allows dutyholders to remain ignorant about things not specifically mentioned - believe dutyholders need a holistic awareness of the process (including its implications) to effect a positive impact on H&S performance

[62] I am confident if the regulator is not seen on a site, the "fear" of a regulator rapidly decreases. "Organisations have no memory" – Trevor Kletz

[67] Duty holders must own the risks they create, not regulators

Comments on Impact on Business Performance:

[30] likely to encourage similar approach in other business areas

[62] Impact of food & drug admin & medicines (MHRA) in UK disproportionate. The can close does your market. ∴ regulator effect variable.

[64] Depends on risks being managed

Responses in respect of Outliers (H&S) Factor 51:



[32] {Score = -1} It's all in understanding the statement about the regulator taking an active interest in how a business's culture affects its management of risk. I took this to mean the regulator getting involved in a company's culture and in some way attempting to change it - that I think then would have a -ve impact. However if it just means the regulator making an effort to understand the culture and dealing with it appropriately ie horses for courses then I'm probably with the majority as seeing this as positive.

Responses in respect of Outliers (Business) Factor 103:

[32] 103 {Score = -1} It's all in understanding the statement about the regulator taking an active interest in how a business's culture affects its management of risk. I took this to mean the regulator getting involved in a company's culture and in some way attempting to change it - that I think then would have a -ve impact. However if it just means the regulator making an effort to understand the culture and dealing with it appropriately ie horses for courses then I'm probably with the majority as seeing this as positive.

[Note – response for both 51 and 103 in Parts 1 & 2.]

52 Organization has an individual in top management accountable for health & safety performance

Impact on Health and Safety Performance				Impact on Business Performance			
Mean	SD	Distribution	Universal	Mean	SD	Distribution	Universal
2.97	.944		88%	2.00	1.391		88%

Comments on Impact on Health and Safety Performance:

[9] That increases the priority of health & safety issues in the company and makes them become more visible, both internally and external

[16] Better that every top manager is accountable.


[29] Probably beneficial at board level - board champion...

[94] Whole Board/Exec team should be involved

Comments on Impact on Business Performance:

[27] All management board are accountable

Part 3 Statements

		Mean	Standard Deviation	Strongly Disagree	Disagree	Neither Agree/Disagree	Agree	Strongly Agree
105	Health and safety and productivity/profitability are in competition with each other	-1.13	.968					

Comments:

[28] H&S is good business in many cases, but the problem is that for transient managers, who are rewarded on basis of profitability, in the short term, this is not the case.


[94] This represents reality and companies + regulators need to address it (eg NASA, BP etc)

[104] They can do i.e. do I comply involving increased cost now, or do I take the risk? This may form part of a risk management decision.

Responses in respect of Outliers Statement 105:

[18] {Score = +1} I interpret the responses of the majority here as dangerous wishful thinking. This is what all companies and senior executives like to believe. The problem lies partly in the wording and how it is interpreted. Does the phrase imply 'always', or 'sometimes' in conflict. My opinion is that, incontrovertibly, they are sometimes in conflict in reality, and there are many accidents which result from that conflict being decided in the favour of production. Equally I admit that in some companies an excellent safety record and an excellent profitability and productivity go hand in hand, so excellent compromises between the two are quite certainly achievable. However, at the margin and at the level of decisions about specific actions, purchases, designs, etc. there are inevitable trade-offs in which there are higher safety-lower productivity options contrasting with lower safety-higher productivity ones. Safety and productivity seldom have common maxima. I label the position of the majority here 'dangerous' because it implies that hard decisions do not have to be made, and that it is possible for all to go home happy. That detracts attention from actively managing the conflicts which will inevitably arise. In summary, I would not budge on this item either.

[63] {Score = +1} Whilst as a health and safety inspector I do not believe this opinion - my experience is that this is the opinion of companies/business i.e. health and safety can have a negative effect on productivity. During inspection this is one of the myths I often have to dispel.

		Mean	Standard Deviation	Strongly Disagree	Disagree	Neither Agree/Disagree	Agree	Strongly Agree
106	Occupational health and safety should be viewed as an integral part of productivity, competitiveness and profitability	1.70	.494					

Comments:

[28] H&S is good business in many cases, but the problem is that for transient managers, who are rewarded on basis of profitability, in the short term, this is not the case.

[94] "Should be" but see 105

107	The nature of the business (sector & complexity) significantly influences an organization's attitude and approach to health & safety	Mean	Standard Deviation	Strongly Disagree	Disagree	Neither Agree/Disagree	Agree	Strongly Agree
		0.98	.900					

Comments:

[94] But ample evidence from major events that high hazard sectors do not always have appropriate attitude.

[104] The word 'can' should have been added before significantly influence as it may not do in all circumstances.

Responses in respect of Outliers Statement 107:

[16] {Score = -1} All organisations should have the same attitude and approach to H&S – zero tolerance of unsafe situations, open and non-recriminatory culture, pervasive awareness of duty to protect yourself, your fellow workers and the public etc. The attitude and approach should remain the same for large or small companies, whether in a high hazard industry like manufacturing explosives or low hazard like an office. The tools and processes will be different in each case, not the attitude or approach.

[72] {Score = 0 (changed from -1)} The reason I responded in the manner I did was that I have come across organizations that implement OH&S because they believe they should and are not necessarily affected by sector or complexity. I have found this in small businesses and for instance in a large Turkish company which said we are not interested in badges "we want to improve the wellbeing of our employees". A University in Wales expressed a similar viewI suppose my response to the statement has not reflected that many organizations are certainly influenced by the risks within their sector of work.

[101] {Score = -2} In my opinion, the nature, sector or complexity of the business does not, in itself, influence an organisation's attitude and approach to health and safety. It is the individuals employed within those businesses or sectors that influence the approach. Whilst the climate in which an employee or contractor operates is somewhat influenced by these factors, my considered opinion is that this is not 'significant' as specified within the statement and hence why I selected disagree.

108	The business benefits of health and safety justify the business costs	Mean	Standard Deviation	Strongly Disagree	Disagree	Neither Agree/Disagree	Agree	Strongly Agree
		1.06	.710					

Comments:

[20] Depends on the risk + what is reasonably practicable

[39] The quantitative evidence for the cost-benefit of SMS is equivocal.

[45] OHS is rarely justified on the bases of money alone

[87] provided the business costs are spent wisely

[94] but not usually visible to a company on its balance sheet

[104] In general yes, but don't know if they do in all cases - see also 105.

109	A positive health and safety culture is important to the overall success of an organization	Mean	Standard Deviation	Strongly Disagree	Disagree	Neither Agree/Disagree	Agree	Strongly Agree
		1.50	.671					

Comments:

[94] But the company itself needs to believe this – it's not enough fir regulators/experts etc to say it

110	The factors for business success are generally the same regardless of the size of a business	Mean	Standard Deviation	Strongly Disagree	Disagree	Neither Agree/Disagree	Agree	Strongly Agree
		0.37	1.067					

Comments:

[39] It is easy to generalise this if one thinks of principles such as cash flow, lock-up, order book strength, pipeline and productivity. Whilst the same generalities could be given as advice by the HSE in relation to Q111, my view is that advice needs to be far more tangible and relevant to organisational and sector contexts.

[87] With larger and more diverse organisations, communication and control become critical

[104] Not everyone wants or needs quality from an organisation / product / supplier, but they do want to know what they are getting for their money / service - this should come down to transparency.

111	HSE should provide different advice for small/uncomplicated and for large/complex organizations	Mean	Standard Deviation	Strongly Disagree	Disagree	Neither Agree/Disagree	Agree	Strongly Agree
		0.77	.982					

Comments:

[9] Different advice leads to different standards for SMEs and large organizations. However, I am convinced that SMEs need a set of tools that helps them to comply with legal requirements. Especially as regulation in health and safety has slowly changed from being very specific to a framework of requirements that have to be defined in detail by the employer.

[9] This could lead to different levels of H&S in different companies. However small companies may need tools tailored to their kind of business in order to make it easier for them to understand and comply with HSE regulations. (R2)

[19] the statement requires qualification. The law applying to both types of organisation is the same so that advice cannot be "different". But advice targeted at smaller companies needs to be briefer and more easily assessable.

[19] Please see comments for Round 1 – in particular in relation to statement 111. As a regulator HSE cannot be seen to be applying different standards, in legal compliance, to organisations of differing size and complexity. But advice could and should be made available in a briefer and less complex version for smaller and less complicated organisations.(R2)

[20] Only in so much as it translates the needs for small business

[22] The principles to be followed (in terms of safety management systems, promoting positive H&S culture) are the same regardless of the size and nature of the organisation so the general advice should be the same. However, the advice should always be presented and couched in terms to suit the particular audience so the format, language, style in which the advice is presented will differ.

[35] The same advice should be given consistent with the risk no matter what the size of the organisation but it may need to be given in a different way.

[39] It is easy to generalise this if one thinks of principles such as cash flow, lock-up, order book strength, pipeline and productivity. Whilst the same generalities could be given as advice by the HSE in relation to Q111, my view is that advice needs to be far more tangible and relevant to organisational and sector contexts.

[42] the core principles are the same but the treatment of the subject matter will vary and be developed into more detail for organisations at the more complex end of the spectrum.

[53] I believe the advice should be consistent regardless of size/complexity but clearly the application should be much simpler for the small business i.e. they should not feel daunted by the prospect of satisfying health and safety procedures.

[59] I believe that some form of support for employers in how and who to choose when they are considering appointing their H&S adviser is a critical precursor to success or failure in H&S management.

[96] The question seems to (incorrectly) suggest that size and complexity are in some way connected. It also fails to mention the more relevant differentiator – the hazard potential/risk associated with the organisations activities.

[98] not sure there is a need for different advice but the advice needs to be provided in terms that someone dealing with health and safety in a small business along with a large number of other issues can easily understand, compared to a large company who have dedicated health and safety staff. In general the advice would be the same but the language used, format etc may be very different.

[104] Suggest that the word 'different' should have been shown as 'tailored' (to the size and nature of the organization). Different, to me, suggests that I might have a different rule to someone of a different size, but tailored suggests more that the fundamentals are the same, with the size and nature affecting how certain elements are applied.

Appendix H Supplementary Tables

Table H1

'Top 10' Negative Impact on Health and Safety	IMPACT				Universal?			
	MEANS		Standard Deviation		H&S		Business	
	H&S	Business	H&S	Bus	YES	NO	YES	NO
29 Organization has environment in which the priority is to get the work done, by whatever means necessary	-3.29	-.92	.824	2.242	97%	3%	88%	12%
33 The job requirements exceed worker competence (capabilities and training)	-3.18	-3.14	1.201	.870	98%	2%	98%	2%
24 Everyone has their own job and keeps their nose out of everybody else's business	-2.75	-2.36	.952	.861	93%	7%	86%	14%
3 Responsibility for health & safety is delegated entirely to health & safety specialists/advisors	-2.68	-1.46	1.361	1.501	83%	17%	84%	16%
18 Organization discourages workers from doing more than the minimum needed to comply with rules and regulations	-2.64	-2.00	1.200	1.480	95%	5%	84%	16%
10 Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)	-2.45	-2.38	1.246	1.134	96%	4%	95%	5%
36 Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring	-2.29	-1.43	1.011	1.614	79%	21%	84%	16%
5 Workers understand their own job, but not how it relates to the work of others	-1.74	-1.79	1.418	1.272	90%	10%	88%	12%
37 Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand	-.97	1.77	1.274	1.561	74%	26%	79%	21%
42 Organization operates in a market with intense competition from rivals	-.51	.92	1.564	2.181	76%	24%	76%	24%

Table H2

'Top 10' Positive Impact on Health and Safety	IMPACT				Universal?			
	MEANS		Standard Deviation		H&S		Business	
	H&S	Business	H&S	Bus	YES	NO	YES	NO
2 Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)	3.56	2.75	.747	.909	97%	3%	95%	5%
17 Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)	3.52	3.23	.563	.684	95%	5%	95%	5%
22 Organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity	3.48	2.95	.793	.805	98%	2%	97%	3%
25 Organization perceives health & safety outcomes as important to business success	3.43	2.54	.637	1.105	91%	9%	79%	21%
9 Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant	3.42	2.75	.658	.909	95%	5%	95%	5%
21 Everyone is encouraged to share and discuss issues openly and feels their views are valued	3.41	3.08	.632	.822	98%	2%	95%	5%
19 Organization has regular, structured, internal review and audit processes which include health and safety (e.g. workplace inspections)	3.20	2.66	.769	.840	76%	24%	66%	34%
23 Organization has "No blame" internal reporting of incidents (e.g. near misses, violations of procedures)	3.06	2.63	1.065	1.076	97%	3%	90%	10%
30 Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary	2.98	1.75	1.102	1.543	97%	3%	93%	7%
52 Organization has an individual in top management accountable for health & safety performance	2.97	2.00	.944	1.391	88%	12%	88%	13%

Table H3

‘Top 9’ Negative Impact on Business	IMPACT				Universal?			
	MEANS		Standard Deviation		H&S		Business	
	H&S	Business	H&S	Bus	YES	NO	YES	NO
33 The job requirements exceed worker competence (capabilities and training)	-3.18	-3.14	1.201	.870	98%	2%	98%	2%
10 Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)	-2.45	-2.38	1.246	1.134	96%	4%	95%	5%
24 Everyone has their own job and keeps their nose out of everybody else’s business	-2.75	-2.36	.952	.861	93%	7%	86%	14%
18 Organization discourages workers from doing more than the minimum needed to comply with rules and regulations	-2.64	-2.00	1.200	1.480	95%	5%	84%	16%
5 Workers understand their own job, but not how it relates to the work of others	-1.74	-1.79	1.418	1.272	90%	10%	88%	12%
3 Responsibility for health & safety is delegated entirely to health & safety specialists/advisors	-2.68	-1.46	1.361	1.501	83%	17%	84%	16%
36 Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring	-2.29	-1.43	1.011	1.614	79%	21%	84%	16%
29 Organization has environment in which the priority is to get the work done, by whatever means necessary	-3.29	-.92	.824	2.242	97%	3%	88%	12%
31 Training is focused solely on the immediate job requirements including relevant safe working practices	-.47	-.59	1.727	1.623	75%	25%	84%	16%

Table H4

‘Top 11’ Positive Impact on Business	IMPACT				Universal?			
	MEANS		Standard Deviation		H&S		Business	
	H&S	Business	H&S	Bus	YES	NO	YES	NO
17 Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)	3.52	3.23	.563	.684	95%	5%	95%	5%
21 Everyone is encouraged to share and discuss issues openly and feels their views are valued	3.41	3.08	.632	.822	98%	2%	95%	5%
32 Workers are trained and encouraged to identify and solve job-related problems	2.61	3.00	.926	.816	95%	5%	95%	5%
41 Wise investment in modern capital equipment (from office equipment to manufacturing plant)	2.30	2.97	.944	.816	97%	3%	97%	3%
22 Organization has a “Don’t walk by” culture of stop and question within workforce without fear of peer or management animosity	3.48	2.95	.793	.805	98%	2%	97%	3%
35 Organization employs people with the specialist knowledge it needs	2.69	2.95	.999	.805	95%	5%	96%	4%
27 Workers, supervisors, middle and senior managers are all involved and engaged in decision-making	2.91	2.84	.924	1.087	88%	12%	88%	12%
13 Organization has a comprehensive formal system for managing maintenance (e.g. of plant, buildings)	2.88	2.81	.713	.794	76%	24%	79%	21%
38 Organization uses employment practices that promote work flexibility for employees and encourage workforce stability and commitment	2.35	2.78	.799	.983	91%	9%	97%	3%
2 Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)	3.56	2.75	.747	.909	97%	3%	95%	5%
9 Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant	3.42	2.75	.658	.909	95%	5%	95%	5%

Table H5

Ranked by absolute differences in Impact Means (H&S – Business). (Shading = difference is statistically significant (p<0.05))	Impact on H&S	Impact on Business	Absolute Difference
37 Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand	-0.97	1.77	2.73
26 Organization gives rewards linked to meeting individual productivity/profitability targets	-0.47	2.05	2.52
29 Organization has environment in which the priority is to get the work done, by whatever means necessary	-3.29	-0.92	2.37
40 The adoption of management philosophies such as 'lean production', 'just in time'	-0.43	1.84	2.27
42 Organization operates in a market with intense competition from rivals	-0.51	0.92	1.42
30 Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary	2.98	1.75	1.23
3 Responsibility for health & safety is delegated entirely to health & safety specialists/advisors	-2.68	-1.46	1.22
4 Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems	0.98	1.98	1.00
52 Organization has an individual in top management accountable for health & safety performance	2.97	2.00	0.97
25 Organization perceives health & safety outcomes as important to business success	3.43	2.54	0.89
36 Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring	-2.29	-1.43	0.86
14 Performance assessment includes clear and measurable health & safety targets	2.86	2.03	0.83
2 Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)	3.56	2.75	0.81
47 CEOs/directors liable to receive personal sanctions for violation of legal duties and regulatory standards	2.44	1.69	0.75
9 Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant	3.42	2.75	0.67
41 Wise investment in modern capital equipment (from office equipment to manufacturing plant)	2.30	2.97	0.67
18 Organization discourages workers from doing more than the minimum needed to comply with rules and regulations	-2.64	-2.00	0.64
45 Organization operates in a global market	0.02	0.66	0.64
51 Regulators taking an active interest in how a business's culture affects its management of risk	2.42	1.87	0.55
19 Organization has regular, structured, internal review and audit processes which include health and safety (e.g. workplace inspections)	3.20	2.66	0.54
22 Organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity	3.48	2.95	0.52
50 Regulators provide practical diagnostic tools and measures of performance on risk management	2.08	1.58	0.50
7 Jobs give workers day-to-day discretion and control (autonomy) over their work	1.85	2.33	0.49
49 Regulators prescribe the process for managing risks	0.71	0.25	0.45
44 Organization operates in a European market	0.19	0.64	0.45
46 Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)	2.00	1.55	0.45

23	Organization has “No blame” internal reporting of incidents (e.g. near misses, violations of procedures)	3.06	2.63	0.44
38	Organization uses employment practices that promote work flexibility for employees and encourage workforce stability and commitment	2.35	2.78	0.43
8	Organization uses a consistent approach to risk assessment	2.68	2.29	0.40
24	Everyone has their own job and keeps their nose out of everybody else's business	-2.75	-2.36	0.39
32	Workers are trained and encouraged to identify and solve job-related problems	2.61	3.00	0.39
34	Use of agreed, cross-industry criteria to assess competence, with procedures in place to review and maintain standards	2.25	1.86	0.39
39	Organization supports and encourages staff (e.g. by incentives such as time-off or vouchers) to engage in health and well-being activities	2.11	1.71	0.39
15	Public reporting of the organization's health & safety performance	2.09	1.71	0.38
28	Worker representatives are involved in planning and implementing policies and procedures	2.74	2.39	0.35
21	Everyone is encouraged to share and discuss issues openly and feels their views are valued	3.41	3.08	0.33
6	Organization ensures employees behave consistently with company rules	2.71	2.39	0.32
17	Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)	3.52	3.23	0.28
35	Organization employs people with the specialist knowledge it needs	2.69	2.95	0.26
48	Involvement of external specialists in assessing compliance with legal duties and regulatory standards	1.79	1.56	0.23
20	Organization gives prompt feedback to workers following reviews, audits and inspections	2.92	2.71	0.21
43	Organization benchmarks its performance against others	2.20	2.40	0.20
1	Organization has a clearly communicated statement of its values	2.47	2.64	0.17
16	Organization has formal procedures for actively capturing and retaining tacit knowledge (e.g. 'corporate memory')	2.82	2.68	0.14
31	Training is focused solely on the immediate job requirements including relevant safe working practices	-0.47	-0.59	0.12
11	Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)	1.77	1.88	0.11
12	Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks	2.82	2.70	0.11
10	Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)	-2.45	-2.38	0.08
13	Organization has a comprehensive formal system for managing maintenance (e.g. of plant, buildings)	2.88	2.81	0.07
27	Workers, supervisors, middle and senior managers are all involved and engaged in decision-making	2.91	2.84	0.07
5	Workers understand their own job, but not how it relates to the work of others	-1.74	-1.79	0.05
33	The job requirements exceed worker competence (capabilities and training)	-3.18	-3.14	0.04

Table H6

Ranked by differences in Impact Means (H&S – Business) -ve = 'Better' for Business +ve='Better' for H&S. (Shading = difference is statistically significant (p<0.05))		Impact on H&S	Impact on Business	Diff (H&S – Business)
37	Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand	-0.97	1.77	-2.73
26	Organization gives rewards linked to meeting individual productivity/profitability targets	-0.47	2.05	-2.52
29	Organization has environment in which the priority is to get the work done, by whatever means necessary	-3.29	-0.92	-2.37
40	The adoption of management philosophies such as 'lean production', 'just in time'	-0.43	1.84	-2.27
42	Organization operates in a market with intense competition from rivals	-0.51	.92	-1.42
3	Responsibility for health & safety is delegated entirely to health & safety specialists/advisors	-2.68	-1.46	-1.22
4	Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems	.98	1.98	-1.00
36	Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring	-2.29	-1.43	-0.86
41	Wise investment in modern capital equipment (from office equipment to manufacturing plant)	2.30	2.97	-0.67
18	Organization discourages workers from doing more than the minimum needed to comply with rules and regulations	-2.64	-2.00	-0.64
45	Organization operates in a global market	.02	.66	-0.64
7	Jobs give workers day-to-day discretion and control (autonomy) over their work	1.85	2.33	-0.49
44	Organization operates in a European market	.19	.64	-0.45
38	Organization uses employment practices that promote work flexibility for employees and encourage workforce stability and commitment	2.35	2.78	-0.43
24	Everyone has their own job and keeps their nose out of everybody else's business	-2.75	-2.36	-0.39
32	Workers are trained and encouraged to identify and solve job-related problems	2.61	3.00	-0.39
35	Organization employs people with the specialist knowledge it needs	2.69	2.95	-0.26
43	Organization benchmarks its performance against others	2.20	2.40	-0.20
1	Organization has a clearly communicated statement of its values	2.47	2.64	-0.17
11	Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)	1.77	1.88	-0.11
10	Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)	-2.45	-2.38	-0.08
33	The job requirements exceed worker competence (capabilities and training)	-3.18	-3.14	-0.04
5	Workers understand their own job, but not how it relates to the work of others	-1.74	-1.79	0.05
13	Organization has a comprehensive formal system for managing maintenance (e.g. of plant, buildings)	2.88	2.81	0.07
27	Workers, supervisors, middle and senior managers are all involved and engaged in decision-making	2.91	2.84	0.07
12	Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks	2.82	2.70	0.11

55				
31	Training is focused solely on the immediate job requirements including relevant safe working practices	-0.47	-0.59	0.12
16	Organization has formal procedures for actively capturing and retaining tacit knowledge (e.g. 'corporate memory')	2.82	2.68	0.14
20	Organization gives prompt feedback to workers following reviews, audits and inspections	2.92	2.71	0.21
48	Involvement of external specialists in assessing compliance with legal duties and regulatory standards	1.79	1.56	0.23
17	Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)	3.52	3.23	0.28
6	Organization ensures employees behave consistently with company rules	2.71	2.39	0.32
21	Everyone is encouraged to share and discuss issues openly and feels their views are valued	3.41	3.08	0.33
28	Worker representatives are involved in planning and implementing policies and procedures	2.74	2.39	0.35
15	Public reporting of the organization's health & safety performance	2.09	1.71	0.38
34	Use of agreed, cross-industry criteria to assess competence, with procedures in place to review and maintain standards	2.25	1.86	0.39
39	Organization supports and encourages staff (e.g. by incentives such as time-off or vouchers) to engage in health and well-being activities	2.11	1.71	0.39
8	Organization uses a consistent approach to risk assessment	2.68	2.29	0.40
23	Organization has "No blame" internal reporting of incidents (e.g. near misses, violations of procedures)	3.06	2.63	0.44
46	Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)	2.00	1.55	0.45
49	Regulators prescribe the process for managing risks	.71	.25	0.45
50	Regulators provide practical diagnostic tools and measures of performance on risk management	2.08	1.58	0.50
22	Organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity	3.48	2.95	0.52
19	Organization has regular, structured, internal review and audit processes which include health and safety (e.g. workplace inspections)	3.20	2.66	0.54
51	Regulators taking an active interest in how a business's culture affects its management of risk	2.42	1.87	0.55
9	Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant	3.42	2.75	0.67
47	CEOs/directors liable to receive personal sanctions for violation of legal duties and regulatory standards	2.44	1.69	0.75
2	Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)	3.56	2.75	0.81
14	Performance assessment includes clear and measurable health & safety targets	2.86	2.03	0.83
25	Organization perceives health & safety outcomes as important to business success	3.43	2.54	0.89
52	Organization has an individual in top management accountable for health & safety performance	2.97	2.00	0.97
30	Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary	2.98	1.75	1.23

Figure H1a: Standard Deviations and Absolute Mean Scores for Impact on H&S Performance

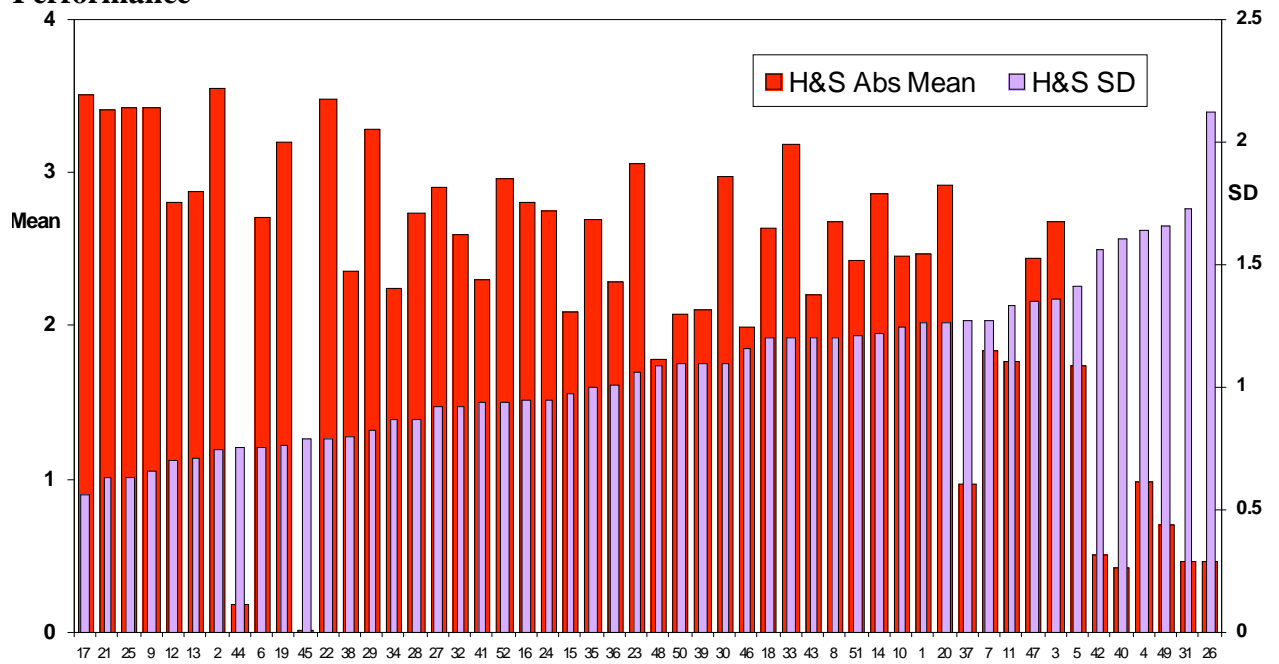


Figure H1b: Standard Deviations and Absolute Mean Scores for Impact on Business Performance

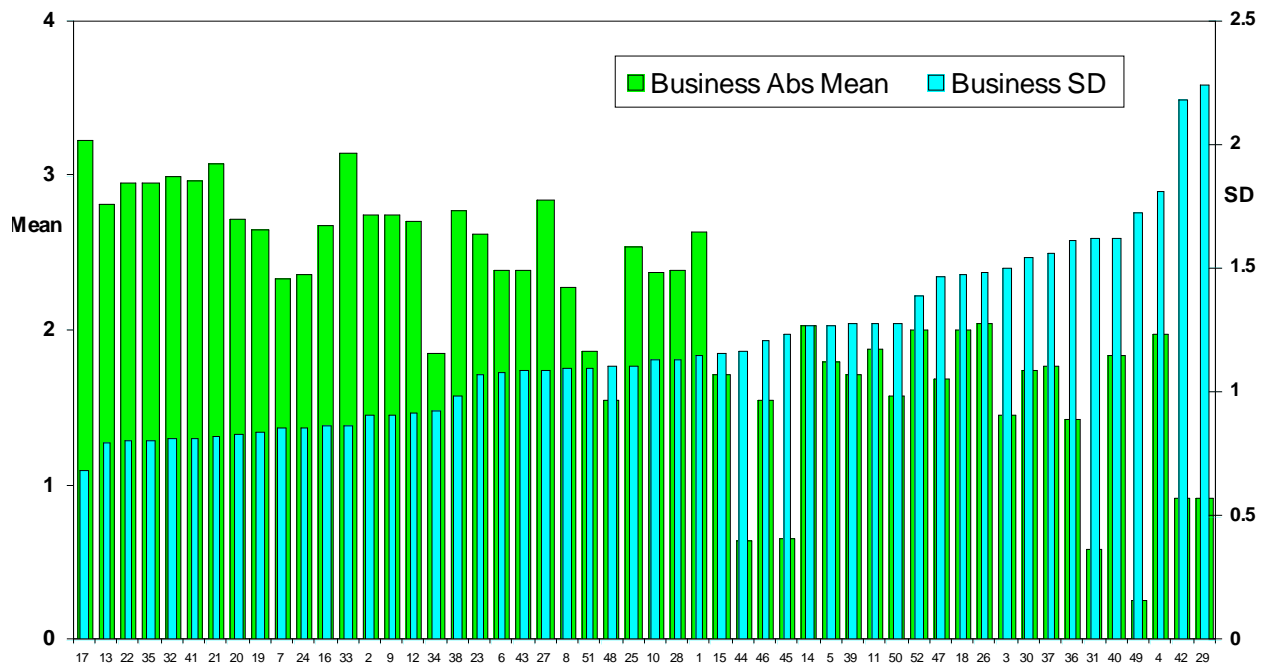


Figure H2a: Mean Scores for Impact on H&S Performance by 'Constituency'

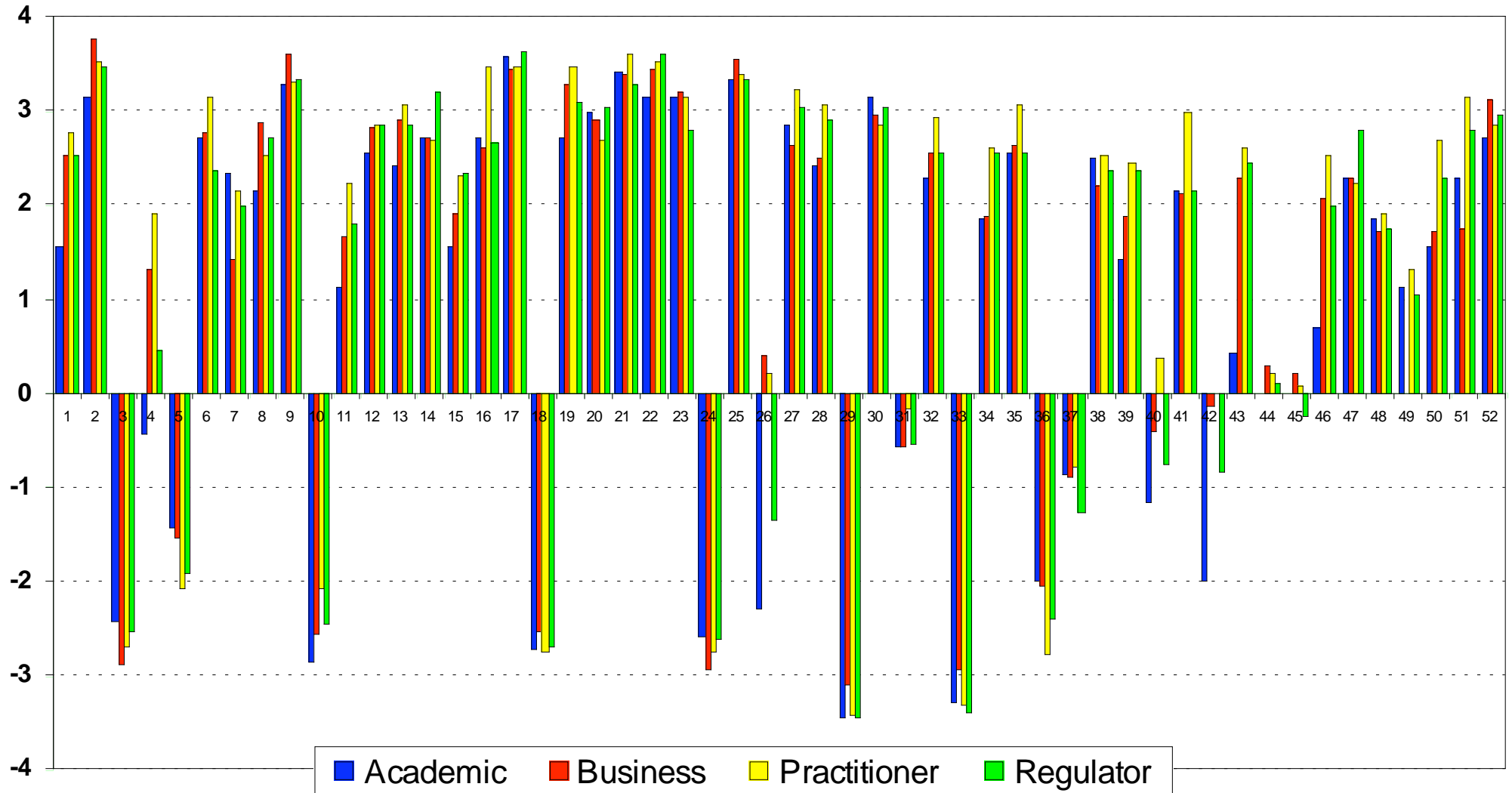


Figure H2b: Mean Scores for Impact on Business Performance by 'Constituency'

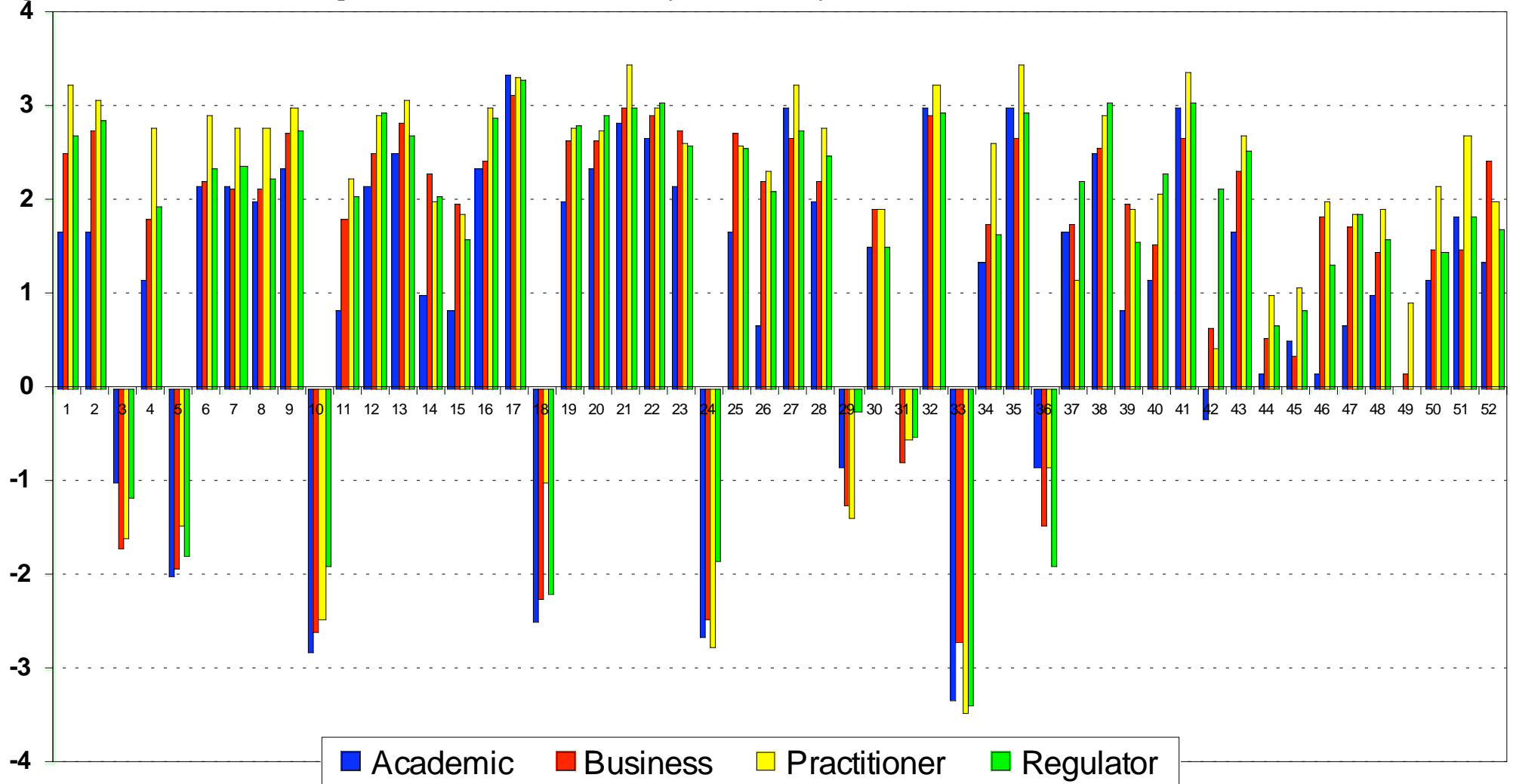


Table H7

Mean Impact Scores by 'Constituency'		H&S Performance				Business Performance			
		Academic	Business	Practitioner	Regulator	Academic	Business	Practitioner	Regulator
1	Organization has a clearly communicated statement of its values	1.57	2.52	2.77	2.52	1.67	2.52	3.23	2.70
2	Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)	3.14	3.76	3.54	3.48	1.67	2.76	3.08	2.85
3	Responsibility for health & safety is delegated entirely to health & safety specialists/advisors	-2.43	-2.88	-2.69	-2.52	-1.00	-1.72	-1.62	-1.16
4	Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems	-0.43	1.33	1.92	0.45	1.17	1.80	2.77	1.95
5	Workers understand their own job, but not how it relates to the work of others	-1.43	-1.52	-2.08	-1.90	-2.00	-1.92	-1.46	-1.79
6	Organization ensures employees behave consistently with company rules	2.71	2.76	3.15	2.38	2.17	2.20	2.92	2.35
7	Jobs give workers day-to-day discretion and control (autonomy) over their work	2.33	1.44	2.15	2.00	2.17	2.12	2.77	2.37
8	Organization uses a consistent approach to risk assessment	2.14	2.88	2.54	2.71	2.00	2.13	2.77	2.25
9	Risks are assessed and acted on whenever modifications or changes are planned or occur to the organization, people, processes or plant	3.29	3.60	3.31	3.33	2.33	2.72	3.00	2.75
10	Organization discourages Informal communications between staff (e.g. ad-hoc conversations, talking in corridors)	-2.86	-2.54	-2.08	-2.45	-2.83	-2.60	-2.46	-1.90
11	Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)	1.14	1.68	2.23	1.80	0.83	1.80	2.23	2.05
12	Workers provided with and required to follow explicit, well-designed procedures and standards for carrying out tasks	2.57	2.84	2.85	2.85	2.17	2.52	2.92	2.95
13	Organization has a comprehensive formal system for managing maintenance (e.g. of plant, buildings)	2.43	2.92	3.08	2.86	2.50	2.84	3.08	2.70
14	Performance assessment includes clear and measurable health & safety targets	2.71	2.72	2.69	3.20	1.00	2.29	2.00	2.05
15	Public reporting of the organization's health & safety performance	1.57	1.92	2.31	2.33	0.83	1.96	1.85	1.60
16	Organization has formal procedures for actively capturing and retaining tacit knowledge (e.g. 'corporate memory')	2.71	2.63	3.46	2.67	2.33	2.42	3.00	2.89
17	Organization acts on knowledge gathered internally and from others (e.g. lessons learned from incidents, operational feedback)	3.57	3.44	3.46	3.63	3.33	3.12	3.31	3.30
18	Organization discourages workers from doing more than the minimum needed to comply with rules and regulations	-2.71	-2.52	-2.75	-2.70	-2.50	-2.24	-1.00	-2.20
19	Organization has regular, structured, internal review and audit processes which include health and safety (e.g. workplace inspections)	2.71	3.28	3.46	3.10	2.00	2.64	2.77	2.80
20	Organization gives prompt feedback to workers following reviews, audits and inspections	3.00	2.92	2.69	3.05	2.33	2.64	2.75	2.90
21	Everyone is encouraged to share and discuss issues openly and feels their views are valued	3.43	3.40	3.62	3.29	2.83	3.00	3.46	3.00
22	Organization has a "Don't walk by" culture of stop and question within workforce without fear of peer or management animosity	3.14	3.44	3.54	3.60	2.67	2.92	3.00	3.05
23	Organization has "No blame" internal reporting of incidents (e.g. near misses, violations of procedures)	3.14	3.20	3.15	2.81	2.17	2.76	2.62	2.60
24	Everyone has their own job and keeps their nose out of everybody else's business	-2.57	-2.92	-2.75	-2.62	-2.67	-2.48	-2.77	-1.85
25	Organization perceives health & safety outcomes as important to business success	3.33	3.56	3.38	3.33	1.67	2.72	2.58	2.55

26	Organization gives rewards linked to meeting individual productivity/profitability targets	-2.29	0.40	0.23	-1.33	0.67	2.20	2.31	2.10
27	Workers, supervisors, middle and senior managers are all involved and engaged in decision-making	2.86	2.64	3.23	3.05	3.00	2.68	3.23	2.75
28	Worker representatives are involved in planning and implementing policies and procedures	2.43	2.50	3.08	2.90	2.00	2.21	2.77	2.47
29	Organization has environment in which the priority is to get the work done, by whatever means necessary	-3.43	-3.08	-3.42	-3.43	-0.83	-1.24	-1.38	-0.25
30	Organization has culture where workers feel able to refuse to do work they consider unsafe or to take risks they consider unnecessary	3.14	2.96	2.85	3.05	1.50	1.92	1.92	1.50
31	Training is focused solely on the immediate job requirements including relevant safe working practices	-0.57	-0.56	-0.15	-0.53	0.00	-0.80	-0.54	-0.53
32	Workers are trained and encouraged to identify and solve job-related problems	2.29	2.56	2.92	2.57	3.00	2.92	3.23	2.95
33	The job requirements exceed worker competence (capabilities and training)	-3.29	-2.92	-3.31	-3.38	-3.33	-2.72	-3.46	-3.40
34	Use of agreed, cross-industry criteria to assess competence, with procedures in place to review and maintain standards	1.86	1.88	2.62	2.57	1.33	1.75	2.62	1.65
35	Organization employs people with the specialist knowledge it needs	2.57	2.64	3.08	2.55	3.00	2.68	3.46	2.95
36	Organization is undergoing major change, such as downsizing, outsourcing and/or business restructuring	-2.00	-2.04	-2.77	-2.40	-0.83	-1.48	-0.83	-1.90
37	Organization uses flexible employment practices to allow it to adjust staffing levels rapidly in response to fluctuations in demand	-0.86	-0.88	-0.77	-1.25	1.67	1.76	1.15	2.20
38	Organization uses employment practices that promote work flexibility for employees and encourage workforce stability and commitment	2.50	2.20	2.54	2.38	2.50	2.56	2.92	3.05
39	Organization supports and encourages staff (e.g. by incentives such as time-off or vouchers) to engage in health and well-being activities	1.43	1.88	2.46	2.38	0.83	1.96	1.92	1.55
40	The adoption of management philosophies such as 'lean production', 'just in time'	-1.14	-0.40	0.38	-0.75	1.17	1.52	2.08	2.30
41	Wise investment in modern capital equipment (from office equipment to manufacturing plant)	2.14	2.12	3.00	2.14	3.00	2.68	3.38	3.05
42	Organization operates in a market with intense competition from rivals	-2.00	-0.12	0.00	-0.83	-0.33	0.64	0.42	2.12
43	Organization benchmarks its performance against others	0.43	2.28	2.62	2.45	1.67	2.32	2.69	2.53
44	Organization operates in a European market	0.00	0.29	0.23	0.10	0.17	0.54	1.00	0.67
45	Organization operates in a global market	0.00	0.21	0.08	-0.25	0.50	0.33	1.08	0.83
46	Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)	0.71	2.08	2.54	2.00	0.17	1.83	2.00	1.32
47	CEOs/directors liable to receive personal sanctions for violation of legal duties and regulatory standards	2.29	2.28	2.23	2.81	0.67	1.72	1.85	1.85
48	Involvement of external specialists in assessing compliance with legal duties and regulatory standards	1.86	1.72	1.92	1.76	1.00	1.46	1.92	1.60
49	Regulators prescribe the process for managing risks	1.14	0.00	1.31	1.05	0.00	0.16	0.92	0.00
50	Regulators provide practical diagnostic tools and measures of performance on risk management	1.57	1.72	2.69	2.30	1.17	1.48	2.15	1.45
51	Regulators taking an active interest in how a business's culture affects its management of risk	2.29	1.76	3.15	2.81	1.83	1.48	2.69	1.84
52	Organization has an individual in top management accountable for health & safety performance	2.71	3.12	2.85	2.95	1.33	2.42	2.00	1.70

Table H8 Large Variation between ‘Constituencies’ (H&S)

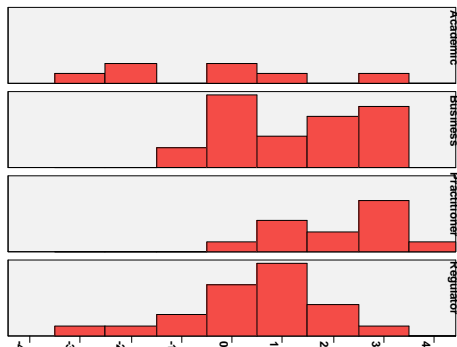
Impact on Health and Safety by ‘Constituency’	Academic	Business	Practitioner	Regulator	Total	SD of Means	MAD of Means
26 Organization gives rewards linked to meeting individual productivity/profitability targets	-2.29	0.40	0.23	-1.33	-0.47	1.289	1.062
4 Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems	-0.43	1.33	1.92	0.45	0.98	1.029	0.809
43 Organization benchmarks its performance against others	0.43	2.28	2.62	2.45	2.20	1.019	0.757
42 Organization operates in a market with intense competition from rivals	-2.00	-0.12	0.00	-0.83	-0.51	0.918	0.678
46 Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)	0.71	2.08	2.54	2.00	2.00	0.783	0.559
40 The adoption of management philosophies such as ‘lean production’, ‘just in time’	-1.14	-0.40	0.38	-0.75	-0.43	0.650	0.469
51 Regulators taking an active interest in how a business’s culture affects its management of risk	2.29	1.76	3.15	2.81	2.42	0.610	0.479
49 Regulators prescribe the process for managing risks	1.14	0.00	1.31	1.05	0.71	0.593	0.438

Table H9 Large Variation between ‘Constituencies’ (Business)

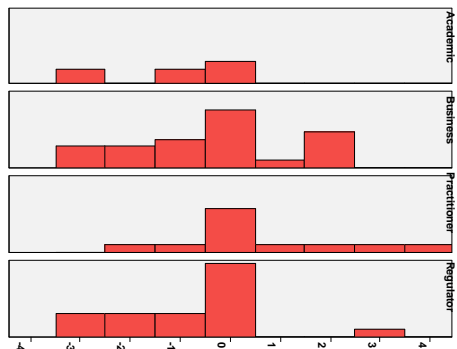
Impact on Business by ‘Constituency’	Academic	Business	Practitioner	Regulator	Total	SD of Means	MAD of Means
42 Organization operates in a market with intense competition from rivals	-0.33	0.64	0.42	2.12	0.92	1.026	0.704
46 Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)	0.17	1.83	2.00	1.32	1.55	0.828	0.588
26 Organization gives rewards linked to meeting individual productivity/profitability targets	0.67	2.20	2.31	2.10	2.05	0.773	0.576
18 Organization discourages workers from doing more than the minimum needed to comply with rules and regulations	-2.50	-2.24	-1.00	-2.20	-2.00	0.670	0.493
4 Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems	1.17	1.80	2.77	1.95	1.98	0.659	0.438
1 Organization has a clearly communicated statement of its values	1.67	2.52	3.23	2.70	2.64	0.649	0.436
2 Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)	1.67	2.76	3.08	2.85	2.75	0.629	0.461
11 Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)	0.83	1.80	2.23	2.05	1.88	0.622	0.448

Figure H3 Spread of Responses by Constituency – Impact on H&S Performance

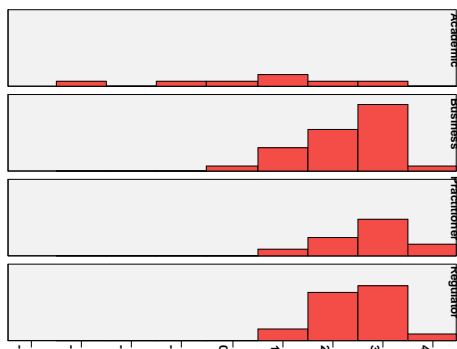
4. Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems



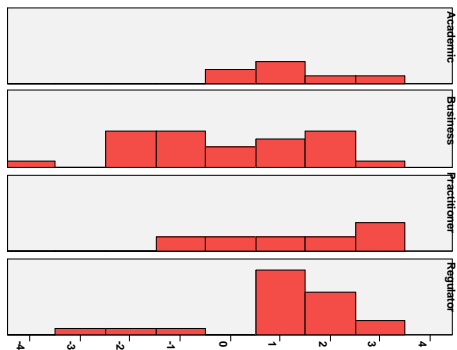
40. The adoption of management philosophies such as 'lean production', 'just in time'



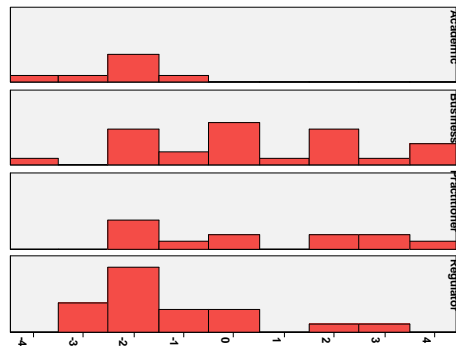
43. Organization benchmarks its performance against others



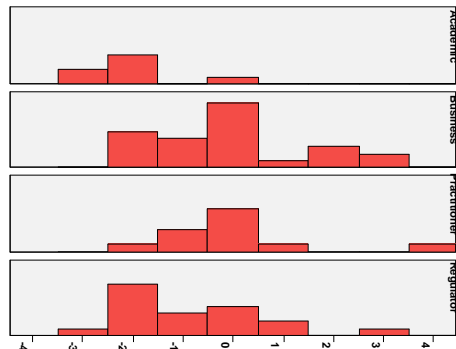
49. Regulators prescribe the process for managing risks



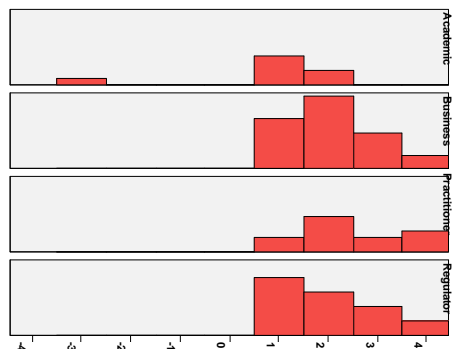
26. Organization gives rewards linked to meeting individual productivity/profitability targets



42. Organization operates in a market with intense competition from rivals



46. Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)



51. Regulators taking an active interest in how a business's culture affects its management of risk

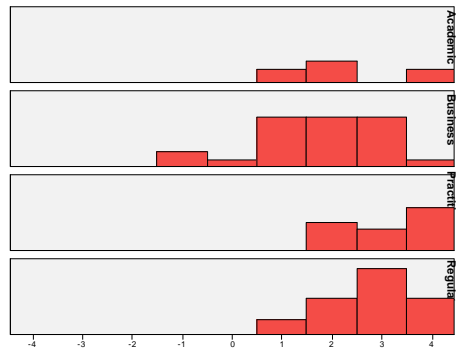
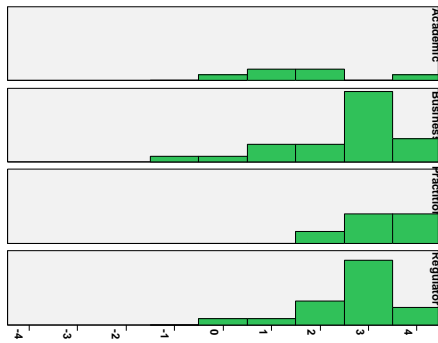
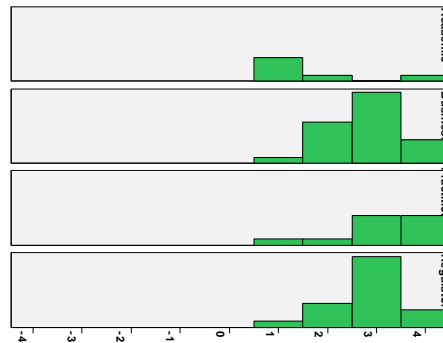


Figure H4: Spread of Responses by Constituency – Impact on Business Performance

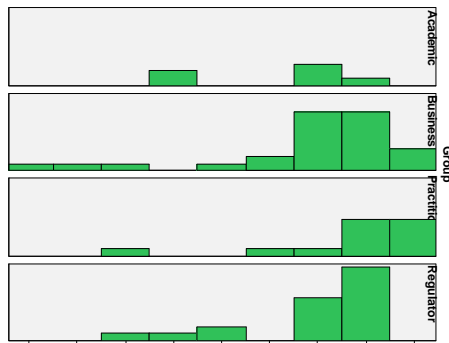
1. Organization has a clearly communicated statement of its values



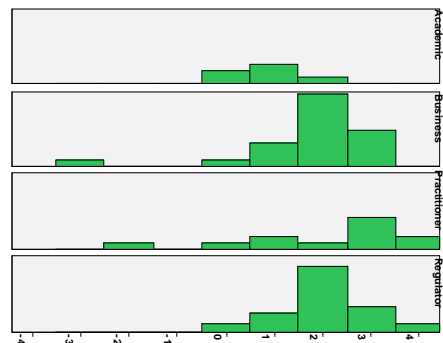
2. Senior management demonstrate commitment to health & safety, e.g. through their visible involvement in back-to-the-floor activities (such as workplace tours, inspections)



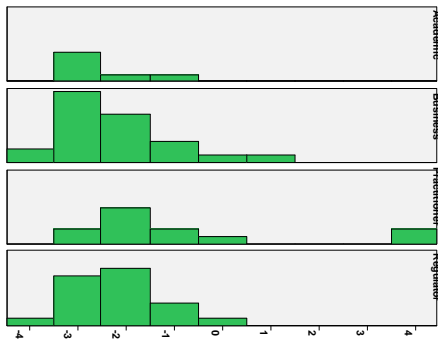
4. Organization has eliminated duplication and overlap (redundancy in resources and processes) at all levels including within health & safety systems



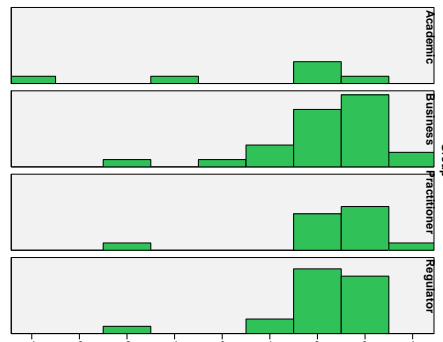
11. Adoption of formal management systems (e.g. ISO 9001, ISO 14001, BS OHSAS 18001 or sector-specific systems)



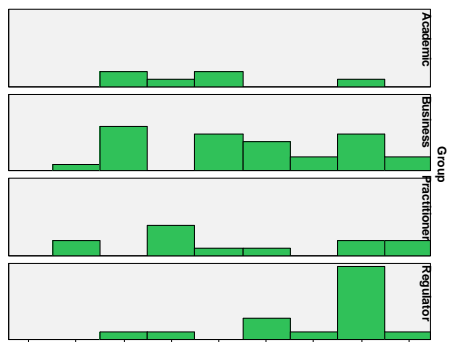
18. Organization discourages workers from doing more than the minimum needed to comply with rules and regulations



26. Organization gives rewards linked to meeting individual productivity/profitability targets



42. Organization operates in a market with intense competition from rivals



46. Existence of external awards/rewards for good health & safety performance (i.e. health & safety performance reflected in insurance premiums, in trade association awards/sanctions, etc)

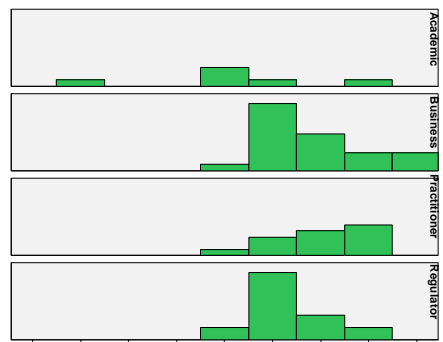
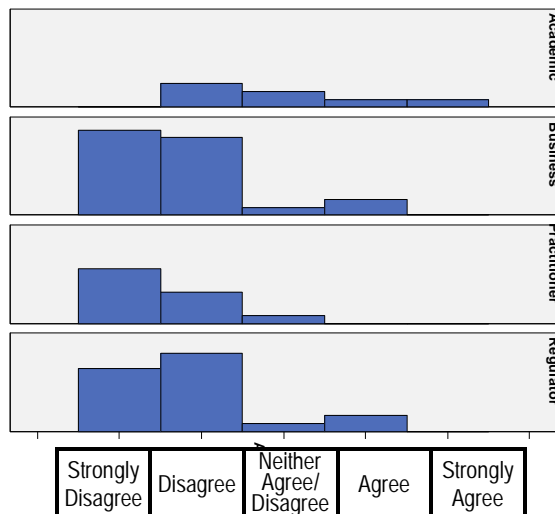


Table H10: Mean Agreement/Disagreement to Part 3 Statements by ‘Constituency’

	2=Strongly Agree - 2 = Strong Disagree	Academic	Business	Practitioner	Regulator	Overall
105	Health and safety and productivity/profitability are in competition with each other	0.00	-1.24	-1.31	-1.14	-1.09
106	Occupational health and safety should be viewed as an integral part of productivity, competitiveness and profitability	1.29	1.72	1.77	1.71	1.68
107	The nature of the business (sector & complexity) significantly influences an organization’s attitude and approach to health & safety	1.29	0.76	1.15	1.14	1.02
108	The business benefits of health and safety justify the business costs	0.43	1.08	1.23	1.14	1.06
109	A positive health and safety culture is important to the overall success of an organization	1.14	1.70	1.38	1.48	1.50
110	The factors for business success are generally the same regardless of the size of a business	-0.29	0.16	1.00	0.40	0.35
111	HSE should provide different advice for small/uncomplicated and for large/complex organizations	1.14	0.50	1.08	0.85	0.80

Figure H5: Spread of Agreement/Disagreement responses Statements 105 & 110 by ‘Constituency’

105 Health and safety and productivity/profitability are in competition with each other



110 The factors for business success are generally the same regardless of the size of a business

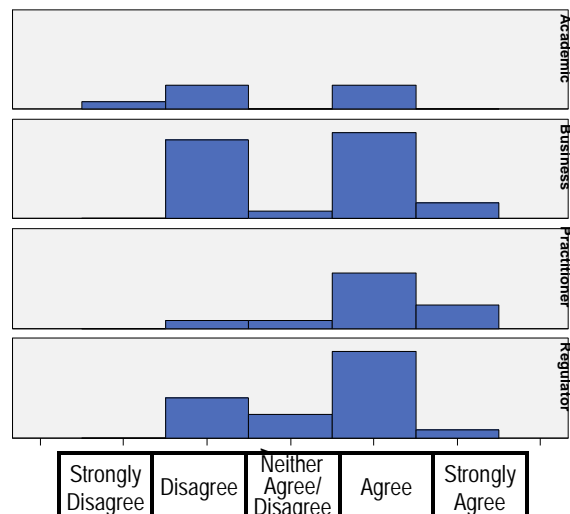


Figure H6: Responses on Universal Applicability to H&S Performance by ‘Constituency’

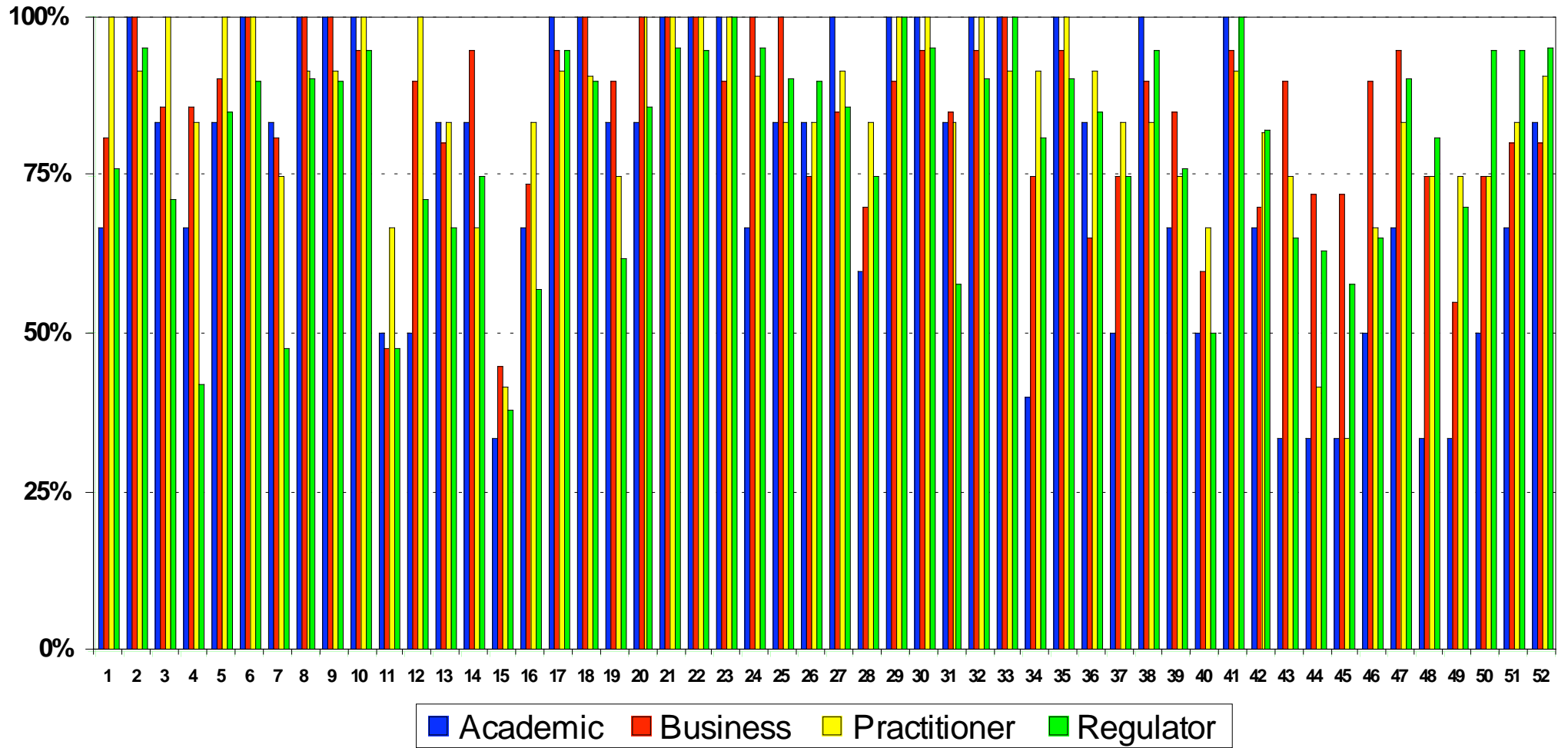


Figure H7: Responses on Universal Applicability to Business Performance by 'Constituency'

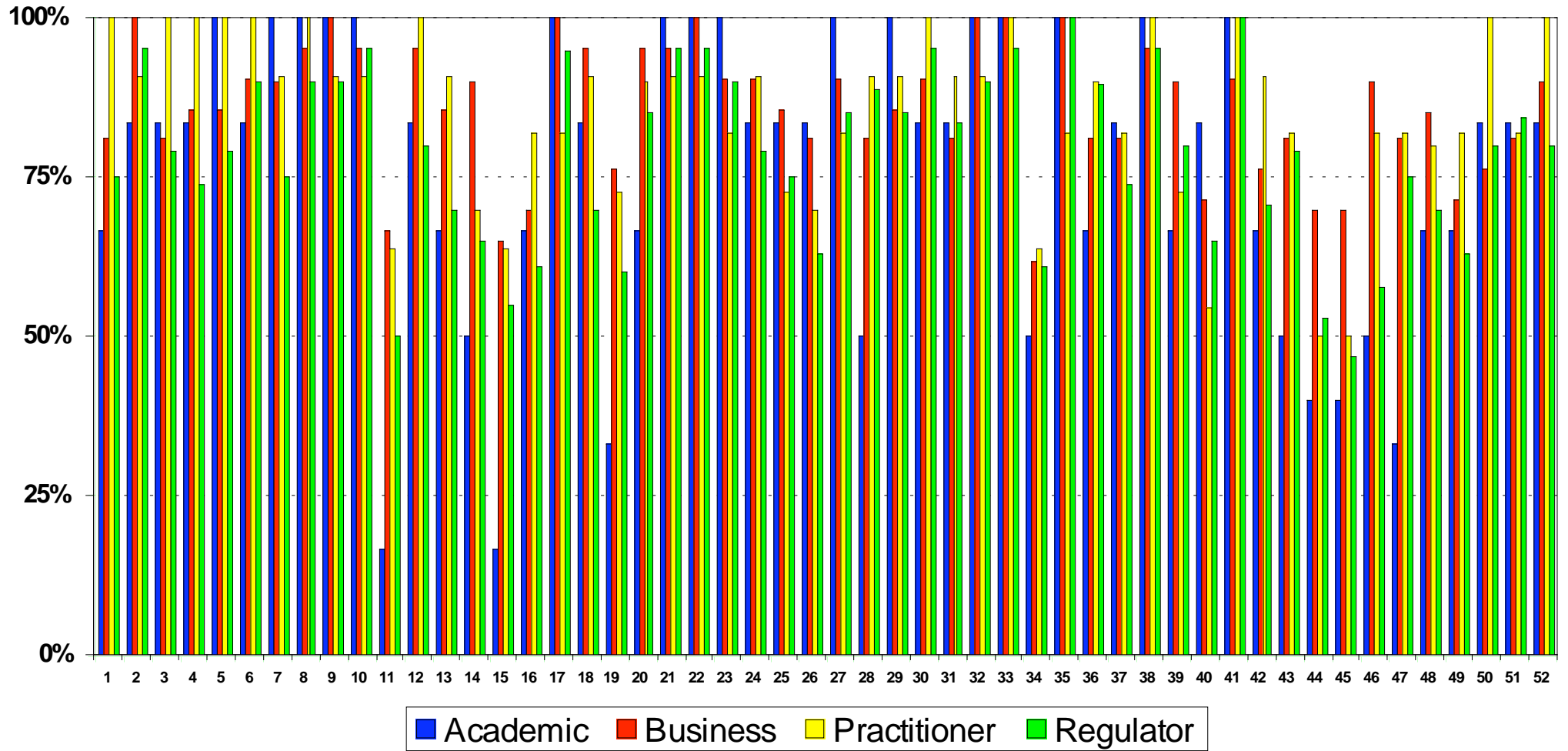


Table H11: General Comments

[17] Health & Safety is about attitude – top down and bottom up. Form filling is in the main only useful for covering one back. A practical hands-on discussion always provides an outcome that is far more useful to the task. The HSE provide little or no helpful advice when asked and often adopt an inconsistent approach to both problem solving and enforcement.

[37] (Under Qs 79-91) It is not easy to be specific with answers to some of these questions – Worker involvement may assist a process but may be equally likely to stall it on occasion. Found that some of the questions in Part 2 were quite difficult to answer as the effect that some factors may have depends on circumstances. Some companies have successfully profited from doing less on H&S whereas others have been caught – this has had a negative effect on profit.

[43] Good Health and Safety management in theory should support and benefit productivity/profitability. In practice many organisations/management still do not appreciate this. However costs for H&S can outweigh business benefits where an overly bureaucratic or risk averse approach is taken.

[45] Several of the questions could be answered either a negative or positive impact because the result is dependent on an unspecified condition. For example, the involvement of employee representatives in OHS matters can be positive or negative depending on the motivation of the individuals involved.

[45] It appears that this survey is focused on identifying the “business value” associated with management of OHS performance. AIHA has recently completed an extensive study of the Value of the Industrial Hygiene Profession that may be of interest (see www.aiha.org)

[51] Most important building block of H&S is senior management support and ownership of safety responsibility by direct line management. Having established the management side, the next step improvement is bottom up safety with consultation, safety reps and worker involvement.

[53] The confidence factor varies as although the “process” may have an impact on successful health & safety or business performance – it is how the “process” is implemented that would determine the level of success.

[55] My view of European and global organisations is restricted to CA enforced sector such as retailers where this fact can actually be a negative influence on health & safety as they have many different rules and regulations to comply with – the UK being the most stringent – and feel it does not influence their business performance. Ultimately all businesses had the aim of being profitable, depending on the type of business this is much more important to them than health & safety.

[58] Visual commitment to H&S is in my view the most important factor to influence staff. With limited worker involvement (few trade unions) it can be difficult to get views from the operators. Some form of positive encouragement (e.g. all employees must make 32 H&S suggestions per year can have a useful impact). Where companies have a good H&S record it is often difficult to keep enthusiasm up. By involvement with H&S committees in reviewing and ownership of policies and procedures companies can keep their systems up to date and relevant. The use (misuse) of consultants whose job often appears to make everything look very black with a view to increasing business can have a massive effect on organisations view that H&S is a paperwork exercise. It is vital that companies have their own in-house expertise who have enough knowledge to be confident that any external help they get results in competent and realistic advice. The regulators have a difficult role in trying to move dutyholders forward without making it look as though they will drown in paperwork. It is important that the regulators come across as professional and realistic. They need a knowledge of the industries they are dealing with including the financial climate in which they operate. A particular area of concern is the widespread use of contractors to undertake many of the high risk activities. Many companies do not have the expertise to judge the competence of these contractors and do not fully appreciate their own responsibilities.

[61] The approach taken by an organisation to health and safety can be influenced by the past experience of senior managers, and therefore their perception of risk, and the leadership they then provide in this area. The focus of an organisation is too often on what is perceived to be the main risks of the industry/sector, whereas the areas in which people are getting hurt are entirely different. Organisations need to commit to best practice honestly and sincerely, through a genuine desire to enhance

[73] It is important to distinguish between the different but mutually supportive functions of a

company's safety management system (SMS) and its governance framework. The SMS should deliver reliable day to day risk management whereas the governance framework will ensure at the most senior levels of accountability that the business has the wherewithal to identify and control risk; that those processes are subjected to verification; and that lessons learned are effectively implemented.

In limited companies it is important to recognise the important governance contribution to be made by non-exec/directors especially when they chair board sub-committees such as the audit and corporate responsibility committees.

Safety practitioners have an important role to play but in large organisations they must learn how to form alliances with other strategic players such as business assurance, insurable risk management, legal and corporate responsibility – there is a need to provide CPD and development opportunities for practitioners to operate effectively at Board level in PLC'S and other large organisations.

[75] These judgements are very hard to make. Many of the factors cited are associative not causative. There is a need to take fuller account of reputational ethical and other cultural drivers. The mix of motivational and delivery success factors can be quite diverse. Supply chain/procurement influences are crucial.

[77] I note the question(s) on "no blame". This is a concept that is complex and has so many different outcomes. Would suggest a discussion of "Just culture" better. Have so much to say about so many questions – but have questions + observations rather than confident answers.

[78] Effective business management should address all risks posed by activities and culture of organisation, including risks to production/profitability, health + safety, environment generally, good commercial practice means good management of all business risks.

[81] In the items relating to 'no blame' reporting, I have assumed that you mean no blame for 'honest' errors. In short, I am assuming the existence of a just culture where truly egregious unsafe acts are sanctioned.

[85] My opinions are based on knowledge/experience of a wide range of organisations from industrial to local authorities, nursing homes to small private companies. Much paper work and lip service is paid to Health and Safety Management Systems but few senior managers have a grasp of what it all means and there is rarely a plan of auditing the system as a whole, only parts of the system and often this is confused with inspection. The position of the health and safety representative/adviser/officer/manager is questionable and may not be included in the senior management team and decisions taken may not be actioned. This cynical view may not be true of all organisations but is a general impression gained from many of them – getting the product out of the door on time is often far more important to the company and its survival as a viable operation. Local authority and educational organisations, in my opinion, require more for less constantly and suffer the inevitability of falling standards and greater risk of not meeting their commitment to their policy statement

[[92] Robust and confident Health and Safety Management, give staff confidence that you are interested in their welfare? And linked to overall performance of the company, Staff consistently comment on health and safety matters including the failure of other EU members to adhere to any standards that apply to the nature of our business, We are the only ones that comply!

[74] I find that if there is a clear line to budget allocation, HS measures are easier to implement, be it training, consultancy, equipment, this is true for SMEs as well. (Round 2).

[94] An overall observation: H+S professionals, whether in industry, regulators or elsewhere, constantly need to be wary of theory versus practice/the real world From a regulator's perspective, we need to try to unpick how industry sees the world and find better ways to influence on H+S matters (particularly at company board/exec levels). The round 1 results for Q105 are an illustration in point of theory/aspirations vs the real world! Just consider N|SA, BP, First Fontergy etc.....(Round 2).

Table H12: Comments on Question Set, Questionnaire Design & Process

[1] I have not commented on individual questions as I do hundreds of surveys and questions have to be short and inevitably beg further clarification. they then get too long and the answer becomes more obvious. surveys are always a trade off and have to leave a certain amount of subjectivity even to 'experts'. I take statements at their face value.

[5] The factors/statements are wide ranging.

[9] I think you covered quite a lot of factors with an impact on health and safety.

[16] It would have been earlier if you could have printed our previous scores on this chart so we only had to mark changes (if any) – maybe highlight those where I'm different from the mean. (Round 2).

[21] The scale used is cumbersome & confusing and prone to error – it does not conform to any recognised scaling technique that am aware of. Thus was unhelpful.
The question set was good, but I would be interested to be the factor structure.

[21] As before, the scale chosen for rating here is 'unusual' and error prone – with too many [can't read]. This is not helpful. (Round 2).

[21] Randomising the order/even reversing the order of the two iterations of the questions would reduce the likelihood of respondents referring to each to maintain consistency. There is little point in a consistency check if to two versions are identical & permit quick reference. (Round 2).

[25] Some questions (e.g. No.11) invite respondees to interpret them too much – which affects the response. I replied positively to Q11 – though if the targets were about not exceeding an accident quota my answer would have been more negative.

[25] Given the degree of interpretation implicit in answering I am not confident in the process.

[26] I believe this questionnaire has far too many questions to give a thoughtful response on all these. Less thoughtful as you go along. Of course you may be looking for intuitive (not sure of word) or those answered on current prejudice. I'm still 100% sure I full understand what 'business culture' means either!

[32] Very interesting set of questions.

[45] Some of the statements / questions appeared biased toward a specific answer because of the use of qualifiers such as solely (e.g. 31)

[67] Many questions are too general – Organisations, especially large ones, do not have a single behaviour consistently throughout. Different teams, locations, sites all vary enormously. It is the leaders who make a difference – setting expectations, standards and demanding their delivery. Some questions treat "Organisation" as though it is a single person. Some strange ideas in here – most situations can be managed safely – it's HOW it's done that counts.

[75] These judgements are very hard to make. Many of the factors cited are associative not causative. There is a need to take fuller account of reputational ethical and other cultural drivers. The mix of motivational and delivery success factors can be quite diverse. Supply chain/procurement influences are crucial.

[88] Very long complex questionnaire for a small low risk office environment. Lots of duplication and ambiguous questions, no option for n/a or don't know

Appendix I Unedited General Written-in Responses

Round One

[1] I have not commented on individual questions as I do hundreds of surveys and questions have to be short and inevitably beg further clarification. they then get too long and the answer becomes more obvious. surveys are always a trade off and have to leave a certain amount of subjectivity even to 'experts'. I take statements at their face value.

[5] The factors/statements are wide ranging. A few suggestions, bearing in mind the wording may need amending:

- (i) Organisations use in-house expertise in preference to use of external consultants (positive impact)
- (ii) Organisation subject to period inspection by regulator (positive impact) (universal=yes)
- (iii) Availability of some free, confidential H&S advice to SMEs (positive impact) (University = No) – Alleviates work of Workplace Health Connect + HWL
- (iv) Organisation given earned autonomy on H&S matters & not subject to regulator interventions (Negative impact H&S/Positive for business)

[6] I was unable to complete Part 2 as my answers did not differ from Part 1. In some questions in Part 1 I was aware of possible interaction effects which would have influenced my judgement – I've written these in. Hope they are helpful.

[9] I think you covered quite a lot of factors with an impact on health and safety. If I may suggest another factor that has not been discussed explicitly it would be the concept of uncertainty, i.e. new risks that have not been anticipated before. That could cover "new" diseases like BSE or "new" technical risks related to the introduction of new tools like virtual reality "caves" for design applications in car industry, architecture and work place design. Even GMM and GMO may contain unknown risks. In my opinion due to the acceleration of technical development we need business cultures that are capable of detecting these "new" risks at an early stage that do not fit into the risk inventories we know today.

As you may notice, I made much more comments in part one compared to the same question related to business success in part two. Since I am active in the field of health and safety, I have more comments on the H&S impact compared to the business impact.

[14] Size and complexity of organisation relevant to many questions, as is severity of hazard. Presume judging business performance as profitability, although there are other criteria.

[17] Health & Safety is about attitude – top down and bottom up. Form filling is in the main only useful for covering one back. A practical hands-on discussion always provides an outcome that is far more useful to the task. The HSE provide little or no helpful advice when asked and often adopt an inconsistent approach to both problem solving and enforcement.

[18] Where NO is answered for 'Universal' the reasons are related to organisation size (SME vs large) and/or to the nature of the work (routine, expert, supervisory, direct operation) and/or industrial relations climate.

I miss as influence the coordinating and motivating role of good safety staff is a strong influence on performance in medium to large companies. The role of well designed work places & equipment is also poorly represented.

[21] The scale used is cumbersome & confusing and prone to error – it does not conform to any recognised scaling technique that am aware of. Thus was unhelpful.

The question set was good, but I would be interested to be the factor structure.

[25] 1. There is little in the question set about measuring H&S performance and what is necessary to do it well.

2. Some questions (e.g. No.11) invite respondees to interpret them too much – which affects the response. I replied positively to Q11 – though if the targets were about not exceeding an accident quota my answer would have been more negative.

3. Given the degree of interpretation implicit in answering I am not confident in the process.

[26] Re Universal, where I have said [appears to be something missing] I'm primarily thinking of the differences between smaller and large businesses. Some of the factors will have a stronger impact, whether positive or negative for smaller businesses. [Comments in respect of Part 1]

I believe this questionnaire has far too many questions to give a thoughtful response on all these. Less thoughtful as you go along. Of course you may be looking for intuitive (not sure of word) or those answered on current prejudice. I'm still 100% sure I full understand what 'business culture' means either!

[34] The feedback omits the important of WIFME – individuals at all levels need a personal motivation/understanding of value to them as individuals (ie as opposed to company) of positive H&S progress.

[32] Very interesting set of questions. I think the two qualities that make all the difference are Leadership and Ownership and I'm not sure they are really captured in the questions. Hope they are subliminally there at least!

[36] Additional Factor: Managers and Supervisors have all completed a Health & Safety Risk assessment course/programme. Question relevant to both Part 1 & Part 2. My view (positive impact) (Confidence very) and is universal.

[37] (Under Qs 79-91) It is not easy to be specific with answers to some of these questions – Worker involvement may assist a process but may be equally likely to stall it on occasion. Found that some of the questions in Part 2 were quite difficult to answer as the effect that some factors may have depends on circumstances. Some companies have successfully profited from doing less on H&S whereas others have been caught – this has had a negative effect on profit.

[43] Good Health and Safety management in theory should support and benefit productivity/profitability. In practice many organisations/management still do not appreciate this. However costs for H&S can outweigh business benefits where an overly bureaucratic or risk averse approach is taken.

[45] Some of the statements / questions appeared biased toward a specific answer because of the use of qualifiers such as solely (e.g. 31)

Several of the questions could be answered either a negative or positive impact because the result is dependent on an unspecified condition. For example, the involvement of employee representatives in OHS matters can be positive or negative depending on the motivation of the individuals involved.

It appears that this survey is focused on identifying the "business value" associated with management of OHS performance. AIHA has recently completed an extensive study of the Value of the Industrial Hygiene Profession that may be of interest (see www.aiha.org)

[50] The position of SMEs is totally different to large firms. SMEs need a very different approach. Organisational change and downsizing can have short term adverse effect but a long term good effect on H&S.

[51] Most important building block of H&S is senior management support and ownership of safety responsibility by direct line management. Having established the management side, the next step improvement is bottom up safety with consultation, safety reps and worker involvement.

[53] The confidence factor varies as although the "process" may have an impact on successful health & safety or business performance – it is how the "process" is implemented that would determine the level of success.

[55] My view of European and global organisations is restricted to CA enforced sector such as retailers where this fact can actually be a negative influence on health & safety as they have many different rules and regulations to comply with – the UK being the most stringent – and feel it does not influence their business performance. Ultimately all businesses had the aim of being profitable, depending on the type of business this is much more important to them than health & safety.

[58] Visual commitment to H&S is in my view the most important factor to influence staff. With limited worker involvement (few trade unions) it can be difficult to get views from the operators. Some form of positive encouragement (e.g. all employees must make 32 H&S suggestions per year can have a useful impact). Where companies have a good H&S record it is often difficult to keep enthusiasm up. By involvement with H&S committees in reviewing and ownership of policies and procedures companies can keep their systems up to date and relevant. The use (misuse) of consultants whose job often appears to make everything look very black with a view to increasing business can have a massive effect on organisations view that H&S is a paperwork exercise. It is vital that companies have their own in-house expertise who have enough knowledge to be confident that any external help they get results in competent and realistic advice. The regulators have a difficult role in trying to move dutyholders forward without making it look as though they will drown in paperwork. It is important that the regulators come across as professional and realistic. They need a knowledge of the industries they are dealing with including the financial climate in which they operate. A particular area of concern is the widespread use of contractors to undertake many of the high risk activities. Many companies do not have the expertise to judge the competence of these contractors and do not fully appreciate their own responsibilities.

[60] It might be useful to identify of organisational characteristics that are important to consider when a factor is not universal. e.g., high reliability, customer service, construction etc.

[61] The approach taken by an organisation to health and safety can be influenced by the past experience of senior managers, and therefore their perception of risk, and the leadership they then provide in this area. The focus of an organisation is too often on what is perceived to be the main risks of the industry/sector, whereas the areas in which people are getting hurt are entirely different. Organisations need to commit to best practice honestly and sincerely, through a genuine desire to enhance health and safety performance.

[64] Other influencers might be

- Clarity about organisational roles/accountabilities of interfaces
- ability to recognise/monitor declining performance – ‘organisational draft’
- ensuring clearly defined competences in H&S
- recognising the difference between industrial safety (AFR) and process safety
- having in place an effective, structured oversight process.

[67] Many questions are too general – Organisations, especially large ones, do not have a single behaviour consistently throughout. Different teams, locations, sites all vary enormously. It is the leaders who make a difference – setting expectations, standards and demanding their delivery. Some questions treat “Organisation” as though it is a single person. Some strange ideas in here – most situations can be managed safely – it’s HOW it’s done that counts.

[73] It is important to distinguish between the different but mutually supportive functions of a company's safety management system (SMS) and its governance framework. The SMS should deliver reliable day to day risk management whereas the governance framework will ensure at the most senior levels of accountability that the business has the wherewithal to identify and control risk; that those processes are subjected to verification; and that lessons learned are effectively implemented.

In limited companies it is important to recognise the important governance contribution to be made by non-exec/directors especially when they chair board sub-committees such as the audit and corporate responsibility committees.

Safety practitioners have an important role to play but in large organisations they must learn how to form alliances with other strategic players such as business assurance, insurable risk management, legal and corporate responsibility - there is a need to provide CPD and development opportunities for practitioners to operate effectively at Board level in PLC'S and other large organisations.

[75] These judgements are very hard to make. Many of the factors cited are associative not causative. There is a need to take fuller account of reputational ethical and other cultural drivers. The mix of motivational and delivery success factors can be quite diverse. Supply chain/procurement influences are crucial.

[77] I note the question(s) on “no blame”. This is a concept that is complex and has so many different outcomes. Would suggest a discussion of “Just culture” better. Have so much to say about so many questions – but have questions + observations rather than confident answers.

[78] Effective business management should address all risks posed by activities and culture of organisation, including risks to production/profitability, health + safety, environment generally, good commercial practice means good management of all business risks.

[81] In the items relating to 'no blame' reporting, I have assumed that you mean no blame for 'honest' errors. In short, I am assuming the existence of a just culture where truly egregious unsafe acts are sanctioned.

Missing topics: one of the defining features of hi-reliability or generative organisations is an expectation that things will go wrong (chronic unease; feral vigilance) and train staff to detect and recover their inevitable errors. They also brain storm novel ways in which the organisational defences and barriers could fail.

[83] I have completed this with respect to my clients and the factors regularly discussed with them, rather than with respect to my own business

[85] My opinions are based on knowledge/experience of a wide range of organisations from industrial to local authorities, nursing homes to small private companies. Much paper work and lip service is paid to Health and Safety Management Systems but few senior managers have a grasp of what it all means and there is rarely a plan of auditing the system as a whole, only parts of the system and often this is confused with inspection. The position of the health and safety representative/adviser/officer/manager is questionable and may not be included in the senior management team and decisions taken may not be actioned. This cynical view may not be true of all organisations but is a general impression gained from many of them - getting the product out of the door on time is often far more important to the company and its survival as a viable operation. Local authority and educational organisations, in my opinion, require more for less constantly and suffer the inevitability of falling standards and greater risk of not meeting their commitment to their policy statement

[88] Very long complex questionnaire for a small low risk office environment. Lots of duplication and ambiguous questions, no option for n/a or don't know

[[92] Robust and confident Health and Safety Management, give staff confidence that you are interested in their welfare? and linked to overall performance of the company, Staff consistently comment on health and safety matters including the failure of other EU members to adhere to any standards that apply to the nature of our business, We are the only ones that comply!

Round 2

[14] Q1-Q52 There are many questions where SMEs can be different and will not necessarily benefit from the formal measures described. Values of owners more important & achieve same ends – Applies to all questions not universal except Q4 – not sure what is meant.

[16] It would have been earlier if you could have printed our previous scores on this chart so we only had to mark changes (if any) – maybe highlight those where I'm different from the mean.

[19] Please see comments for Round 1 – in particular in relation to statement 111. As a regulator HSE cannot be seen to be applying different standards, in legal compliance, to organisations of differing size and complexity. But advice could and should be made available in a briefer and less complex version for smaller and less complicated organisations.

[21] As before, the scale chosen for rating here is 'unusual' and error prone – with too many [can't read]. This is not helpful.

Randomising the order/even reversing the order of the two iterations of the questions would reduce the likelihood of respondents referring to each to maintain consistency. There is little point in a consistency check if two versions are identical & permit quick reference.

[66] I have a problem with the question about universal impact. Given the variation in sectors and size of organizations, very few of the factors are likely to have a universal impact. "Universal also implies 'worldwide' which is also almost never likely to apply. So my "universality" implies – likely to apply to most organisations in the UK, leaving aside very small workplaces.

[73] It would be relevant to draw attention to other related issues such as corporate responsibility, corporate governance and the influential and complementary activities of business assurance, corporate audit committee, independent verifications and the importance of non-executive directors (particularly for plc's and global corporations)

[74] I find that if there is a clear line to budget allocation, HS measures are easier to implement, be it training, consultancy, equipment, this is true for SMEs as well.

[94] An overall observation: H+S professionals, whether in industry, regulators or elsewhere, constantly need to be wary of theory versus practice/the real world. From a regulator's perspective, we need to try to unpick how industry sees the world and find better ways to influence on H+S matters (particularly at company board/exec levels). The round 1 results for Q105 are an illustration in point of theory/aspirations vs the real world! Just consider N|SA, BP, First Fontergy etc.....

[104] Universal - I'm afraid that I did not go through at the time and mark the Universal applicable boxes and hope that my answers still have some validity. As an observation, I would suggest caution in reading too much from this area, as I noticed during the recent workshop that we all have natural perceptions about other industries, but often without the actual experience. We are therefore often surprised that our thought that "everyone must have this view" isn't always correct.

How management behaviours associated with successful health and safety performance relate to those associated with success in other domains

This study was instigated by an approach by HSE in December 2007, who were seeking a Delphi study under the heading 'How Management Behaviours Associated with Successful Health and Safety Performance Relate to those Associated with Success in Other Domains' to inform HSE's approach to managing health and Safety. HSE had already carried out or commissioned systematic literature reviews and supplementary studies and had concluded that the research base was limited. They were now seeking 'to use a Delphi approach to gather informed views from key, expert, stakeholders.

HSE posed four main questions: (a) what are the management factors/characteristics (including activities, behaviours and skills) that are associated with successful and unsuccessful business management? (b) How do the factors identified in (a) read across to affect success or failure in managing health and safety? (c) What, if any, other management factors/characteristics are uniquely associated with success or failure in managing health and safety (ie are not associated with business management in general)? and (d) How important/ effective are each of the factors identified in (a)–(c)? In addition, evidence was sought to allow comparison across different sectors of the economy'.

An Expert Delphi was employed for this study. Delphi is a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole to deal with a complex problem (Linstone and Turoff, 1975). Panel members for the study were selected from four constituencies, Academic, Business, Health and Safety Professionals and Regulators.

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