



Exploring health and safety practitioners' training needs in workplace health issues

Report on a study supported by IOSH development funding

Dr Stavroula Leka, Prof Sayeed Khan and Prof Amanda Griffiths
Nottingham University

research report

08.2

IOSH, the Chartered body for health and safety professionals, is committed to evidence-based practice in workplace health and safety. We maintain a Research and Development Fund to support research and inspire innovation as part of our work as a 'thought leader' in health and safety.

All recipients of funding from our Research and Development Fund are asked to compile a comprehensive research report of their findings, which is subject to peer review.

For more information on how to apply for grants from the Fund, visit www.iosh.co.uk/researchanddevelopmentfund, or contact:

Dr Luise Vassie
Head of Research and Technical Services
luise.vassie@iosh.co.uk

Mary Ogungbeje
Research and Technical Adviser
mary.ogungbeje@iosh.co.uk



Exploring health and safety practitioners' training needs in workplace health issues

Report on a study supported by IOSH development funding

Dr Stavroula Leka, Prof Sayeed Khan and Prof Amanda Griffiths
Institute of Work, Health and Organisations
University of Nottingham
International House
Jubilee Campus
Wollaton Road
Nottingham
NG8 1BB
UK

All rights reserved. No part of this publication may be reproduced in any material form (including photocopying or storing it in any medium by electronic or photographic means and whether or not transiently or incidentally to some other use of this publication) without written permission of IOSH, the copyright owner. Applications for written permission to reproduce any part of this publication should be addressed to the publisher.

IOSH assumes no responsibility for the contents of this research report, in whole or in part, nor for the interpretation or concepts advanced by the authors. The views expressed in this report are the authors' own, and do not necessarily reflect those of any employing or other organisation. All web addresses are current at the time of going to press. The publisher takes no responsibility for subsequent changes.

Warning: The doing of an unauthorised act in relation to a copyright work may result in both a civil claim for damages and criminal prosecution.

This report is printed on chlorine-free, acid-free stock produced from woodpulp originating from managed, sustainable plantations. The paper is recyclable and biodegradable.

© IOSH 2008
Printed in England by Paradigmprint (UK) Ltd

Published by IOSH
The Grange
Highfield Drive
Wigston
Leicestershire
LE18 1NN
UK
t +44 (0)116 257 3100
f +44 (0)116 257 3101
www.iosh.co.uk

Contents

Lists of figures	4
List of tables	5
Acknowledgments	6
Abstract	7
Executive summary	8
1 Introduction	10
2 Method	11
3 Results	13
4 Conclusions	24
References	26
Appendices	
Appendix 1: Schedule for expert panel interviews	27
Appendix 2: Delphi survey of workplace health experts	28
Appendix 3: IOSH member survey	35
Appendix 4: Training priorities in descending order	41
Appendix 5: Statistical analyses of differences in perceptions of key priorities	42

List of figures

1	Age of respondents	15
2	Distribution of respondents by IOSH membership category	16
3	Number of years respondents have worked in OSH	16
4	Respondents' qualifications	17

List of tables

1	Key priorities for workplace health from the expert interviews	13
2	The future roles of OSH practitioners, from the expert interviews	13
3	Knowledge and skills needed for the future role of OSH practitioners, from the expert interviews	13
4	The top five priorities in workplace health, from the Delphi survey	14
5	Respondents' membership of IOSH groups, in descending order	17
6	Respondents' top 10 desirable training priorities	18
7	Overview of significant associations between respondents' group membership and their perception of the importance of and need for training in the top 10 workplace health priorities	19
8	Overview of significant associations between respondents' level of qualification and their perception of the importance of and need for training in the top 10 workplace health priorities	21
9	Overview of significant associations between respondents' IOSH membership grade and their perception of the importance of and need for training in the top 10 workplace health priorities	21
10	Perception of the importance of 'health promotion' in relation to respondents' age	22
11	Perception of the importance of 'return to work and rehabilitation' in relation to respondents' work experience in OSH	22
12	Perception of the importance of 'health promotion' in relation to respondents' work experience in OSH	22
13	Areas for future knowledge development that respondents consider important, in descending order	23
14	Areas for future skill development that respondents consider important, in descending order	23
15	Respondents' preferred method of training delivery, in descending order	23

Acknowledgments

The authors would like to thank the Institution of Occupational Safety and Health (IOSH) for supporting this project through its Research Development Fund. We are also grateful to all the experts who participated in this research and the 1,679 IOSH members who responded to the online survey that was developed as part of this project. The contribution of the following experts is particularly acknowledged:

Dr Janet Asherson, Head of Health and Safety, CBI
Cynthia Atwell, occupational health consultant and Senior Visiting Teaching Fellow, University of Warwick
Dr John Ballard, Editor, *Occupational Health (at Work)*; Director, The At Work Partnership; former editor of *Occupational Health Review* and *Industrial Relations Services*
Gary Booton, Director of Health, Safety and Environment, EEF – the manufacturers' organisation
Neil Budworth, former President of IOSH; Head of Health and Safety, E.ON
Teresa Budworth, Chief Executive, NEBOSH
Bill Callaghan, former Chair, Health and Safety Commission
David Coats, Associate Director – Policy, The Work Foundation
Tom Cox, Professor of Organisational Psychology; Director, Institute of Work, Health and Organisations, University of Nottingham
Geraint Day, Health of Health and Environment, Institute of Directors
Steve Deacon, Group Medical Director, Scottish Power plc
John Doidge, Corporate Safety Improvement Manager, Rolls-Royce plc
Mike Garstang, Director of Health, Safety and Environment, Centrica plc
Alex Grieve, Head of Group Health, Safety and Environment and Group Medical Adviser, GKN plc
David Harrison, Director, Workplace Wellbeing, University of Birmingham
Richard Heron, Vice-President Health and Chief Medical Officer, BP International
Sharon Horan, occupational health consultant; former Chair, Society of Occupational Health Nursing
Godric Jolliffe, former Editor, *Safety and Health Practitioner*
Kath Jones, Principal Consultant, Improvement and Development Agency; formerly Corporate Health and Safety Manager, LBR
Richard Jones, Policy and Technical Director, IOSH
Tony Lewis, Principal Education Officer, Chartered Institute of Environmental Health; formerly Senior Lecturer in Environmental Health, Nottingham Trent University
Colin Mackay, Principal Psychologist, Business Health Psychology Unit, Corporate Specialist Division, HSE
Bill McCulloch, former Group Director of Health and Safety, Vodafone; Medical Director, Alpha One Healthcare
Hugh Robertson, Senior Health and Safety Officer, Trades Union Congress
David Snashall, past President, Faculty of Occupational Medicine; Head of Service and Senior Lecturer, Occupational Health Department, Guys and St Thomas's Hospital, London
John Spanswick, Chairman, Bovis Lend Lease; Chairman, Major Contractors Group; Health and Safety Commissioner
Eugene Waclawski, President 2005–06, Society of Occupational Medicine; NHS Argyll and Clyde Occupational Health Service
Ian Waldram, Trustee and former President, IOSH; former Chair of IOSH's Technical Affairs Committee; former EHSO Manager, Mobil North Sea Ltd
Lawrence Waterman, Chairman, Sypol; Head of Health and Safety, Olympic Delivery Authority; former President, IOSH
Barry Wilkes, Development Manager, NEBOSH

The authors would also like to acknowledge the advice and support of Dr Luise Vassie (IOSH), Barry Wilkes (NEBOSH) and Viola Wong (I-WHO) for their help in the analysis and preparation of the final report.

Abstract

This research explored current training needs among occupational safety and health (OSH) practitioners with regard to workplace health issues. In line with this primary aim, it aimed to identify occupational health issues that should be targeted through education and training schemes for OSH practitioners, explore the views of workplace health experts and members of the Institution of Occupational Safety and Health (IOSH) on priority issues in workplace health, and identify priorities to be addressed through continuous professional development (CPD) programmes. The research was conducted in four stages that included interviews and a Delphi survey with experts in workplace health, as well as a survey of all members of IOSH undertaking CPD. There was overall agreement among the workplace health experts and OSH practitioners on the highest priorities for workplace health, namely common mental health problems and work-related stress. Further key areas included health surveillance and identification of emerging risks, musculoskeletal disorders, sickness absence, planning for major health-related scares and incidents, work-related driving, work-life balance, engagement and advice of small and medium-sized enterprises, evaluation of health and safety interventions and immigrant/migrant populations. Experts and practitioners also agreed on the key knowledge and skills required for the future role of health and safety practitioners. It is recommended that CPD programmes target and aim to develop knowledge and skills in all key identified areas. The study participants were also asked for their preferred mode of training delivery. Results indicated a preference for a blend of e-learning and face-to-face workshops.

Executive summary

The overall aim of this research was to explore current training needs among occupational safety and health (OSH) practitioners with regard to workplace health issues. In line with this primary aim, there were three objectives to this research:

- to explore workplace health experts' views on priority issues for workplace health
- to explore the views of members of the Institution of Occupational Safety and Health (IOSH) on these priority issues
- to identify the knowledge and skills that need to be addressed through Continuous Professional Development (CPD) programmes.

The research was conducted in four stages. In Stage 1, a panel of 30 national-level experts with considerable knowledge and experience in workplace health was identified. This included members of regulatory and organisational bodies, sector skills councils, and educational and professional bodies. Their opinions were gathered on future priorities in workplace health and likely gaps in the knowledge, skills and abilities (KSAs) of OSH practitioners with regard to workplace health issues. In Stage 2, data from the interviews were collated, subjected to thematic analysis and summarised. They were then used to develop a Delphi survey that was conducted with experts in two rounds. In Stage 3, a questionnaire was designed on the basis of the results from the previous stages of the research. All members of IOSH who were undertaking CPD received an email with a link to a questionnaire, which consisted of closed questions and explored the respondents' level of qualifications, views about gaps in their KSAs with regard to workplace health issues, and views on which of these issues represent priorities for their further education and training. In Stage 4, the survey data were analysed using appropriate statistical techniques to identify current training needs among OSH practitioners with regard to workplace health issues, taking into consideration variations among members with different levels of qualifications.

There was overall agreement among the workplace health experts and OSH practitioners on the highest priorities for workplace health, namely common mental health problems and work-related stress. Although the two groups prioritised other issues differently, further key areas included:

- health surveillance and identification of emerging risks
- musculoskeletal disorders
- sickness absence
- planning for major health-related scares and incidents
- work-related driving
- work-life balance
- engagement and advice of small and medium-sized enterprises (SMEs)
- evaluation of health and safety interventions
- immigrant/migrant populations.

Despite some differences in the perception of importance of these issues among different sub-groups of practitioners, it is recommended that CPD training programmes develop knowledge and skills in relation to all the above priorities, emphasising the key priorities of common mental health problems and work-related stress.

Experts and practitioners also agreed on the key knowledge and skills required for the future role of health and safety practitioners. Key knowledge areas include:

- attitudes, persuasion and behaviour change
- risk perception and communication
- change management
- development of legislation and guidance
- organisational culture
- professional codes of conduct
- the multi-factorial nature of ill health
- awareness of boundaries of personal and other groups' professional competences.

Key skills areas include:

- influencing
- making the business case for workplace health
- early identification of workplace health priorities
- leadership
- understanding business models and processes
- project management for OSH issues
- presentation skills
- assertiveness
- practice and evaluation of workplace health interventions
- mediation and conflict management.

It is recommended that CPD programmes target and aim to develop all these knowledge and skills areas. The study participants were also asked for their preferred mode of training delivery. Results indicated a preference for a blend of e-learning and face-to-face workshops.

1 Introduction

1.1 Project aims and objectives

Over the past decades, emphasis has been placed on the changing nature of work and new forms of risk that could negatively affect employees' health and safety, performance and attendance. These are mainly associated with new types of occupational hazard that have been identified in connection with the psychological, social and organisational aspects of work. Issues such as work-related stress, bullying and harassment, and rehabilitation are receiving increased attention.

Although important progress has been made to advance the knowledge base in relation to these issues, there are possible gaps in the translation of this knowledge into practice.

OSH practitioners play a key role in understanding and addressing current challenges in workplace health. To this end, their perception of priorities and of their knowledge and skills base are critically important.

The aim of this research was to explore current training needs among OSH practitioners with regard to workplace health issues. In line with this primary aim, there were three objectives aligned to this research:

- 2 explore workplace health experts' views on priority issues for workplace health
- 3 explore the views of IOSH members on these priority issues
- 4 identify the knowledge and skills that need to be addressed through CPD programmes.

1.2 Project background

This report presents the findings of research conducted with the support of IOSH to identify OSH practitioners' views on current training needs with regard to workplace health issues. The research was conducted in four stages.

In Stage 1, the project was steered by Professor Sayeed Khan (EEF – the manufacturers' organisation, and IOSH), Dr Stavroula Leka (Institute of Work, Health and Organisations (I-WHO)), Professor Amanda Griffiths (I-WHO), Barry Wilkes (National Examining Board in Occupational Safety and Health (NEBOSH)) and Hazel Harvey (IOSH). A panel of 30 national-level experts with considerable knowledge and experience in workplace health was identified. They included members of regulatory and organisational bodies, sector skills councils, and educational and professional bodies. Their opinions were gathered through telephone interviews on future priorities in workplace health and likely gaps in the KSAs of OSH practitioners with regard to workplace health issues.

In Stage 2, data from the interviews were collated, subjected to thematic analysis and summarised. They were then used to develop a Delphi survey that was conducted with workplace health experts in two rounds. In Stage 3, a questionnaire was designed on the basis of the results from the previous stages of the research. All IOSH members undertaking compulsory CPD, apart from Technician members, received an email with a link to a questionnaire, which consisted of closed questions and explored the respondents' level of qualifications, views about gaps in their KSAs on workplace health issues, and views on which of these issues represent priorities for their further education and training. In Stage 4, the survey data were analysed using appropriate statistical techniques to identify current training needs among health and safety practitioners with regard to workplace health issues, taking into consideration variations among members with different levels of qualifications. These were compared with the interview and Delphi data.

The main findings of this research are presented in this report. Ethical approval for the study was granted by the Ethics Committee of I-WHO.

2 Method

2.1 Research design

This research employed a mixed design combining qualitative and quantitative methods. Semi-structured interviews were used to explore the views of 30 experts in relation to workplace health issues. The findings of the interviews were analysed thematically and informed the design of a Delphi survey that was distributed to the experts in two separate rounds. The findings from the interviews and the Delphi survey were used to create the questionnaire survey that was distributed to IOSH members. The diverse methods used allowed a thorough exploration of the views of both workplace health experts and OSH practitioners in relation to current priorities in workplace health, their KSAs in these areas and their needs for further training.

2.2 Semi-structured interviews

Semi-structured telephone interviews were conducted with 30 health and safety experts. The panel consisted of national-level experts in the area of workplace health, including members of regulatory and organisational bodies, sector skills councils, and educational and professional bodies. Their opinions were gathered on future priorities in workplace health and likely gaps in the KSAs of OSH practitioners with regard to workplace health issues.

The interview schedule (see Appendix 1) consisted of five questions to elicit information from experts on:

- current priorities in workplace health
- the current role of the OSH practitioner in workplace health
- the future role of the OSH practitioner in workplace health
- whether OSH practitioners have the right KSAs to deal with current priorities in workplace health
- any areas, topics or issues that OSH practitioners should not tackle.

The interview schedule was piloted with three experts before the study took place and no problems were identified.

Interviews were conducted between June and August 2006 and lasted approximately 30 minutes each. The data were subjected to thematic analysis that informed the design of the subsequent Delphi survey.

2.3 Delphi survey

Following the analysis of the interview data, a Delphi survey was developed (see Appendix 2). This staged approach explored experts' views in relation to specific areas of concern through a ranking exercise on two occasions a month apart (September and October 2006). The same 30 experts that participated in the interview study were asked to fill in the Delphi survey.

Participants were asked to rank their five top priorities (with 1 as highest importance and 5 as lowest importance) in relation to workplace health issues. They were also asked to indicate any disagreement with suggested future roles of OSH practitioners with regard to workplace health matters, and with key knowledge areas and skills required for the future role of OSH practitioners. The Delphi survey was piloted with five experts before dissemination and some items were rephrased.

The five highest-rating priorities identified by the majority of the respondents and major themes raised in the first round were used to draft the questionnaire for the second round of the survey.

2.4 Online survey

A survey was developed on the basis of the findings of the first two stages of the research (the interviews and the Delphi survey). A link to this was sent to all IOSH members of Graduate level and above via email (see Appendix 3).

The survey was anonymous and consisted of four sections. The first section asked the respondents to select from a list their current and emerging priorities in workplace health over the next five to 10 years. It also asked them to indicate whether they would like any of these areas to be included in CPD training programmes. The second section asked respondents to identify important knowledge and skills areas required of future OSH practitioners in workplace health matters. The third section

asked about the respondents' preferred mode of delivery of CPD training. Finally, the fourth section sought demographic information (age, level of IOSH membership, qualifications, IOSH group membership* and number of years spent working in OSH). The survey was piloted with 10 OSH practitioners and some items were rephrased before the main survey was conducted. In total, 1,679 responses were received, amounting to a response rate of 21.2 per cent.

* At the time the survey was undertaken, IOSH's subject-specific networking groups were known as 'specialist groups', but these have since been renamed 'IOSH groups'. The main body of this report reflects the new terminology, although the questionnaire (Appendix 3) retains the original wording.

3 Results

3.1 Semi-structured interviews

Semi-structured interviews were conducted with 30 workplace health experts over two months. The responses were thematically analysed and the main findings are presented in this section. The key priorities for workplace health as identified by the respondents are listed in Table 1.

Ageing workforce Common mental health problems (eg anxiety, depression, stress) Defining boundaries of work and non-work health issues (unpacking multifactorial causes) Disabilities (eg learning difficulties and physical disabilities) Evaluation of OSH interventions Harassment and bullying Health promotion (eg cardiovascular health, obesity, diet, exercise) Health surveillance and feedback of data to organisations How to access treatment and health services How to engage and advise SMEs Immigrant/migrant work population (seasonal, temporary, non-English-speaking) Musculoskeletal disorders	Non-standard workplaces (eg mobile workers, home working, teleworking) Planning for major health-related crises (eg terrorism, pandemics) Psychiatric illness (eg bipolar disorder, schizophrenia) Sickness absence (monitoring, management, return to work, rehabilitation, presenteeism) Thermal comfort (hot and cold working environments) Traditional work-related hazards (eg chemicals, radiation, asbestos) Traditional work-related health issues (eg noise, hand–arm vibration, skin, respiratory) Work design and organisation Work–life balance (eg flexible working, long working hours, tiredness) Work-related driving
--	--

Table 1
Key priorities for workplace health, from the expert interviews

The experts were also asked their views on the future role of OSH practitioners at work. The key findings are shown in Table 2.

Proactive and preventative role (rather than reactive, inspection, ticking boxes) Joined-up thinking and working with other disciplines and professional groups (occupational health, HR and so on) – holistic approach Managing external OSH providers, contract management Awareness of boundaries of own and other professional groups' competence Acting as an enabler (advocate, catalyst, adviser, supporter, awareness-raiser) rather than as a doer – encouraging line managers to do what they should do Facilitating the integration of OSH into normal business practice (as opposed to it being a 'bolt-on') Distinguishing between work-related and non-work-related health problems Making the business case for OSH and persuading senior management (higher status function than at present)

Table 2
The future roles of OSH practitioners, from the expert interviews

The participants were also asked about the knowledge and skills that in their view are necessary for the future role of OSH practitioners. Their key views are presented in Table 3.

Learning skills – keeping up to date with new regulations and knowledge areas, such as work organisation Presentation and training skills Conflict management Early identification of problems Behaviour change Influencing and leadership skills Communication skills Strategic and business process awareness – systems-level thinking	Assertiveness skills Project management Case management and referral to specialist advisers Processes of organisational change Evaluation skills Ethics, confidentiality Awareness of boundaries of own competence and other groups' professional competences
---	---

Table 3
Knowledge and skills needed for the future role of OSH practitioners, from the expert interviews

Finally, all the experts identified one area that should not be within the remit of OSH practitioners: individual clinical management. However, it should be noted that the majority noted that potentially there are no areas that OSH practitioners cannot tackle, provided they recognise the boundaries of their competence and work in synergy with other expert groups.

3.2 Delphi survey

3.2.1 Round 1

A Delphi survey was developed on the basis of the interview findings and the same 30 experts who were interviewed were asked to complete it. A total of 25 responses were received in Round 1 of the survey. Participants were asked to rank their five top priorities (from 1 as highest importance to 5 as lowest importance) in relation to workplace health issues. The overall top five priorities are shown in Table 4.

Table 4
The top five priorities in workplace health, from the Delphi survey

Common mental health problems (eg anxiety, depression, stress)
Sickness absence (monitoring, management, return to work, rehabilitation, presenteeism)
Musculoskeletal disorders
How to engage and advise SMEs
Evaluation of OSH interventions

The experts were also asked to indicate whether they disagreed with any of the suggested future roles of OSH practitioners with regard to workplace health matters, or with the suggested key knowledge and skills areas required for the future role of OSH practitioners. The majority of the respondents did not indicate any disagreement. However, a few respondents thought that OSH practitioners should have no role in case management (even in a non-clinical capacity). A few suggested it might be inappropriate to expect OSH practitioners to take on more liaison with senior management or to integrate OSH into normal business practice. A minority thought that assertiveness, conflict management and time management were not key skills for the future role of OSH practitioners, and that codes of conduct and the biopsychosocial model of health and illness are not key knowledge areas.

3.2.2 Round 2

The five highest-rating priorities identified by the majority of the respondents, together with the issues raised in the first round, were used to draft the questionnaire for the second round of the survey. Respondents were asked to rank their top three priorities and indicate whether they disagreed about the necessity of the issues identified by some of the respondents in Round 1. The survey was sent to the same 30 experts and 18 responses were received. The top three priorities were again confirmed, namely:

- common mental health problems
- sickness absence management
- musculoskeletal disorders.

Again, the majority of the respondents indicated no disagreement about the important KSAs for future OSH practitioners.

3.3 Online survey

3.3.1 Data

A total of 8,826 anonymous emails, with a link to the survey included, were sent to IOSH members of Graduate level and above (in other words, those undertaking compulsory CPD with the exception of Technician members) on 16 January 2007. Of these, 7,911 were successfully delivered, while 915 were not, owing to delivery failure (748) or receiving an out-of-office response (167). The survey was available online for members to complete between 16 and 31 January. By 31 January, 1,142 responses (response rate 14.4 per cent) had been received.

On 31 January, 8,826 reminder emails were sent to the same members, informing them that the survey would remain available until 9 February. This time 7,656 emails reached the members, while 1,170 did not, owing to delivery failure (957) or receiving an out-of-office response (213). The reminder email generated 539 responses. A total of 1,681 responses were received from both emails. Two members submitted their responses twice and their duplicate responses were deleted, leaving the final sample as 1,679 (response rate 21.2 per cent).

An open question was asked about the number of years respondents had been working in OSH. As a result, a wide variety of responses were received. Some respondents provided a detailed account of employment history, whereas others simply put down an approximate number of years working in

the field. The various responses were grouped into four categories, namely '10 years or less', '11–20 years', '21–30 years' and '31 years or more'.

3.3.2 Data analysis

The data were analysed using descriptive statistics, chi-square analysis and logistic regression. Chi-square analysis was used to explore whether there was any association between respondents' membership of IOSH groups and their perceptions of key priorities for workplace health. Logistic regression was used to explore interactions between demographic variables and the respondents' perceptions.

3.3.3 Characteristics of the sample

Nearly three quarters of the respondents were in their 40s or 50s (Figure 1) and were Chartered members of IOSH (Figure 2). They were members of a wide variety of groups (Table 5). The largest group represented in the sample was Construction (22.8 per cent), followed by Public Services (13.9 per cent) and Environmental and Waste Management (10.8 per cent). 14.8 per cent of the respondents did not indicate which groups they belonged to.

Nearly half (43.7 per cent) reported that they had worked in OSH for between 11 and 20 years (Figure 3); 39 per cent had 10 years' or less experience; and a few had experience of 31 years or more.

Almost a third of the respondents (30 per cent) had completed a postgraduate degree or diploma in OSH; a quarter (24.6 per cent) possessed a NEBOSH Part 2 Diploma and 21.7 per cent had other qualifications or qualifications in addition to the options provided (Figure 4).

3.3.4 Training priorities

Table 6 shows the 10 priority areas that the most respondents regarded as both (a) current and emerging priorities in workplace health over the next five to 10 years, and (b) areas in which they felt further training was needed. 'Common mental health problems' topped the list, as over 40 per cent of respondents answered affirmatively to both questions. This was followed by 'management standards for work stress', 'health surveillance and identification of emerging risks', 'planning for major health-

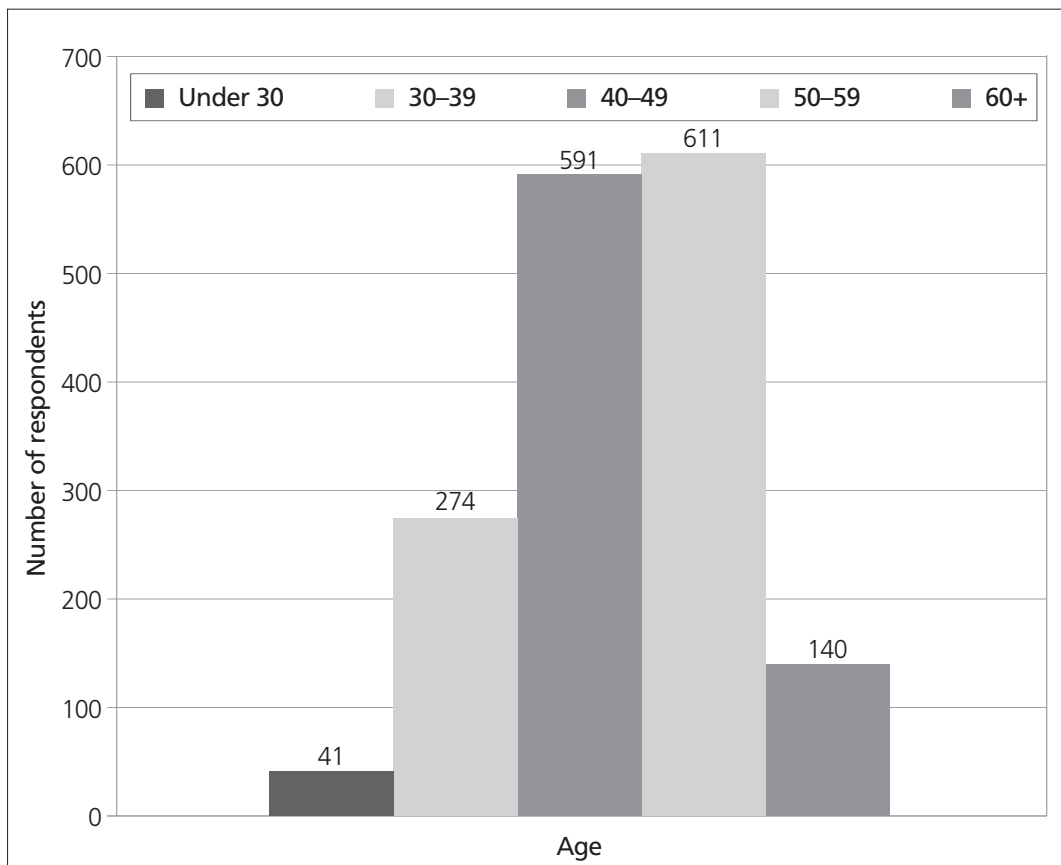


Figure 1
Age of the respondents

Figure 2
 Respondents' IOSH membership categories

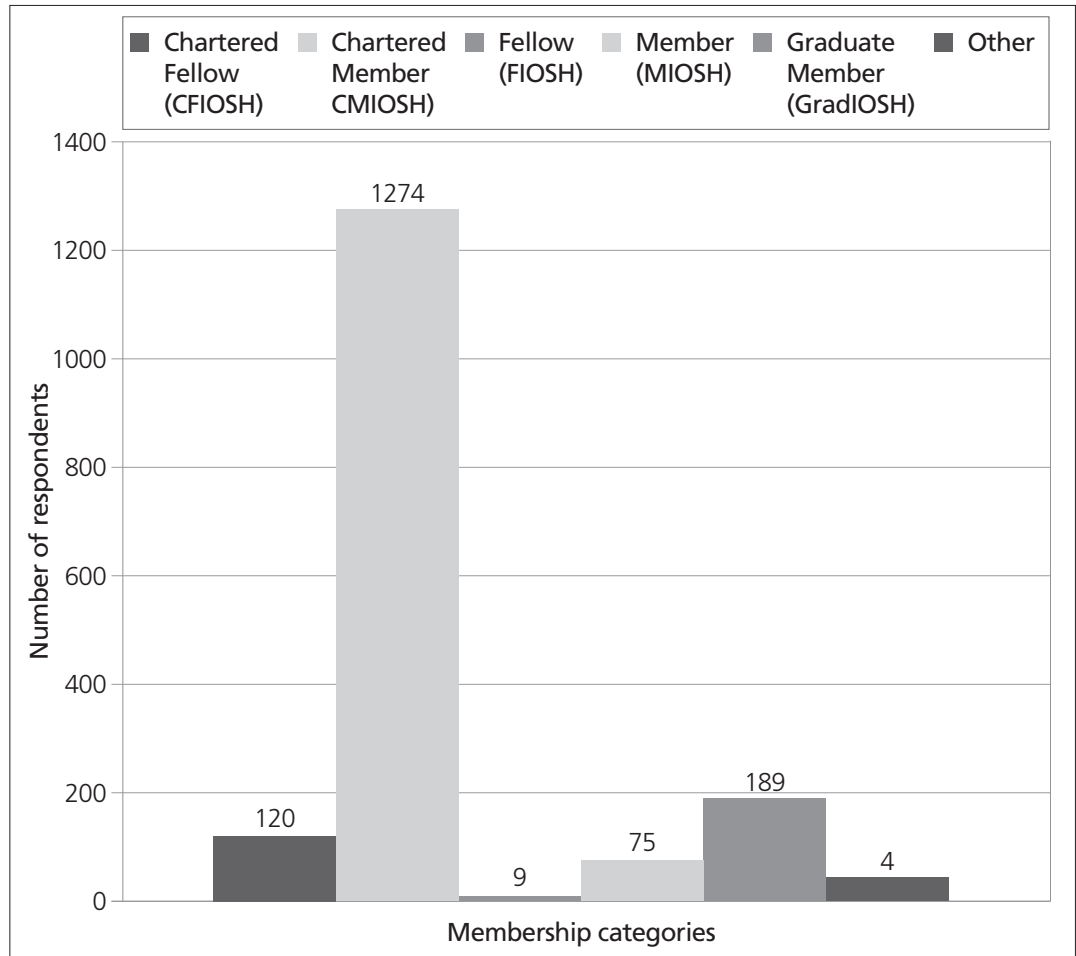
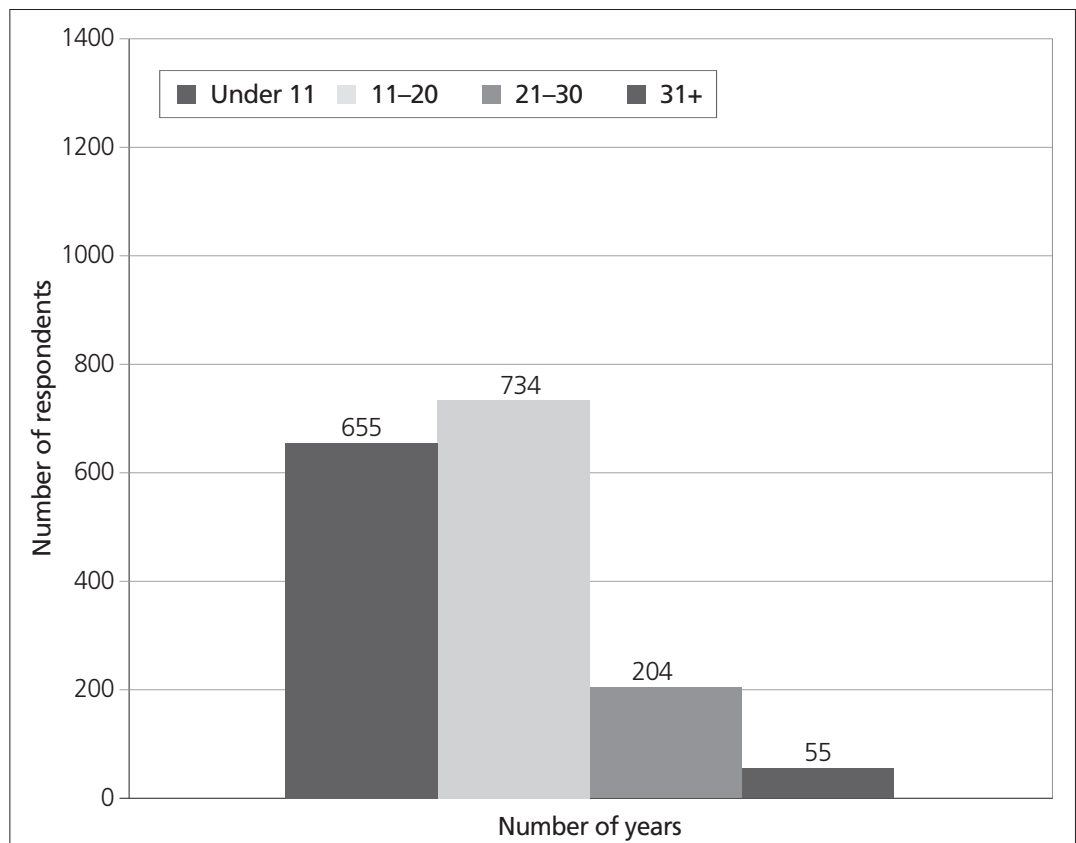


Figure 3
 Number of years spent working in OSH



IOSH Group	Number	%
Construction	382	22.8
None	249	14.8
Public Services	233	13.9
Environmental and Waste Management	182	10.8
Healthcare	160	9.5
Consultancy	134	8.0
Education	108	6.4
Fire Risk Management	98	5.8
Railway	72	4.3
Hazardous Industries	58	3.5
International	55	3.3
Retail and Distribution	50	3.0
Offshore	49	2.9
Food and Drink	38	2.3
Safety Sciences	38	2.3
Communications and Media	30	1.8
Rural Industries	23	1.4

Table 5
Respondents' membership of IOSH groups, in descending order

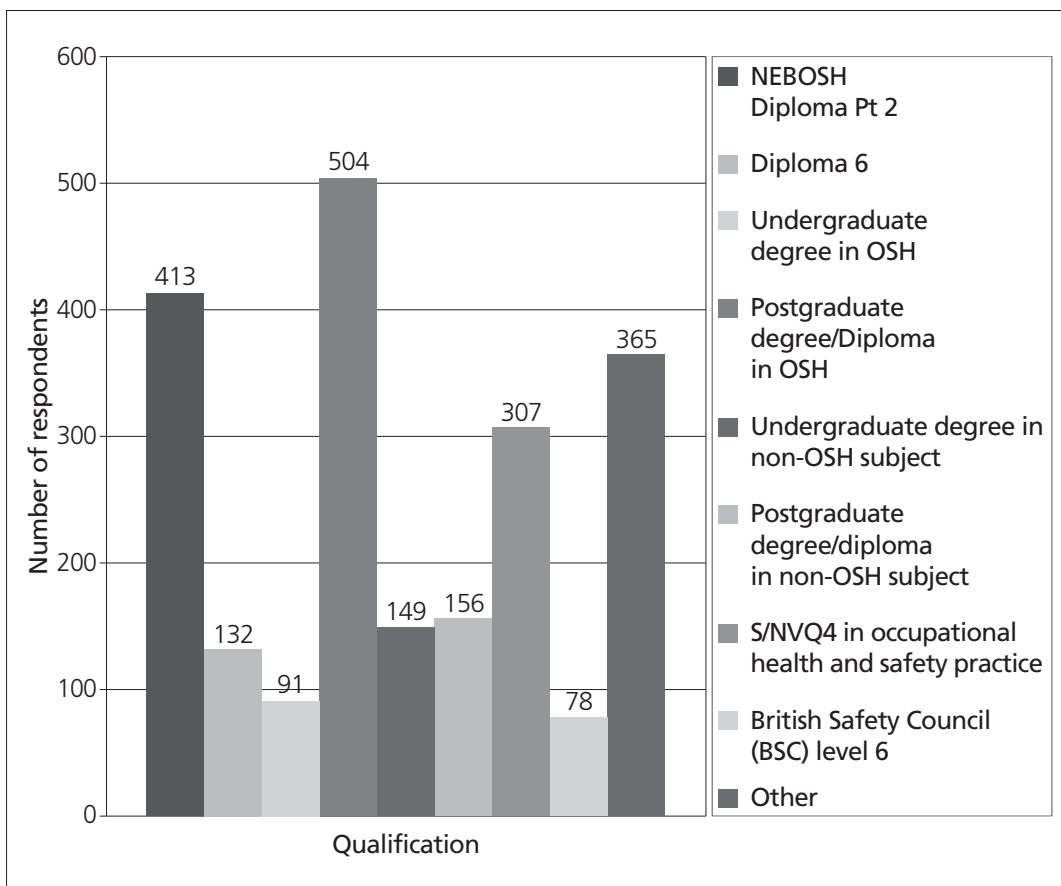


Figure 4
Respondents' qualifications

Table 6
Respondents' top
10 desirable
training priorities

Training priority	Number	%
1 Common mental health problems	771	45.9
2 Management standards for workplace stress	660	39.3
3 Health surveillance and identification of emerging risks	580	34.5
4 Planning for major health-related scares and incidents	575	34.2
5 Work-related driving	567	33.8
6 Work-life balance	533	31.7
7 Immigrant/migrant work population	503	30.0
8 Non-standard workplaces	496	29.5
9 Return to work and rehabilitation	493	29.4
10 Health promotion	480	28.6

related scares and incidents', 'work-related driving', 'work-life balance', and 'immigrant/migrant work population'. For the full list of all 25 priorities, see Appendix 4.

The data were analysed for any association between respondents' perceptions of the top 10 priorities (defined in terms of their importance and the desirability of further training) and their IOSH group memberships, membership grade, age, length of time employed in OSH, and a combination of two or more of those factors. The following sections present a summary of all the significant results of these analyses; further details can be found in Appendix 5. Other key findings in relation to knowledge and skills that were reported as important for the future role of OSH practitioners are presented in section 3.3.10.

3.3.5 Perception of key priorities in relation to IOSH group membership

Table 7 gives an overview of the significant relationships between group membership and the key priorities.

Five groups were found to have a significant relationship with the key priority 'Common mental health problems': Construction, Healthcare, Offshore, Public Services and Safety Sciences. A larger proportion of respondents from Healthcare and Public Services considered 'Common mental health problems' as important workplace health issues, whereas a smaller proportion in the Construction and Offshore Groups shared the view. Further training on the issue was more attractive to respondents from Public Services and Safety Sciences. Detailed breakdowns of the proportions in each group can be found in Appendix 5 (Tables A1–A6).

The perceptions of five groups were also found to be significantly associated with 'Management standards for work stress'. They were Fire Risk Management, Healthcare, Offshore, Railway and Safety Sciences. Proportionally more respondents from the Fire Risk Management, Healthcare and Safety Sciences Groups identified the issue as important or suitable for further training. However, the issue was generally perceived as unimportant among respondents from Offshore and Railway (see Tables A7–A11).

Perception of 'Health surveillance and identification of emerging risks' was significantly associated with the Construction and Hazardous Industries Groups. The issue was more important for respondents from Construction than Hazardous Industries, but further training was more appealing to the latter (see Tables A12–A14).

The relationship between perceptions of 'Planning for major health-related scares and incidents' and respondents' group was significant for the Education and Safety Sciences Groups. Proportionally more respondents from the Education and Safety Sciences Groups than other groups believed the issue was important and were more likely to express a need for training on the issue (see Tables A15–A17).

Among the top 10 priorities, perceptions of 'Work-related driving' were found to be significantly associated with the largest number of groups, namely Communications and Media, Construction,

	Important (I) Training priority (T)	1 Common mental health problems	2 Management standards for work stress	3 Health surveillance and identification of emerging risks	4 Planning for major health- related scares and incidents	5 Work-related driving	6 Work-life balance	7 Immigrant/migrant work population	8 Non-standard workplaces	9 Return to work and rehabilitation	10 Health promotion
IOSH Group											
Communications and Media	I										
	T					✓	✓				✓
Construction	I	✗		✓		✓		✓	✗		
	T					✓	✓	✓	✗		✓
Consultancy	I										
	T									✗	
Education	I				✓					✓	
	T				✓						
Environmental and Waste Management	I										
	T										
Fire Risk Management	I										✓
	T		✓								
Food and Drink	I										
	T										
Hazardous Industries	I			✓		✓					
	T			✓			✓				
Healthcare	I	✓	✓			✗		✗			
	T					✗		✗			
International	I										
	T										
Offshore	I	✗	✗			✗			✗	✗	✗
	T										
Public Services	I	✓						✗	✓	✓	
	T	✓						✗			
Railway	I		✗							✗	
	T										
Retail and Distribution	I										✗
	T					✓			✓		
Rural Industries	I					✓					
	T					✓					
Safety Sciences	I				✓	✗					
	T	✓	✓								

Table 7
Overview of significant associations between respondents' group membership and their perception of the importance (I) of and need for training (T) in the top 10 workplace health priorities

✓ = positive association
✗ = negative association

Hazardous Industries, Healthcare, Offshore, Retail and Distribution, Rural Industries and Safety Sciences. 'Work-related driving' was indicated as an important issue and/or training need among respondents from the Communications and Media, Construction, Hazardous Industries, Retail and Distribution and Rural Industries Groups, but not among respondents from Healthcare, Offshore and Safety Sciences (see Tables A18–A28).

There was a significant association between perceptions of 'Work-life balance' and members of the Communications and Media, Construction and Hazardous Industries Groups as regards training. Respondents from these groups showed a proportionally greater desire for training on this issue than respondents who were not members of these groups (see Tables A29–A31).

Three groups were found to be significantly associated with perceptions of 'Immigrant/migrant work population' as regards importance and further training: Construction, Healthcare and Public Services. Respondents from Construction had a greater tendency to perceive the issue as important and requiring further training, whereas respondents from the other groups had a greater tendency to respond the opposite (see Tables A32–A37).

Four groups were shown to have significant association with perceptions of 'Non-standard workplaces'. They were Construction, Offshore, Public Services and Retail and Distribution. Respondents from Public Services and Retail and Distribution tended to view the issue as important. The issue was less important and/or less of a priority for further training among respondents from the Construction and Offshore Groups (see Tables A39–A42).

Perceptions of 'Return to work and rehabilitation' were significantly related to the Consultancy, Education, Offshore, Public Services and Railway Groups. The issue was less likely to be identified as important or requiring further training among respondents from the Consultancy, Offshore and Railway Groups, but more likely to be identified as important in Education and Public Services (see Tables A43–A47).

Perceptions of 'Health promotion' were significantly associated with five groups: Communications and Media, Construction, Fire Risk Management, Offshore and Retail and Distribution. Proportionally more people from Communications and Media, Construction and Fire Risk Management said that 'Health promotion' was important or that further training in the area was desirable. On the other hand, respondents from the Offshore and Retail and Distribution Groups were more likely to perceive it as unimportant (see Tables A48–A52).

3.3.6 Perceptions of key priorities in relation to qualifications of respondents

Table 8 summarises the significant relationships between respondents' qualifications and their perception of the key priorities.

There was a significant relationship between 'Common mental health problems' and some of the respondents' qualifications. These respondents held undergraduate degrees in a non-OSH subject, S/NVQ 4 in Occupational Health and Safety Practice and British Safety Council (BSC) Level 6. Respondents with an undergraduate degree in a non-OSH subject or BSC Level 6 were more likely to indicate 'Common mental health problems' as important and/or an issue that required further training, whereas respondents with an S/NVQ in Occupational Health and Safety Practice were more likely to perceive the issue as unimportant (see Tables A53–A57).

Four qualifications were found to have a significant relationship with perceptions of 'Health surveillance and identification of emerging risks'. They were NEBOSH Part 2, Diploma 6, an undergraduate degree in a non-OSH subject and a postgraduate degree or diploma in OSH. Unlike respondents with a postgraduate degree or diploma in OSH, respondents with NEBOSH Part 2, Diploma 6 or an undergraduate degree in a non-OSH subject tended not to see the issue as important or an area that required further training (see Tables A57–A61).

A significantly larger proportion of respondents with NEBOSH Part 2 indicated that they would like to have further training in 'Planning for major health-related scares and incidents' (see Table A62). Respondents with S/NVQ 4 in Occupational Health and Safety Practice were more likely to view the 'Immigrant/migrant work population' as important (see Table A63).

'Non-standard workplaces' was an important issue among respondents with NEBOSH Part 2 or a postgraduate degree or diploma in a non-OSH subject, but not among respondents with S/NVQ 4 in Occupational Health and Safety Practice (see Tables A64–A66).

Qualification	Important (I) Training priority (T)	1 Common mental health problems	3 Health surveillance and identification of emerging risks	8 Non-standard workplaces	9 Return to work and rehabilitation
S/NVQ Level 4	I	X		X	
	T				
BSC Level 6	I	✓			
	T				
Diploma 6	I		X		X
	T				
NEBOSH Part 2	I		X	✓	
	T		X		
Undergraduate degree (non-OSH)	I	✓	X		
	T	✓			
Postgraduate OSH degree or diploma	I		✓		
	T				
Postgraduate non-OSH degree or diploma	I			✓*	X
	T				

* This finding includes a significant negative association for members of the Public Services Group

There was a significant relationship between 'Return to work and rehabilitation' and two qualifications: Diploma 6 and postgraduate degree or diploma in a non-OSH subject. The issue was seen as not important among respondents with these qualifications (see Tables A67–A68).

Proportionally more respondents with NEBOSH Part 2 indicated that they did not need training in 'Health promotion' (see Table A69).

3.3.7 Perception of key priorities in relation to level of IOSH membership

A significantly larger proportion of Chartered Members and Fellows of IOSH viewed 'Return to work and rehabilitation' as important and 'Health promotion' as unimportant (see Tables 9 and A70–A71).

Qualification	Important (I) Training priority (T)	9 Return to work and rehabilitation	10 Health promotion
Chartered Members and Fellows	I	✓	X
	T		

Table 8
Overview of significant associations between respondents' level of qualification and their perception of the importance (I) of and need for training (T) in the top 10 workplace health priorities

✓ = positive association
X = negative association

Table 9
Overview of significant associations between respondents' IOSH membership grade and their perception of the importance (I) of and need for training (T) in the top 10 workplace health priorities

✓ = positive association
X = negative association

3.3.8 Perception of key priorities in relation to respondents' age

Table 10 shows that the younger respondents are, the more likely they were to perceive 'Health promotion' as important.

Table 10
Perception of the importance of 'health promotion' in relation to respondents' age

	Age of respondents (years)									
	Under 30		30–39		40–49		50–59		60 and over	
	No.	%	No.	%	No.	%	No.	%	No.	%
'Health promotion' is not an important issue	12	29.3	95	34.7	256	43.3	280	45.8	62	44.3
'Health promotion' is an important issue	29	70.7	179	65.3	335	56.7	331	54.2	78	55.7

3.3.9 Perception of key priorities in relation to numbers of years in OSH

The least and the most experienced respondents tended to regard 'Return to work and rehabilitation' as unimportant (Table 11). The more experienced the respondents, the more likely they were to perceive 'Health promotion' as unimportant (Table 12).

Table 11
Perception of the importance of 'return to work and rehabilitation' in relation to respondents' work experience in OSH

	Length of work experience in OSH (years)							
	10 or under		11–20		21–30		over 30	
	No.	%	No.	%	No.	%	No.	%
'Return to work and rehabilitation' is not an important issue	337	51.5	333	45.4	88	43.1	30	54.5
'Return to work and rehabilitation' is an important issue	318	48.5	401	54.6	116	56.9	25	45.5

Table 12
Perception of the importance of 'Health promotion' in relation to respondents' work experience in OSH

	Length of work experience in OSH (years)							
	10 or under		11–20		21–30		over 30	
	No.	%	No.	%	No.	%	No.	%
'Health promotion' is not an important issue	251	38.3	317	43.2	99	48.5	29	52.7
'Health promotion' is an important issue	404	61.7	417	56.8	105	51.5	26	47.3

3.3.10 Areas of knowledge and skills required of future OSH practitioners

The respondents were also asked to indicate the knowledge and skills areas they view as important for future OSH practitioners. With regard to knowledge, except 'Multi-factorial nature of ill health – biopsychosocial model' (33.3 per cent), all the options provided were rated by over 50 per cent of the respondents as important (Table 13). The top three were 'Attitudes, persuasion and behaviour change' (83.2 per cent), 'Risk perception and communication' (81.2 per cent) and 'Change management' (67.7 per cent).

As far as skills were concerned, once again the majority of the options were rated as important by over half of the respondents (Table 14). The three that received the most support were 'Influencing' (75.6 per cent), 'Making the business case for workplace health' (72.4 per cent) and 'Early identification of workplace health priorities' (65.5 per cent).

3.3.11 Preferred mode of delivery for CPD training

As Table 15 shows, the majority of the respondents preferred a mix of e-learning and face-to-face workshops or modules on weekdays (59.4 per cent). The same delivery mode but at weekends was preferred by 14.7 per cent, with 22.4 per cent preferring pure e-learning.

Important areas of knowledge	No.	%
1 Attitudes, persuasion and behaviour change	1397	83.2
2 Risk perception and communication	1363	81.2
3 Change management	1137	67.7
4 Development of legislation and guidance	1066	63.5
5 Organisational culture	992	59.1
6 Professional code of conduct – ethics, confidentiality, record-keeping, awareness of boundaries and competence	962	57.3
7 Multifactorial nature of ill health (biopsychosocial model)	559	33.3

Table 13
Areas for future knowledge development that respondents consider important, in descending order

Important areas of skill	No.	%
1 Influencing	1270	75.6
2 Making the business case for workplace health ('carrot' as well as 'stick')	1216	72.4
3 Early identification of workplace health priorities (eg monitoring and surveillance)	1100	65.5
4 Leadership	1045	62.2
5 Understanding essential business models and processes (eg financial and accounting models, operational and strategic processes, business process re-engineering)	976	58.1
6 Project management for OSH issues	931	55.4
7 Presentation skills (eg public speaking, using multimedia technology)	923	55.0
8 Assertiveness	899	53.5
9 Practice and evaluation of workplace health interventions	761	45.3
10 Mediation and conflict management	693	41.3
11 Time management	648	38.6
12 Managing referrals or external occupational health providers	548	32.6

Table 14
Areas for future skill development that respondents consider important, in descending order

Preferred method of training delivery	No.	%
Mix of e-learning and face-to-face workshops or modules (weekdays)	998	59.4
E-learning (entire course via the internet, including online delivery of course materials and tutorials)	376	22.4
Mix of e-learning and face-to-face workshops or modules (weekends)	246	14.7
Other	51	3.0

Table 15
Respondents' preferred method of training delivery, in descending order

4 Conclusions

This research had three objectives:

- to explore experts' views on priority issues for workplace health
- to explore the views of IOSH members on these priority issues
- to identify the knowledge and skills that need to be addressed through CPD programmes.

This section presents the overall findings of the study and provides some recommendations for further research, practice and training in workplace health.

4.1 Key findings of the study

The views of experts on priority issues in workplace health were explored both through interviews and a Delphi survey. In all, 22 issues were identified, the top five being common mental health problems (such as anxiety, depression and stress), sickness absence (monitoring, management, return to work, rehabilitation and 'presenteeism'), musculoskeletal disorders, engagement of and advice for SMEs, and evaluation of OSH interventions. The views of experts largely reflect current and future priorities in workplace health as reported in the literature.¹ Other important issues were also mentioned, such as the changing concept of the workplace (commuting, home working, mobile workers), work-life balance, disabilities and vulnerable workers (immigrant, migrant, illegal, older and so on). Issues such as health surveillance, sickness absence, return to work and rehabilitation, and access to treatment and health services were also reported as important.

The future role of OSH practitioners is viewed by experts as a proactive and preventive role that requires working with other disciplines and professional groups, so OSH practitioners will need to know the boundaries of their competence. In addition, they should be able to manage external OSH providers and facilitate the integration of OSH into normal business practice. Making the business case for OSH and persuading senior management were also viewed as important, as was acting as an enabler. Finally, distinguishing between work-related and non-work-related OSH problems was mentioned as an important part of practitioners' future role. Similar priorities for training OSH practitioners have been identified by the National Institute for Occupational Safety and Health in the United States.²

In addition, experts viewed a number of skill and knowledge areas as important for the future role of OSH practitioners. These included:

- learning skills and keeping up to date with new regulations and knowledge areas
- conflict management
- behaviour change
- influencing and leadership skills
- management, organisational and communication skills
- understanding organisational change
- being aware of their own competence boundaries and those of other professionals.

It is important to note that the majority of the experts thought that potentially there are no areas that OSH practitioners cannot tackle, provided that they understand the boundaries of their own competence and co-operate with other expert groups.

The research also explored, through a survey, the views of OSH practitioners themselves in relation to key priorities in workplace health, key knowledge and skills, and desirable training areas. OSH practitioners reported 'Common mental health problems' as the most important key priority, followed by 'Management Standards for work stress'. Essentially, their views agreed with those of the experts as far as the top priorities for workplace health are concerned, and they indicated that these two issues also represent their top priorities for training. However, in looking at the rest of the key issues mentioned, their views were slightly different to those of the experts. OSH practitioners viewed health surveillance and identification of emerging risks, planning for major health-related scares and incidents and work-related driving as top priorities in workplace health. These issues, although mentioned by the experts, were not among their top five priorities. Other issues mentioned by practitioners were work-life balance, immigrant/migrant work population, non-standard workplaces, return to work and rehabilitation, and health promotion. They also indicated that they would like to receive more training in these areas. Support for increased training in the multidisciplinary nature of

OSH was also found through a study by the Health and Safety Executive (HSE) and EEF on the competences of occupational physicians.³

More detailed analysis on the basis of practitioners' IOSH group membership revealed that those who worked in healthcare and public services regarded common mental health problems as more important than did practitioners working in construction, the offshore industry or safety sciences. This is not a surprising finding, as work-related stress and other common mental health problems have been found to be more prevalent in healthcare and the public sector.⁴ OSH practitioners working in construction and hazardous industries prioritised more health surveillance and identification of emerging risks, while those working in education and safety sciences prioritised more planning for major health-related scares and incidents. Those working in construction also placed more importance on immigrant/migrant workers and work-related driving. Return to work and rehabilitation was seen as more important by practitioners working in education and public services. Again, these findings generally reflect differences in the nature of these occupational sectors.

Some differences were also identified through analyses of the respondents' qualifications. Respondents who had an undergraduate degree in a non-OSH subject or BSC Level 6 were more likely to indicate common mental health problems as important and an issue that required further training. In addition, respondents with NEBOSH Part 2, Diploma 6 or an undergraduate degree in a non-OSH subject viewed health surveillance and identification of emerging risks as more important. Respondents with S/NVQ 4 in Occupational Health and Safety Practice were more likely to view the immigrant/migrant work population as important.

Chartered members of IOSH viewed return to work and rehabilitation as important and health promotion as unimportant. The younger respondents were, the more likely they were to perceive health promotion as important.

Practitioners reported that the most important areas of knowledge required for future OSH practitioners were attitudes, persuasion and behaviour change, risk perception and communication. Other important issues were change management, development of legislation and guidance, and organisational culture and professional codes of conduct (including ethics, confidentiality, record keeping, and awareness of boundaries and competence). These findings are similar to those of the HSE/EEF survey on the competences of occupational physicians.³ It can be concluded, therefore, that the views of the OSH practitioners were not different from those of the workplace health experts. In terms of skills for future OSH practitioners, influencing, making the business case for workplace health, early identification of workplace health priorities, leadership and understanding essential business models and processes were reported as most important. Finally, for delivery of CPD training, the majority of practitioners preferred a mix of e-learning and face-to-face workshops or modules on weekdays.

4.2 Further research

Although there was overall agreement about the key priorities for workplace health, this research identified some differences between IOSH groups as well as between respondents with different levels of qualifications and experience. Further research could explore these differences in greater depth.

References

- 1 Rial-Gonzalez E, Copsey S, Paoli P and Schneider E. *Priorities for occupational safety and health research in the EU-25*. Luxembourg: Office for Official Publications of the European Communities, 2005.
- 2 Sauter S L and Hurrell J J. Occupational health psychology: origins, content, and direction. *Professional Psychology: Research and Practice* 1999; 30 (2): 117–122.
- 3 Reetoo K N, McDonald E B and Harrington J M. *Competencies of occupational physicians: the customer's perspective*. Sudbury: HSE Books, 2004.
- 4 Jones J R, Huxtable C S and Hodgson J T. *Self-reported work-related illness in 2005/06: results from the Labour Force Survey*. London: Office for National Statistics, 2006.

Appendix 1: Schedule for expert panel interviews

Exploring current training needs among health and safety practitioners with regard to workplace health issues

Background to the I-WHO/EEF study

Over the past decades, emphasis has been placed on the changing nature of work and new forms of risk that could negatively affect employee health and safety as well as employee performance and attendance. These are mainly associated with new types of occupational hazard that have been termed psychosocial. Issues such as work-related stress, bullying and harassment, chronic illness and rehabilitation are now receiving attention on a global basis.

Although important progress has been made to advance the knowledge base in relation to these issues, there are possible gaps in the translation of this knowledge into effective practice by health and safety practitioners.

The role of the health and safety practitioner in understanding and dealing with current challenges in workplace health is invaluable. To this end, their perception of priorities to be addressed in workplace health and their knowledge base are of critical importance.

This research seeks to explore current training needs among health and safety practitioners with regard to workplace health issues.

Interview questions

- 1 What, in your view, are the current priorities in workplace health?
- 2 What is the current role of the health and safety practitioner in workplace health?
- 3 What should be the future role of the health and safety practitioner in workplace health?
- 4 Do you think that health and safety practitioners have the right knowledge, skills and abilities to deal with current priorities in workplace health? Why?
- 5 Are there any areas, topics or issues that health and safety practitioners should not tackle, in your view?

Appendix 2: Delphi survey of workplace health experts

Round 1

IOSH research into the role of OSH practitioners – Delphi survey

Dear colleagues,

Thank you very much for your recent participation in an interview about the future role of health and safety practitioners in workplace health issues. We have now interviewed 30 experts in this field, and append a summary of their responses.

As part of the Delphi process, would you be so kind as to spare us a further few minutes simply to:

- indicate **the TOP FIVE priorities** (1 being the highest priority and 5 the lowest), and
- mark with an X any items listed by others that you **DISAGREE** with.

There is space for additional comments. This is a confidential reply that will only be read by us: all responses will be summarised and none will be attributable to any individual.

We would like to include in our final report to IOSH a list of those who participated in this project. We would be grateful if you would agree to this, and indicate your agreement by listing your current and/or former relevant positions of employment and affiliations.

We would be most grateful if you could click on the shaded area, insert your response as indicated (1 to 5, or X as appropriate), save it and send it back to us by 13 October. If you prefer, you can print it out and send it to us by conventional mail.

With thanks and best wishes,

Dr Stavroula Leka
Professor Sayeed Khan
Professor Amanda Griffiths
University of Nottingham

1 Interview question: What are the big issues in workplace health?

Please indicate (by marking 1–5) those areas which you think are the **top five** priorities.

Ageing workforce	
Common mental health problems (eg anxiety, depression, stress)	
Defining boundaries of work and non-work health issues (unpacking multifactorial causes)	
Disabilities (eg learning difficulties and physical disabilities)	
Evaluation of OSH interventions	
Harassment and bullying	
Health promotion (eg cardiovascular health, obesity, diet, exercise)	
Health surveillance and feedback of data to organisations	
How to access treatment and health services	
How to engage and advise SMEs	
Immigrant/migrant work population (seasonal, temporary, non-English-speaking)	
Musculoskeletal disorders	
Non-standard workplaces (eg mobile workers, home working, teleworking)	
Planning for major health-related crises (eg terrorism, pandemics)	
Psychiatric illness (eg bipolar disorder, schizophrenia)	
Sickness absence (monitoring, management, return to work, rehabilitation, 'presenteeism')	
Thermal comfort (hot and cold working environments)	
Traditional work-related hazards (eg chemicals, radiation, asbestos)	
Traditional work-related health issues (eg noise, hand–arm vibration, skin, respiratory)	
Work design and organisation	
Work–life balance (eg flexible working, long working hours, tiredness)	
Work-related driving	

2 Interview question: What should be the future role(s) of OSH practitioners in workplace health matters?

Please indicate your **disagreement** with a suggested role by placing an X in the box next to it. (We will assume you agree if you leave the boxes blank.)

Acting as an enabler (advocate, catalyst, adviser, supporter, influencer, awareness-raiser) rather than as a 'doer' – encouraging line managers to accept and undertake their OSH responsibilities	
Liaising and working with other professional groups (eg internal and external occupational health and human resources specialists)	
Non-clinical case management – return to work and rehabilitation	
A more proactive and preventive role (rather than reacting, inspecting, ticking boxes)	
Higher status function as consultant/business partner (and systems-level thinking), liaising with senior management, integrating OSH into normal business practice	

If you have any comments about the suggested roles as listed above, or think anything is missing, please make a note here:

--

3 Interview question: What are the key knowledge areas and skills required for the future role of OSH practitioners?

Please indicate your **disagreement** with a suggested knowledge area or skill by placing an X in the box next to it. (We will assume you agree if you leave the boxes blank.)

Knowledge of:	
Organisational culture and change management	
Sickness absence management and rehabilitation/return to work	
Human behaviour, attitudes and behaviour change	
Health models (eg patient-advocate role, record-keeping, definitions of health and disability)	
Biopsychosocial model of causes of ill health (including the role of 'soft' issues such as psychosocial factors and work design on health)	
Health risk perception	
Code of conduct – ethics, confidentiality, awareness of boundaries of competence	
Skills in:	
Assertiveness	
Communication	
Conflict management	
Early identification of problems	
Influencing	
Leadership	
Managing (and referral to) external OSH providers and being aware of their areas of expertise and potential contribution	
Presentation and training	
Research methods for evaluating interventions and outcomes	
Selling and making the business/investment case for OSH (ie 'carrot' as well as 'stick')	
Strategic/business process awareness	
Time management	

If you have any comments about the suggested knowledge areas and skills as listed above, or think anything is missing, please make a note here:

4 Please insert below your name and current and/or former relevant professional positions or affiliations (as you would like them to appear in our final report).

Thank you again for your participation.

Round 2

IOSH research into the role of OSH practitioners – Delphi survey

Dear colleagues,

Thank you very much for your recent participation in an interview and Delphi survey about the future role of health and safety practitioners in workplace health issues.

As part of the Delphi process, would you be so kind as to spare us a further few minutes simply to:

- indicate **the TOP THREE priorities** (1 being the highest priority and 3 the lowest), and
- mark with an X any items listed by others that you **DISAGREE** with.

There is space for additional comments. This is a confidential reply that will only be read by us: all responses will be summarised and none will be attributable to any individual.

We would like to include in our final report to IOSH a list of those who participated in this project. We would be grateful if you would agree to this, and indicate your agreement by listing your current and/or former relevant positions of employment and affiliations.

We would be most grateful if you could click on the shaded area, insert your response as indicated (1 to 3, or X as appropriate), save it and send it back to us by 5 November. If you prefer, you can print it out and send it to us by conventional mail.

With thanks and best wishes,

Dr Stavroula Leka
Professor Sayeed Khan
Professor Amanda Griffiths
University of Nottingham

1 What are the big issues in workplace health?

Please indicate (by marking 1–3) those areas which you think are the **top three** priorities.

Common mental health problems (eg anxiety, depression, stress)	
Sickness absence (monitoring, management, return to work, rehabilitation, 'presenteeism')	
Musculoskeletal disorders	
How to engage and advise SMEs	
Evaluation of OSH interventions	

2 What should be the future role(s) of OSH practitioners in workplace health matters?

Please indicate your **disagreement** with a suggested role by placing an X in the box next to it. (We will assume you agree if you leave the boxes blank.)

Non-clinical case management – return to work and rehabilitation	
Higher status function as consultant/business partner (and systems-level thinking), liaising with senior management, integrating OSH into normal business practice	

If you have any comments about the suggested roles as listed above, or think anything is missing, please make a note here:

3 What are the key knowledge areas and skills required for the future role of OSH practitioners?

Please indicate your **disagreement** with a suggested knowledge area or skill by placing an X in the box next to it. (We will assume you agree if you leave the boxes blank.)

Knowledge of:	
Biopsychosocial model of causes of ill health (including the role of 'soft' issues such as psychosocial factors and work design on health)	
Code of conduct – ethics, confidentiality, awareness of boundaries of competence	
Skills in:	
Assertiveness	
Conflict management	
Time management	

If you have any comments about the suggested knowledge areas and skills as listed above, or think anything is missing, please make a note here:

4 Please insert below your name and current and/or former relevant professional positions or affiliations (as you would like them to appear in our final report).

Thank you again for your participation.

Appendix 3: Survey

Email text

Dear IOSH member

Workplace health – OSH practitioner needs

What do you think are the current priorities in workplace health? Do you feel you have the knowledge and skills to deal with them? Would you like to receive more training in these areas? This is your chance to tell us.

Here at the University of Nottingham, supported by a grant from the IOSH Research and Development Fund, we are trying to find out what the training needs of OSH practitioners are with regard to workplace health issues. By gathering your views about priority issues and practitioner knowledge, skills and abilities in relation to workplace health, we can identify priorities for practitioner education and training programmes.

Please take a few minutes to fill out our short (10 questions) and simple questionnaire by clicking on this link: www.safesurveys.info/workplace-health/workplacehealth2.htm. The survey is on a secure site and will be online until 31 January. All information provided will be treated in confidence. Your views will help to inform the content and provision of the education and training available to you.

The results of this survey will be made available on the IOSH website.

If you experience any difficulties with this survey or have any questions relating to it, please contact murray.clark@iosh.co.uk.

We really value your views and ideas. Thank you for your time.

Kind regards

Professor Sayeed Khan
Chief Medical Adviser, Engineering Employers' Federation and
Special Professor of Occupational Health, University of Nottingham

Reminder email text

Dear IOSH member

Earlier this month you received an email asking you to tell us your views on the current priorities in workplace health, whether you feel you have the knowledge and skills to deal with these and asking you about your training needs. We had a fantastic response to our email and so far over 1,000 surveys have been returned. We would like to thank everyone for taking part, but as responses are still coming in we have extended the deadline for a further week, so if you haven't sent us your views yet, you can now do so up until Friday 9 February 2007.

The survey is from the University of Nottingham, supported by a grant from the IOSH Research and Development Fund, and aims to find out what the training needs of OSH practitioners are with regard to workplace health issues. By gathering your views about priority issues and practitioner knowledge, skills and abilities in relation to workplace health, we can identify priorities for practitioner education and training programmes.

Please take a few minutes to fill out our short (10 questions) and simple questionnaire by clicking on this link: www.safesurveys.info/workplace-health/workplacehealth2.htm. The survey is on a secure site and all information provided will be treated in confidence. Your views will help to inform the content and provision of the education and training available to you.

The results of this survey will be made available on the IOSH website.

If you experience any difficulties with this survey or have any questions relating to it, please contact murray.clark@iosh.co.uk.

We really value your views and ideas. Thank you for your time and interest in this research.

Kind regards

Professor Sayeed Khan
Chief Medical Adviser, Engineering Employers' Federation and
Special Professor of Occupational Health, University of Nottingham

Workplace health – OSH practitioner needs

This survey seeks your views about **workplace health** and information on your **skills and knowledge** in this area as an occupational safety and health (OSH) practitioner. Your responses will help us design better continuous professional development (CPD) training courses that will cater for the needs of OSH practitioners in the changing world of work. The questionnaire should take no longer than five minutes to complete and is confidential, and the survey results will be made available on the IOSH website. Please complete and return the questionnaire by 31 January 2007. Thank you for your participation in this project.

Current and emerging priorities

Q1 What, in your view, are the current and emerging priorities in **workplace health** over the next 5–10 years? Please tick as many options as you like in the **first column**. In terms of CPD training, which areas on this list would you like to see included? Please tick as many items as you like in the **second column**.

	Workplace health priorities	CPD training desirable
Access to health services and treatment	<input type="checkbox"/>	<input type="checkbox"/>
Ageing workforce	<input type="checkbox"/>	<input type="checkbox"/>
Common mental health problems (eg stress, anxiety, depression)	<input type="checkbox"/>	<input type="checkbox"/>
Commuting to/from work	<input type="checkbox"/>	<input type="checkbox"/>
Disabilities (chronic health conditions)	<input type="checkbox"/>	<input type="checkbox"/>
Distinguishing the boundaries between work and non-work issues	<input type="checkbox"/>	<input type="checkbox"/>
Engaging and advising SMEs	<input type="checkbox"/>	<input type="checkbox"/>
Evaluation of workplace interventions (individual and organisational level)	<input type="checkbox"/>	<input type="checkbox"/>
Harassment and bullying	<input type="checkbox"/>	<input type="checkbox"/>
Health promotion (eg cardiovascular health, obesity, diet, exercise, lifestyle)	<input type="checkbox"/>	<input type="checkbox"/>
Health surveillance and identification of emerging risks	<input type="checkbox"/>	<input type="checkbox"/>
Immigrant/migrant work population (seasonal, temporary, non-English-speaking)	<input type="checkbox"/>	<input type="checkbox"/>
Management standards for work stress	<input type="checkbox"/>	<input type="checkbox"/>
Musculoskeletal disorders	<input type="checkbox"/>	<input type="checkbox"/>
Non-standard workplaces (eg mobile working, home working, teleworking)	<input type="checkbox"/>	<input type="checkbox"/>
Physical hazards (eg chemicals, radiation, asbestos)	<input type="checkbox"/>	<input type="checkbox"/>
Planning for major health-related scares and incidents (eg terrorism, pandemics), business continuity	<input type="checkbox"/>	<input type="checkbox"/>
Psychiatric illness (eg bipolar disorder, schizophrenia)	<input type="checkbox"/>	<input type="checkbox"/>
Return to work and rehabilitation	<input type="checkbox"/>	<input type="checkbox"/>
Sickness absence (eg monitoring, management)	<input type="checkbox"/>	<input type="checkbox"/>
Thermal comfort	<input type="checkbox"/>	<input type="checkbox"/>

	Workplace health priorities	CPD training desirable
Work organisation, including work design and management style	<input type="checkbox"/>	<input type="checkbox"/>
Work–life balance (eg flexible working, long working hours, tiredness)	<input type="checkbox"/>	<input type="checkbox"/>
Work-related driving	<input type="checkbox"/>	<input type="checkbox"/>
Work-related physical health issues (eg hearing loss, hand–arm vibration, dermatitis, respiratory disorders)	<input type="checkbox"/>	<input type="checkbox"/>
Any other issues? Please specify:		

Which of the following will be important areas of knowledge and skill required of future OSH practitioners on workplace health matters? For questions 2 and 3, please tick as many options as you like.

Q2	Knowledge of:	
	Attitudes, persuasion and behaviour change	<input type="checkbox"/>
	Change management	<input type="checkbox"/>
	Developments in legislation and guidance	<input type="checkbox"/>
	Multifactorial nature of ill health (biopsychosocial model)	<input type="checkbox"/>
	Organisational culture	<input type="checkbox"/>
	Professional codes of conduct – ethics, confidentiality, record keeping, awareness of boundaries of competence	<input type="checkbox"/>
	Risk perception and communication	<input type="checkbox"/>
Q3	Skills in:	
	Assertiveness	<input type="checkbox"/>
	Early identification of workplace health problems (eg monitoring and surveillance)	<input type="checkbox"/>
	Influencing	<input type="checkbox"/>
	Leadership	<input type="checkbox"/>
	Making the business case for workplace health ('carrot' as well as 'stick')	<input type="checkbox"/>
	Managing referrals or external occupational health providers	<input type="checkbox"/>
	Mediation and conflict management	<input type="checkbox"/>
	Practice and evaluation of workplace health interventions	<input type="checkbox"/>
	Presentation skills (eg public speaking, using multimedia technology)	<input type="checkbox"/>
	Project management for OSH issues	<input type="checkbox"/>

Understanding essential business models and processes (eg financial and accounting models, risk management, operational and strategic processes, business process re-engineering)

Time management

If you have any comments about the suggested knowledge areas and skills as listed above, or think anything is missing, please make a note here:

Mode of delivery for CPD training

Q4 Please indicate your preferred mode of delivery for CPD training over a two or three-year period.

E-learning (entire course via the internet, incorporating online delivery of learning materials and tutorials)

Mix of e-learning and face-to-face workshops/tutorials (weekends)

Mix of e-learning and face-to-face workshops/tutorials (weekdays)

Other (please specify)

Demographic information

Q5 Please tell us your age:

under 30	30–39	40–49	50–59	60 and over
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q6 Which category of IOSH membership do you belong to?

Chartered Fellow (CFIOSH) Chartered Member (CMIOSH)

Fellow (FIOSH) Member (MIOSH)

Graduate Member (Grad IOSH)

Other (please specify)

Q7 Your qualifications:

NEBOSH Diploma Part 2

Diploma 6

Undergraduate degree in OSH

Postgraduate diploma/degree in OSH

Undergraduate degree in non-OSH subject

Postgraduate diploma/degree in non-OSH subject

S/NVQ 4 in Occupational Health and Safety Practice

British Safety Council (BSC) Level 6

Other (please specify)

Q8 Which IOSH specialist groups do you belong to?

None

Communications and Media

Construction

Consultancy

Education

Environmental

Fire Risk Management

Food and Drink

Hazardous Industries

Healthcare

International

Offshore

Public Services

Railway

Retail and Distribution

Rural Industries

Safety Sciences

Q9 How long have you worked in OSH?

Q10 Do you have any other comments about workplace health that you would like to add?

Thank you very much for your participation! If you have any questions about this project, please contact murray.clark@iosh.co.uk.

Appendix 4: Training priorities in descending order

Training priority	No.	%
1 Common mental health problems	771	45.9
2 Management standards for work stress	660	39.3
3 Health surveillance and identification of emerging risks	580	34.5
4 Planning for major health-related scares and incidents	575	34.2
5 Work-related driving	567	33.8
6 Work-life balance	533	31.7
7 Immigrant/migrant work population	503	30.0
8 Non-standard workplaces	496	29.5
9 Return to work and rehabilitation	493	29.4
10 Health promotion	480	28.6
11 Distinguishing the boundaries between work and non-work health	450	26.8
12 Musculoskeletal disorders	442	26.3
13 Ageing workforce	437	26.0
14 Physical work-related health issues	421	25.1
15 Sickness absence	364	21.7
16 Work organisation, including work design and management style	346	20.6
17 Harassment and bullying	322	19.2
18 Evaluation of workplace interventions	298	17.7
19 Physical hazards	286	17.0
20 Disabilities	279	16.6
21 Engaging and advising SMEs	262	15.6
22 Thermal comfort	157	9.4
23 Access to health services and treatment	143	8.5
24 Commuting to/from work	139	8.3
25 Psychiatric illness	139	8.3

Appendix 5: Statistical analyses of differences in perceptions of key priorities

Table A1
Perceived importance of 'Common mental health problems' by group membership (Healthcare)

		'Common mental health problems'		Total
		Unimportant	Important	
Non-Healthcare Group	Frequency	490	974	1464
	Expected frequency	469.7	994.3	
	% in non-Healthcare Group	33.5	66.5	
Healthcare Group	Frequency	31	129	160
	Expected frequency	51.3	108.7	
	% in Healthcare Group	19.4	80.6	
Total	Frequency	521	1103	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		13.151 (b)	1	0.000

Table A2
Perceived importance of 'Common mental health problems' by group membership (Construction)

		'Common mental health problems'		Total
		Unimportant	Important	
Non-Construction Group	Frequency	370	872	1242
	Expected frequency	398.4	843.6	
	% in non-Construction Group	29.8	70.2	
Construction Group	Frequency	151	231	382
	Expected frequency	122.6	259.4	
	% in Construction Group	39.5	60.5	
Total	Frequency	521	1103	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		12.715 (b)	1	0.000

		'Common mental health problems'		Total
		Unimportant	Important	
Non-Offshore Group	Frequency	496	1079	1575
	Expected frequency	505.3	1069.7	
	% in non-Offshore Group	31.5	68.5	
Offshore Group	Frequency	25	24	49
	Expected frequency	15.7	33.3	
	% in Offshore Group	51.0	49.0	
Total	Frequency	521	1103	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		8.317 (b)	1	0.004

Table A3
Perceived importance of 'Common mental health problems' by group membership (Offshore)

		'Common mental health problems'		Total
		Unimportant	Important	
Non-Public Services Group	Frequency	473	918	1391
	Expected frequency	446.3	944.7	
	% in non-Public Services Group	34.0	66.0	
Public Services Group	Frequency	48	185	233
	Expected frequency	74.7	158.3	
	% in Public Services Group	20.6	79.4	
Total	Frequency	521	1103	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		16.455 (b)	1	0.000

Table A4
Perceived importance of 'Common mental health problems' by group membership (Public Services)

Table A5
Perceived desirability of training in 'Common mental health problems' by group membership (Public Services)

		Training in 'Common mental health problems'		Total
		Undesirable	Desirable	
Non-Public Services Group	Frequency	736	655	1391
	Expected frequency	722.1	668.9	
	% in non-Public Services Group	52.9	47.1	
Public Services Group	Frequency	107	126	233
	Expected frequency	120.9	112.1	
	% in Public Services Group	45.9	54.1	
Total	Frequency	843	781	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		3.905 (b)	1	0.048

Table A6
Perceived desirability of training in 'Common mental health problems' by group membership (Safety Sciences)

		Training in 'Common mental health problems'		Total
		Undesirable	Desirable	
Non-Safety Sciences Group	Frequency	831	755	1586
	Expected frequency	823.3	762.7	
	% in non-Safety Sciences Group	52.4	47.6	
Safety Sciences Group	Frequency	12	26	38
	Expected frequency	19.7	18.3	
	% in Safety Sciences Group	31.6	68.4	
Total	Frequency	843	781	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		6.442 (b)	1	0.011

		'Management standards for work stress'		Total
		Unimportant	Important	
Non-Healthcare Group	Frequency	660	804	1464
	Expected frequency	636.4	827.6	
	% in non-Healthcare Group	45.1	54.9	
Healthcare Group	Frequency	46	114	160
	Expected frequency	69.6	90.4	
	% in Healthcare Group	28.8	71.3	
Total	Frequency	706	918	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		15.656 (b)	1	0.000

Table A7
Perceived importance of 'Management standards for work stress' by group membership (Healthcare)

		Training in 'Management standards for work stress'		Total
		Undesirable	Desirable	
Non-Fire Risk Management Group	Frequency	886	640	1526
	Expected frequency	874.8	651.2	
	% in non-Fire Risk Management Group	58.1	41.9	
Fire Risk Management Group	Frequency	45	53	98
	Expected frequency	56.2	41.8	
	% in Fire Risk Management Group	45.9	54.1	
Total	Frequency	931	693	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		5.550 (b)	1	0.018

Table A8
Perceived desirability of training in 'Management standards for work stress' by group membership (Fire Risk Management)

Table A9
Perceived importance of 'Management standards for work stress' by group membership (Offshore)

		'Management standards for work stress'		Total
		Unimportant	Important	
Non-Offshore Group	Frequency	674	901	1575
	Expected frequency	684.7	890.3	
	% in non-Offshore Group	42.8	57.2	
Offshore Group	Frequency	32	17	49
	Expected frequency	21.3	27.7	
	% in Offshore Group	65.3	34.7	
Total	Frequency	706	918	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		9.801 (b)	1	0.002

Table A10
Perceived desirability of training in 'Management standards for work stress' by group membership (Safety Sciences)

		Training in 'Management standards for work stress'		Total
		Undesirable	Desirable	
Non-Safety Sciences Group	Frequency	916	670	1586
	Expected frequency	909.2	676.8	
	% in non-Safety Sciences Group	57.8	42.2	
Safety Sciences Group	Frequency	15	23	38
	Expected frequency	21.8	16.2	
	% in Safety Sciences Group	39.5	60.5	
Total	Frequency	931	693	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		5.070 (b)	1	0.024

		'Management standards for work stress'		Total
		Unimportant	Important	
Non-Railway Group	Frequency	663	889	1552
	Expected frequency	674.7	877.3	
	% in non-Railway Group	42.7	57.3	
Railway Group	Frequency	43	29	72
	Expected frequency	31.3	40.7	
	% in Railway Group	59.7	40.3	
Total	Frequency	706	918	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		8.095 (b)	1	0.004

Table A11
Perceived importance of 'Management standards for work stress' by group membership (Railway)

		'Health surveillance and identification of emerging risks'		Total
		Unimportant	Important	
Non-Construction Group	Frequency	594	648	1242
	Expected frequency	575.1	666.9	
	% in non-Construction Group	47.8	52.2	
Construction Group	Frequency	158	224	382
	Expected frequency	176.9	205.1	
	% in Construction Group	41.4	58.6	
Total	Frequency	752	872	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.911 (b)	1	0.027

Table A12
Perceived importance of 'Health surveillance and identification of emerging risks' by group membership (Construction)

Table A13
Perceived importance of 'Health surveillance and identification of emerging risks' by group membership (Hazardous Industries)

		'Health surveillance and identification of emerging risks'		Total
		Unimportant	Important	
Non-Hazardous Industries Group	Frequency	735	831	1566
	Expected frequency	725.1	840.9	
	% in non-Hazardous Industries Group	46.9	53.1	
Hazardous Industries Group	Frequency	17	41	58
	Expected frequency	26.9	31.1	
	% in Hazardous Industries Group	29.3	70.7	
Total	Frequency	752	872	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		6.987 (b)	1	0.008

Table A14
Perceived desirability of training in 'Health surveillance and identification of emerging risks' by group membership (Hazardous Industries)

		Training in 'Health surveillance and identification of emerging risks'		Total
		Undesirable	Desirable	
Non-Hazardous Industries Group	Frequency	980	586	1566
	Expected frequency	972.0	594.0	
	% in non-Hazardous Industries Group	62.6	37.4	
Hazardous Industries Group	Frequency	28	30	58
	Expected frequency	36.0	22.0	
	% in Hazardous Industries Group	48.3	51.7	
Total	Frequency	1008	616	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.860 (b)	1	0.027

		'Planning for major health-related scares and incidents'		Total
		Unimportant	Important	
Non-Education Group	Frequency	778	738	1516
	Expected frequency	767.3	748.7	
	% in non-Education Group	51.3	48.7	
Education Group	Frequency	44	64	108
	Expected frequency	54.7	53.3	
	% in Education Group	40.7	59.3	
Total	Frequency	822	802	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.513 (b)	1	0.034

Table A15
Perceived importance of 'Planning for major health-related scares and incidents' by group membership (Education)

		Training in 'Planning for major health-related scares and incidents'		Total
		Undesirable	Desirable	
Non-Education Group	Frequency	949	567	1516
	Expected frequency	939.1	576.9	
	% in non-Education Group	62.6	37.4	
Education Group	Frequency	57	51	108
	Expected frequency	66.9	41.1	
	% in Education Group	52.8	47.2	
Total	Frequency	1006	618	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.125 (b)	1	0.042

Table A16
Perceived desirability of training in 'Planning for major health-related scares and incidents' by group membership (Education)

Table A17
Perceived importance of 'Planning for major health-related scares and incidents' by group membership (Safety Sciences)

		'Planning for major health-related scares and incidents'		Total
		Unimportant	Important	
Non-Safety Sciences Group	Frequency	809	777	1586
	Expected frequency	802.8	783.2	
	% in non-Safety Sciences Group	51.0	49.0	
Safety Sciences Group	Frequency	13	25	38
	Expected frequency	19.2	18.8	
	% in Safety Sciences Group	34.2	65.8	
Total	Frequency	822	802	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.189 (b)	1	0.041

Table A18
Perceived importance of 'Work-related driving' by group membership (Healthcare)

		'Work-related driving'		Total
		Unimportant	Important	
Non-Healthcare Group	Frequency	567	897	1464
	Expected frequency	585.1	878.9	
	% in non-Healthcare Group	38.7	61.3	
Healthcare Group	Frequency	82	78	160
	Expected frequency	63.9	96.1	
	% in Healthcare Group	51.3	48.8	
Total	Frequency	649	975	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		9.424 (b)	1	0.002

		Training in 'Work-related driving'		Total
		Undesirable	Desirable	
Non-Healthcare Group	Frequency	931	533	1464
	Expected frequency	944.7	519.3	
	% in non-Healthcare Group	63.6	36.4	
Healthcare Group	Frequency	117	43	160
	Expected frequency	103.3	56.7	
	% in Healthcare Group	73.1	26.9	
Total	Frequency	1048	576	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		5.726 (b)	1	0.017

Table A19
Perceived desirability of training in 'Work-related driving' by group membership (Healthcare)

		Training in 'Work-related driving'		Total
		Undesirable	Desirable	
Non-Communications and Media Group	Frequency	1034	560	1594
	Expected frequency	1028.6	565.4	
	% in non-Communications and Media Group	64.9	35.1	
Communications and Media Group	Frequency	14	16	30
	Expected frequency	19.4	10.6	
	% in Communications and Media Group	46.7	53.3	
Total	Frequency	1048	576	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.262 (b)	1	0.039

Table A20
Perceived desirability of training in 'Work-related driving' by group membership (Communications and Media)

Table A21
Perceived
importance of
'Work-related
driving' by group
membership
(Construction)

		'Work-related driving'		Total
		Unimportant	Important	
Non-Construction Group	Frequency	524	718	1242
	Expected frequency	496.3	745.7	
	% in non-Construction Group	42.2	57.8	
Construction Group	Frequency	125	257	382
	Expected frequency	152.7	229.3	
	% in Construction Group	32.7	67.3	
Total	Frequency	649	975	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		10.914 (b)	1	0.001

Table A22
Perceived
desirability of
training in 'Work-
related driving' by
group membership
(Construction)

		Training in 'Work-related driving'		Total
		Undesirable	Desirable	
Non-Construction Group	Frequency	826	416	1242
	Expected frequency	801.5	440.5	
	% in non-Construction Group	66.5	33.5	
Construction Group	Frequency	222	160	382
	Expected frequency	246.5	135.5	
	% in Construction Group	58.1	41.9	
Total	Frequency	1048	576	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		8.986 (b)	1	0.003

		'Work-related driving'		Total
		Unimportant	Important	
Non-Hazardous Industries Group	Frequency	637	929	1566
	Expected frequency	625.8	940.2	
	% in non-Hazardous Industries Group	40.7	59.3	
Hazardous Industries Group	Frequency	12	46	58
	Expected frequency	23.2	34.8	
	% in Hazardous Industries Group	20.7	79.3	
Total	Frequency	649	975	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		9.312 (b)	1	0.002

Table A23
Perceived importance of 'Work-related driving' by group membership (Hazardous Industries)

		'Work-related driving'		Total
		Unimportant	Important	
Non-Offshore Group	Frequency	619	956	1575
	Expected frequency	629.4	945.6	
	% in non-Offshore Group	39.3	60.7	
Offshore Group	Frequency	30	19	49
	Expected frequency	19.6	29.4	
	% in Offshore Group	61.2	38.8	
Total	Frequency	649	975	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		9.519 (b)	1	0.002

Table A24
Perceived importance of 'Work-related driving' by group membership (Offshore)

Table A25
Perceived
importance of
'Work-related
driving' by group
membership
(Safety Sciences)

		'Work-related driving'		Total
		Unimportant	Important	
Non-Safety Sciences Group	Frequency	628	958	1586
	Expected frequency	633.8	952.2	
	% in non-Safety Sciences Group	39.6	60.4	
Safety Sciences Group	Frequency	21	17	38
	Expected frequency	15.2	22.8	
	% in Safety Sciences Group	55.3	44.7	
Total	Frequency	649	975	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		3.796 (b)	1	0.051

Table A26
Perceived
desirability of
training in 'Work-
related driving' by
group membership
(Retail and
Distribution)

		Training in 'Work-related driving'		Total
		Undesirable	Desirable	
Non-Retail and Distribution Group	Frequency	1027	547	1574
	Expected frequency	1015.7	558.3	
	% in non-Retail and Distribution Group	65.2	34.8	
Retail and Distribution Group	Frequency	21	29	50
	Expected frequency	32.3	17.7	
	% in Retail and Distribution Group	42.0	58.0	
Total	Frequency	1048	576	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		11.443 (b)	1	0.001

		'Work-related driving'		Total
		Unimportant	Important	
Non-Rural Industries Group	Frequency	646	955	1601
	Expected frequency	639.8	961.2	
	% in non-Rural Industries Group	40.3	59.7	
Rural Industries Group	Frequency	3	20	23
	Expected frequency	9.2	13.8	
	% in Rural Industries Group	13.0	87.0	
Total	Frequency	649	975	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		7.047 (b)	1	0.008

Table A27
Perceived importance of 'Work-related driving' by group membership (Rural Industries)

		Training in 'Work-related driving'		Total
		Undesirable	Desirable	
Non-Rural Industries Group	Frequency	1038	563	1601
	Expected frequency	1033.2	567.8	
	% in non-Rural Industries Group	64.8	35.2	
Rural Industries Group	Frequency	10	13	23
	Expected frequency	14.8	8.2	
	% in Rural Industries Group	43.5	56.5	
Total	Frequency	1048	576	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.518 (b)	1	0.034

Table A28
Perceived desirability of training in 'Work-related driving' by group membership (Rural Industries)

Table A29
Perceived desirability of training in 'Work-life balance' by group membership (Communications and Media)

		Training in 'Work-life balance'		Total
		Undesirable	Desirable	
Non-Communications and Media Group	Frequency	1075	519	1594
	Expected frequency	1069.9	524.1	
	% in non-Communications and Media Group	67.4	32.6	
Communications and Media Group	Frequency	15	15	30
	Expected frequency	20.1	9.9	
	% in Communications and Media Group	50.0	50.0	
Total	Frequency	1090	534	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.058 (b)	1	0.044

Table A30
Perceived desirability of training in 'Work-life balance' by group membership (Construction)

		Training in 'Work-life balance'		Total
		Undesirable	Desirable	
Non-Construction Group	Frequency	859	383	1242
	Expected frequency	833.6	408.4	
	% in non-Construction Group	69.2	30.8	
Construction Group	Frequency	231	151	382
	Expected frequency	256.4	125.6	
	% in Construction Group	60.5	39.5	
Total	Frequency	1090	534	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		10.000 (b)	1	0.002

		Training in 'Work-life balance'		Total
		Undesirable	Desirable	
Non-Hazardous Industries Group	Frequency	1059	507	1566
	Expected frequency	1051.1	514.9	
	% in non-Hazardous Industries Group	67.6	32.4	
Hazardous Industries Group	Frequency	31	27	58
	Expected frequency	38.9	19.1	
	% in Hazardous Industries Group	53.4	46.6	
Total	Frequency	1090	534	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		5.093 (b)	1	0.024

Table A31
Perceived desirability of training in 'Work-life balance' by group membership (Hazardous Industries)

		'Immigrant/migrant work population'		Total
		Unimportant	Important	
Non-Healthcare Group	Frequency	674	790	1464
	Expected frequency	687.8	776.2	
	% in non-Healthcare Group	46.0	54.0	
Healthcare Group	Frequency	89	71	160
	Expected frequency	75.2	84.8	
	% in Healthcare Group	55.6	44.4	
Total	Frequency	763	861	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		5.322 (b)	1	0.021

Table A32
Perceived importance of 'Immigrant/migrant work population' by group membership (Healthcare)

Table A33
Perceived desirability of training in 'Immigrant/migrant work population' by group membership (Healthcare)

		Training in 'Immigrant/migrant work population'		Total
		Undesirable	Desirable	
Non-Healthcare Group	Frequency	981	483	1464
	Expected frequency	993.4	470.6	
	% in non-Healthcare Group	67.0	33.0	
Healthcare Group	Frequency	121	39	160
	Expected frequency	108.6	51.4	
	% in Healthcare Group	75.6	24.4	
Total	Frequency	1102	522	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.910 (b)	1	0.027

Table A34
Perceived importance of 'Immigrant/migrant work population' by group membership (Construction)

		'Immigrant/migrant work population'		Total
		Unimportant	Important	
Non-Construction Group	Frequency	612	630	1242
	Expected frequency	583.5	658.5	
	% in non-Construction Group	49.3	50.7	
Construction Group	Frequency	151	231	382
	Expected frequency	179.5	202.5	
	% in Construction Group	39.5	60.5	
Total	Frequency	763	861	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		11.142 (b)	1	0.001

		Training in 'Immigrant/migrant work population'		Total
		Undesirable	Desirable	
Non-Construction Group	Frequency	873	369	1242
	Expected frequency	842.8	399.2	
	% in non-Construction Group	70.3	29.7	
Construction Group	Frequency	229	153	382
	Expected frequency	259.2	122.8	
	% in Construction Group	59.9	40.1	
Total	Frequency	1102	522	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		14.327 (b)	1	0.000

Table A35
Perceived desirability of training in 'Immigrant/migrant work population' by group membership (Construction)

		'Immigrant/migrant work population'		Total
		Unimportant	Important	
Non-Public Services Group	Frequency	635	756	1391
	Expected frequency	653.5	737.5	
	% in non-Public Services Group	45.7	54.3	
Public Services Group	Frequency	128	105	233
	Expected frequency	109.5	123.5	
	% in Public Services Group	54.9	45.1	
Total	Frequency	763	861	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		6.907 (b)	1	0.009

Table A36
Perceived importance of 'Immigrant/migrant work population' by group membership (Public Services)

Table A37
Perceived desirability of training in 'Immigrant/migrant work population' by group membership (Public Services)

		Training in 'Immigrant/migrant work population'		Total
		Undesirable	Desirable	
Non-Public Services Group	Frequency	924	467	1391
	Expected frequency	943.9	447.1	
	% in non-Public Services Group	66.4	33.6	
Public Services Group	Frequency	178	55	233
	Expected frequency	158.1	74.9	
	% in Public Services Group	76.4	23.6	
Total	Frequency	1102	522	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		9.091 (b)	1	0.003

Table A38
Perceived importance of 'Non-standard workplaces' by group membership (Construction)

		'Non-standard workplaces'		Total
		Unimportant	Important	
Non-Construction Group	Frequency	566	676	1242
	Expected frequency	582.8	659.2	
	% in non-Construction Group	45.6	54.4	
Construction Group	Frequency	196	186	382
	Expected frequency	179.2	202.8	
	% in Construction Group	51.3	48.7	
Total	Frequency	762	862	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		3.861 (b)	1	0.049

		Training in 'Non-standard workplaces'		Total
		Undesirable	Desirable	
Non-Construction Group	Frequency	834	408	1242
	Expected frequency	850.4	391.6	
	% in non-Construction Group	67.1	32.9	
Construction Group	Frequency	278	104	382
	Expected frequency	261.6	120.4	
	% in Construction Group	72.8	27.2	
Total	Frequency	1112	512	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.282 (b)	1	0.039

Table A39
Perceived desirability of training in 'Non-standard workplaces' by group membership (Construction)

		'Non-standard workplaces'		Total
		Unimportant	Important	
Non-Offshore Group	Frequency	729	846	1575
	Expected frequency	739.0	836.0	
	% in non-Offshore Group	46.3	53.7	
Offshore Group	Frequency	33	16	49
	Expected frequency	23.0	26.0	
	% in Offshore Group	67.3	32.7	
Total	Frequency	762	862	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		8.464 (b)	1	0.004

Table A40
Perceived importance of 'Non-standard workplaces' by group membership (Offshore)

Table A41
Perceived importance of 'Non-standard workplaces' by group membership (Public Services)

		'Non-standard workplaces'		Total
		Unimportant	Important	
Non-Public Services Group	Frequency	682	709	1391
	Expected frequency	652.7	738.3	
	% in non-Public Services Group	49.0	51.0	
Public Services Group	Frequency	80	153	233
	Expected frequency	109.3	123.7	
	% in Public Services Group	34.3	65.7	
Total	Frequency	762	862	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		17.303 (b)	1	0.000

Table A42
Perceived desirability of training in 'Non-standard workplaces' by group membership (Retail and Distribution)

		Training in 'Non-standard workplaces'		Total
		Undesirable	Desirable	
Non-Retail and Distribution Group	Frequency	1084	490	1574
	Expected frequency	1077.8	496.2	
	% in non-Retail and Distribution Group	68.9	31.1	
Retail and Distribution Group	Frequency	28	22	50
	Expected frequency	34.2	15.8	
	% in Retail and Distribution Group	56.0	44.0	
Total	Frequency	1112	512	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		3.718 (b)	1	0.054

		Training in 'Return to work and rehabilitation'		Total
		Undesirable	Desirable	
Non-Consultancy Group	Frequency	1009	481	1490
	Expected frequency	1019.3	470.7	
	% in non-Consultancy Group	67.7	32.3	
Consultancy Group	Frequency	102	32	134
	Expected frequency	91.7	42.3	
	% in Consultancy Group	76.1	23.9	
Total	Frequency	1111	513	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.015 (b)	1	0.045

Table A43
Perceived desirability of training in 'Return to work and rehabilitation' by group membership (Consultancy)

		'Return to work and rehabilitation'		Total
		Unimportant	Important	
Non-Education Group	Frequency	729	787	1516
	Expected frequency	716.9	799.1	
	% in non-Education Group	48.1	51.9	
Education Group	Frequency	39	69	108
	Expected frequency	51.1	56.9	
	% in Education Group	36.1	63.9	
Total	Frequency	768	856	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		5.801 (b)	1	0.016

Table A44
Perceived importance of 'Return to work and rehabilitation' by group membership (Education)

Table A45
Perceived
importance of
'Return to work
and rehabilitation'
by group
membership
(Offshore)

		'Return to work and rehabilitation'		Total
		Unimportant	Important	
Non-Offshore Group	Frequency	733	842	1575
	Expected frequency	744.8	830.2	
	% in non-Offshore Group	46.5	53.5	
Offshore Group	Frequency	35	14	49
	Expected frequency	23.2	25.8	
	% in Offshore Group	71.4	28.6	
Total	Frequency	768	856	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		11.810 (b)	1	0.001

Table A46
Perceived
importance of
'Return to work
and rehabilitation'
by group
membership
(Public Services)

		'Return to work and rehabilitation'		Total
		Unimportant	Important	
Non-Public Services Group	Frequency	677	714	1391
	Expected frequency	657.8	733.2	
	% in non-Public Services Group	48.7	51.3	
Public Services Group	Frequency	91	142	233
	Expected frequency	110.2	122.8	
	% in Public Services Group	39.1	60.9	
Total	Frequency	768	856	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		7.401 (b)	1	0.007

		'Return to work and rehabilitation'		Total
		Unimportant	Important	
Non-Railway Group	Frequency	722	830	1552
	Expected frequency	734.0	818.0	
	% in non-Railway Group	46.5	53.5	
Railway Group	Frequency	46	26	72
	Expected frequency	34.0	38.0	
	% in Railway Group	63.9	36.1	
Total	Frequency	768	856	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		8.327 (b)	1	0.004

Table A47
Perceived importance of 'Return to work and rehabilitation' by group membership (Railway)

		Training in 'Health promotion'		Total
		Undesirable	Desirable	
Non-Communications and Media Group	Frequency	1117	477	1594
	Expected frequency	1111.1	482.9	
	% in non-Communications and Media Group	70.1	29.9	
Communications and Media Group	Frequency	15	15	30
	Expected frequency	20.9	9.1	
	% in Communications and Media Group	50.0	50.0	
Total	Frequency	1132	492	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		5.620 (b)	1	0.018

Table A48
Perceived desirability of training in 'Health promotion' by group membership (Communications and Media)

Table A49
Perceived desirability of training in 'Health promotion' by group membership (Construction)

		Training in 'Health promotion'		Total
		Undesirable	Desirable	
Non-Construction Group	Frequency	893	349	1242
	Expected frequency	865.7	376.3	
	% in non-Construction Group	71.9	28.1	
Construction Group	Frequency	239	143	382
	Expected frequency	266.3	115.7	
	% in Construction Group	62.6	37.4	
Total	Frequency	1132	492	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		12.055 (b)	1	0.001

Table A50
Perceived importance of 'Health promotion' by group membership (Fire Risk Management)

		'Health promotion'		Total
		Unimportant	Important	
Non-Fire Risk Management Group	Frequency	657	869	1526
	Expected frequency	645.5	880.5	
	% in non-Fire Risk Management Group	43.1	56.9	
Fire Risk Management Group	Frequency	30	68	98
	Expected frequency	41.5	56.5	
	% in Fire Risk Management Group	30.6	69.4	
Total	Frequency	687	937	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		5.840 (b)	1	0.016

		'Health promotion'		Total
		Unimportant	Important	
Non-Offshore Group	Frequency	659	916	1575
	Expected frequency	666.3	908.7	
	% in non-Offshore Group	41.8	58.2	
Offshore Group	Frequency	28	21	49
	Expected frequency	20.7	28.3	
	% in Offshore Group	57.1	42.9	
Total	Frequency	687	937	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.559 (b)	1	0.033

Table A51
Perceived importance of 'Health promotion' by group membership (Offshore)

		'Health promotion'		Total
		Unimportant	Important	
Non-Retail and Distribution Group	Frequency	659	915	1574
	Expected frequency	665.8	908.2	
	% in non-Retail and Distribution Group	41.9	58.1	
Retail and Distribution Group	Frequency	28	22	50
	Expected frequency	21.2	28.8	
	% in Retail and Distribution Group	56.0	44.0	
Total	Frequency	687	937	1624
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		3.965 (b)	1	0.046

Table A52
Perceived importance of 'Health promotion' by group membership (Retail and Distribution)

Table A53
Perceived importance of 'Common mental health problems' by qualification (undergraduate degree in non-OSH subject)

		'Common mental health problems'		Total
		Unimportant	Important	
No undergraduate degree in non-OSH subject	Frequency	430	901	1331
	Expected frequency	416.4	914.6	
	% of those with no undergraduate degree in non-OSH subject	32.3	67.7	
Undergraduate degree in non-OSH subject	Frequency	33	116	149
	Expected frequency	46.6	102.4	
	% of those with undergraduate degree in non-OSH subject	22.1	77.9	
Total	Frequency	463	1017	1480
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		6.433 (b)	1	0.011

Table A54
Perceived desirability of training in 'Common mental health problems' by qualification (undergraduate degree in non-OSH subject)

		Training in 'Common mental health problems'		Total
		Undesirable	Desirable	
No undergraduate degree in non-OSH subject	Frequency	703	628	1331
	Expected frequency	688.9	642.1	
	% of those with no undergraduate degree in non-OSH subject	52.8	47.2	
Undergraduate degree in non-OSH subject	Frequency	63	86	149
	Expected frequency	77.1	71.9	
	% of those with undergraduate degree in non-OSH subject	42.3	57.7	
Total	Frequency	766	714	1480
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		5.957 (b)	1	0.015

		'Common mental health problems'		Total
		Unimportant	Important	
No S/NVQ 4	Frequency	348	827	1175
	Expected frequency	367.1	807.9	
	% of those with no S/NVQ 4	29.6	70.4	
S/NVQ 4	Frequency	115	192	307
	Expected frequency	95.9	211.1	
	% of those with S/NVQ 4	37.5	62.5	
Total	Frequency	463	1019	1482
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		6.696 (b)	1	0.008

Table A55
Perceived importance of 'Common mental health problems' by qualification (S/NVQ 4)

		'Common mental health problems'		Total
		Unimportant	Important	
No BSC Level 6	Frequency	447	955	1402
	Expected frequency	438.6	963.4	
	% of those with no BSC Level 6	31.9	68.1	
BSC Level 6	Frequency	16	62	78
	Expected frequency	24.4	53.6	
	% of those with BSC Level 6	20.5	79.5	
Total	Frequency	463	1017	1480
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.444 (b)	1	0.035

Table A56
Perceived importance of 'Common mental health problems' by qualification (BSC Level 6)

Table A57
Perceived
importance of
'Health surveillance
and identification
of emerging risks'
by qualification
(NEBOSH Part 2)

		'Health surveillance and identification of emerging risks'		Total
		Unimportant	Important	
No NEBOSH Part 2	Frequency	468	601	1069
	Expected frequency	492.7	576.3	
	% of those with no NEBOSH Part 2	43.8	56.2	
NEBOSH Part 2	Frequency	215	198	413
	Expected frequency	190.3	222.7	
	% of those with NEBOSH Part 2	52.1	47.9	
Total	Frequency	683	799	1482
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		8.218 (b)	1	0.004

Table A58
Perceived
desirability of
training in 'Health
surveillance and
identification of
emerging risks'
by qualification
(NEBOSH Part 2)

		Training in 'Health surveillance and identification of emerging risks'		Total
		Undesirable	Desirable	
No NEBOSH Part 2	Frequency	646	423	1069
	Expected frequency	662.2	406.8	
	% of those with no NEBOSH Part 2	60.4	39.6	
NEBOSH Part 2	Frequency	272	141	413
	Expected frequency	255.8	157.2	
	% of those with NEBOSH Part 2	65.9	34.1	
Total	Frequency	918	564	1482
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		3.725 (b)	1	0.054

		'Health surveillance and identification of emerging risks'		Total
		Unimportant	Important	
No Diploma 6	Frequency	611	739	1350
	Expected frequency	622.2	727.8	
	% of those with no Diploma 6	45.3	54.7	
Diploma 6	Frequency	72	60	132
	Expected frequency	60.8	71.2	
	% of those with Diploma 6	54.5	45.5	
Total	Frequency	683	799	1482
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.173 (b)	1	0.041

Table A59
Perceived importance of 'Health surveillance and identification of emerging risks' by qualification (Diploma 6)

		'Health surveillance and identification of emerging risks'		Total
		Unimportant	Important	
No undergraduate degree in non-OSH subject	Frequency	601	730	1331
	Expected frequency	612.4	718.6	
	% of those with no undergraduate degree in non-OSH subject	45.2	54.8	
Undergraduate degree in non-OSH subject	Frequency	80	69	149
	Expected frequency	68.6	80.4	
	% of those with undergraduate degree in non-OSH subject	53.7	46.3	
Total	Frequency	681	799	1480
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		3.932 (b)	1	0.047

Table A60
Perceived importance of 'Health surveillance and identification of emerging risks' by qualification (undergraduate degree in non-OSH subject)

Table A61
Perceived importance of 'Health surveillance and identification of emerging risks' by qualification (postgraduate degree/diploma in OSH)

		'Health surveillance and identification of emerging risks'		Total
		Unimportant	Important	
No postgraduate degree/diploma in OSH	Frequency	471	510	981
	Expected frequency	451.2	529.8	
	% of those with no postgraduate degree/diploma in OSH	48.0	52.0	
Postgraduate degree/diploma in OSH	Frequency	212	292	504
	Expected frequency	231.8	272.2	
	% of those with postgraduate degree/diploma in OSH	42.1	57.9	
Total	Frequency	683	802	1485
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.743 (b)	1	0.029

Table A62
Perceived desirability of training in 'Planning for major health-related scares and incidents' by qualification (NEBOSH Part 2)

		Training in 'Planning for major health-related scares and incidents'		Total
		Undesirable	Desirable	
No NEBOSH Part 2	Frequency	676	393	1069
	Expected frequency	655.7	413.3	
	% of those with no NEBOSH Part 2	63.2	36.8	
NEBOSH Part 2	Frequency	233	180	413
	Expected frequency	253.3	159.7	
	% of those with NEBOSH Part 2	56.4	43.6	
Total	Frequency	909	573	1482
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		5.843 (b)	1	0.016

		'Immigrant/migrant work population'		Total
		Unimportant	Important	
No S/NVQ 4	Frequency	569	606	1175
	Expected frequency	553.4	621.6	
	% of those with no S/NVQ 4	48.4	51.6	
S/NVQ 4	Frequency	129	178	307
	Expected frequency	144.6	162.4	
	% of those with S/NVQ 4	42.0	58.0	
Total	Frequency	698	784	1482
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.009 (b)	1	0.045

Table A63
Perceived importance of 'Immigrant/migrant work population' by qualification (S/NVQ 4)

		'Non-standard workplaces'		Total
		Unimportant	Important	
No NEBOSH Part 2	Frequency	523	546	1069
	Expected frequency	503.5	565.5	
	% of those with no NEBOSH Part 2	48.9	51.1	
NEBOSH Part 2	Frequency	175	238	413
	Expected frequency	194.5	218.5	
	% of those with NEBOSH Part 2	42.4	57.6	
Total	Frequency	698	784	1482
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		5.132 (b)	1	0.023

Table A64
Perceived importance of 'Non-standard workplaces' by qualification (NEBOSH Part 2)

Table A65
Perceived
importance of
'Non-standard
workplaces' by
qualification
(S/NVQ 4)

		'Non-standard workplaces'		Total
		Unimportant	Important	
No S/NVQ 4	Frequency	526	649	1175
	Expected frequency	553.4	621.6	
	% of those with no S/NVQ 4	44.8	55.2	
S/NVQ 4	Frequency	172	135	307
	Expected frequency	144.6	162.4	
	% of those with S/NVQ 4	56.0	44.0	
Total	Frequency	698	784	1482
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		12.386 (b)	1	0.000

Table A66
Perceived
importance of
'Non-standard
workplaces' by
qualification
(postgraduate
degree in non-OSH
subject)

		'Non-standard workplaces'		Total
		Unimportant	Important	
No postgraduate degree in non-OSH subject	Frequency	636	688	1324
	Expected frequency	623.5	700.5	
	% of those with no postgraduate degree in non-OSH subject	48.0	52.0	
Postgraduate degree in non-OSH subject	Frequency	61	95	156
	Expected frequency	73.5	82.5	
	% of those with postgraduate degree in non-OSH subject	39.1	60.9	
Total	Frequency	697	783	1480
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.470 (b)	1	0.034

		'Return to work and rehabilitation'		Total
		Unimportant	Important	
No Diploma 6	Frequency	627	723	1350
	Expected frequency	637.7	712.3	
	% of those with no Diploma 6	46.4	53.6	
Diploma 6	Frequency	73	59	132
	Expected frequency	62.3	69.7	
	% of those with Diploma 6	55.3	44.7	
Total	Frequency	700	782	1482
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		3.786 (b)	1	0.052

Table A67
Perceived importance of 'Return to work and rehabilitation' by qualification (Diploma 6)

		'Return to work and rehabilitation'		Total
		Unimportant	Important	
No postgraduate degree/diploma in non-OSH subject	Frequency	609	715	1324
	Expected frequency	625.3	698.7	
	% of those with no postgraduate degree/diploma in non-OSH subject	46.0	54.0	
Postgraduate degree/diploma in non-OSH subject	Frequency	90	66	156
	Expected frequency	73.7	82.3	
	% of those with postgraduate degree/diploma in non-OSH subject	57.7	42.3	
Total	Frequency	699	781	1480
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		7.659 (b)	1	0.006

Table A68
Perceived importance of 'Return to work and rehabilitation' by qualification (postgraduate degree/diploma in non-OSH subject)

Table A69
Perceived desirability of training in 'Health promotion' by qualification (NEBOSH Part 2)

		Training in 'Health promotion'		Total
		Undesirable	Desirable	
No NEBOSH Part 2	Frequency	725	344	1069
	Expected frequency	748.0	321.0	
	% of those with no NEBOSH Part 2	67.8	32.2	
NEBOSH Part 2	Frequency	312	101	413
	Expected frequency	289.0	124.0	
	% of those with NEBOSH Part 2	75.5	24.5	
Total	Frequency	1037	445	1482
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		8.460 (b)	1	0.004

Table A70
Perceived importance of 'Return to work and rehabilitation' by IOSH membership category (Chartered membership)

		'Return to work and rehabilitation'		Total
		Unimportant	Important	
Non-Chartered members	Frequency	649	745	1394
	Expected frequency	664.8	729.2	
	% of non-Chartered members	46.6	53.4	
Chartered members	Frequency	146	127	273
	Expected frequency	130.2	142.8	
	% of Chartered members	53.5	46.5	
Total	Frequency	795	872	1667
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		4.386 (b)	1	0.036

		'Health promotion'		Total
		Unimportant	Important	
Non-Chartered members	Frequency	611	783	1394
	Expected frequency	593.7	800.3	
	% of non-Chartered members	43.8	56.2	
Chartered members	Frequency	99	174	273
	Expected frequency	116.3	156.7	
	% of Chartered members	36.3	63.7	
Total	Frequency	710	957	1667
Pearson chi-square		Value	df	Asymp. sig. (2-sided)
		5.346 (b)	1	0.021

Table A71
Perceived importance of 'Health promotion' by IOSH membership category (Chartered membership)

IOSH

The Grange
Highfield Drive
Wigston
Leicestershire
LE18 1NN
UK

t +44 (0)116 257 3100
f +44 (0)116 257 3101
www.iosh.co.uk

IOSH is Europe's leading body for health and safety professionals. We have over 34,000 members worldwide, including 13,000 Chartered Safety and Health Practitioners.

The Institution was founded in 1945 and is an independent, not-for-profit organisation that sets professional standards, supports and develops members and provides authoritative advice and guidance on health and safety issues. IOSH is formally recognised by the ILO as an international non-governmental organisation.

£35

Institution of Occupational Safety and Health
Founded 1945
Incorporated by Royal Charter 2003
Registered charity 1096790

