Mental Health & Prevention (2014) 2, 26–34

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/mhp

Development of guidelines for workplace prevention of mental health problems: A Delphi consensus study with Australian professionals and employees

Nicola J. Reavley[a,*], Anna Ross[a], Angela Martin[b], Anthony D. LaMontagne[a], Anthony F. Jorm[a]

[a]*Melbourne School of Population and Global Health, University of Melbourne, Victoria 3010, Australia*
[b]*School of Management, University of Tasmania, Hobart, Tasmania 7001, Australia*

Received 18 September 2013; received in revised form 15 July 2014; accepted 23 July 2014
Available online 2 August 2014

KEYWORDS
Mental disorders;
Workplace;
Prevention;
Delphi consensus process;
Guidelines

Abstract
The purpose of the research was to conduct a Delphi expert consensus study (with employer, health professional and employee experts) to develop guidelines for the workplace prevention of mental health problems. A systematic review of websites, books, pamphlets and journal articles was conducted; a 363-item survey developed; and 314 strategies were endorsed as essential or important by at least 80% of all three panels. The endorsed strategies provided information on: creating a positive work environment; reducing job strain; rewarding employee efforts; workplace fairness; provision of supports; supportive change management; provision of training; provision of mental health education; and employee responsibilities.

Introduction

The 2007 Australian National Survey of Mental Health and Wellbeing (NSMHWB) estimated that mental disorders affect as many as one in five people in a 12-month period (Slade, Johnston, Oakley Browne, Andrews & Whiteford, 2009). Depression, anxiety and related disorders are the most prevalent mental disorders and are among the leading causes of disability worldwide (World Health Organisation, 2008). In addition to social impact, mental disorders can significantly affect workplace productivity due to absenteeism and presenteeism (being sub-optimally productive at work) (Cocker, Martin, & Scott, 2011; Goetzel, Long, & Ozminkowski, 2004; Sanderson and Andrews, 2006).

The ability to work plays a critical role in mental and physical wellbeing (LaMontagne, Keegel, Louie, & Ostry,

*Corresponding author. Tel.: +61 3 9035 7628; fax: +61 3 9349 5815.
E-mail addresses: nreavley@unimelb.edu.au (N.J. Reavley), anross@unimelb.edu.au (A. Ross), angela.martin@utas.edu.au (A. Martin), alamonta@unimelb.edu.au (A.D. LaMontagne), ajorm@unimelb.edu.au (A.F. Jorm).

http://dx.doi.org/10.1016/j.mhp.2014.07.002
2212-6570/

2010; Wilkinson & Marmot, 2003). Work is a primary determinant of socioeconomic position and plays a key role in social connectedness, the development of identity and self-esteem. However, there is strong evidence that a poor psychosocial work environment can increase the risk of mental health problems, particularly depression (Bonde, 2008; Stansfeld & Candy, 2006). Research in this area has focussed on job strain (LaMontagne, Keegel, Vallance, Ostry, & Wolfe, 2008), effort-reward imbalance (Siegrist, 1996) and organisational justice (Kivimaki, Elovainio, Vahtera, & Ferrie, 2003). Interventions that aim to increase employee control have been shown to have beneficial effects on mental health (Egan, Bambra, & Thomas, 2007), For example, problem solving or steering committees comprising employee representatives and managers have led to improvements in measures of mental health in a number of environments including US local government agencies (Landsbergis & Vivona-Vaughan, 1995), the UK Civil Service (Bond & Bunce, 2001) and Canadian hospitals (Bourbonnais, Brisson, & Vinet, 2006). There is evidence that job-stress interventions, particularly those that use a 'systems approach', that is, targeting both working conditions (e.g. task restructuring) and individual skills and behaviours (individual stress management and physical training) are most likely to result in health benefits (Egan et al., 2007; LaMontagne, Keegel, & Vallance, 2007).

Moreover, the workplace is increasingly recognised as an important setting for health promotion, not only to address health problems caused by work, but also to address non work-related problems that may become visible or be exacerbated within the working environment (LaMontagne, Noblet, & Landsbergis, 2012; Martin, Sanderson, & Cocker, 2009; Sanders & Crowe, 1996). Until relatively recently, much workplace health promotion activity has focussed on physical, rather than mental health promotion (Sturgeon, 2006) and the literature on the prevention of mental health problems in the workplace is relatively limited. In a recent systematic review of workplace (secondary) prevention studies that used control groups and assessment of depressive disorder with a validated screening instrument, Dietrich, Deckert, Ceynowa, Hegerl, and Stengler (2012) identified only one (French) study that met the inclusion criteria. This gap in evidence is particularly striking in the Australian context, as the majority of research has been carried out in Europe and the US, which have different health and occupational health and safety (OHS) regulatory frameworks. However, some evidence suggests that workplace interventions may produce improvements in mental health literacy (Kitchener & Jorm, 2004) and reduce depression and anxiety symptoms. In a 2009 study, Martin, Sanderson, Scott, and Brough (2009) systematically reviewed workplace interventions that aimed to reduce symptoms of depression and anxiety in participants, some of whom had diagnosed disorders. Over half the interventions used psychoeducation with cognitive behaviour therapy or training in coping skills within a stress management framework, while the others focused on physical activity, poor work environment and cardiovascular disease. A meta-analysis of 17 studies showed small but positive overall effects of the interventions on symptoms of depression and anxiety.

In addition, implementation of research findings in workplace policies and practices remains a significant challenge. While evidence of the effectiveness of interventions may be increasing, workplace health researchers often struggle to effectively communicate research findings to workplace decision-makers. In turn, workplace practices may not adequately inform research. Such knowledge exchange, which incorporates the idea of knowledge as a changing set of understandings shaped by both researchers and users, is increasingly recognised as an effective means of taking up research information (Greenhalgh, Robert, Bate, Kyriakidou, Macfarlane & Peacock, 2004). It involves engaging decision makers in all relevant sectors and represents a move towards viewing practice-based evidence as equally relevant as evidence-based practice (Marmot, 2004).

In this context, assessing expert consensus offers a way of bringing together available research evidence and best practice in order to enable recommendations and decisions to be made. Such methods have been widely applied in the development of clinical practice guidelines. The most commonly used consensus method is the Delphi process (Jones & Hunter, 1995), which has been used to develop mental health first aid guidelines using the expertise of professionals, consumers and carers (Jorm, Minas, Langlands, & Kelly, 2008; Kelly, Jorm, Kitchener, & Langlands, 2008; Langlands, Jorm, Kelly, & Kitchener, 2008). In a workplace setting, the Delphi consensus method has also been used to develop guidelines for organisations supporting employees returning to work after an episode of anxiety, depression or a related mental health problem (Reavley, Ross, Killackey, & Jorm, 2012).

This aim of the study was to develop guidelines for organisations wishing to implement a strategy for workplace prevention of common mental health problems (depression and anxiety disorders), encompassing mental health problems that may be caused by work, and also those that may become apparent in the working environment. Once established, the guidelines may be used to facilitate the development of preventive policy and practice in the workplace setting.

Materials and methods

The Delphi method

The Delphi process involves a group of experts making private ratings of agreement with a series of statements, feedback to the group of a statistical summary of the ratings, and then another two rounds of rating (Jones & Hunter, 1995). Statements about workplace strategies to prevent mental health problems were derived from a search of the lay and scientific literature, and these were presented to a panel of experts in three sequential rounds. Any additional strategies suggested by panel members were included in the subsequent round for all experts to rate. A summary of group ratings was fed back to the panel members after the first two rounds. Panel members could choose to either change or maintain their ratings. In this way, a list of statements that had substantial consensus in ratings was developed, and those statements with low or conflicting ratings discarded.

Panel formation

There were three separate panels. One comprised consumer advocates representing the employee perspective, who

were asked to participate if they had an understanding of the issues involved in workplace prevention of mental health problems (referred to as employees). A second panel consisted of people working in the public or private sector organisations in the area including human resources professionals, occupational health and safety (OHS) professionals and those in managerial positions (hereafter referred to as managers). The third panel consisted of professionals in the field, including occupational physicians, psychologists, occupational therapists and mental health consultants.

Employees were recruited by distributing information about the study to consumer organisations associated with mental health issues (beyondblue: the national depression initiative). Managers were recruited through direct contact from researchers and employer representative organisations (e.g. Chambers of Commerce). Health professionals were recruited through the Australian and New Zealand Society of Occupational Medicine (ANZSOM) and the Australasian Faculty of Occupational and Environmental Medicine (AFOEM), the Australian Psychological Society's occupational health psychology interest group and through personal contacts of the researchers. Participants were limited to Australian organisations due to differences in health and regulatory systems in other countries. The study did not aim to get representative samples of experts, because the Delphi method requires panel members who are information and experience rich rather than representative. All those who agreed to be involved were accepted as panel members.

At least 20 members are necessary for each Delphi panel in order to avoid one member having a large influence on the results (Akins, Tolson, & Cole, 2005; Jones & Hunter, 1995). In this study, panel membership numbered 113, with 47 employees, 32 managers and 34 health professionals. 69.5% of panel members were female (66.0% of the employees, 71.9% of the managers and 70.6% of the professionals). The median age was 43 years for the professionals and for the employees, and 48.5 years for the managers. Of the 34 professionals on the panel, there were 9 psychologists, 6 mental health researchers, 5 occupational physicians, 6 mental health consultants/advisors, 2 occupational therapists, 1 chaplain, 1 social worker and 1 counsellor. The 32 managers had varying roles and included 16 people in managerial positions and 10 health and wellbeing advisors/coordinators.

Questionnaire development and administration

A systematic literature review was conducted of websites, reports, books, pamphlets and journal articles for discussion of strategies regarding how organisations could prevent mental health problems in the workplace. This involved a comprehensive search in Google search engines (www.google.com.au, www.google.co.uk, www.google.ca, www.google.com.au). The following search terms were entered into each: workplace AND (prevention OR prevent OR promotion OR education) AND (mental health OR mental disorder OR mental wellbeing OR depression OR anxiety OR distress) AND "mentally healthy workplace". The first 50 sites for each Google search engine were examined for specific statements about how organisations could prevent mental health problems in the workplace. Any links that appeared on these web pages that the authors thought may contain useful information were followed. Rele vant journal articles were located on PsycINFO and PubMed, using the keyword search terms: (workplace) AND (prevention OR prevent OR education OR promotion) in the title AND ("mental health" OR "mental disorder" OR depression OR anxiety OR distress OR "mental wellbeing") in the abstract OR ("mentally healthy workplace") OR "psychologically healthy workplace" mentioned in the text of article.

We obtained suggestions for how organisations could prevent mental health problems in the workplace from 23 websites, 29 journal articles and 66 booklets/factsheets.

Table 1 Search strategies and results

Search source	Search terms	Search results	Examples
www.google.com.au www.google.co.uk www.google.ca www.google.com.au (first 50 search results)	workplace AND (prevention OR prevent OR promotion OR education) AND (mental health OR mental disorder OR mental wellbeing OR depression OR anxiety OR distress) AND "mentally healthy workplace"	23 Websites	http://wmhp.cmhaontario.ca/ http://www.gwlcentreformentalhealth.com
		66 Booklets/ factsheets	Mind: Employers' guide to mentally healthy workplaces European Network for Workplace Health Promotion: A guide to creating a mentally healthy workplace
PsycInfo PubMed	(workplace) AND (prevention OR prevent OR education OR promotion) in the title AND ("mental health" OR "mental disorder" OR depression OR anxiety OR distress OR "mental wellbeing") in the abstract OR ("mentally healthy workplace") OR "psychologically healthy workplace" mentioned in the text of article	29 Journal articles	Michie and Williams (2003) LaMontagne et al. (2007)

See Table 1 for details of the searches strategies and results. The majority of strategies came from booklets/factsheets. A full list can be obtained from the authors on request. The information gathered from these sources was analysed by one of the authors (AR) and written up as individual survey items. This document was presented to a working group comprising four of the authors, who screened the items to ensure they fitted the definition of actions that organisations could take to prevent mental health problems, were comprehensible and had a consistent format, while remaining as faithful as possible to the original wording of the information. In addition, the questionnaire content was informed by a small number of strategies suggested by the working group to fill perceived gaps in the questionnaire's content. After several draft surveys, the group produced a list of 363 items that formed the first survey sent to panel members.

The Round 1 survey was organised into fourteen sections (see Table 2). Panel members were asked to rate the importance of each item. The rating scale used was: essential, important, depends, unimportant, should not be included, do not know. The Round 1 survey also included comment boxes that allowed panel members to give feedback after each section. To analyse the comments that panel members had written in the first round questionnaire, one of the authors (AR) read through all the comments and wrote them up as draft strategies. The working group evaluated the suggested draft strategies to determine whether they were original ideas that had not been included in the first round questionnaire. Any strategy that was judged by the group to be an original idea was included as a new item to be rated in the second round questionnaire. Panel members completed the questionnaires online using SurveyMonkey. The study was approved by the Human Research Ethics Committee of the University of Melbourne.

Table 2 Round 1 survey sections and number of items

Section	Number of items
1. The mental health and wellbeing strategy	12
2. The role of leadership in creating a mentally healthy workplace	35
3. Improving the physical work environment	5
4. Balancing job demands with job control	53
5. Rewarding employees' efforts	21
6. Creating a fair workplace	20
7. Provision of workplace supports	5
8. Managing staff during times of organisational or role change	6
9. Developing leadership and management skills	14
10. Managing under-performance	5
11. Developing a mental health and wellbeing policy	19
12. Providing mental health education to employees	90
13. Implementing a mental health education strategy	50
14. Employee responsibilities in preventing mental health problems	28
Total	372

Statistical analysis

On completion of each round, the survey responses were analysed by obtaining percentages for the health professional, employer and employee panels for each item. The following cut-off points were used:

Criteria for accepting an item

- If at least 80% of all panels rated an item as essential or important as a guideline for organisations to prevent mental health problems, it was included in the guidelines.

Criteria for re-rating an item

Panel members rerated an item in the next round if:

- 80% or more of the panel members in one group rated an item as essential or important.
- 70–79% of panel members in any group rated an item as either essential or important.

Criteria for rejecting an item

- Any items that did not meet the above conditions were excluded.

Pearson correlation coefficients were used to assess the extent to which ratings between panels were similar, by comparing the percentages of respondents in each panel rating items as essential or important.

Results

The participation rate of taking part in all three rounds was 67.3% (55.9% health professionals, 68.8% managers, 74.5% employees). See Table 3 for the number of panel members who completed each round.

See Figure 1 for an overview of the numbers of items that were included, excluded, created and re-rated in each round of the survey. Across three rounds, 314 strategies were rated as essential or important by at least 80% across all three panels. Overall, ratings of whether items

Table 3 Participant numbers for each round of the survey.

Panel	Round 1 *N*	Round 2 *N* (% of round 1)	Round 3 *N* (% of round 1)
Employee	47	40 (85.1)	35 (74.5)
Employer	32	26 (74.3)	22 (68.8)
Professional	34	22 (64.7)	19 (55.9)
Total	113	88 (77.9)	76 (67.3)

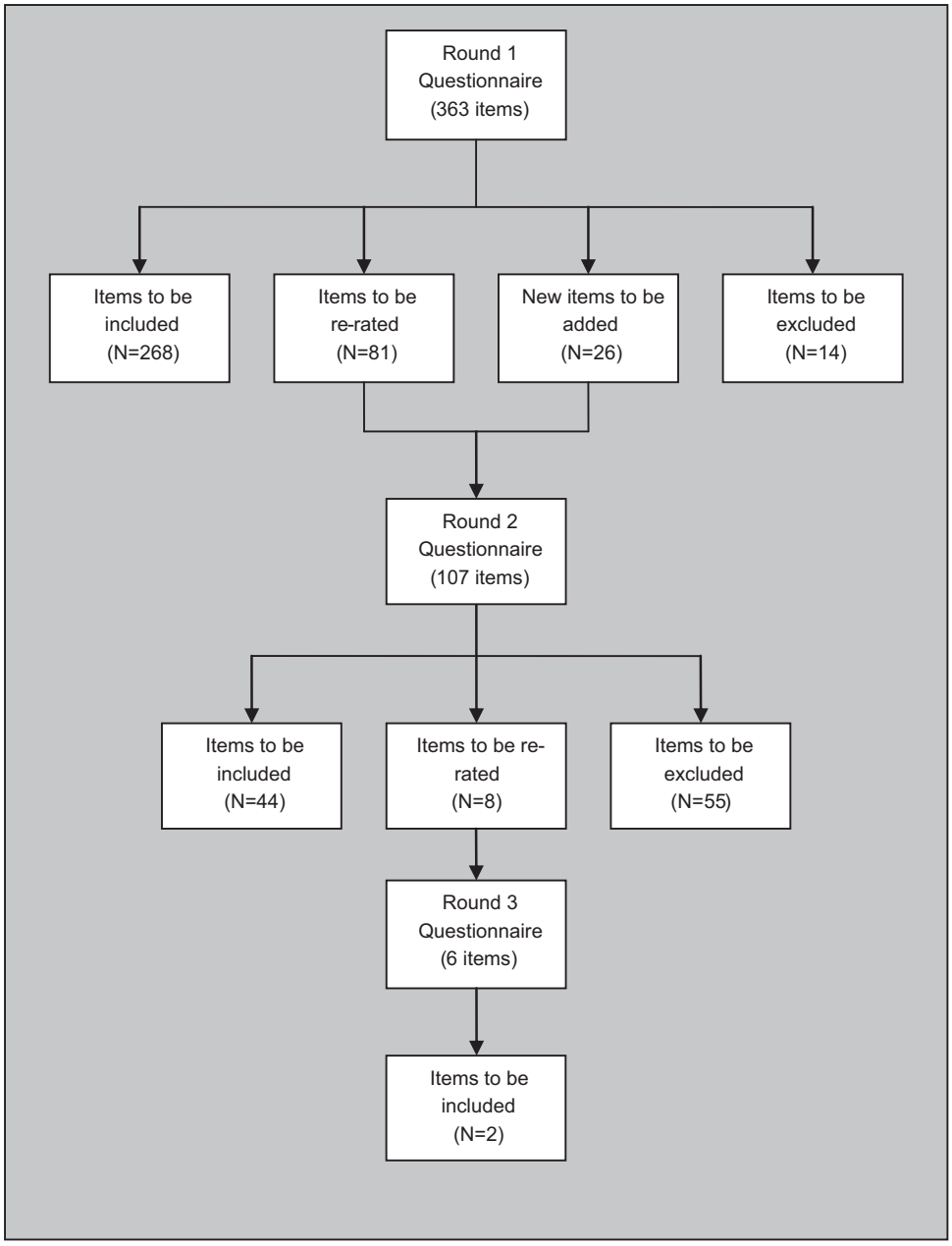

Figure 1 Overview of statements throughout the 3 rounds of questionnaires. Note: Total number of items endorsed/included in guidelines = 314.

were essential or important were similar across the employee, employer and professional panels, with correlations of $r=0.89$ between health professionals and employees, $r=0.92$ between health professionals and managers and $r=0.86$ between managers and employees.

Differences between groups

However, as might be expected, there were some areas for which views tended to differ. Among items that did not reach the criteria for acceptance in round 1, those that received notably lower or higher ratings in one group than in the others ($\pm$10%) are outlined below.

Comparison between employees and other groups

Items that received lower ratings from employees than both health professionals and managers included those relating to: holding managers accountable for maintaining a mentally healthy workplace; senior managers encouraging employees to look after their own health; building a strong team spirit by organising group activities and competitions; balancing out the level of demand with the level of discretion or control over the job; planning some free weekends (shift workers); keeping long work shifts and overtime to a minimum (shift workers); and having regular informal appraisal processes in additional to formal reviews.

Items that received higher ratings from employees than the other two groups included those relating to: enabling employees to say no to demands they feel unable to cope

with without this affecting career advancement; involving employees in the setting of workloads, priorities and deadlines; having 'stress-related leave' provided for in policy; and providing information to all employees on management styles and practices that can help promote mental wellbeing of employees.

Many of the items that received higher ratings from employees related to the role of the committee responsible for developing and implementing a mental health and wellbeing strategy, including the inclusion of a range of stakeholders in this group; having the committee open to anyone with an interest in workplace mental health promotion; having the committee role of the employee in their job description; having people employees know and feel they can approach as members of the committee; providing training for committee members on what to do when approached by someone with a mental health problem; including all employees in committee initiatives; responsibilities of the committee to include researching and identifying mental health programs and resources; the committee making key decision makers aware of the business case for improving mental health and wellbeing; committee members acting as role models; the committee developing links with mental health services in the community; employees accepting opportunities for counselling when they are available.

Comparison between managers and other groups

First-round items that received lower ratings from managers compared to both health professionals and employees included those relating to: the mental health and wellbeing strategy covering appropriate rewards for employees' efforts; creating an organisational mission statement that incorporates values of trust, honesty and fairness and displaying this prominently; including information on drafting and enforcing effective policy in supervisor training; providing for 'stress-related leave' in mental health and wellbeing policy; providing for discretionary leave to reduce parenting or carer responsibilities in the policy; the support of the mental health education strategy by a detailed implementation plan; the development of a dedicated budget for the strategy; the development of a contingency plan to address possible implementation barriers; the provision of Mental Health First Aid training to all employees; the provision of booster sessions to reinforce training; the inclusion of a range of stakeholders in the committee implementing the strategy; having the committee role of the employee in their job description; having people employees know and feel they can approach as members of the committee; providing training for committee members on what to do when approached by someone with a mental health problem; including all employees in committee initiatives; responsibilities of the committee to include researching and identifying mental health programs and resources; employees educating themselves and others about mental health issues.

A number of items that received lower ratings from managers were those regarding the mental health education that organisations may provide to all employees (rather than to senior managers and supervisors). These included those relating to: providing mental health education; including information on 'what mental health is'; including information on the types of mental health problems; including information on the impact of symptoms of mental health problems on the skills necessary for work; including information on the factors that determine a person's mental health; including information on how to investigate and take remedial actions if an employee reports a situation that threatens the mental health of employees; including information on management styles and practices that can help promote mental wellbeing of employees; including information on what do to if an employee refuses to recognise a mental health issue; including information on how to approach and interact with an employee who is in a distressed state; and including information on the importance of early identification and intervention for preventing mental health problems.

Items that received higher ratings from managers than the other two groups included: avoiding permanent night shifts (shift workers); avoiding several days of work followed by 4–7 day mini-vacations (shift workers); and speaking to the supervisor, HR representative or other appropriate workplace person if an employee is concerned about their mental health.

Comparison between health professionals and other groups

Items that received lower ratings from health professionals than the other two groups included those relating to: minimising anxiety prior to meetings by providing advance notice of topics to be discussed; considering processes that allow employees to explore internal positions that better match their skills; evaluating performance around outcomes rather than working hours; optimising the use of on-site personnel and resources for the implementation of initiatives; senior management seeking out opportunities to find out what other organisations are doing; employees limiting the amount of work they take home in the evenings.

Items that received higher ratings from health professionals than the other two groups included those relating to: engaging in positive gossip about what employees have done right; and the strategy addressing multiple components of an employee's life.

Guidelines development

One of the authors (AR) prepared a draft of the guidelines by grouping items of similar content under specific headings and rewriting many of them into continuous prose. The guidelines retained the original wording of the items as much as possible, whilst remaining easy to read. The draft guidelines were then given to panel members for final comment, feedback and endorsement. Only minor changes were asked for by panel members at this stage.

The final guidelines (see Appendix A) provide information and advice on how organisations should aim to prevent mental health problems. The main points are summarised in Appendix B. The guidelines cover the following areas: Implementing a mental health and wellbeing strategy; Developing a positive work environment: What managers and supervisors can do; Balancing job demands with job control; Rewarding employees' efforts; Creating a fair workplace; Provision of workplace supports; Managing staff during times of organisational or role change; Managing mental health-related under-performance; Developing

leadership and management skills; Providing mental health education to employees; Employee responsibilities in preventing mental health problems.

Discussion

The project aimed to identify actions that organisations can take to prevent mental health problems in the workplace, through the use of a Delphi expert consensus process. Overall, 314 strategies were endorsed from a comprehensive range of suggestions. The endorsed strategies were written into a guidelines document which aims to inform policy and practice, and is freely available to those in a range of workplace roles (including management, business owners and employees) as well as policy makers and practitioners.

Those working to prevent mental health problems in the workplace have often pointed to the need for improved communication, and the development of a shared language, between those working in mental health promotion and those in the business world (Czabala, Charzynska, & Mroziak, 2011). The Delphi consensus method, and the use of panels of health professionals, managers and employees, offers a way to move towards a shared view of workplace prevention of mental health problems. It can also help to highlight areas in which opinions differ, pointing to the need for further discussion.

When responses between panels were compared, some key features emerged. The most notable of these were the differences between the employer and other panels on items relating to organisational commitment to developing and implementing the mental health and wellbeing strategy. Managers gave lower ratings to items such as having the mental health education strategy supported by a detailed implementation plan; having a dedicated budget for the strategy; and the development of a contingency plan to address possible implementation barriers. In addition, managers had a more limited view of the role of the implementation committee than the other two panels, for example, they were less likely to endorse committee members having their committee role in their job description, or giving committee members responsibility for researching and identifying mental health programs and resources. Managers also endorsed a narrower range of topics to be included in health education for all employees than the other two panels, for example, including information on the impact of symptoms of mental health problems on the skills necessary for work, and including information on the factors that determine a person's mental health.

Such differences are likely to arise from employer concern about the direct costs involved in strategy implementation and the productivity implications of employees spending time on implementation of a mental health and wellbeing strategy. They may also reflect a low level of awareness of the importance of organisational policies and practices for prevention of mental health problems or a reluctance to see prevention of mental health problems as the responsibility of an employer. Varying views on where responsibility for employee mental health lies may also be reflected in the different ratings given to the item about senior managers encouraging employees to look after their own health (Cleary, Hilton, Sheridan, & Whiteford, 2008; Page, LaMontagne, & Louie, in press). While over 93% of managers and health professionals rated this as essential or important, only 78% of employees did so. Health professionals also gave higher ratings to the recommendation that the mental health and wellbeing strategy should address multiple components of an employee's life.

Employees were more likely to highly rate items relating to employee involvement in setting workloads, priorities and deadlines, as well as in the mental health strategy implementation committee. This is likely to reflect the orientation towards advocacy of the employee panel members, who were largely recruited from the consumer and carer forum of beyondblue. Such members might be expected to take the view that employees should be involved in planning processes, while managers may resist ceding control. This is also reflected in job stress research, which shows a persisting discrepancy in employee and manager views on employee participation in job stress problem characterisation and intervention development. Indeed, enacting genuine employee participation in this regard is challenging, but essential to optimising employee buy-in and intervention effectiveness (LaMontagne, D'Souza, & Shann, 2012).

One of the challenges of a project aiming to develop guidelines for organisations as diverse as workplaces is to make them sufficiently specific as to be useful while remaining broad enough to be relevant to organisations of various types and sizes. One area that exemplifies this difficulty is the formation of a committee to implement the mental health and wellbeing strategy. In round 2, this item received over 90% endorsement from employees and health professionals but only 79.2% of managers endorsed it, possibly reflecting the view that this would not be appropriate for small organisations. However, as the item was very close to the 80% cut off even for managers, it was included in order to avoid the logical inconsistency of having items relating to the operation of the committee (which were clearly endorsed) while omitting the item relating to the formation of the committee.

Given the links between job strain and mental health problems (LaMontagne et al., 2008), as well as the evidence for the health benefits of organisation-level interventions that aim to reduce this (Egan et al., 2007; LaMontagne et al. 2007), there is a need for further investigation of the enablers of and barriers to implementation of such interventions for prevention of mental health problems in the Australian context (LaMontagne et al., 2012). Such investigation should focus on organisations of varying sizes and industry types and should also include a particular focus on managers' attitudes and capabilities as these are likely to play an important role in the success or failure of such interventions (Cleary et al., 2008; Martin, 2010).

These guidelines may be compared to those developed in other countries, such as Canada. The recently released Canadian voluntary standards for psychological health and safety in the workplace were developed through consultation with business, unions and health professionals (Canadian Standards Association, 2013). As with the guidelines described here, they have a strong focus on organisations rather than on individual behaviours and have a strong focus on leadership, planning, implementation and evaluation. They contain tools that allow organisations to assess and control risks associated with organisational changes and job demands, introduce practices to support psychological

well-being, and review how well policies and other approaches are working. This points to the need to develop tools for Australian organisations to assist in implementation of the guidelines described here.

Limitations of the study include the difficulty in applying many of the recommendations contained in the guidelines in different organisational contexts, such as small to medium enterprises where resources, expertise and other limiting contextual factors may be need to be further explored (Martin et al., 2009). Some panel members also raised the issue of difficulty in rating some of the items, due to the wide range of organisational environments in which they might apply. Further limitations relate to the online Delphi process, including the possibility that some panel members were asked to advise on issues/questions that were outside their expertise, possibly leading to a lack of inclusion of items related to the latest research or best-practice evidence.

Conclusions

Developing and building on consensus between managers, employees and health professionals is of critical importance in improving workplace prevention of mental health problems, as evidence suggests that interventions that address both working conditions and individual skills and behaviours are the key to preventing mental health problems (LaMontagne et al., 2007). Interventions should therefore be carried out in collaboration with key stakeholders in order to maximise the chances of success. It is hoped that these guidelines will facilitate the development of high-quality, comprehensive and effective programs. Further research is needed to explore how these guidelines might be implemented in workplaces of different types and sizes.

Acknowledgements

Funding for the study was provided by WorkSafe Victoria, through the Institute for Safety, Compensation and Recovery Research (ISCRR), by Centre grant funding from the Victorian Health Promotion Foundation (VicHealth) (grant #15732) to ADL, and by the NHMRC Australia Fellowship awarded to AFJ. We thank beyondblue, ANZSOM and AFOEM for their assistance in recruiting panel members.

Appendix A. Supplementary Information

Supplementary data associated with this article can be found in the online version at http://dx.doi.org/10.1016/j.mhp.2014.07.002.

References

Akins, R. B., Tolson, H., & Cole, B. R. (2005). Stability of response characteristics of a Delphi panel: Application of bootstrap data expansion. *BMC Medical Research Methodology*, *5*, 37.

Bond, F. W., & Bunce, D. (2001). Job control mediates change in a work reorganization intervention for stress reduction. *Journal of Occupational Health Psychology*, *6*(4), 290–302.

Bonde, J. P. (2008). Psychosocial factors at work and risk of depression: A systematic review of the epidemiological evidence. *Occupational and Environmental Medicine*, *65*(7), 438–445.

Bourbonnais, R., Brisson, C., & Vinet, A., et al. (2006).Effectiveness of a participative intervention on psychosocial work factors to prevent mental health problems in a hospital setting. *Occupational and Environmental Medicine*, *63*(5), 335–342.

Canadian Standards Association. (2013). Psychological health and safety in the workplace – Prevention, promotion, and guidance to staged implementation, from: ⟨http://shop.csa.ca/en/canada/occupational-health-and-safety-management/cancsa-z1003-13bnq-9700-8032013/invt/z10032013/?utm_source=redirect&utm_medium=vanity&utm_content=folder&utm_campaign=z1003⟩ Retrieved 21.05.13.

Cleary, C. M., Hilton, M. F., Sheridan, J., & Whiteford, H. A. (2008). Corporate barriers preventing the initiation of mental health programs. *Journal of Occupational Health and Safety*, *24*, 507–517.

Cocker, F., Martin, A., & Scott, J., et al. (2011).Factors associated with presenteeism among employed Australian adults reporting lifetime major depression with 12-month symptoms. *Journal of Affective Disorders*, *135*(1–3), 231–240.

Czabala, C., Charzynska, K., & Mroziak, B. (2011). Psychosocial interventions in workplace mental health promotion: An overview. *Health Promotion International*, *26*(Suppl. 1), i70–i84.

Dietrich, S., Deckert, S., Ceynowa, M., Hegerl, U., & Stengler, K. (2012). Depression in the workplace: A systematic review of evidence-based prevention strategies. *International Archives of Occupational and Environmental Health*, *85*(1), 1–11.

Egan, M., Bambra, C., & Thomas, S., et al. (2007).The psychosocial and health effects of workplace reorganisation. 1. A systematic review of organisational-level interventions that aim to increase employee control. *Journal of Epidemiology and Community Health*, *61*(11), 945–954.

Goetzel, R. Z., Long, S. R., & Ozminkowski, R. J., et al. (2004). Health, absence, disability, and presenteeism cost estimates of certain physical and mental health conditions affecting U.S. employers. *Journal of Occupational and Environmental Medicine*, *46*(4), 398–412.

Greenhalgh, T., Robert, G., Bate, P., Kyriakidou, O., Macfarlane, F., Peacock, R. (2004). How to Spread Good Ideas: A systematic review of the literature on diffusion, dissemination and sustainability of innovations in health service delivery and organisation. Report for the National Co-ordinating Centre for NHS Service Delivery and Organisation R&D (NCCSDO). London, University College, London.

Jones, J., & Hunter, D. (1995). Consensus methods for medical and health services research. *British Medical Journal*, *311*(7001), 376–380.

Jorm, A. F., Minas, H., Langlands, R. L., & Kelly, C. M. (2008). First aid guidelines for psychosis in Asian countries: A Delphi consensus study. *International Journal of Mental Health Systems*, *2*(1), 2.

Kelly, C. M., Jorm, A. F., Kitchener, B. A., & Langlands, R. L. (2008). Development of mental health first aid guidelines for suicidal ideation and behaviour: A Delphi study. *BMC Psychiatry*, *8*, 17.

Kitchener, B. A., & Jorm, A. F. (2004). Mental health first aid training in a workplace setting: A randomized controlled trial [ISRCTN13249129]. *BMC Psychiatry*, *4*, 23.

Kivimaki, M., Elovainio, M., Vahtera, J., & Ferrie, J. E. (2003). Organisational justice and health of employees: Prospective cohort study. *Occupational and Environmental Medicine*, *60*(1), 27–33. (discussion 33-24).

LaMontagne, A. D., Noblet, A., & Landsbergis, P. A. (2012). Intervention development and implementation: Understanding and addressing barriers to organizational-level interventions. In: C. Biron, M. Karanika-Murray, & C. L. Cooper (Eds.), *Improving organizational interventions for stress and well-being: Addressing process and context* (pp. 21–38). London: Routledge.

LaMontagne, A. D., Keegel, T., Louie, A. M., & Ostry, A. (2010). Job stress as a preventable upstream determinant of common mental disorders: A review for practitioners and policy-makers. *Advances in Mental Health*, *9*(1), 17–35.

LaMontagne, A. D., Keegel, T., & Vallance, D. (2007). Protecting and promoting mental health in the workplace: Developing a systems approach to job stress. *Health Promotion Journal of Australia*, *18*(3), 221–228.

LaMontagne, A. D., Keegel, T., Vallance, D., Ostry, A., & Wolfe, R. (2008). Job strain – Attributable depression in a sample of working Australians: assessing the contribution to health inequalities. *BMC Public Health*, *8*, 181.

LaMontagne, A. D., D'Souza, R. M., & Shann, C. B. (2012). Socio-demographic and work setting correlates of poor mental health in a population sample of working Victorians: Application in evidence-based intervention priority setting. *International Journal of Mental Health Promotion*, *14*(2), 109–122.

LaMontagne, A. D., Keegel, T., Louie, A. M., Ostry, A., & Landsbergis, P. A. (2007). A systematic review of the job-stress intervention evaluation literature, 1990–2005. *International Journal of Occupational Medicine and Environmental Health*, *13*(3), 268–280.

Landsbergis, P. A., & Vivona-Vaughan, E. (1995). Evaluation of an occupational stress intervention in a public agency. *Journal of Organisational Behavior*, *16*(29), 48.

Langlands, R. L., Jorm, A. F., Kelly, C. M., & Kitchener, B. A. (2008). First aid for depression: A Delphi consensus study with consumers, carers and clinicians. *Journal of Affective Disorders*, *105*(1-3), 157–165.

Marmot, M. G. (2004). Evidence based policy or policy based evidence?. *British Medical Journal*, *328*(7445), 906–907.

Martin, A. (2010). Individual and contextual correlates of managers' attitudes towards depressed employees. *Human Resource Management*, *49*(4), 647–666.

Martin, A., Sanderson, K., & Cocker, F. (2009). Meta-analysis of the effects of health promotion intervention in the workplace on depression and anxiety symptoms. *Scandinavian Journal of Work, Environment and Health*, *35*(1), 7–18.

Martin, A., Sanderson, K., Scott, J., & Brough, P. (2009). Promoting mental health in small-medium enterprises: an evaluation of the "Business in Mind" program. *BMC Public Health*, *9*, 239.

Michie, S., & Williams, S. (2003). Reducing work related psychological ill health and sickness absence: A systematic literature review. *Occupational and Environmental Medicine*, *60*(1), 3–9.

Page, K. M., LaMontagne, A. D., & Louie, A. M., et al. (2014). Stakeholder perceptions of job stress in an Australian context: implications for policy & practice. *Journal of Public Health Policy* (in press).

Reavley, N. J., Ross, A., Killackey, E. J., & Jorm, A. F. (2012). Development of guidelines to assist organisations to support employees returning to work after an episode of anxiety, depression or a related disorder: A Delphi consensus study with Australian professionals and consumers. *BMC Psychiatry*, *12*, 135.

Sanders, D., & Crowe, S. (1996). Overview of health promotion in the workplace. In: A. Scriven, & J. Orme (Eds.), *Health Professional Perspectives* (pp. 199–209). London: Macmillan.

Sanderson, K., & Andrews, G. (2006). Common mental disorders in the workforce: Recent findings from descriptive and social epidemiology. *Canadian Journal of Psychiatry*, *51*(2), 63–75.

Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, *1*(1), 27–41.

Slade, T., Johnston, A., Oakley Browne, M. A., Andrews, G., & Whiteford, H. (2009). 2007 National survey of mental health and wellbeing: methods and key findings. *Australian and New Zealand Journal of Psychiatry*, *43*(7), 594–605.

Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental health-a meta-analytic review. *Scandavian Journal of Work, Environmental and Health*, *32*(6), 443–462.

Sturgeon, S. (2006). Promoting mental health as an essential aspect of health promotion. *Health Promotion International*, *21*(Suppl. 1), S36–S41.

Wilkinson, R. G., & Marmot, M. (Eds.). (2003). *Social determinants of health: The solid facts*. Geneva: World Health Organisation.

World Health OrganisationM. (2008). *Global burden of disease 2004 update*. Geneva: World Health Organisation.