Integrated Workplace Mental Health Promotion for the Prevention and Management of Mental Illness in the Workplace:
A Intervention Study in a Male Blue Collar Manufacturing Setting

Final report to beyondblue

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EXECUTIVE SUMMARY

Project Aims & Methods

In this project, we aimed to implement and evaluate an integrated job stress prevention and mental health literacy intervention in a predominantly male, blue-collar manufacturing setting. Intervention implementation and effectiveness was evaluated using a controlled experimental design, with one Melbourne area worksite receiving the intervention for one year while a similar regionally-based worksite from the same company served as a wait-list control. The control site received a restricted range of activities after the intervention was completed at the main intervention site. Data on the main outcomes of interest, exposure to job stressors and mental health literacy, was collected by survey at baseline, the end of year 1, and the end of year 2. Qualitative interviews were also conducted with key informants during and at the conclusion of the intervention.

Results

We developed the intervention in collaboration with external workplace stakeholders (a community health organisation and beyondblue’s Workplace Program) as well as staff of the company, including the operations manager, occupational health and safety officer, floor supervisors and general staff. Project activities included beyondblue workplace training for staff and managers, Mental Health First Aid, a tailored leadership workshop, one-on-one management coaching, and specific job stress reduction and team building activities for general staff.

Post-intervention survey respondents reported that they experienced beneficial changes at both the workplace and individual levels. Over 56% of respondents at the intervention site reported that the intervention had resulted in positive improvements in their workplace in comparison to 16% at the control site (p=0.002). Similarly, respondents at the intervention site were far more likely to report some personal benefit from the intervention (52% intervention vs 16% control, p=0.005). This was supported by the qualitative interviews, which suggested that the intervention was a positive and protective factor during a particularly difficult time of ownership change and restructuring in the company.

However, we found no clear evidence of improvement from our survey-based measurements of specific psychosocial working conditions and mental health literacy. Due to a low response rate and very small numbers of responses at the control site, we were effectively unable to use the control site as a non-intervention comparison for analyses comparing change in the intervention versus control site for working conditions and mental health literacy. Considering change only within the intervention site, however, showed relatively small changes in both directions (improvements and worsening) in
working conditions and mental health literacy. This suggests that neither was appreciably changed over the course of the intervention.

**Future Directions**

Despite the lack of strong positive findings regarding specific changes in psychosocial working conditions and mental health literacy, we would argue that continued efforts are warranted to develop integrated intervention efforts for male blue-collar work settings. This segment of the working population has some of the worst working conditions, the poorest help-seeking behaviours, high stigma against mental illness, and high prevalence of mental disorders. These characteristics make this setting a high priority for intervention, as well as one of the most challenging in which to achieve change. Based on our experiences in this project, we offer the following recommendations for future research and continuing intervention efforts in male blue-collar work settings:

- Relationship development to build credibility and trust is an essential prelude to intervention planning and implementation. The use of existing relationships in the relevant sectors is one strategy to shortcut this process (e.g., specifically trained peers, such as used in *Mates in Construction*, or established groups in the sector to deliver intervention, such as *Incolink* in the building industry). The implementation of intervention activities by people of comparable socio-demographic background would enhance cultural relevance as well as credibility;
- Long time frames are needed for relationship and tailored program development;
- Program champions are needed at various levels (worker, supervisor, manager, union, etc.) to sustain engagement;
- Considerable flexibility in intervention implementation is required in order to accommodate industry needs, particularly if paid work time is granted for intervention activities (e.g., frequent rescheduling of activities, offering multiple sessions for each activity so as not to disrupt production);
- Alternatives to standard survey methods of measurement are desperately needed to overcome literacy, numeracy, CALD, and computer access limitations in blue-collar work settings (e.g., use of smart phones to do more frequent and shorter data collections).
# TABLE OF CONTENTS

Context .................................................................................................................................................... 6

Aim of the current project .................................................................................................................. 6

Background .......................................................................................................................................... 6

Size of the issue and existing intervention studies ........................................................................ 7

Issues identified in past studies .................................................................................................... 8

Approach ............................................................................................................................................ 9

The setting ........................................................................................................................................ 9

Measures used in evaluation ............................................................................................................ 10

Details on the activities conducted ............................................................................................... 11

Year 1: Engaging the company on the project activities and needs assessment ...................... 11

Year 2: Intervention development ................................................................................................ 12

Components of the training ............................................................................................................. 15

Year 3: Evaluation .......................................................................................................................... 17

Results ............................................................................................................................................. 19

Descriptive results of the sample .................................................................................................. 19

Working conditions ....................................................................................................................... 21

Mental health literacy results ......................................................................................................... 23

Overall reported benefit of the intervention .................................................................................. 24

Results from the pre-intervention interviews .............................................................................. 25

Results from the post-intervention interviews ............................................................................. 28

Discussion ....................................................................................................................................... 33

Interpretation of positive results .................................................................................................. 33

Interpretation of null results ......................................................................................................... 34

Conclusions .................................................................................................................................... 35
List of figures and tables

Figure 1. The range of factors influencing the success of workplace mental health and job stress prevention and control interventions in blue-collar settings ................................................................. 8
Figure 2. Program logic for the combined job stress beyondblue intervention ................................. 14
Table 1. Schedule of activities.................................................................................................................. 15
Table 2. Demographic characteristics of the intervention and control site, at baseline and follow up. ........................................................................................................................................ 20
Table 3. Results of the intervention, quantitative results comparing baseline and follow-up, intervention and control site ........................................................................................................... 22
Table 4. Mental health literacy results, quantitative results comparing baseline and follow-up, intervention and control site .................................................. Error! Bookmark not defined.
Table 5. Reported improvements in the workplace following the intervention .................................. 24
Table 6. Reported personal improvements following the intervention ............................................. 24
CONTEXT

Aim of the current project

In this project, we aimed to implement and evaluate an integrated job stress and mental health literacy intervention in a predominantly male, blue-collar manufacturing setting. Intervention implementation and effectiveness was evaluated using a controlled experimental design, with one Melbourne area worksite receiving the intervention for one year while a similar regionally-based worksite from the same company served as a wait-list control. The control site received a restricted range of activities after the interventions were completed at the main intervention site. Data on the main outcomes of interest, exposure to job stressors and mental health literacy, was collected at baseline, the end of year 1, and the end of year 2. This project built on a previous (2007-2010) uncontrolled intervention study to develop, implement, and evaluate an integrated mental health literacy and job stress intervention approach in 10 Canberra worksites conducted in partnership with beyondblue’s Workplace Program (LaMontagne, Keegel, Shann, & D’Souza, 2014; LaMontagne, Keegel, Shann, & Noblet, in press).

Background

Interventions to promote mental health in the workplace are gaining acceptability as a means to prevent, screen, and effectively manage depression and anxiety among employees in various industrialised democracies (LaMontagne, D’Souza, & Shann, 2012; LaMontagne, Martin, et al., 2014; Martin, Sanderson, & Cocker, 2009; Sanderson & Andrews, 2006; Wang et al., 2007). In Australia, such programs have expanded rapidly over the last several years, with the largest of these, beyondblue’s national workplace program, being launched in 2004 (Highet, Shann, & Young, 2010). In general, these programs seek to educate employees about how to recognise and respond to depression and related mental disorders in the workplace, to improve knowledge of depression and related disorders as treatable illnesses, to destigmatise mental disorders, and to develop skills in how to assist a work colleague or supervisee to seek professional help (henceforth referred to as ‘mental health literacy’). There is limited published evidence of the effectiveness of these programs in Australia (LaMontagne, Keegel, et al., 2014). An international meta-analysis has shown that workplace mental health promotion (MHP) programs can generally also be effective in reducing depression and anxiety symptoms in employees, while the effects are small (Harvey et al., 2014). Further evidence on process and effectiveness of these programs in improving mental health literacy would support their further improvement and expansion.
Workplace MHP programs should also aim to reduce work-related risk factors for mental health (LaMontagne, Martin, et al., 2014). Psychosocial working conditions, such as job control and job insecurity have emerged as substantial preventable risk factors for mental illness (LaMontagne, Keegel, Louie, & Ostry, 2010). A 2006 systematic review, for example, concluded that there is “robust and consistent evidence that high job demands, low job control and the combination of the two [job strain] are prospective risk factors for common mental disorders” (Stansfeld & Candy, 2006). In building the case for interventions to improve psychosocial working conditions, previous research from the investigators and others has demonstrated that the combination of low control and high demand jobs (or ‘job strain’) accounts for ~15% of prevalent depression among working Victorians (LaMontagne, Keegel, Vallance, Ostry, & Wolfe, 2008; LaMontagne, Louie, Keegel, Ostry, & Shaw, 2006). The problem is disproportionately borne by lower status workers and inadequately addressed by OH&S regulators and the Workers Compensation system (Keegel, Ostry, & LaMontagne, 2009; LaMontagne, Keegel, Louie, Ostry, & Landsbergis, 2007). There are, however, feasible and effective means of preventing and controlling job stress, (LaMontagne & Keegel, 2010; LaMontagne, Sanderson, & Cocker, 2010) and employers would be the main economic beneficiaries of addressing the problem (LaMontagne & Keegel, 2012).

While a growing number of international systematic reviews have established what to do to most effectively address job stress (briefly, to combine worker- and work-directed interventions in a comprehensive approach) (LaMontagne et al., 2007), evidence on how to achieve this is still evolving (LaMontagne, Martin, et al., 2014; LaMontagne, Noblet, & Landsbergis, 2012). This project aimed to fill this gap in knowledge by providing evidence on how to most effectively address job stress in blue-collar organisations within the Australian context.

**Size of the issue and existing intervention studies.**

Those employed in ‘blue collar’ industries such as manufacturing and construction are identified as suffering from higher rates of suicide (Milner, Spittal, Pirkis, & LaMontagne, 2012), and mental ill health (PricewaterhouseCoopers, 2014), in addition to the historically-recognised high rates of workplace injuries. However, a recent review of literature in the area revealed a limited number of interventions set in blue-collar settings that specifically address mental ill health (Barrett, Haslam, Lee, & Ellis, 2005; Griffin-Blake, Tucker, & Liburd, 2006; Gullestrup, Lequertier, & Martin, 2011; Hanbury, Wallace, & Clark, 2011; Thomason & Pond, 1995). Only one of these interventions was set in Australia (Gullestrup et al., 2011) and sought to investigate the effectiveness of a suicide prevention and early intervention program the construction industry in Queensland, Australia. Further, the majority of interventions set in blue collar industries have been at the secondary and tertiary level (Thomason &
Pond, 1995), with little or no attention to the primary level working conditions that also contribute to the high burden of health and illness. This poses both ethical (interventions should address all modifiable risk factors according to the Ottawa Charter for Health Promotion) as well as credibility challenges (worker cynicism at intervention being directed mainly at them and not at their poor working conditions) (LaMontagne, Martin, et al., 2014).

**Issues identified in past studies**

The reasons for the small number of mental health job stress intervention studies in blue-collar industries are likely connected to a range of impediments at the macro-economic as well as industry, workplace and individual levels. These factors have previously been noted as impacting the implementation of past mental health interventions (Barrett et al., 2005; Gullestrup et al., 2011) (Figure 1). At the national contextual level, the economic climate and the shift towards overseas outsourcing of manufacturing and basic construction jobs is likely to influence organisational and individual willingness to engage in workplace health & wellbeing programs as well as research intervention projects. There is also a range of industry specific challenges that need to be considered, such as increasingly ‘flexible’ forms of employment (seen in the form of temporary and contract-based work), and an historical focus on physical OHS issues rather than mental health. At the organisational level, the studies cited above have identified a lack management buy-in as a barrier to intervention effectiveness, which may be connected to wider economic pressures. Individuals in blue-collar jobs may have a lower overall level of education and lower general health literacy, and thus are likely to be operating from a lower base level of knowledge compared to higher skilled professions.

**Figure 1. The range of factors influencing the success of workplace mental health and job stress prevention and control interventions in blue-collar settings**
APPRAOCHE

The setting

This project came about following discussions between the researchers and a local community health organisation that had been providing regular health and wellbeing activities to the intervention site. The community health organisation conducted a preliminary survey and identified mental health and job stress as significant concerns for employees. Following this, the community health organisation approached the investigators to discuss the possibility of conducting a workplace mental health intervention project at the site. The project team (led by Prof LaMontagne) then applied for and was successful in obtaining funding from a *beyondblue* Victorian Centre of Excellence grant at the end of 2011.

The company is a small to medium enterprise that produces and supplies windows and doors to both residential and commercial clients across multiple states of Australia. There are two sections that comprise manufacturing production within the company: aluminium/glass and timber.

The intervention was conducted in the largest factory, located in Melbourne, Victoria. Over 80% of employees in the company are male, the majority of whom work in the factories. Most females are employed in the company are in administrative or sales roles. There are distinct differences in the age distribution of employees working in different jobs at the main intervention site. Males employed in the timber factory tend to have a longer history of employment in the company (15 years plus, on average), to be of Caucasian or European background and to be over the age of 45. Those employed in the aluminium/glass factory are more often recent migrants from Asian countries, and under the age of 30.

The control site was located in regional Victoria, approximately one and a half hours from the Melbourne CBD. The workplace contained approximately 70 employees, of whom 90% were male. There is a larger number of permanent staff (76%) and a smaller number of casual (14%) and salaried staff (10%) compared to the intervention site. However, the age distribution is similar, with the majority of employees being aged between 31 and 50 years (55%) and 18 and 30 years (35%). Approximately 8% of the workforce comes from a culturally and linguistically diverse (CALD) background.
**Measures used in evaluation**

After consultation with staff at the site, we decided on a paper and pencil survey as our main data collection method for program evaluation. Items on the survey included: description of job (job title), employment status (fulltime/part time/ causal/other), length of time employed at the organisation, hours worked per week) and demographic information (age, sex, education history, relationship status). We assessed psychosocial working conditions using questions from the Copenhagen Psychosocial Questionnaire (COP-SOQ) short version (Bjorner & Pejtersen, 2010). Mental health literacy was assessed using survey items developed by *beyondblue* (Highet, Hickie, & Davenport, 2002; Pierce & Shann, 2012). We also used the Mental Health Knowledge Schedule (Evans-Lacko et al., 2010) and the Reported and Intended Behaviour Scale (RIBS) (Evans-Lacko et al., 2011) to assess knowledge, stigma, reported and intended behaviour scale. Psychological distress was measured using the abbreviated psychological distress scale (K6) (Kessler et al., 2003).
Details on the activities conducted

YEAR 1: ENGAGING THE COMPANY ON THE PROJECT ACTIVITIES AND NEEDS ASSESSMENT

Prior to funding of the project

Following successful application for project funding, the research project team began a series of activities to engage both management and general staff in the development of the intervention. These activities were deemed necessary for building trust and rapport between the researchers and the participants, ensuring that program material was appropriate and tailored to the organisation, and to increase employee participation in program activities.

Communication with management

Soon after the project was funded, we had a meeting with senior management of the company to formalise the partnership. At this stage, senior managers expressed their concern that the project could result in increased stress-related Workers’ Compensation claims. A frank discussion ensued wherein the Lead Investigator stated that we could not guarantee what might happen in this regard, but that we did not expect an increase in claims. We also noted that the best defence against a claim is to be able to show the regulator that risk assessment has been done and steps have been taken to minimise identified risks, such as would occur through the conduct of this project. Agreement was then made to go forward with the project. Concerns about stress-related claims are likely to be a significant barrier to uptake of job stress and other workplace mental health interventions by workplace decision-makers. This is an issue that merits further attention in the future.

Once the project was underway, the research team met regularly with the Occupational Health and Safety (OHS) manager, the external Health Promotion Officer and the company’s General Manager. Management were continually kept up to date with the intervention as it developed and their advice was sought about how to tailor the project to the organisation’s needs and scheduling demands. Updates about the progress of the study were regularly communicated to the management team, key stakeholders and ‘champions’ within the organisation via informal in-person meetings, email and phone. The research team also participated in the organisation’s Health and Wellbeing team meetings with the aim of incorporating project activities into the normal every-day workings of the organisation.

Communication with general staff

The research team also conducted regular presentations and ‘walk-throughs’ (informal shop floor visits) to engage general staff. This involved visiting the factory floor during working hours and talking to the general staff about the project. The general staff were invited to periodic presentations
conducted by the research team and were also given information sheets about the project. Project brochures with contact information were also posted on each of the area bulletin boards around the site.

Needs assessment

A quantitative needs assessment was conducted by survey. The main content of the survey reflected the two main outcome areas of interest: reducing workplace stressors and improving mental health literacy. The research team also conducted a series of semi-structured interviews to further inform the development of tailored intervention activities and get feedback on the progress of the project at the main intervention site. These were conducted approximately 12 months after the engagement phase of the project had started. Interviewees included the OHS manager, the general manager, floor staff/ team leaders and an external health promotion provider. Interview questions were around the following topics: perceptions about the engagement phase of the project, including what had worked well, what could be done differently going forward, what contextual factors had or could have influenced the project, adequacy of communication about the project by the research team (e.g., how information was received and from whom, and whether this was satisfactory), what interviewees had learnt to date and what they would like to gain from the project. Responses to the interview questions were recorded, transcribed and imported the qualitative data management software, QSR NVIVO. There were 6 of these needs assessment/implementation interviews.

YEAR TWO: INTERVENTION DEVELOPMENT

A number of specific intervention targets were identified for the intervention based on the survey and interviews. These were discussed and refined with both general staff and management. These are described on the left hand side in the program logic presented in Figure 1. In addition to the general priorities of job stress and mental health literacy, specific issues raised in both the quantitative and qualitative needs assessment included the need for improved job control, greater recognition of a job well done, improved quality and consistency of communication from management to general staff, and improved supervisory support. As many of these specific priorities relate to management practice, it was agreed that a major focus would be on a manager coaching program to improve practice in these particular areas. Activities included mental health literacy training for general staff and managers (beyondblue workplace training delivered by beyondblue’s Workplace Program), Mental Health First Aid for nominated staff, management skills development workshops and coaching, and job stress prevention and control information and skill development sessions communication (‘comms’) meetings for general staff and management (Figure 1, middle). These activities were
intended, in turn, to impact the desired outcomes on the far right of Figure 1. Detailed components of the training are described below.
Figure 2. Program logic for the combined job stress *beyondblue* intervention

**Intervention targets**
- Mental health literacy
- Job control
- Inconsistent and limited communication, particularly about change
- Lack or reward and recognition
- Limited supervisor support
- Low morale

**Strategies/Program Activities**
- MHL training for general staff and managers
- Management skill development workshop and coaching
- Job stress training for general staff

**Desired Outcomes**
- Decreased stigma around mental health issues
- Improved manager communication
- Improved supervisor support
- Improved morale
- Improved job control
- Reduced job demands
Intervention activities were designed to fit around the operational demands of the company by scheduling activities over a series of weeks or months (e.g., management coaching), repeating sessions for both shifts, working around rostering, and rescheduling in response to large work orders (high pressure work periods). Management supported the scheduling of training sessions on paid company time by releasing 8—15 workers at a time throughout the day from their work to attend intervention activities. As shown in Table 1 below, the intervention was conducted over a period of months at the main intervention site and was conducted at a later time period in the control site, which received a less intensive version of the intervention due to feasibility constraints (resources and distance—the site was 2 hours outside of Melbourne by car).

Table 1. Schedule of activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Main intervention site</th>
<th>Control site</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>beyondblue general staff training</strong></td>
<td>June 2013</td>
<td>June 2014</td>
</tr>
<tr>
<td><strong>beyondblue manager training</strong></td>
<td>July 2013</td>
<td>July 2014</td>
</tr>
<tr>
<td><strong>Job stress activities for general staff</strong></td>
<td>September 2013</td>
<td>Nil</td>
</tr>
<tr>
<td><strong>Management coaching</strong></td>
<td>July-November 2013</td>
<td>November 2014</td>
</tr>
<tr>
<td><strong>Mental Health First Aid Training (for nominated staff)</strong></td>
<td>November 2014</td>
<td></td>
</tr>
</tbody>
</table>

**COMPONENTS OF THE TRAINING**

**Mental health literacy training**

Our initial engagement and needs assessment with the company indicated a need to provide greater education and awareness about mental health, and information on where to seek help for mental health problems. With this in mind, general staff and management received mental health literacy training sessions. As arranged in the development of the grant application in collaboration with beyondblue’s Workplace Program, these were provided by beyondblue’s Workplace Program. Sessions were rostered across multiple days at times to ensure that as many employees were able to attend as possible. The program included a two hour session for general staff and a three hour session for supervisors and managers. Sessions were facilitated by a health professional with experience delivering workplace training. The first part of the beyondblue sessions were psycho-educational and presented the prevalence rates of common mental health problems, signs and symptoms of such problems in the workplace, and effective treatment and management approaches. The training included vignette videos of real people describing their own experiences of managing their depression.
and anxiety in the workplace. The chosen vignettes featured males in blue collar work settings to match the demographic of the organisation.

The second part of the workshop was focused on reducing stigma towards mental illness and increasing participants’ confidence and skills to have conversations in the workplace with people they might be concerned about. This utilised case study scenarios to give participants the opportunity to put what they had learnt into practice. The standard beyondblue sessions were adapted for the project to suit the blue-collar context and included expanded coverage of job stress to highlight the links between job stress, workplace mental health, and workplace-specific aspects of mental health literacy. The manager sessions also covered important legal/regulatory aspects under OH&S, anti-discrimination, and employment law.

We also provided financial support for managers and floor supervisors to attend Mental Health First Aid training (MHFA). One senior manager and 2 floor supervisors attended the training. Those who attended were self-nominated. MHFA is the help provided to a person who is developing a mental health problem, or in a mental health-related crisis, until appropriate professional treatment is received or the crisis resolves. MHFA training covers:

- how to recognise the signs and symptoms of mental health problems;
- knowledge of the possible causes or risk factors for these mental health problems;
- awareness of the evidenced based medical, psychological and alternative treatments available;
- skills in how to give appropriate initial help and support someone experiencing a mental health problem;
- skills in how to take appropriate action if a crisis situation arises involving suicidal behaviour, panic attack, stress reaction to trauma, overdose or threatening psychotic behaviour.

Job stress prevention

Because a number of the identified needs could best be addressed through improvements in management practice, tailored one-on-one management coaching was conducted with all managers at the intervention site over a six-month period. Those who took part (n=6) included the general manager, shop floor management, and sales management. These sessions were specifically designed to improve:

- understanding of current management skills (including giving and receiving feedback);
• leadership skills (effective leadership, delegation, handling performance management, and conflict management);
• staff reward and recognition (including job control);
• change management (how to have conversations about change going on in the company, including redundancies), and;
• overall communication.

The aim was for these activities to improve the working conditions for general staff through the improvement of management practice, in particular targeting improvements in supervisor and collegial support, the amount of control workers are allowed about how, when and what type of work they do, supervisor communication and positive feedback provided to employees, and overall morale.

General staff received a series of activities run by a psychologist also aimed at improving working conditions (‘comms’ meetings). The first activity focused on employees’ perceptions about how the organisation could address job stress and negative factors while also promoting positive aspects of work such as a positive team environment. For example, job rotation was suggested for the administration department and in the factory to allow employees the chance to experience different types of work in the organisation. Following this, there were a series of activities addressing team morale (working together effectively), stigma around mental health issues and seeking help, recognising when colleagues were experiencing job stress (signs and symptoms) and providing co-worker support to address this, recognising their own experience of job stress and seeking help. There were also sessions provided on the Employee Assistance Program and how to access this if needed, emphasising that the service is free and confidential. All sessions conducted with general staff were tailored to the demographics of the participants and used an interactive and non-threatening approach to facilitating the activities and discussion. This included ball games followed by discussions, as well as brainstorming in teams on butcher’s paper.

YEAR THREE: EVALUATION

We conducted a follow up survey to assess the results of the intervention. The survey was the same as was conducted at baseline but included the following additional questions: “did you participate in any activities that were part of this project?”, “if yes, which ones (beyondeblue training, comms meetings, other activities)”, “have you seen any improvements in your workplaces due to this project?”, and “have you found that the project has improved anything for you personally?”.

The response rate to the final survey was 72% in the intervention site and 20% in the control site.
The research team also conducted semi-structured interviews with the OHS manager, the general manager, floor staff/ team leaders, an external health promotion provider and external coach-psychologist (who helped deliver the coaching aspect of the project). The purpose of these later interviews was to gain some further understanding about the context and implementation of the intervention. Interview questions were around the following topics: whether the participant undertook any of the project activities, what they learnt, perceptions of the project, if anything within the industry or company could have affected the project either positively or negatively, what was done well in the project, what wasn’t done so well, whether there had been change in the organisation due to the project, and if there is anything they would suggest to do differently if the project was run again.

There were a total of 9 of these interviews.
RESULTS

The baseline survey was administered in November 2012 in both the intervention and control sites. We had an initial response rate of approximately 36% at the intervention site and 20% at the control site. The poor response rate was related to complexities in how the survey was administered (discussed further below and in the limitations section). We improved the process related issues that hindered the delivery of the first survey, then repeated the survey at the intervention site after the beyondblue training has been conducted. This time the response rate at the main intervention site was 63%. The final survey was conducted after all components of the intervention has been completed and yielded a response rate of 76% at the intervention site and 29% at the control site.

As the job stress intervention did not begin until after survey 2 at the intervention site, the baseline results for this site could include both surveys 1 and 2. However, the baseline for assessing the effect of the beyondblue training at the intervention site utilised survey 1 only, as both the general staff and management beyondblue training had already been conducted by survey 2.

DESCRIPTIVE RESULTS OF THE SAMPLE

The demographic characteristics at the intervention and control sites at baseline (two baseline surveys combined, T1 + T2) and final follow up survey (T3) are shown in Table 2. As can be seen, across both sites at baseline and follow up, most people were aged between 31 and 50 years and were male. More than half the sample were married. The majority of participants completing the survey had received high school education only. As can be seen, most people were employed on a permanent basis. A slightly larger proportion of persons at the intervention site had more than one job than at the control site. There were similar hours worked per week at the intervention and control sites across the baseline and follow up.
Table 2. Demographic characteristics of the intervention and control site, at baseline and follow up.

<table>
<thead>
<tr>
<th></th>
<th>Intervention group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline (n=84)</td>
<td>Follow Up T3 (n=69)</td>
</tr>
<tr>
<td><strong>Age group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-30 yrs</td>
<td>19.77</td>
<td>22.86</td>
</tr>
<tr>
<td>31-50 yrs</td>
<td>46.51</td>
<td>48.57</td>
</tr>
<tr>
<td>51 yrs +</td>
<td>33.72</td>
<td>28.57</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>81.61</td>
<td>82.35</td>
</tr>
<tr>
<td>Female</td>
<td>18.39</td>
<td>17.65</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>28.57</td>
<td>38.57</td>
</tr>
<tr>
<td>Married/defacto</td>
<td>71.43</td>
<td>61.43</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>6.02</td>
<td>13.43</td>
</tr>
<tr>
<td>Secondary</td>
<td>57.83</td>
<td>46.27</td>
</tr>
<tr>
<td>Vocational training</td>
<td>12.05</td>
<td>14.93</td>
</tr>
<tr>
<td>Tertiary</td>
<td>24.1</td>
<td>25.37</td>
</tr>
<tr>
<td><strong>Employment arrangements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent/ongoing</td>
<td>85.71</td>
<td>84.06</td>
</tr>
<tr>
<td>Casual</td>
<td>13.1</td>
<td>15.94</td>
</tr>
<tr>
<td>Other</td>
<td>1.19</td>
<td>0</td>
</tr>
<tr>
<td><strong>Had more than one job</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>85.88</td>
<td>86.76</td>
</tr>
<tr>
<td>Yes</td>
<td>14.12</td>
<td>13.24</td>
</tr>
<tr>
<td><strong>English as a second language</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>24.14</td>
<td>20</td>
</tr>
<tr>
<td>Yes</td>
<td>75.86</td>
<td>80</td>
</tr>
<tr>
<td><strong>Hours worked per week</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>39.73</td>
<td>39.2</td>
</tr>
<tr>
<td><strong>Tenure in years</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>9.42</td>
<td>8.66</td>
</tr>
</tbody>
</table>
WORKING CONDITIONS

The results in Table 3 present the working conditions in the intervention and control sites at baseline and following the intervention. Results reflect mean responses of scaled outcome measures, with standard deviation (SD), and the total number of response for each measure. As can be seen from the very small numbers of responses at the control site, we were effectively unable to use the control site as a non-intervention comparison (numbers and response rate too small to interpret), thus analyses comparing change in the intervention versus control site (none of which were statistically significant) are not presented.

There were relatively small changes in both directions (improvements and worsening) at the intervention site, suggesting that working conditions were not appreciably affected over the course of the intervention. In both the intervention and control sites, for example, there was a small improvement in support provided by co-workers. There was also an improvement in rewards and recognition in both sites. Staff at the intervention site also reported an increase in job control and skill discretion, while there was an overall decrease in these variables in the control site. In the intervention site, there was a decrease in supervisor support and an increase in psychological demands. The impact of the sale of the company and overall economic environment is likely to have contributed to the extent to which staff felt they could talk to the managers about changes in the company or question supervisors, as well as lower satisfaction with the information provided by supervisors. In the control site, supervisor support increased, while overall working conditions decreased over the time of the intervention. We were not able to observe any significant differences between the intervention and control site, which is likely to due to small sample size, and a range of uncontrolled factors influencing the study.
Table 3. Results of the intervention, quantitative results comparing baseline and follow-up, intervention and control site.

<table>
<thead>
<tr>
<th></th>
<th>Intervention group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Follow Up</td>
</tr>
<tr>
<td>Co-worker Support</td>
<td>Mean</td>
<td>2.87</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>83</td>
</tr>
<tr>
<td>Supervisor Support</td>
<td>Mean</td>
<td>3.11</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>83</td>
</tr>
<tr>
<td>Reward and recognition</td>
<td>Mean</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>80</td>
</tr>
<tr>
<td>Skill discretion</td>
<td>Mean</td>
<td>3.04</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>80</td>
</tr>
<tr>
<td>Job control</td>
<td>Mean</td>
<td>2.80</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.08</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>80</td>
</tr>
<tr>
<td>Psychological Demands</td>
<td>Mean</td>
<td>2.46</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>79</td>
</tr>
<tr>
<td>Job security</td>
<td>Mean</td>
<td>2.52</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>84</td>
</tr>
<tr>
<td>Difficulty in getting another job</td>
<td>Mean</td>
<td>2.68</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>84</td>
</tr>
<tr>
<td>Information from supervisors</td>
<td>Mean</td>
<td>2.98</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>83</td>
</tr>
<tr>
<td>Staff consulted about change</td>
<td>Mean</td>
<td>2.17</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.89</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>83</td>
</tr>
<tr>
<td>Opportunity to questions manager</td>
<td>Mean</td>
<td>1.99</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>84</td>
</tr>
</tbody>
</table>

Notes: Co-worker support (1=low to 4=high); Supervisor support (1=low to 4=high); Reward and recognition (1=low to 4=high); Skill discretion (1=low to 5=high); Job control (1=low to 5=high); Psychological demands (1=low to 4=high); Job security (1=low to 4=high); Difficulty in getting another job (1=low to 4=high); Information from supervisors (1=low to 4=high); Staff consulted about change (0=never to 4=always); Opportunity to questions manager (0=never to 4=always)
MENTAL HEALTH LITERACY RESULTS

Mental health literacy results are shown in Table 4. As above, the low numbers and response rate from the control site precluded meaningful analysis comparing change between intervention and control sites. Nevertheless, there was small improvements in three of the five measures in both the intervention and control sites. In the intervention site, there was a decrease in stigma, an increase in the number of times participants helped another person with a mental health issue ("in the past year, have you tried to help someone that you suspected as having depression?") and increased recognition that adverse working conditions are worse for mental health. However, there was a decrease in overall confidence a person would feel in helping another person with a mental health problem. There were no improvements in mental health knowledge, skills or behaviour in the control site.

Table 4. Mental health literacy results, quantitative results comparing baseline and follow-up, intervention and control site.

<table>
<thead>
<tr>
<th></th>
<th>Intervention group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Follow Up</td>
</tr>
<tr>
<td><strong>Sigma</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>11.55</td>
<td>11.89</td>
</tr>
<tr>
<td>SD</td>
<td>3.96</td>
<td>3.64</td>
</tr>
<tr>
<td>Obs</td>
<td>78</td>
<td>62</td>
</tr>
<tr>
<td><strong>Confidence in providing help</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>7.90</td>
<td>7.78</td>
</tr>
<tr>
<td>SD</td>
<td>4.11</td>
<td>4.57</td>
</tr>
<tr>
<td>Obs</td>
<td>77</td>
<td>63</td>
</tr>
<tr>
<td><strong>Number of times helped another</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.15</td>
<td>1.44</td>
</tr>
<tr>
<td>SD</td>
<td>1.68</td>
<td>1.79</td>
</tr>
<tr>
<td>Obs</td>
<td>80</td>
<td>63</td>
</tr>
<tr>
<td><strong>Depression and stress same thing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.94</td>
<td>1.80</td>
</tr>
<tr>
<td>SD</td>
<td>0.68</td>
<td>0.77</td>
</tr>
<tr>
<td>Obs</td>
<td>81</td>
<td>65</td>
</tr>
<tr>
<td><strong>Stressful job increases depression</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.23</td>
<td>1.12</td>
</tr>
<tr>
<td>SD</td>
<td>0.73</td>
<td>0.74</td>
</tr>
<tr>
<td>Obs</td>
<td>81</td>
<td>65</td>
</tr>
</tbody>
</table>

Notes: Stigma (0= high stigma to 21=low stigma); Confidence in providing help (0=not confident to 18=very confidence); Number of times helped another (0=lowest score on helping behaviour to 6=highest score on helping); Depression and stress same thing (0=agree to 4=disagree); Stressful job increases likelihood of depression (0=agree to 4=disagree)
OVERALL REPORTED BENEFIT OF THE INTERVENTION

In the follow up surveys, we asked participants whether they had observed any positive changes as a result of the intervention. Over 56% of those in the intervention site reported that the intervention had resulted in positive improvements in their workplace (Table 5). In comparison, only 15.8% of those in the control site reported positive changes in the workplace related to the intervention. The difference between the intervention and control site was significant (chi-square(1)=9.62, p=0.002). Table 6 shows the extent to which people reported personal benefits from the intervention. Those persons in the intervention site reported significantly more personal benefits than those in the control site (chi-square(1)=7.95, p=0.005).

Table 5. Reported improvements in the workplace following the intervention

<table>
<thead>
<tr>
<th></th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (%)</td>
<td>56.25</td>
<td>15.79</td>
</tr>
<tr>
<td>No (%)</td>
<td>43.75</td>
<td>84.21</td>
</tr>
<tr>
<td>Total (N)</td>
<td>64</td>
<td>19</td>
</tr>
</tbody>
</table>

Pearson chi2(1 ) = 9.62 Pr = 0.002

Table 6. Reported personal improvements following the intervention

<table>
<thead>
<tr>
<th></th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (%)</td>
<td>52.31</td>
<td>15.79</td>
</tr>
<tr>
<td>No (%)</td>
<td>47.69</td>
<td>84.21</td>
</tr>
<tr>
<td>Total (N)</td>
<td>65</td>
<td>19</td>
</tr>
</tbody>
</table>

Pearson chi2(1 ) = 7.95 Pr = 0.005
RESULTS FROM THE PRE-INTERVENTION INTERVIEWS

As mentioned previously, we conducted six interviews prior to the program activities beginning. Interviewees included the OHS manager, the general manager, floor staff/team leaders and an external health promotion provider. Four interviewees were male and two were female. Interviewees ranged in age from 35 to 55 years of age. The purpose of these interviews was to gain an understanding as to how the project was being perceived, ascertain perspectives on the focus of the project and gain insight into how the program activities should be tailored. Qualitative findings of the pre-intervention interviews are discussed under the headings below, which correspond to the topics covered in the interviews.

1: Understandings of project goals

Most of the interviewees could describe specific components of the project (e.g., to improve mental health literacy) but usually neglected mention of the role of working conditions as an influence on mental health (a key emphasis of the intervention).

“The aim of the project is to] raise awareness of mental health programs and availability, and access to those programs.” (Male, OHS representative)

“Well, it’s about assisting people with issues, with depression and other matters related to that, that could be affecting their work life balance basically.” (Male, General Manager)

2: Attitudes towards the project in the lead up to intervention activities beginning

In principle, both management and general staff thought that the project would be beneficial. However, managers expressed some reservations about intervention activities.

“I think in general, they’re [management] pretty positive about it. At time they’re still unsure. That could be we [the project team and the key stakeholders in the organisation] haven’t communicated that effectively or just natural reactions from some people, where they think, “oh there’s no problem”. (Male, General Manager)

The perception from management was that general employees lacked knowledge about the project and would be unlikely to engage with activities.

“Some of the other guys on the floor are probably a little bit in the dark. They probably have been to one of those one things where someone’s come in, talks, maybe does a survey and then you never hear about it again. Once you do that once or twice, you tend not to give it your undivided attention.” (Male, Team Leader)
“I think the general staff haven’t really engaged. I don’t think they really know what’s going on. They’re not aware of it.” (Male, Senior Manager)

3: Areas that should be targeted in the intervention

Interviewees agreed that increasing knowledge about mental health and help-seeking should be priorities for the intervention. The interviewees also highlighted the importance of addressing supervisor support, addressing workload, and team morale.

“Supervisor support, whether that be from the floor, the team leaders assisting and spreading the load or managers understanding, you know, there’s so much you can do with certain people and again distributing that workload evenly and assisting where they can.” (Male, Team leader)

“There isn’t a great sense of team within the business, within the individual work teams. I gauge that by the degrees of separation I see when people are in personal time, like morning tea, lunch time…not many people have lunch with other members of their work team.” (Male, Senior Manager)

Addressing the considerable stigma against mental health was seen as integral to the project.

“So I mean, like I said before, there is a stigma attached to mental health I think. And I think that the only way to get the most out of the project is to get people to let go of that stigma.” (Female, Senior Manager)

Organisational culture was also identified as a priority area for the project:

“…I think that it’s almost like a [organisation’s name] culture. For example, we used to give people a little plaque when they reached 5 years’ employment with [the organisation]. But recently, about a year or year and a half ago, they did away with and now you’ll only get a plaque if you’ve been with the company for 10 years…. And it didn’t really mean a lot, it wasn’t really high costing for [the organisation] but it just gave someone recognition … I find that little things like that really affect people, and I don’t think they realise this, that that little bit of recognition just at being at your job for 5 years meant a lot to some people.” (Female, Senior Manager)

4: Running intervention activities in the face of considerable economic pressure

Interviewees identified a fluctuating economic environment and industry pressure as considerable issues that could affect the project moving forward.

“Yeah, obviously the building industry is always up and down. At the moment, we… actually, right at the moment, we’re absolutely flat out and I know that it puts a lot of extra strain on the guys. At times
money is tight. Everyone wants to make the most with the least amount of resources. So that sort of thing, everyone gets stressed.” (Male, General Manager)

“I think the present economic climate with the pressure on business and to make a profit, the number of job losses at present in the community and downsizing of companies, I think people will feel a bit more fearful about this, in the case that they’re exposing a weakness” (Male, Senior Manager)

5: How to engage and present the intervention activities

Interviewees were asked for recommendations regarding how to implement program activities. Suggestions revolved around the leadership development and mental health literacy. A number of interviewees had suggestions about how best to engage general employees and managers:

“I think that the manager workshops and project is a really good idea and yeah I think that if it’s sort of like a whole or half day thing where everybody goes in together would probably be for the best.” (Female, Senior Manager)

Managers recognised the importance of scheduling activities during work time in order to encourage participation in the project. There was a perception that general workers would need convincing that the project was occurring independently from management:

“I think if we don’t do these during work hours, we don’t get any turn out at all. I don’t think that at this stage people see it as a benefit to them, I think they see it as a manager driven process that they’re required to engage in. I think that’s ok by the way because until the point they come to a realisation about why they’re doing it and the importance, I think it helps for us to be more directive before they’re more informed.” (Male, Senior Manager)

In addition to suggestions on the structure of activities, interviewees identified the need to tailor language and communication strategies:

“I’ll point out is you can have all the literature and explain it well, but I think that with some of my people, the best thing for them is we need to probably talk more clearly about it, and probably in smaller groups. If they have questions they can ask- some of the guys feel more comfortable in smaller groups. But I think communicating this just a little bit better is what it’s really all about.” (Male, General Manager)

In particular, engaging the culturally and linguistically diverse (CALD) workers was seen as a priority:

“I wondered if you could have, it’s not best practice or ideal, but I wondered if you could get one of their [CALD workers’] work mates to help translate it [the survey]. But then it’s not anonymous, but
the feedback that came from them about the interpreter coming out is that they all felt very suspicious of that. It isn’t best practice, but at least you’d get some feedback and they’d feel valued.” (Female, external Health Promotion Officer)

RESULTS FROM THE POST-INTERVENTION INTERVIEWS

Nine post-intervention interviews were conducted with stakeholders (including most of those who participated in the pre-intervention interviews plus a few additional). Interviewees for the post-intervention interviews included the general manager, the OHS manager, a factory team leader, 3 senior managers (operations, customer service and LEAN), an external health promotion officer, and two new interviewees (an external coach-psychologist who was involved in program implementation and a general staff member). Interviewees ranged in age from 35–55 years of age. The overall aim of these interviews was to assess whether overall understandings of the project goals had changed, whether managers felt the intervention had benefited their own management style and the organisation as a whole, what aspects of the project were seen as successful, which areas were seen as needing more attention, and how to integrate project elements into normal business activity.

1: Understanding of the project

Compared to the pre-intervention interviews, some interviewees were able to better identify the full scope of the project, mentioning that it was about improving mental health literacy, but also working conditions.

“I think the principle was about assessing wellbeing, mental health, and what sort of ticks in the workplace, what makes everyone engage and want to look after themselves and what does work do to you .... it’s helping the management team and employees understand better what they have to do in life in general and how we as a team can work together and help each other out, and improve productivity and absenteeism and that in the workplace.” (Male, General Manager)

However, there was continued belief that the project was mainly about mental health literacy, rather than working conditions.

“I think the project was about raising awareness of both mental health issues in general but also access to information and subsequent services.” (Male, OHS Manager)

2: Benefits for managers

Interviewees reported that their understanding about mental health improved and therefore they developed deeper understanding of their staff:
“I actually started to see the difference between when someone was becoming agitated and stressed and recognise the difference between competence and someone who might be starting to show some of the early levels of depression so that we could actually provide some support.” (Male, Operations manager)

“what we were taught in a couple of those sessions, that made me think twice about the way I interact with some of the guys here...” (Male, LEAN manager)

3: Enablers and what was done well in the project

The interviewees identified a number of factors that positively influenced the project. The fact that the project included activities that could be accessed by all staff was seen as a positive, particularly because some programs previously were not accessible to all staff:

“It met the expectations in terms of delivering the mental health literacy component. Staff really seemed that they got a lot out of it in terms of understanding depression, anxiety awareness, those sorts of things. I think the mental health first aid for those volunteers that wanted to be a part of it, I think they really got a lot out of that and felt that they could take that back into the workplace and I also feel the team building, that was something that was really lacking and it was great that that was able to be offered to all staff, not just a select few.” (Female, External Health Promotion Officer)

“I think that it was probably good that it sort of related to everybody right from the front gate to the back gate. So it wasn’t just for people in the factory where we do hear a lot of stuff in the office about they’re doing stretching in the factory. But we don’t really get a project in the office about manual handling or safe lifting practices or anything like that so we just continue on. Then you do hear about personal protective equipment in the factory, it’s very high but we don’t really have anything in here. So I guess this project was good because it related to everyone whether you were the GM at the front or the guy loading a truck at the back.” (Female, Senior Manager)

Allowing for work time for employees to participate in program activities was thought to yield a higher response rate in the follow-up survey, as well as attendance at ‘comms’ meetings:

“And what we changed I think was actually provide work time, work resources in their teams, and then support if people didn’t understand a question.” (Male, Senior Manager)

Support from management and having an internal champion driving the program was seen to be vital for the project to succeed. Support for the program was linked to an understanding of the benefits of the program:
“Some people were focused on the bottom line and the dollar value and things like that, just getting business done. Where others can see the bigger picture where you know, you improve your health and wellbeing and mental awareness of your employees gets you further down the track...” (Male, Senior Manager)

“I’ve got to say it’s only because - the engagement happened because of the operations manager at [the site]. He drove that. He allocated time, facilities, resourcing through people to sit down and go through with the people do you actually understand what is being asked of you?” (Male, OHS Manager)

Building rapport and trust with the employees at the intervention site was seen as an enabler of the program. Being present at the site to foster relationships was seen as vital for the program’s success:

“But truly, it’s those little touches and I feel that in the work that I do as well it’s those little touches, the added – kind of that people component that really fosters that trust and rapport amongst the people that you’re working with. It’s a little gesture that actually goes such as long way...” (Female, external health promotion officer)

“I think the people representing Melbourne Uni presented in a very personable, friendly manner which is a great start...people were quite warm and funny at times and very engaging with our people. The fact that return visits is very key to delivery of this type of program and as far as I can tell there’s been a reasonable amount of time invested physically onsite as follow-ups...” (Male, OHS Manager)

4: Barriers to the project, what could have been done differently and suggestions for future projects

When the intervention activities began, interviewees mentioned that they often didn’t know what was happening with the program activities until the very last minute.

“Look, the start like I said at the very start, it was a little unclear on exactly sort of what we were doing. I think maybe because everyone sort of jumped into it almost you know, both feet straight in and yeah, it was almost like we were halfway through a conversation, if that makes sense.” (Male, Senior Manager)

However, respondents indicated that clarity about activities improved as the project progressed.

“So I know for myself and a few of the guys on the floor, we knew what it was about and how our involvement was going to make any difference and also what we were, sort of what was expected from us, and what was going to happen”. (Male, Senior Manager)

The interviewees identified issues such as University red tape (delays related to having to gain Ethics approval for changes in survey administration) and the complexity of the initial baseline survey as
barriers. The survey was complex due to ethical issues. University red tape was identified as influencing the timelines of the program, which created frustrations amongst the interviewees and the organisation. It was suggested that survey processes be made even more appropriate for the blue-collar workforce and that changes in timelines be better communicated in the future.

“The ethics – I completely appreciate where you guys had to come from and how hard that would have been but in manufacturing they don’t understand those processes. For them everything is like a cut throat environment, deadlines and so forth and they don’t understand that it takes eight months to get ethical approval.” (Female, External Health Promotion Officer)

The complexity of the surveys was not helped by the limited numeracy and literacy levels.

“A lot of the questions in a lot of ways were not really written in plain English, you know? So if you’ve got people with the equivalent of Year 6 and Year 7 English and you ask some of those questions, and some of the questions are asked in the positive and some of the questions are asked in the negative, and I understand the idea behind that is that people don’t just tick, ‘Yes, yes, yes, yes, yes…’ and just roll all the way down the page. And so I think the survey was not written in the simplest English it should have been.” (Male, Senior Manager)

Furthermore, even though we had support from Senior Managers, one of which was our workplace champion, we found it difficult to engage higher management, which would have been beneficial for the project.

“Yeah, so if the general manager isn’t participating in the process then I think that’s pretty indicative of perhaps the level of engagement of the others. You know, he’s not leading by example is he…. so if he’s saying it’s okay to not participate then that’s probably why [another manager] got away with it [not fully participating in the program].” (Female, external coach)

Individual engagement levels and stigma towards mental health issues were seen as having a large impact on the project.

“I think there was just a general stigma in life, I don’t think it was a stigma here in particular, I think just in general. A lot of people just don’t like to talk about things like that, whether it be a personal issue or a work issue.” (Male, General Manager)

“If the guys at the top had no buy-in to this or weren’t held accountable themselves then everyone else could choose whether they were involved or engaged in the process or not…” (Female, External Coach)
5: Overall project outcomes and changes within the organisation as a result of the project

Most (seven) interviewees described benefits they have seen at the intervention site as a result of the project. Improvements in co-worker support during periods of change were reported, as well as observable changes in managerial styles.

“The groups that did take part are still happy, you know, despite the fact that they’ve had a change in ownership, they’ve had a change of IT program, they’ve had all the other business pressures. And I think that’s because those groups have learnt to support each other more, whereas the groups that didn’t get involved are still acting as individuals.” (Male, Senior Manager)

“I know the guys there are just working side by side, doesn’t even have to be a team leader. Just seems to be a little bit more courtesy towards each other.” (Male, Team Leader)

“Just their management style... they’re able to delegate a bit more and give more responsibility to their team leaders instead of feeling like they have to do it all.” (Male, Senior Manager)
DISCUSSION

The overall aim of this project was to provide an integrated job stress and mental health literacy intervention in a predominantly male blue-collar manufacturing setting in Victoria, Australia. We developed this intervention in collaboration with external workplace stakeholders (a community health organisation and beyondblue’s Workplace Program) as well as staff of the company, including the operations manager, occupational health and safety officer, floor supervisors and general staff. Project activities included beyondblue workplace training for staff and managers, Mental Health First Aid, a tailored leadership workshop, one-on-one management coaching, and specific job stress reduction and team building activities for general staff. Survey respondents reported that they experienced beneficial changes at both the workplace and individual level. This was supported by the qualitative interviews, which suggested that the intervention was a positive and protective factor during a particularly difficult time of ownership change and restructuring in the company. However, we found no evidence of improvement from our survey-based measurements of psychosocial working conditions and mental health literacy.

INTERPRETATION OF POSITIVE RESULTS

There are likely a number of factors underpinning these positive results. First of all, we deliberately took a highly collaborative approach, encouraging participation from all levels of the company inclusive of general staff and management (Nielsen, Taris, & Cox, 2010). We also paid close attention to the engagement phase of the project (also identified as critical in workplace interventions (Nielsen et al., 2010), in order to understand the organisational context, establishing close relationships with key stakeholders in the intervention and increasing employee ‘readiness to change’. To the best of our ability, we embedded intervention activities in the daily routines of the factory by scheduling activities during work time and tailoring intervention activities (including frequent rescheduling of intervention activities) to meet the operational demands of the company. We did periodic ‘walk throughs’ of the factory in order to build rapport and trust with workers, and to enable informal contact and opportunity to discuss or ask questions about project activities.

The overall approach we used in this study was consistent with the integrated approach to workplace mental health (LaMontagne, Martin, et al., 2014), which argues that the greatest benefit from workplace mental health intervention will be achieved by: 1) reducing work-related risk factors for ill mental health (meeting OH&S obligations); 2) promoting the positive aspects of work, as well as worker strengths and positive capacities; and 3) addressing mental health problems among working people regardless of cause (work-related, other, or a combination of the two). Based on the findings of our mixed method needs assessment, we conducted most of activities aiming to reduce work-
related risks through manager-directed intervention activities, targeting improvements in communication, recognition and reward, supervisor support and job control. In the qualitative interviews, for example, managers told us that they altered the way in which work was allocated and managed in an effort to improve job control. One of the strategies they implemented was to allow factory workers greater choice over the work they did by encouraging work rotation. The second principle of the integrated approach is to promote the positive aspects of work. We did this in the ‘comms’ meeting workshops for general staff, which emphasised team building, helping behaviours, humour and the positive aspects of work. This was also highlighted in the beyondblue sessions, which discussed work as a positive influence on wellbeing. The third principal of the integrated approach was a major focus of the beyondblue Workplace Program, and by encouraging the organisation to support two-days of paid training release time to do Mental Health First Aid training (three people from the site were trained). This training will increase the likelihood that stakeholders are better able to address mental health problems in the workplace if and when they arise, and we have also been informed that the MH First Aiders have become ‘go-to’ people for workers with questions of various kinds about mental health. When taken as a whole, we would argue that this integrated and comprehensive approach was related to the positive results reported by participants.

INTERPRETATION OF NULL RESULTS

However, we would acknowledge that survey based measures of workplace stressors and mental health literacy suggested no significant positive changes over the period of the intervention. Key outcomes showed generally small changes, but in both the improvement and deterioration directions, and the direction of change did not pattern differentially in the intervention and control site. Taken as whole, this suggests that there was little to no change over the course of the intervention period, though a previous uncontrolled study showed evidence of improvements in mental health literacy though no improvements in psychosocial working conditions (Bjorner & Pejtersen, 2010).

External factors likely explain these null findings at least in part. Several years before the intervention began, the company was sold to a large multinational company. This sale shifted the company from being a medium-sized business to being part of a large multinational corporation that had diverse interests across the construction and building industry. The sale also impacted staff morale and contributed to negative feelings about the company. During the current project, the multinational company that owned the factory underwent downsizing. There was considerable anxiety about this at the main intervention site. For example, at one point during the second year of the study, there was a ‘black book’ being circulated throughout the factory, which contained a betting list of people predicted to be ‘let go’. Further, it became general knowledge that the large multinational company
was trying to sell the particular branch of the business conducted at the two participating worksites, leading to considerable anxiety among staff. Supervisors and managers were seen by workers as being problematic during this time, with general staff reporting that they were not communicative with them about the changes going in the workplace. To some extent, this may have been an unfair criticism as floor supervisors may not have actually had information to share. Regardless, supervisors were not entirely successful in addressing the concerns of general staff, which flowed through to undermine the intervention (at one Wellbeing Committee meeting, a general staff member noted that another person was let go that day, noting “How’s that for mental health?”). The company was eventually sold and the ownership changed in the 3rd year of the project.

We also believe that the survey approach and measures used were not optimal for the demographic in this project. The comprehensibility and manageability of the survey were likely limited by the relatively low literacy and numeracy of general staff. Further, while paid work time was made available for survey completion, many workers chose to take their survey packs home. This may have been related to literacy and numeracy, sensitivity due to the project being about mental health, or other reasons. We also attempted to overcome English language barriers by providing Mandarin and Vietnamese translators for CALD participants. We also had difficulties with our first survey administration, being hampered by a complex response process to protect respondent anonymity that was required as a condition of our Ethics approval. These difficulties were highlighted in the qualitative stakeholder interviews, which emphasised the importance of ensuring that the language and presentation of materials were appropriate to the literacy levels of the target population. Another issue was the low response rate we received in the control site, which is likely attributable to us being less able to be physically present, and therefore unable to develop relationships and trust at this location.

CONCLUSIONS

Our study was among the first in Australia to implement a combined job stress and mental health literacy intervention in a blue collar manufacturing setting. Some positive workplace and individual level changes were reported, but we failed to show significant reductions in job stressors or improvements in mental health literacy in our survey-based evaluation. The challenges in implementing a workplace intervention in a blue collar male dominated setting included: fitting workplace interventions into the operational demands of a functioning manufacturing setting; low levels of literacy and education of participants; high levels of stigma against mental health and low levels of knowledge about where to seek help, and ownership change and company restructuring.
From the findings of this study, we would recommend that future intervention projects in blue-collar settings would benefit from having a ‘grass roots’ buy in from the workplace and an identified workplace champion to drive change in the organisation. In addition, support from all levels of management is a vital component of intervention activities, and addressing the underlying stigma that blue collar workers hold against mental illness. Last, partnership between workplaces, researchers, intervention experts (psychologists, organisational change experts), policy makers and funders is vital for the development and implementation of a tailored intervention approach.

Despite the lack of strong positive findings in the evaluation of this intervention, we would argue that continued efforts are warranted to develop integrated intervention efforts for male blue-collar work settings. The segment of the working population has some of the worst working conditions, the poorest help-seeking behaviours, high stigma against mental illness, and high prevalence of mental disorders. These characteristics make this setting a very high priority for intervention, as well as one of the most challenging in which to achieve change (LaMontagne et al., in press). Based on the experience of this project, we offer the following recommendations for future research and continuing intervention efforts in male blue-collar work settings:

- Relationship development to build credibility and trust is an essential prelude to intervention planning and implementation. The use of existing relationships in the relevant sectors is one strategy to shortcut this process (e.g., specifically trained peers, such as used in Mates in Construction, or established groups in the sector to deliver intervention, such as Incolink in the building industry). The implementation of intervention activities by people of comparable socio-demographic background would enhance cultural relevance as well as credibility;
- Long time frames are needed for relationship and tailored program development;
- Program champions are needed at various levels (worker, supervisor, manager, union, etc.) to sustain engagement;
- Considerable flexibility in intervention implementation is required in order to accommodate industry needs, particularly if paid work time is granted for intervention activities (e.g., frequent rescheduling of activities, offering multiple sessions for each activity so as not to disrupt production);
- Alternatives to standard survey methods of measurement are desperately needed to overcome literacy, numeracy, CALD, and computer access limitations in blue-collar work settings (e.g., use of smart phones to do more frequent and shorter data collections).
REFERENCES AND BIBLIOGRAPHY


