SAFEWORK SA COMMISSIONED RESEARCH GRANT

DEVELOPING A WORKPLACE BULLYING RISK AUDIT TOOL

FINAL PROJECT REPORT

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SUMMARY

Workplace bullying is a severe psychosocial hazard that costs the Australian economy up to $36 billion annually. The latest Australian Workplace Barometer report, commissioned by Safe Work Australia, indicates that in 2014–15, 9.7% of Australian employees reported having been bullied in the six months prior to being surveyed (Potter, Dollard, & Tuckey, 2016). The importance of tackling workplace bullying in Australia is clearly demonstrated by the 2012 federal inquiry, the introduction of bullying legislation in Victoria in 2011 (i.e., Brodie’s law), the Guide for Preventing and Responding to Workplace Bullying developed by Safe Work Australia (2013a, 2016), and the 2014 introduction of ‘stop bullying’ orders by the Fair Work Commission.

To ensure long-term success in tackling bullying at work, organisations need evidence-based strategies and tools that are user-friendly and easy to implement. Yet there is scant evidence regarding bullying prevention, and a corresponding lack of concrete information to inform practical approaches. Organisations typically focus on publishing an anti-bullying policy, educating workers about bullying, and responding to individual cases. While these approaches are part of a comprehensive solution, they ultimately place responsibility on individual employees, rather than creating safe working conditions that are free of the underlying risks in the organisation that enable, trigger, and reward bullying. As a result, bullying persists as a major work health and safety problem that organisations are ill-equipped to tackle.

This project, funded by a SafeWork SA Commissioned Research Grant (CRG), is innovative in creating an evidence-based practical tool to assess the risk of workplace bullying before it occurs. The tool is based on the organisational risk contexts for workplace bullying, identified in our previous CRG Project (Tuckey et al., 2015).

Based on content analysis of 342 workplace bullying complaint files lodged with SafeWork SA (over 5,500 pages), our prior research revealed that perceptions of workplace bullying arise when supervisors (or other employees holding a coordinating role) perform 11 job activities (e.g., administering leave and entitlements; clarifying and defining job roles; appraising and rewarding performance). These job activities fall within three risk contexts for workplace bullying: (1) administrating and coordinating working hours; (2) managing work performance; and (3) shaping relationships and the work environment.

In the current project we conducted a series of studies to translate the three workplace bullying risk contexts into concrete, specific behavioural indicators that form the basis of a workplace bullying risk audit tool. Rather than diagnosing a problem with individual supervisors or managers, the indicators signify how job activities are typically performed within the work unit and, as such, serve as markers of the functioning of the organisational system in nine job activity domains. Within these domains, the actions of individuals (both supervisors and employees) contribute to the functioning of the system, shaped by relevant policies, procedures, and processes.

In the first stage of the project we generated additional information to guide the development of the risk audit tool. A total of 159 indicators were identified from supplementary analysis of the 342 workplace bullying complaints and through 44 critical incident interviews. Next, the indicators were validated by retranslating them into the job activity domains and rating each indicator in terms of effectiveness. The end point from this series of studies was a behaviourally anchored risk audit tool, presented in graphical format, comprised of 75 indicators in nine job activity domains.

In the second stage of the project, the risk audit tool was evaluated in terms of outcomes (i.e., its predictive capacity) and useability. The outcome evaluation was conducted with 25 hospital teams (primarily clinical
wards) to assess the effectiveness of the workplace bullying risk audit tool as a predictor of bullying exposure and examine other indicators of the validity and reliability of the tool. Based on responses from 212 participants, the results of multi-level modelling show that the risk audit tool can predict concurrent exposure to bullying, beyond six work and organisational characteristics established as risk factors for bullying within the scholarly evidence base (i.e., role clarity, role conflict, role overload, work constraints, job autonomy, and organisational fairness). We also demonstrated that the risk audit tool can discriminate amongst hospital work units that are rated – based on independent criteria – as high, medium, and low risk for bullying, violence, threatening behaviour, absenteeism, patient safety incidents, and staff safety incidents.

In the process evaluation with end-users, the tool was trialled within eight organisations. Five end-users participated in an interview to provide feedback on the tool. The interview data revealed that the risk audit tool serves dual purposes. The tool can be used to: (1) identify areas for improvement in organisational functioning before bullying occurs, as a prevention strategy; and (2) collect information in relation to individual cases to locate points of intervention after bullying has occurred, as an intervention strategy. The concrete and specific indicators, representing both effective and ineffective functioning in each job activity domain, were seen as particularly valuable by end-users. Recommendations from the end-user participants regarding the content, design, and presentation of the risk audit tool provide future research directions.

Overall, the findings of this CRG Project reveal:

- Predictive evidence of the workplace bullying risk audit tool in predicting concurrent workplace bullying, beyond the most dominantly-studied work and organisational risk factors;
- Discriminant evidence of the tool in discriminating among clusters of teams with high, medium and low risks on a range of work health and safety measures;
- The appropriateness of the tool to be used at team or work unit level, rated by multiple team members;
- Positive feedback from end-users on the applications of the tool and its relevance, appropriateness, and distinctiveness.

Future efforts should focus on further assessing the predictive capacity of the tool over time, in a range of industries, and for a variety of psychosocial hazards. Efforts should be also directed to developing resources to support implementation of the tool by individual organizations and by health and safety regulators.
PART 1: INTRODUCTION

1.1 BACKGROUND

Extensive evidence has documented bullying as a serious work health and safety hazard that needs urgent attention in Australia. It has been estimated that workplace bullying costs the Australian economy up to $36 billion annually (Productivity Commission, 2010) and that up to 5 million Australian workers will be targeted by workplace bullying at some time during their working life (Australian Human Rights Commission, 2004). Since 2001–02, compensation claims relating to bullying and harassment have continued to increase in frequency per million hours worked, and as a proportion of total mental stress claims (Safe Work Australia, 2014a). In 2009–10, the median cost of bullying claims ($16,400) was more than 10 times that for all accepted claims ($1,500), and bullying claims resulted in a median of 8.6 weeks’ lost time from work (compared to 0.6 weeks for all claims) (Safe Work Australia, 2013b).

The latest Australian Workplace Barometer report on workplace bullying, commissioned by Safe Work Australia, indicates that 9.7% of Australian employees reported having been bullied in 2014–15, which equates to the sixth highest prevalence rate compared with 34 European countries (Potter, Dollard, & Tuckey, 2016). The importance of tackling workplace bullying in Australia is clearly demonstrated by the 2012 Parliamentary Inquiry into this issue, the introduction of bullying legislation in Victoria in 2011 (i.e., Brodie’s law), the Guide for Preventing and Responding to Workplace Bullying developed in 2013 by Safe Work Australia (2013a, 2016), and the 2014 introduction of ‘stop bullying’ orders by the Fair Work Commission. In the scholarly literature, based on data from high quality prospective studies, a meta-analysis documented that bullying leads to a range of mental health problems for employees after accounting for their baseline levels of mental health, and also to greater absenteeism rates (Nielsen & Einarsen, 2012).

Factors reflecting the ways in which jobs are designed and organised are recognised as the primary antecedents of workplace bullying and other forms of victimisation at work, supporting the notion that negative behaviour thrives in (and contributes to) a poor-quality work environment (cf. Einarsen, Raknes, & Matthiesen, 1994). Specifically, Bowling and Beehr’s (2006) meta-analytic evidence from 90 mostly cross-sectional studies supports the conclusion that work and organisational factors – role stressors, organisational constraints, and job autonomy – are more important determinants than individual target characteristics – negative affectivity and self-esteem – as predictors of workplace victimisation (including workplace bullying). Likewise, in their review Aquino and Thau (2009) highlighted role conflict, role ambiguity, and management styles that do not provide clear guidelines for workplace conduct as three factors that increase employee vulnerability to victimisation.

Despite these conclusions from across the body of scholarly work, research findings have not yet led to clear, easy to implement guidelines for the prevention of workplace bullying. For example, while we know that one of the most consistent job design factors associated with bullying exposure is role ambiguity, advice to ‘ensure clear job descriptions’ may not be specific enough to guide practical efforts. This disconnection between research and practice is illustrated by the dearth of workplace bullying prevention and intervention studies published within the international peer-reviewed literature, especially those that focus on work and organisational factors (Hodgins, MacCurtain, & Mannix-McNamara, 2014). Hence, while the scholarly evidence base provides guidance on which factors are consistently associated with elevated exposure to bullying at work, it lacks detailed knowledge about how to address these risks at the source.
To generate the specific information needed for effective bullying prevention and develop practical tools to support prevention efforts, our research focuses on the organisational risk contexts for bullying – areas of functioning in which certain job activities occur that create the risk of bullying and its perception. These risk contexts were identified in a previous CRG Project (Tuckey et al., 2015). In that research, we reviewed 342 bullying complaints lodged with SafeWork SA from 2010 to 2013, and conducted grounded theory analysis of case materials from multiple sources (case summary, detailed evidence provided by the target, WHS inspector reports, and case outcomes; over 5,000 pages in total). We discovered that the risk of bullying manifests in three risk contexts in which supervisors (or other employees holding coordinating roles) perform core personnel and task management functions: (1) coordinating and administrating working hours; (2) managing work performance; and (3) shaping relationships and the work environment.

These organisational risk contexts offer clear focal points for risk management efforts to redesign work conditions and processes to minimise employee vulnerability to workplace bullying at the design stage.

1.2 RISK MANAGEMENT OF PSYCHOSOCIAL HAZARDS

In relation to work health and safety, the risk management process is a systematic way of identifying, analysing, and eliminating or reducing hazards (i.e., potential sources of harm). Psychosocial hazards are those aspects of the design and management of work, and its social and organisational contexts that have the potential to cause psychological or physical harm to workers (Leka, Giffiths & Cox, 2003 as cited in Leka & Cox, 2008, p. 1). Workplace bullying is a psychosocial hazard, along with factors such as work overload, work pressure, harassment, violence, and fatigue.

As outlined by Safe Work Australia (2014b), psychosocial hazards (like physical hazards) – including workplace bullying – can be addressed proactively through a risk management process. The risk management of psychosocial hazards follows the same steps as those used to manage risks to physical hazards, as outlined in Figure 1.

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**Figure 1.** A Summary of the Risk Management Process for Psychosocial Hazards
In brief, the first step involves identifying the hazards that have the potential to impact on psychological and physical health. Second, the risk that harm will result from exposure to the hazards needs to be assessed and the risk factors understood in detail. Third, based on the risk assessment process, measures are put in place to control the risks. Finally, the control measures are reviewed to see whether they have been effective in managing the risks.

Workers should be involved in each aspect of the risk management process through sharing information and seeking their input. In particular, workers should be consulted to identify potential hazards; understand the risks involved; and in designing, implementing, and evaluating the effectiveness of risk controls.

A general principle of the risk management framework is that risks are best controlled by addressing the work environment and systems of work. Focussing on the behaviour of workers is considered least effective because it does not address the inherent risks, although targeting behaviour may be a useful strategy to supplement changes to work processes and systems.

In this project we focus on the second step of the risk management process – assessing the risks. Risk assessment involves identifying and examining the risk factors in detail to understand where and how the risk of harm arises, determine effective control measures, and prioritise actions to address the risks.

The workplace bullying risk audit tool developed and evaluated in this project can be used to identify the risk factors associated with the way that job activities are carried out within work units. These risk factors function as leading indicators of bullying and offer detailed guidance about the focal points for risk control measures to prevent bullying at work.

1.3 AIM AND OBJECTIVES

Using qualitative and quantitative approaches, in this project we developed, trialled, and evaluated a risk audit tool specific to workplace bullying. Our aim was to create a tool that could be used by a range of stakeholders to assess leading indicators of bullying and inform the risk management of these factors, with the ultimate goal of reducing workplace injuries arising from exposure to bullying at work.

We achieved this aim through three specific objectives:

1. Identifying a comprehensive range of effective and ineffective indicators of the three organisational risk contexts for bullying (coordinating and administrating working hours, managing work performance, and shaping relationships and the work environment);

2. Translating these indicators into a behaviourally anchored risk audit tool through a range of validation processes; and

3. Formatively evaluating the audit tool in terms of its predictive and discriminant ability (outcome evaluation) and usability (process evaluation).

1.4 COLLABORATORS

This project was conducted by a multidisciplinary team of researchers from the University of South Australia, University of Queensland, and Auburn University USA. The research team collaborated with representatives from the Australian Nursing and Midwifery Federation SA Branch, South Australian Salaried Medical Officers Association, and SafeWork SA, who together provided input into strategic decisions required during the project, advice on the project framing, and information about the potential applications.
of the risk audit tool, as well as hands on practical support to review research materials, recruit participants, and interpret the findings. The outcome evaluation component was supported by the Southern Adelaide Local Health Network (SALHN), and only made possible given the relationships built with SAHLN during an existing ARC Linkage Project with the University of South Australia. Special thanks go to Sarven McLinton from the Asia Pacific Centre for Work Health and Safety at the University of South Australia for assistance with this aspect of the project.

PART 2: RATIONALE UNDERPINNING THE RESEARCH

In the scholarly literature, the traditional approach to identifying the risk factors for workplace bullying (see Neall & Tuckey, 2014) involves the use of a cross-sectional survey measuring employees’ subjective perceptions of their exposure to bullying and their experience of a range of psychosocial work characteristics, and correlating these two sets of measures to see which relationships are statistically significant. In this way, the focus of existing research has been the link between individual perceptions of work and organisational factors and individual perceptions of bullying, based on the assumption that ratings of ‘negative’ features of the work and organisation made by bullied employees will be higher than those of non-bullied employees.

Outside the scholarly literature, there are a handful of existing workplace bullying risk assessment tools which also focus on general perceptions of psychosocial work characteristics. A number of the tools are checklists centred directly on workplace bullying such as the Workplace Assessment Tool (WorkSafe New Zealand, 2014), Workplace Bullying Prevention – Self Assessment Tool (Comcare, Australian Government, 2012), and the Individual Mini Self-Assessment – Counterproductive Workplace Behaviours (Safety Concepts, 2015). These checklists require users to indicate whether factors like ‘high job demands’, ‘low job resources’ or ‘poor leadership styles’ (and other psychosocial factors) are evident in the workplace.

In addition, there are more general psychosocial risk monitoring surveys such as the Australian Workplace Barometer (Dollard et al., 2012), People at Work Project (WorkSafe Queensland, 2017), The Positive Work Environment Toolkit (Victorian Public Service Commission, 2015), and Stresswise: Preventing Work-related Stress (WorkSafe Victoria, 2007). These tools focus more broadly on psychosocial risk assessment. They aim to identify potential work-related stress hazards and risks (including workplace bullying and harassment), investigate relationships between psychosocial work factors and workplace outcomes such as employee health and productivity, and provide additional resources to support organisations implementing a psychosocial risk management approach.

While the risk factors assessed in these tools are broadly consistent with those identified in the literature, missing from is specific information about how to prevent bullying and where to intervene by changing work conditions, systems, and processes through proactive risk management.

The current project offers a new framework for understanding and addressing bullying risk factors. Instead of focusing on improving general psychosocial work characteristics, our approach tackles the root causes of bullying at work. Specifically, we focus on the underlying organisational risk contexts – areas of organisational functioning in which job activities are performed in a way that creates the risk of bullying and its perception. These job activities are typically performed by a manager or supervisor, or perhaps by another employee holding a formal or informal coordinating role. This approach represents an advance beyond the available knowledge and practical tools for preventing bullying at work in that it goes back to observable indicators of the root causes in the work context.
Rather than focussing on policy (which may not determine effective preventative action, and which ultimately places responsibility on individual employees to behave nicely), or directly on bullying behaviours (which can be regarded as a product of the root causes), through a focus on the underlying organisational risk contexts this project will change the theory and practice of responding to workplace bullying in three ways: (1) from the individual employee to the organisational system; (2) from corrective to preventative measures; and (3) from generic recommendations for improving psychosocial factors that are difficult to translate into practice, to prevention strategies with clear and specific methods for implementation.

PART 3: DEVELOPING THE RISK AUDIT TOOL

As described above, three overarching organisational risk contexts for bullying were identified in our prior CRG Project (Tuckey et al., 2015), through analysis of 342 workplace bullying complaints lodged with SafeWork SA. The risk contexts are: (1) coordinating and administrating working hours; (2) managing work performance; and (3) shaping relationships and the work environment. We discovered that when supervisors carry out unreasonable actions in these areas, or reasonable actions in an unreasonable way, the risk of (perceptions of) bullying increases. Given the nature of the bullying complaints data, only indicators of ineffective functioning in the risks contexts could be obtained from the SafeWork SA files. To develop the risk audit tool, additional indicators were needed to reflect effective functioning in the risk contexts. These were collected via critical incident interviews to give a comprehensive selection of indicators that that were validated in two stages to produce the final risk audit tool.

3.1 GENERATING THE BEHAVIOURAL INDICATORS

Prior to commencing the development of the risk audit tool, ethics approval was obtained from the University of South Australia Human Research Ethics Committee.

The first step was to identify specific behavioural indicators for effective and ineffective functioning in each of the risk contexts for inclusion in the risk audit tool. Two approaches were used to generate the behavioural indicators.

First, the 342 bullying complaints analysed in our previous CRG Project (and coded at the job activity level) were revisited and coded at the behavioural indicator level. Two members of the research team revisited the coded segments of raw text associated with each job activity to extract more specific information by asking the question “what behaviours are being executed by the perpetrator in performing the job activities when the perception of being bullied occurs?” Thus, job activity codes were further broken down to behaviour subcodes by the secondary coders.

The use of different groups of coders for coding job activity codes and behaviour subcodes provided an independent perspective on the credibility of the coding scheme (Lincoln & Guba, 1985). For example, the job activity “Rostering, Scheduling, and Working hours” could be performed in several ways, manifested by behaviours such as “Assigns employees to work on days they have indicated as being unavailable,” “Provides insufficient consultation about rostering changes,” or “Fails to give sufficient notice of roster changes.” The coders worked closely together and regularly discussed the refinement of codes and subcodes with the members of the research team in an iterative process of resolving differences in coding through consensus. This step produced 92 behaviour subcodes categorised in 11 job activity areas.
Second, 44 interviews were conducted with workers (n = 22), managers (n = 19), and work health and safety representatives (n = 3). There were 17 men (38.6%) and 27 women (61.4%) in the sample, from a range of industries including communication services (n = 7), education (n = 4), finance and insurance (n = 4), government (n = 1), health and community services (n = 20), property and business (n = 3), sales (n = 3), and transport and storage (n = 2). The participants were recruited via advertisements in ANMF and SASMOA e-bulletins and print magazines, and through the professional networks of the research team.

The interviews followed a critical incident approach which requires the respondent to identify “critical” experiences, and describe what occurred during the event and why it was significant (Hughes, 2007). Specifically, interview participants were asked to recount detailed examples of their experiences of effective and ineffective supervisory behaviour in each of the 11 job activity domains across the three risk contexts. By asking participants to describe clusters of specific incidents from their observations or experiences in the three risk contexts, the interviews provided rich descriptions of reasonable and unreasonable management actions in each context.

The interviews were recorded with permission and transcribed for analysis. The interview data were analysed following the same process for the SafeWork SA bullying complaints records, by the same two coders, by asking the question “what behaviours are being executed by the supervisor in performing the job activities when the perception of effective / ineffective supervision arises?” This coding process resulted in 138 behaviours across the 11 job activities from the framework, 70 of which overlapped with those identified in the SafeWork SA bullying complaints.

Overall, the two approaches to generating the behavioural indicators resulted in 159 indicators nested within 11 job activity domains, organised into three overarching risk contexts. These indicators were then validated in two studies.

### 3.2 VALIDATING THE BEHAVIOURAL INDICATORS

Once the complete set of indicators was identified, two validation approaches were used in order to translate the indicators into a risk audit tool for evaluation: (1) re-sorting the indicators into the job activity domains; and (2) rating each indicator according to effectiveness.

#### 3.2.1 SORTING THE INDICATORS INTO JOB ACTIVITY DOMAINS

The first validation approach was to sort the behavioural indicators into the job activity domains from which they were initially elicited (and in which they would appear in the risk audit tool). Each of the 159 indicators was compiled into an online survey. Participants were randomly allocated a selection of 40 behavioural indicators from the pool of 159 and asked to sort each indicator into the job activity domain which they felt best represented the behaviour in question. An example is shown in Figure 2.

Potential participants were recruited via email from the professional networks of the research team, and two e-bulletins distributed to members of the ANMF and SASMOA. Responses were gathered until each indicator had been rated at least 25 times, with an average of 27.36 ratings. The final sample consisted of 132 participants (n = 28 males, n = 100 females; four participants did not provide gender information). The industries represented in the sample were: accommodation and food services (n = 4); administrative and support services (n = 6); agriculture, forestry, and fishing (n = 1); education and training (n = 21); healthcare and social assistance (n = 74); information, media, and telecommunications (n = 6); professional, scientific, and technical services (n = 6); public administration and safety (n = 1); rental, hiring, and real estate services (n = 1); retail trade (n = 1); transport, postal, and warehousing (n = 1); and other (n = 7).
To analyse the data, following the approach used by Landy, Rastegary, Thayer & Colvin (1991), the percentage of participants who sorted each indicator into each job activity domain was identified. The threshold for retaining behaviours was those sorted into the original (coded) domain by at least 60% of the participants. Using this criterion, 83 of the 159 behavioural indicators were retained and utilised for the next phase of the project. The remaining 76 behaviours were removed from the item pool. During this process, two domains – Guiding, Directing and Motivating Employees and Leading the Work Unit were merged with other job activity domains as a result of the lack of agreement across participants in categorising the indicators into those domains.

**Promotes safety in the workplace**

- Rostering, Scheduling, and Working Hours
- Administering Leave and Entitlements
- Clarifying, Defining, and Assigning Job Roles
- Guiding, Directing, and Motivating Employees Performance
- Providing Training, Development, and Personal Growth
- Appraising and Rewarding Job Performance
- Managing Tasks and Workload
- Managing Under-Performance
- Respecting, Valuing, and Involving Individual Employees
- Leading the Work Unit
- Maintaining a Safe Work Environment

*Figure 2. Example Item for the Behavioural Indicator Sorting Survey*

### 3.2.2 RATING THE INDICATORS IN TERMS OF EFFECTIVENESS

The set of 83 indicators from the sorting process was presented in a new survey, organised according to the job activity domains. Participants were randomly allocated five job activity domains and asked to rate each behaviour on a scale of 1 to 10 in reference to the perceived effectiveness of the behaviour for carrying out the relevant job activity. An example is shown below in Figure 3.

Participants were recruited via email from the professional networks of the research team, and via an e-bulletin distributed to members of the ANMF. Recruitment continued until each indicator was rated by at least 40 participants. A total of 94 participants were recruited. During screening of the item ratings, we observed that a number of participants had rated behaviours consistently in the opposite direction to that expected based on the extensive interview and bullying complaint data, and in contrast to the sample mean. As a result, data from 20 participants were removed from the analysis as those ratings were deemed to represent consistent rating errors. The final sample used for analysis thus comprised 74 participants, who collectively made 3,629 ratings. A mean number of ratings per indicator is 43.72.
The means and standard deviations for all behavioural indicators were calculated. This process revealed that, within each job activity domain, the indicators consistently fell into two distinct groups – those at the higher end of the scale (more effective indicators) and those at the low end of the scale (less effective indicators) – rather than being spread evenly throughout the scale. Accordingly, indicators from the upper grouping of items were retained if the mean rating for each was outside of the 95% confidence interval for the mean ratings of all indicators within the lower grouping, and vice versa for items from the lower grouping. In this way, the ratings for each group of items did not significantly overlap. A total of 75 items passed this threshold and were utilised in the risk audit tool.

3.2.3 CONSTRUCTING THE FINAL RISK AUDIT TOOL

The final set of items consisted of 75 behaviours across nine job activity domains, nested within the three risk contexts. Table 1 defines each of the nine job activity domains, and shows the number of items in each domain represented in the risk audit tool, together with example indicators from each domain signifying effective and ineffective performance of the job activity within the work unit. The items were placed onto a graphical rating scale – one for each job activity domain – according to their mean effectiveness ratings (in the previous stage). An example of the graphical rating scale for the job activity of Rostering, Scheduling and Working Hours is shown in Figure 4.

The instructions for each behaviourally anchored rating scale ask raters to consider how effectively or ineffectively each of the nine job activities is usually conducted in their work unit. Using the behavioural indicators as a guide, raters: (a) place a tick in the circles corresponding to behaviours that are typically performed when the job activity is carried out in the work unit; and (b) place a cross at the point on the arrow that most accurately represents how effectively or ineffectively that job activity is performed overall in the work unit. The behavioural indicators serve as a guide to the overall level of effectiveness or ineffectiveness of the way in which each job activity is performed in the work unit. If one of the job activities is not performed in the work unit, or does not apply, the scale is left blank.
### Table 1

The Risk Contexts, Job Activities, and Example Behavioural Indicators Represented in the Workplace Bullying Risk Audit Tool

<table>
<thead>
<tr>
<th>Risk Context, Job Activity, and Definition</th>
<th>No. Items</th>
<th>Example Behavioural Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinating and Administrating Working Hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rostering, Scheduling and Working Hours</td>
<td>10</td>
<td>Allows employees meaningful input into their rosters*</td>
</tr>
<tr>
<td>Activities reflecting the management of work shifts and rosters, working hours, and administration of income</td>
<td></td>
<td>Assigns employees to work on days they have indicated as being unavailable+</td>
</tr>
<tr>
<td>Administering Leave and Entitlements</td>
<td>8</td>
<td>Accommodates reasonable leave and break requests*</td>
</tr>
<tr>
<td>Activities related to matters of employee leave and breaks</td>
<td></td>
<td>Makes the process difficult for employees to access entitlements+</td>
</tr>
<tr>
<td>Managing Work Performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarifying and Defining Job Roles</td>
<td>8</td>
<td>Provides clear information about job roles and expectations*</td>
</tr>
<tr>
<td>Activities addressing the clarity and accessibility of information about employee job descriptions, responsibilities, and role expectations</td>
<td></td>
<td>Fails to provide clear information about job roles+</td>
</tr>
<tr>
<td>Providing Training, Development, and Personal Growth</td>
<td>10</td>
<td>Provides reasonable training requests*</td>
</tr>
<tr>
<td>Activities involving the identification of staff training needs, and provision of learning, coaching, and mentoring opportunities</td>
<td></td>
<td>Provides insufficient training for the job role and duties+</td>
</tr>
<tr>
<td>Appraising and Rewarding job Performance</td>
<td>7</td>
<td>Delivers performance feedback privately and respectfully*</td>
</tr>
<tr>
<td>Activities related to the evaluation of employee performance, and the provision of feedback, recognition, and rewards</td>
<td></td>
<td>Neglects to provide appropriate reward and recognition+</td>
</tr>
<tr>
<td>Managing Tasks and Workload</td>
<td>7</td>
<td>Ensures employees have the necessary resources to complete their tasks and workload*</td>
</tr>
<tr>
<td>Activities regarding management of work resources and coordination of employee tasks and workloads</td>
<td></td>
<td>Enforces unreasonable deadlines+</td>
</tr>
<tr>
<td>Managing Under-Performance</td>
<td>7</td>
<td>Provides guidance and training to employees regarding how to address under-performance*</td>
</tr>
<tr>
<td>Activities addressing issues of employee underperformance in the workplace</td>
<td></td>
<td>Fails to address under-performance in a timely manner+</td>
</tr>
<tr>
<td>Shaping Relationships and the Work Environment</td>
<td>12</td>
<td>Treats employees in an honest and upfront way*</td>
</tr>
<tr>
<td>Managing Interpersonal and Team Relationships</td>
<td></td>
<td>Engages in dishonest or fraudulent supervisory behaviours+</td>
</tr>
<tr>
<td>Activities related to how employees are treated individually and coordinated in the work unit, through communication, participatory decision making, and personal concern and support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintaining a Safe Environment</td>
<td>6</td>
<td>Promotes safety in the workplace*</td>
</tr>
<tr>
<td>Activities that enhance or diminish a safe workplace environment for employees</td>
<td></td>
<td>Pressures employees to work in unsafe conditions+</td>
</tr>
</tbody>
</table>

* represents indicators rated as effective; + represents indicators rated as ineffective.
1. ROSTERING, SCHEDULING, AND WORKING HOURS
How work shifts are rostered, and how hours of work are assigned in this work unit.

To complete this scale:

1) In the circles on the right-hand side, please place a tick ✓ next to ALL of the behaviours that are typically performed in your work unit when the job activity of rostering, scheduling, and working hours is carried out.

2) On the arrow on the left-hand side, please place a cross ✗ at the position on the arrow that most accurately represents, overall, how effectively or ineffectively rostering, scheduling, and working hours are managed in your work unit. Remember, the behaviours should only be used a guide to help you decide the level of effectiveness or ineffectiveness with which this job activity is performed as a whole.

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**Figure 4. Example Behaviourally Anchored Rating Scale in the Workplace Bullying Risk Audit Tool**
PART 4: EVALUATING THE RISK AUDIT TOOL

Following development of the risk audit tool, a formative evaluation of the tool was conducted. A combination of qualitative and quantitative approaches were used to assess both process (i.e., issues relating to the implementation of the tool) and outcomes (i.e., the predictive and discriminant capacity of the tool). Formative evaluation is focussed on identifying strengths and weaknesses to make improvements (Brown & Gerhardt, 2002), so that the tool can achieve its ultimate purpose – in this case to function as a leading indicator of bullying at work.

In the outcome evaluation, the risk audit tool was administered within 25 hospital wards to establish whether scores on the tool correlate with current bullying exposure beyond work and organisational antecedents of bullying, and to establish other indicators of the reliability and validity of the tool. In the process evaluation, the tool was trailed in eight workplaces by typical end-users to learn about the potential application of the tool and how to improve its utility.

Prior to commencing the evaluation studies, ethics approval was obtained from the University of South Australia Human Research Ethics Committee and, for the outcome evaluation in hospital wards, the Southern Adelaide Clinical Human Research Ethics Committee.

4.1 OUTCOME EVALUATION

The focal points of the outcome evaluation were the effectiveness of the workplace bullying risk audit tool as a predictor of bullying exposure, and other indicators of the validity and reliability of the tool.

The research questions addressed in the outcome evaluation were:

1. To what extent do the risk audit tool scores differ systematically between work units?

2. What is the level of agreement across risk audit tool scores provided by different staff working in the unit?

3. Can the risk audit tool predict concurrent exposure to workplace bullying beyond job and organisational characteristics identified as risk factors for bullying within the scholarly evidence base (i.e., role clarity, role conflict, role overload, work constraints, job autonomy, and organisational fairness)?

4. Can the risk audit tool discriminate amongst work units classified as high, medium, and low risk according to a set of objective indicators (patient safety incidents, staff safety incidents, absenteeism) and self-reported exposure to workplace bullying, violence and threatening behaviours?

4.1.1 APPROACH

The outcome evaluation was conducted in 25 hospital work units throughout the SALHN, with the support of SALHN. Two different sets of data were utilised.

1. First, we collected information on a range of outcomes (e.g., bullying exposure) and work and organisational characteristics identified as antecedents of bullying (e.g., role clarity, organisational fairness) via a survey administered to staff in the wards concurrently with the risk audit tool.

2. Second, we linked to a database of information established through ARC Linkage Project LP130900102 funded by the Australian Research Council, SafeWork SA, and SALHN. The database contains survey ratings from SALHN staff at three hospitals regarding safety climate, working
conditions, and health and safety outcomes, together with work unit-level data recorded by the hospital and SA Health regarding patient safety incidents, staff incidents, absenteeism. With permission, we extracted unit-level data from this database for the 25 work units who took part in the outcome evaluation.

4.1.2 METHOD

Participants and Procedure
A total of 32 work units (teams) were approached across three SALHN sites – Flinders Medical Centre, Repatriation General Hospital and Noarlunga General Hospital – to participate in the outcome evaluation. Four teams did not respond to multiple requests for a meeting, a further two wards were in the process of decommission at the time of the study, and one team’s data was excluded from the analysis due to only having one participant. Following an initial meeting with participating teams, surveys were left with the team for completion by team members and team leaders. All surveys were marked with a two digit numerical code, to enable researchers to match responses within each team while maintaining confidentiality of individual participant information. Completed surveys were placed in a sealed box located within the work unit.

The final sample comprised 212 participants across 25 teams. Over 80% of participants were female (n = 174, n = 35 male; 3 participants did not indicate gender). The majority of participants were aged 40 and over (n = 135, 63.7%). Nearly 30% (n = 62) identified themselves as holding a managerial, supervisory or coordinator role. The average shift length for staff was between 7-8 hours, and participants worked 30-39 hours on average per week. Over 80% of participants (n = 174) had worked in their site for at least two years. The majority of participating teams (n = 21, 84.0%) had a clinical focus such as rehabilitation, general nursing, specialist nursing, and allied health. The others had clerical (n = 2, 8.0%) or administrative functions (n = 2, 8.0%).

Survey Measures
In conjunction with the risk audit tool, data were also collected from members of each participating team regarding exposure to bullying and several work and organisational characteristics established as risk factors for workplace bullying. Each measure is outlined below.

Workplace Bullying. Current and previous experiences of workplace bullying were measured in response to the following definition of bullying: Bullying is a problem at some workplaces and for some workers. To label something as bullying, the offensive behaviour has to occur repeatedly over a period of time, and the person confronted has to experience difficulties defending him or herself. The behaviour is not bullying if two parties of approximate equal “strength” are in conflict or the incident is an isolated event (Lindström, Hottinen & Bredenberg, 2000). Participants were asked to rate the frequency to which they had been subjected to bullying behaviour over the past six months (i.e., never, now and then, monthly, weekly, daily) and the duration they had been subjected to bullying overall (i.e., less than 1 month, 1-6 months, 7-12 months, 1-2 years, 2+ years) from different sources (i.e., supervisors/managers, co-workers and subordinates). A severity index was also computed by multiplying the frequency and duration scores. Given that the risk contexts for bullying relate to supervisory job activities, we focussed on bullying by supervisors as the outcome measure.

Role Clarity. Participants were asked to rate how clear and certain they were of their job role via six statements, on a 7-point scale from 1 = very false to 7 = very true. An example item from this scale is “I have clear, planned goals and objectives for my job.” (Rizzo, House & Lirtzman, 1970)
**Role Conflict.** Participants were asked to rate the extent of incongruence or incompatibility in the requirements of their job role. They responded to 8 statements on the same 7-point scale, for example “I receive incompatible requests from two or more people” (Rizzo et al., 1970).

**Role Overload.** Participants were asked to rate three items regarding the extent to which they feel too many responsibilities or activities are expected of them in light of the time available, their abilities, and other constraints. Ratings were made on the same 7-point scale used for the above measures. An example item is “I never seem to have enough time to get everything done at work” (Bolino & Turnley, 2005).

**Job Autonomy.** Participants were asked to rate the amount of control they hold over their work, in response to three statements on the same very true to very false 7-point scale. For example “I decide on my own how to do my work” (Courtright, Gardner, Smith, McCormick, & Colbert, 2016).

**Organisational Fairness.** Participants were asked to rate the overall fairness of their treatment by the organisation via three statements. An example item from this measure, rated on the same 7-point scale, is “Overall, I am treated fairly by my organisation” (Ambrose & Schminke, 2009).

**Organisational Constraints.** Participants were also asked to rate the extent to which 11 factors make it difficult or impossible to do their job. An example item from this scale is “Poor equipment or supplies” rated on a scale of 1 = never or less than once per month to 7 = several times per day (Spector & Jex, 1998).

**Database Information**

Measures of the following variables were extracted from the ARC Linkage Project database.

**Bullying severity:** Participants were given the same definition of bullying as that presented in the outcome evaluation survey described above. They were then asked to rate the frequency (i.e., never, rarely, at least once per month, at least once per week, daily) and duration (i.e., less than 1 year, 2-4 years, 5-7 years, 8-10 years and more than 10 years) of exposure to bullying from managers, supervisors or colleagues. A severity index was computed by multiplying the frequency and duration scores and aggregated at the unit level.

**Frequency of violent behaviors experienced:** measured as the frequency of exposure to five violent behaviors (e.g., had objecs thrown at, been hit, kicked, grabbed, shoved or pushed) from patients or visitors in the past year, rated on a 4-point scale from 1 = never to 4 = four or more times, aggregated at the unit level.

**Frequency of threatening behaviors experienced:** measured as the frequency of exposure to three threatening behaviors (e.g., threatened with physical violence) from patients or visitors in the past year, rated on the same 4-point scale, aggregated at the unit level.

**Total staff safety incidents rate:** including staff injuries, staff subjected to hazards and near misses in the past six months.

**Total patient safety incidents rate:** including patient incidents resulting in harm, patients involved in near misses, patient incidents that did not result in any harm, and unclassified patient incidents, in the past six months.

**Absenteeism:** including sick and personal leave in the past six months.
**Analysis Strategy**

Three main analyses were performed:

1. Assessing within-group interrater reliability on risk audit tool scores by calculating \( r_{wg} \) and assessing between-group variability by calculating ICC(1);

2. Examining if the team-level aggregated score on the risk audit tool is a significant predictor of concurrent exposure to workplace bullying within the team beyond work and organisational characteristics established within the literature as antecedents of bullying, through multi-level regression analysis of the survey data;

3. Determining if team-level aggregated risk audit tool scores can discriminate among work units classified as high, medium, and low risk according to objective and subjective criteria from the linked databased, through cluster and discriminant analyses.

### 4.1.3 RESULTS

**Between-Group Variability and Within-Group Agreement on Risk Audit Tool Scores**

The risk audit tool was rated by individual team members to indicate how effectively a job activity is performed *in the work unit* by managers, supervisors or other employees holding a formal or informal coordinating role. Therefore respondents from the same team are likely to share similar perceptions on the risk audit tool, while respondents from different teams are more likely to vary in their risk audit tool scores. Reflecting this rationale, we assessed if individual ratings of the risk audit tool should be aggregated at team-level and function as a team-level predictor of workplace bullying.

To support the aggregation of individual ratings of the risk audit tool, we calculated two indicators of interrater agreement and reliability. First, average interrater agreement, \( r_{wg} \), measures the degree of agreement among respondents in the same work unit. Second, Intraclass Correlation 1, ICC(1), reflects the significance of between-group variance, in other words, whether or not the risk audit tool scores differ significantly between work units. Within each ward, responses were received from staff members who held a managerial, supervisory, or coordinator role (called supervisors) as well as from employees who did not hold such a role. So \( r_{wg} \) and ICC1 were calculated based on ratings from employees only and ratings from both employees and supervisors together (i.e., the whole team).

For risk audit tool scores rated by employees only \((n = 145\) in 25 teams\), the median \( r_{wg} \) was .82 and ICC(1) was .25. For ratings by employees and supervisors together \((n = 212\) in 25 teams\), median \( r_{wg} \) was .78 and ICC(1) was .20. All of these values are well above the recommended levels in prior research for the aggregation of measures (a median of \( r_{wg} \) greater than .70 and ICC(1) larger than .10 are widely accepted criteria). Hence, the \( r_{wg} \) scores indicate a high level of agreement in risk audit tool ratings amongst team members (albeit it slightly lower when supervisors are included). Likewise, the ICC(1) scores indicate that there is meaningful variation in individuals’ ratings on the risk audit tool that can be explained by factors associated with the team in which individuals work.

Therefore, it is justifiable that individual team member ratings of the risk audit tool should be aggregated into a single team score. In the following data analyses, an aggregated team-level score on the risk audit tool (i.e., the mean score across all team members) was calculated and used. Two different scores were calculated for each team: (a) the team-level score for all team members (called the *team score*), and (b) the team-level score for team employees, after removing the scores of those team members holding a managerial, supervisory, or coordinating role (called the *employee score*).
Predictive Capacity of the Risk Audit Tool, Beyond Work and Organisational Antecedents of Bullying

To establish the predictive ability of the risk audit tool, the aggregated team-level risk audit tool score was used, together with with individual team member perceptions of work and organisational antecedents of bullying, to predict individual employee exposure to workplace bullying within the team. Multilevel regression modelling was used, with team members (n = 145 employees, n = 212 employees and supervisors) clustered by wards (n = 25) to take account of the fact that employees from the same ward share the same risk contexts.

A series of models examined the predictive capacity of the risk audit tool beyond the work and organisational characteristics. The Null model was the two-level intercept only model – the empty model, which functions as the basis for the reamaining models in the sequence. Model 1 added the six work and organisational characteristics, which significantly improved model fit compared with the Null model. The team-level risk audit tool score was added in Model 2, separately for the employee and whole team scores, the results of which are reported in Table 2 for each of the three measures of bullying (frequency, duration, and severity).

As shown in Table 2, the team-level risk audit tool score was a significant predictor of the frequency, duration, and severity of workplace bullying exposure, after controlling for all six work and organisational characteristics (i.e., role clarity, role conflict, work constraints, role overload, job autonomy and organisational fairness). This pattern was consistent whether the risk audit tool ratings were made by employees (the employee score) or by all team members including supervisors (the team score), indicating that the risk audit tool is a valid predictor of concurrent bullying exposure.

Potential for the Risk Audit Tool to Correctly Discriminate High, Medium, and Low Risk Teams

To further build the predictive evidence of risk audit tool, we assessed if the aggregated team-level score could discriminate between clusters of high, medium, and low risk work units from the 25 participating teams, based on a set of six objective and subjective criteria collected independently in the ARC Linkage Project. This process involved two steps. The first step identified homogenous clusters of teams based on the independent criteria, sorting the teams into three clusters – high, medium, and low risk – using cluster analysis. Second, a discriminant analysis then determined if team-level scores of risk audit tool can accurately discriminate these clusters.

Step 1. Six criterion measures were collected independently in the ARC Linkage Project for the 25 participating teams, including three subjective self-report measures of exposure to bullying, violent, and threatening behaviors; two objective measures of staff and patient incidents; and objective absenteeism data. These criterion measures were selected to comprehensively include (1) both subjective and objective measures, (2) both psychological and physical health and safety outcomes, and (3) both staff and patients health and safety measures.
Table 2
Final Model Statistics for Frequency, Duration, and Severity of Workplace Bullying Predicted by Work and Organisational Antecedents and the Team-Level Risk Audit Tool Score

<table>
<thead>
<tr>
<th>Workplace Bullying Measure</th>
<th>Employee Score</th>
<th>Team Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>S.E.</td>
</tr>
<tr>
<td><strong>Frequency of Workplace Bullying</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Clarity</td>
<td>.001</td>
<td>.013</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>.002</td>
<td>.008</td>
</tr>
<tr>
<td>Work Constraints</td>
<td>-.006</td>
<td>.010</td>
</tr>
<tr>
<td>Role Overload</td>
<td>.004</td>
<td>.016</td>
</tr>
<tr>
<td>Job Autonomy</td>
<td>-.001</td>
<td>.015</td>
</tr>
<tr>
<td>Organisational Fairness</td>
<td>-.032*</td>
<td>.017</td>
</tr>
<tr>
<td>Risk Audit Tool</td>
<td>-.151**</td>
<td>.045</td>
</tr>
<tr>
<td><strong>Duration of Workplace Bullying</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Clarity</td>
<td>.002</td>
<td>.036</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>.019</td>
<td>.021</td>
</tr>
<tr>
<td>Work Constraints</td>
<td>.013</td>
<td>.029</td>
</tr>
<tr>
<td>Role Overload</td>
<td>.023</td>
<td>.043</td>
</tr>
<tr>
<td>Job Autonomy</td>
<td>.022</td>
<td>.042</td>
</tr>
<tr>
<td>Organisational Fairness</td>
<td>-.046</td>
<td>.047</td>
</tr>
<tr>
<td>Risk Audit Tool</td>
<td>-.482**</td>
<td>.161</td>
</tr>
<tr>
<td><strong>Severity of Workplace Bullying</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Clarity</td>
<td>.004</td>
<td>.048</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>.020</td>
<td>.028</td>
</tr>
<tr>
<td>Work Constraints</td>
<td>.019</td>
<td>.038</td>
</tr>
<tr>
<td>Role Overload</td>
<td>.025</td>
<td>.058</td>
</tr>
<tr>
<td>Job Autonomy</td>
<td>.025</td>
<td>.056</td>
</tr>
<tr>
<td>Organisational Fairness</td>
<td>-.081</td>
<td>.062</td>
</tr>
<tr>
<td>Risk Audit Tool</td>
<td>-.639**</td>
<td>.198</td>
</tr>
</tbody>
</table>

*p < .05 **p < .001

Hierarchical cluster analysis was performed. A three-cluster model best fit the dataset of 22 teams (three teams wards were excluded due to having missing values on the six criterion measures). Cluster 1 (n = 16) describes wards that are performing well in managing health and safety, with lowest rates of exposure to workplace hazards (such as bullying, violence, threatening behaviour, staff safety incidents, and patient safety incidents) and the lowest level of absenteeism among the three clusters. Cluster 2 (n = 6) describes teams that are performing average in managing health and safety, with six criterion scores poorer than Cluster 1 and five scores better than those in Cluster 3. Cluster 3 (n = 3) describes wards that are performing poor in managing health and safety, with highest rates in the six criterion measures. These represent the low, medium, and high risk clusters, respectively.
Table 3
Characteristics of High, Medium, and Low Risk Team Clusters Based on Independent Criteria

<table>
<thead>
<tr>
<th>Cluster Attributes</th>
<th>Cluster 1 Low Risk</th>
<th>Cluster 2 Medium Risk</th>
<th>Cluster 3 High Risk</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster size</td>
<td>13</td>
<td>6</td>
<td>3</td>
<td>22</td>
</tr>
<tr>
<td>Mean of bullying severity</td>
<td>3.44</td>
<td>5.08</td>
<td>6.03</td>
<td>4.24</td>
</tr>
<tr>
<td>Mean of exposure to violent behaviours</td>
<td>6.76</td>
<td>8.75</td>
<td>11.20</td>
<td>7.90</td>
</tr>
<tr>
<td>Mean of exposure to threatening behaviours</td>
<td>3.27</td>
<td>3.84</td>
<td>5.56</td>
<td>3.74</td>
</tr>
<tr>
<td>Mean of staff incidents</td>
<td>6.31</td>
<td>13.33</td>
<td>28.83</td>
<td>11.30</td>
</tr>
<tr>
<td>Mean of patient incidents</td>
<td>14.00</td>
<td>83.33</td>
<td>151.33</td>
<td>51.64</td>
</tr>
<tr>
<td>Mean of absenteeism</td>
<td>70.39</td>
<td>102.26</td>
<td>93.90</td>
<td>82.29</td>
</tr>
</tbody>
</table>

Note. Three of the 25 participating teams were excluded due to missing data on the independent criteria.

**Step 2.** The cluster analysis described above grouped 22 wards into 3 clusters – high, medium, and low risk clusters. To assess the ability of the risk audit tool to discriminate among these three clusters of wards, discriminate analysis was performed. The results indicated that aggregated team-level risk audit tool scores rated by employees (the employee score) significantly predicted cluster membership (i.e., whether a ward is in a cluster of high, medium, or low risk) and accounted for over half (51.3%) of the variance in the clusters of wards. Similarly, the aggregated team-level risk audit tool scores rated by all team members including supervisors (the team score) significantly predicted cluster membership, and accounted for nearly one-third (31.9%) of the variance in the clusters of wards.

Overall, these results indicate that aggregated team-level risk audit tool scores can differentiate work units in terms of the effectiveness in managing health and safety, based on an independently-collected set of subjective and objective health and safety criteria.

4.2 PROCESS EVALUATION

To complement the outcome evaluation, the process evaluation focused on issues connected to the implementation of the tool by typical end users. The focal points of the process evaluation were potential uses of the tool; strengths and weaknesses of the tool (as related to its potential uses); and critical issues in regards to using the tool.

The following research questions were addressed:

1. How was the tool used? In what context, situation? To what end?
2. What worked well when using the tool? For whom? In what situations?
3. What needs to be improved about the tool to make it more useful?
4. What information and resources are needed to use the tool more effectively?
5. What do end users like about the tool? What should change?
6. Who are the other stakeholders who could benefit from a risk assessment tool like this?
7. What are the range of possible uses for the risk audit tool?

4.2.1 METHOD

Potential end-users of the workplace bullying risk audit tool within the professional networks of the research team and collaborating partners were selectively recruited into the process evaluation study. Those professional contacts who were involved in activities relating to bullying prevention, the resolution
of bullying matters/complaints, and/or work health and safety were invited to participate. In response to the email invitations, 14 professionals expressed interest in taking part in the study, after which they were sent the study materials (consent form, ‘How to’ guide for using the tool, and the risk audit tool itself).

During the trial, participants developed a plan for how the risk audit tool could be used in their work role, either in their own workplace or in a different workplace related to their role. They then utilised the tool according to the plan, and were asked to participate in an interview about their experiences.

During the evaluation period, the tool was trialled in eight organisations. Five of the end-users who undertook the trial (n = 4 female; n = 1 male) participated in an interview to provide feedback on the tool, from the following industries: information technology, health and community services, government, and education. Two held management positions in their organisation while the others were made up of a health and safety coordinator, an industrial officer, and a member of a business development team.

Interviews were conducted either in person or via telephone, and all interviews were recorded with permission for accurate transcription. Consent was obtained either in writing prior to the interview or verbally if the interview was conducted over the phone. On average, interviews ran for 30 mins (ranging from 20-40 minutes). Following the interview, all participants were offered an honorarium (i.e., a gift card to the value of $40).

Interview data were analysed using the program Nvivo V.11. A preliminary list of codes was created to address the research questions. These categorised ‘how the tool was trialled’, ‘the uses of the tool’, ‘positive aspects of the tool’, ‘weaknesses of the tool’, and the ‘future of the tool.’ Raw texts from the interviews were allocated to these codes and common responses were then grouped in subcodes. An inter-rater agreement check was conducted to finalise the codes and subcodes.

4.2.2 RESULTS

All of the participants who provided feedback completed the risk audit tool themselves. In three organisations, the tool was administered to multiple employees to give a deeper level of feedback. Additional perspectives were obtained from colleagues working in a managerial capacity, individuals responsible for the rostering duties, a consultant who had experience working as a workplace bullying investigator, and a previous target of workplace bullying.

Potential Uses of the Workplace Bullying Risk Audit Tool

A wide range of functions to which the tool could be applied were identified by end-users during the interviews. These are summarised in Table 4. The overall consensus regarding the purpose of the tool was to both identify potential problems before they occur, and to respond to issues in a way which prevents them from reoccurring. In particular, the ability to identify areas of improvement within different work units was highlighted as a key outcome of the tool. It was suggested that the tool could be administered to employees to gain feedback and understand their perceptions of how effectively the workplace was functioning in each of the domains. This could be incorporated into staff performance reviews, team meetings, or periodic culture surveys.
<table>
<thead>
<tr>
<th>Potential Application</th>
<th>Illustrative Quotes</th>
</tr>
</thead>
</table>
| Receiving feedback from employees/understand their perceptions of organisational functioning | “You could actually have that as the tool in the team meeting...even inviting them to have their input in the strategies and things that could be changed to make it better for them.” (Participant 4)  
“I could get some invaluable feedback from this as a team leader and I also think it would prompt my staff to have an in depth thought about some of these things and how they feel they fit into these.” (Participant 4) |
| n = 3 (60%), References = 9                                                           |                                                                                                                                                                                                                                                                                                                                                    |
| Identify areas for improvement in order to reduce bullying and harassment              | “I’d actually use it as a gap analysis to actually see where our gaps are, what are the issues, when you thought something was done, is it really being done that way, is it work that’s being performed that way or is it what we think is happening but it’s not actually happening.” (Participant 3)  
“We’d definitely be looking at those things that aren’t, specifically aren’t being done well.” (Participant 5)  
“Having something like this would be pretty important to make sure that the managers of these branches are actually doing their jobs properly and I suppose stamping out problems before they come up.” (Participant 5) |
| n = 3 (60%), References = 6                                                           |                                                                                                                                                                                                                                                                                                                                                    |
| Correcting perceptions of work performance, bullying, and harassment                   | “I think that for managers, seeing this broken down to such discreet areas would help them understand that bullying and harassment isn’t just about someone making a smart crack in the work space or some particular focus on performance in the workplace but in a whole range of aspects can come into this.” (Participant 1)  
“What’s good about this tool is that because you’re doing a broad range or sweep... that might be helpful to clarify their [employees’] thinking about actually this is not really bullying in the general sense, this is about performance.” (Participant 2) |
| n = 4 (80%), References = 5                                                           |                                                                                                                                                                                                                                                                                                                                                    |
| Gaining information in broad sense in relation to discerning how bullying behaviour is taking place and investigating bullying complaints | “This could be a fairly relatively objective way for somebody to start to list what they think are the ways they’ve been treated... That’s a good way of getting somebody to be as specific and comprehensive as they can be, with further I can then take up the issue on their behalf say.” (Participant 2)  
“I think if an issue arises I think it’s good to get the tool out and again just look at all the basics and be able to actually I guess acknowledge within your own framework how that’s coming across.” (Participant 3)  
“As the manager I would be very interested if someone came to me and said I’m being bullied or whatever the case may be, actually getting them to complete this and try and understand why there’s that perception there.” (Participant 4) |
| n = 3 (60%), References = 5                                                           |                                                                                                                                                                                                                                                                                                                                                    |
| Clarifying managerial duties and responsibilities to managers                           | “I would see that the team leaders would complete it...to increase their awareness to the breadth [of duties they should engage in] and the tool starts by really clarifying what as a team leader they need to think about.” (Participant 1)  
“It’s a really good overall coverage I think for a manager. Just to remember to look at all the different aspects of managing staff I guess.” (Participant 3) |
| n = 2 (40%), References = 2                                                           |                                                                                                                                                                                                                                                                                                                                                    |
End-users also identified using the tool in response to bullying complaints as one of its most useful aspects. In such cases, they indicated that the tool would provide vital information about how the bullying was occurring through job activities and ways in which to prevent bullying in the future. The perceptions of managers and staff regarding bullying and harassment could also be changed through the use of the tool. Being able to see a breakdown of managerial job duties into discreet areas and the range of positive and negative behaviours that encompass each area, can allow for individuals to understand that feelings of being bullied do not necessarily have to exist only when verbal or physical abuse in the workplace occurs. With such a diverse number of potential uses it was believed that managers/team leaders, employees (especially bullying victims), and occupational health and safety inspectors and coordinators could all use the tool in a way which benefits the work environment.

Positive Design and Presentation Features of the Risk Audit Tool

The positive features of the tool clustered around two overarching themes: design and presentation. A breakdown of these features can be seen in Table 5. In reference to positive design features, it was stated by the end-user participants that the tool comprehensively and accurately covers all key aspects of managerial job activities. End-users felt that splitting up the role of a manager into specific job areas was an effective way of gathering feedback and highlighting areas for improvement. In a similar manner, they indicated that having individual behaviours within each job area was a positive design feature. This aspect, in conjunction with having an overall effectiveness rating, allows users to see whether perceptions of effective performance are actually reflected in the behaviours that typically occur in the work unit. Such information is thought to particularly useful if discrepancies occur between manager and subordinate views about functioning in the three risk contexts.

For positive presentation features, it was stated that separating the job activities into different sections made it easy to use the tool. This approach allowed for more focused thinking rather than a broad overall rating of performance, and offers precise diagnostic information. The titles and definitions were regarded as very clear and easy to understand. The inclusion of colour bands on the scale to represent the effective and ineffective behaviours was also identified as a presentation strength of the tool; a added visual element to assist users allows for more accurate ratings. Finally, the inclusion of the detailed ‘How to’ guide was seen as positive, especially the examples which were relevant and readily applicable.

Weaknesses and Areas for Improvement in the Risk Audit Tool

A number of suggestions to improve the risk audit tool were identified during the interview process, as outlined in Table 6 and Table 7. Recommendations from the end-user participants focussed on the content (i.e., specific behavioural indicators comprising the tool) as well as design and presentation.

In relation to the content, end-users noted the concentration of behaviours at both the ‘effective’ and ‘ineffective’ ends of the scale and suggested that the inclusion of behaviours in the middle of the scale to prevent clustered ratings and to fully capture the landscape of each job domain. Suggestions for inclusion of new indicators were dependent on the nature of the organisation. It was also suggested that some behavioural items within the tool were actually reflective of two separate behaviours and would need to be split up to enable more accurate completion.
Table 5
Positive Design and Presentation Features of the Risk Audit Tool According to End-Users

<table>
<thead>
<tr>
<th>Positive Features</th>
<th>Illustrative Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design</strong></td>
<td></td>
</tr>
<tr>
<td>Provision of detailed and specific behaviours for each job activity</td>
<td>“I think splitting it up into the different tasks or sections of tasks helped myself and I think it will help people to think about the different aspects of the way the, the different things that their managers actually do for them or how they do their job. And because I think in the past when we’ve tried to measure this thing, it’s been very general.” (Participant 5)</td>
</tr>
<tr>
<td>n = 2 (40%), References = 6</td>
<td></td>
</tr>
<tr>
<td>Comprehensive and accurate coverage of managerial job activities</td>
<td>“It’s a really good overall coverage I think for a manager. Just to remember to look at all the different aspects of managing staff I guess.” (Participant 3)</td>
</tr>
<tr>
<td>n = 1 (20%), References = 2</td>
<td></td>
</tr>
<tr>
<td>Multiple ways of rating</td>
<td>“Although you might be ticking these the behaviours that make... the management seem effective it doesn’t necessarily correlate where you’d put the X on the slider. So I thought having both there was useful because it told me things I didn’t expect to see.” (Participant 5)</td>
</tr>
<tr>
<td>n = 1 (20%), References = 2</td>
<td></td>
</tr>
<tr>
<td><strong>Presentation</strong></td>
<td></td>
</tr>
<tr>
<td>Clear job activity titles and definitions</td>
<td>“I thought that they were unambiguous and it was very quick and easy to understand what you were getting at so what you were actually asking. I thought the wording was very, very good.” (Participant 4)</td>
</tr>
<tr>
<td>n = 4 (80%), References = 6</td>
<td>“The descriptions were very, very clear.” (Participant 5)</td>
</tr>
<tr>
<td>Inclusion of colours on the scale</td>
<td>“I like your colours. I think that’s great because not only do, you, it’s a verbal, but it’s also the visual.” (Participant 2)</td>
</tr>
<tr>
<td>n = 2 (40%), References = 2</td>
<td>“Definitely having the colour coding makes it easy.” (Participant 5)</td>
</tr>
<tr>
<td>Separation into discrete job activities</td>
<td>“I thought that the breaking down of all of the aspects that you measure and the clear statements around each of those was pretty good.” (Participant 1)</td>
</tr>
<tr>
<td>n = 1 (20%), References = 1</td>
<td></td>
</tr>
<tr>
<td>Inclusion of the ‘How to’ guide</td>
<td>“I could understand it and apply that knowledge easily. I think having the example there was a really good idea of how to do it.” (Participant 4)</td>
</tr>
<tr>
<td>n = 1 (20%), References = 1</td>
<td></td>
</tr>
</tbody>
</table>

In reference to the presentation of the tool, one end-user suggested adding a numerical index to the overall rating scale. This participant felt as though people who are colour blind would not benefit from the colours on the scale and could use numerical measures to help guide their ratings. Other feedback indicated the potential to improve the instructions to make it clearer that users should provide both an overall effectiveness rating, as well as ticking the circles for relevant individual indicators. In particular, end-users highlighted the need for guidance about making a rating at one end of the scale if behavioural indicators were ticked at the opposite side. While the two methods were regarded as a strength, the instructions on how to combine both ratings within a job activity domain could be clearer.

Being able to apply the tool to specific organisations was a commonly topic within the interviews. Suggestions ranged from rewording items within the tool to better reflect the language used in a particular workplace, to allowing users to skip sections which were not relevant to them (in particular rostering, scheduling, and working hours). Numerous participants stated that there was no form of rostering in their
organisation and that this section should be moved to the back and users given the option to mark the section as inapplicable.

Converting the tool into electronic format was emphasised as an effective way of distributing it within workplaces. This approach was seen as providing a stronger sense of anonymity for respondents as well as assisting with the collection and analysis of data across an organisation.

Having further resources on how to interpret the results of the tool and how to respond to the information provided in the tool was the final key theme to come out of the interviews. Participants felt that managers may not be best equipped with the knowledge to know how to move forward once they have administered the tool and having some guidance would allow for more effective outcomes.

Overall the end user interviews were positive and the consensus opinion was that the risk audit tool could have a range of benefits across numerous organisations. It was deemed easy to use and a strong resource for gathering information within a workplace both to pre-empt problems and to respond to issues, particularly in relation to bullying and harassment. Suggestions for improvement were typically focused upon tailoring the tool to fit specifically with the wording of the environment it was being implemented in, giving rise to considerations of how to distribute the tool on a widely applicable scale.

**Table 6**

*End-User Suggestions for How to Improve the Content of the Risk Audit Tool*

<table>
<thead>
<tr>
<th>Areas for Improvement</th>
<th>Key Quotes</th>
</tr>
</thead>
</table>
| Lack of behaviours in the middle of the scales  
  
  \( n = 1 \) (20%), References = 4 | “You’ve got nothing in the middle section and nothing in the pink section so what other questions could you think of that might actually fit in there because at the moment it’s sort of mostly green or mostly red, there’s nothing in between… By only giving those options in the extremes… you’re automatically pushing people to either completely effective or completely ineffective by not giving options in the middle” (Participant 4) |
| Adding items to fully capture areas  
  
  \( n = 2 \) (40%), References = 4 | “I think the one thing that perhaps was missing for me is something around the culture in the team.” (Participant 1)  
  
  “On maintaining a safe working environment, again the observation from the consultant was, it might be useful to put something in about wellness or even a good physical workplace… just open up that question a bit more to cover aspects of wellness as well as physical safety and emotional safety.” (Participant 2)  
  
  “There’s no question about whether in fact the supervisor might be complying with the relevant industrial instrument that the person’s covered by, whether that’s an agreement, an award, or a workplace policy.” (Participant 2) |
| Should break up behaviours into multiple behaviours  
  
  \( n = 1 \) (20%), References = 1 | “Some of the questions you need to break them up… They’re completely separate items. You can’t put them together because an employer might be able to be really good at swapping shifts but that has no correlation to working reasonable overtime.” (Participant 4) |
### Table 7
End-User Suggestions for How to Improve the Design and Presentation of the Risk Audit Tool

<table>
<thead>
<tr>
<th>Areas for Improvement</th>
<th>Key Quotes</th>
</tr>
</thead>
</table>
| The tool needs to enable respondents to skip non-relevant or inapplicable sections  
  $n = 3$ (60%), References = 5 | “I think possibly given that rostering and scheduling - just looking, is not relevant to all, it might just be a question of re-altering the questions. So for instance, you could still have the, if not applicable please skip, but you might want to put that closer to the back.” (Participant 2)  
  “I think potentially some of the questions were less important in a business like ours... For example, rostering and scheduling we don’t have within our business a rotating, rotating roster or anything like that.” (Participant 5)  
  “Whether it’s possible to, I guess opt out of some questions as opposed to others... at least in our business the rostering and scheduling just wouldn’t be, wouldn’t be a, a question for them at all, they’d have no input into that whatsoever.” (Participant 5) |
| Rewording  
  $n = 2$ (40%), References = 2 | “In relation to the use of the term effective and ineffective. And he thought that perhaps a better terminology could be something like appropriate or inappropriate.” (Participant 2) |
| Making an electronic format for the tool  
  $n = 2$ (40%), References = 2 | “I’d love to see it electronically... it’d be great to be able to drag across, up, and down on the arrow and check the check boxes online.” (Participant 4)  
  “Having an online survey would be excellent, partially because of, if, the only way we would ever be able to have it anonymous would be through an online version.” (Participant 5) |
| How users interpret and analyse the results of the tool  
  $n = 2$ (40%), References = 2 | “I’d actually like to see an interpretation guide at the end of it that actually explains the answers that are coming out at the end. Does it summarize it? Does it give it a score? What’s it actually doing at the end of the day... how do you interpret what you’ve actually got out of the tool?” (Participant 4)  
  “I guess direction on where to go after doing it. If the results point to failings in management even if the information isn’t necessarily accessible but at least pointing you in the direction of where you should be going to find out about certain things.” (Participant 5) |
| Making the instructions clearer regarding ticking behaviours and providing a rating  
  $n = 1$ (20%), References = 1 | “I wasn’t sure whether you could tick boxes within the green sections as well as the yellow sections and the red sections. I did end up just doing that anyway but I guess I can see some people stumbling on that and saying, well because I ticked one in the green, they can’t possibly doing, be doing something in the red as well.” (Participant 5) |
| Honest self-ratings  
  $n = 1$ (20%), References = 1 | “Whether in a self-assessment people would be that honest I’m not sure.” (Participant 1) |
| Adding numerical values to the rating scale  
  $n = 1$ (20%), References = 1 | “I’d actually like to see some sort of ... a numerical scale in there... From a usability perspective, and taking into consideration that my husband is colour blind and can’t see the difference between green and red, a numerical scale might actually be more appealing to more people.” (Participant 4) |
PART 5: DISCUSSION

Despite nearly three decades of research, workplace bullying remains a serious work health and safety hazard. Although work and organisational factors play a major role, existing approaches to addressing bullying tend to treat it as an interpersonal issue, tackled via policies and procedures, training, and investigations. In these approaches the focus is on bullying behaviours, rather than on the causes of bullying. Bullying behaviours are actually a product of the underlying risk factors – a symptom of the problem, rather than the disease to be treated.

In this project, we created an evidence-based audit tool to assess the risk of workplace bullying before it occurs. The tool is based on the organisational risk contexts for workplace bullying, identified in our previous CRG Project (Tuckey et al., 2015).

By addressing the organisational risk contexts for workplace bullying, this project shifts the focus for responding to bullying from individual employees to the organisational functioning, and from corrective to preventative measures. By developing and evaluating a workplace bullying risk audit tool, this project bridges the gap from generic bullying prevention recommendations that are difficult to translate into practice, to a proactive risk management approach with clear and specific methods for implementation. Additionally, the tool acts as an entry point for assessing workplace factors that are consistent with a systematic focus on overall workplace mental health.

We conducted a series of studies to translate the three workplace bullying risk contexts into concrete, specific behavioural indicators that form the basis of the risk audit tool. We found solid evidence that the workplace bullying risk audit tool can predict concurrent exposure to workplace bullying, beyond a variety of work and organisational factors identified within the literature as antecedents to bullying at work. Moreover, our findings indicate that there is a high level of agreement amongst team members in scores on the risk audit tool, and meaningful variation between teams in scores. Risk audit tool scores can also discriminate amongst clusters of teams that are high, medium, and low risk on a range of independently-collected work health and safety indicators, including objective data. The capacity of the tool to identify teams that are performing effectively (and ineffectively) on diverse health and safety outcomes illustrates the value of the tool for maintaining a healthy and safe working environment, including and beyond the prevention of bullying.

PART 6: PRACTICAL IMPLICATIONS FOR BULLYING PREVENTION

The most common bullying prevention recommendation arising from the scholarly literature is to improve psychosocial work and organisational factors (Vartia & Leka, 2011), for instance by increasing role clarity and reducing conflict, ensuring that job demands are not excessive, and providing appropriate resources to do the work. These sorts of generic recommendations are, however, difficult to translate into practice. Consequently, even though the knowledge base regarding the antecedents and consequences of bullying behaviour continues to expand (Neall & Tuckey, 2014), the evidence on prevention initiatives is severely limited (Hodgins et al., 2014). Through this CRG Project, we produced an evidence-based tool to bridge the research-practice gap in bullying prevention.

The behaviourally anchored risk audit tool created in this project can be used as part of a proactive risk management approach to the prevention of workplace bullying. Within the risk management framework for psychosocial hazards (Safe Work Australia, 2014b), the tool is ideally used in the second step – assessing the risks. It provides detailed information regarding how job activities are typically performed within a work
unit, reflecting the functioning of the organisational system in nine core domains rather than diagnosing problems with the behaviour of individual supervisors or managers. In this way, the tool can be used to diagnose problem hotspots which, if addressed through control measures, can prevent or reduce the likelihood of bullying within that work unit. The tool can also be used in the final stage of the ongoing risk management process to review the effectiveness of the control measures in lowering the risk.

Overall, the evaluation data suggest that the workplace bullying risk audit tool can be used in a variety of ways:

- To identify job activities for redesign in order to prevent bullying and enhance work health and safety outcomes;
- To understand the views of frontline workers regarding how the organisation is functioning in key areas of task and personnel management;
- To identify training needs in relation to core managerial competencies for managers, supervisors, and other employees holding a coordinating role;
- To collect information following a complaint or report of bullying to understand the contributing factors and identify where to intervene to manage the risk;
- To augment bullying education and awareness by illustrating the origins of bullying in daily organisational functioning.

Based on our findings, the risk audit tool should be used at the team or work unit level, completed by multiple staff members in the team. Rather than utilising individual scores, the evidence suggests that team-level scores (i.e., the mean score across all individuals from a team) have diagnostic value in terms of bullying risk specifically and work health and safety risk more broadly. As a guide, seeking five or more responses would be a sound threshold, which applied to 92% of the teams included in the outcome evaluation, increasing to ten or more with large teams.

Within a team, both employees and supervisors can complete the risk audit tool. The predictive ability of the tool applies to scores generated from employees only, and to the combination of scores from employees and supervisors within the team. Likewise, there is a high level of agreement within the team on the risk audit tool scores, across multiple team members, whether or not supervisors are included.

Finally, in terms of predictive value, the overall risk audit tool score should be used as the basis for estimating the likelihood of bullying, rather than scores for the individual job activity domains. The detailed information within each section of the tool is, however, vital for gaining a deeper understanding of the nature of the risks in a given work unit, revealing where to intervene to reduce the likelihood of bullying.

**PART 7: CONCLUSIONS AND FUTURE DIRECTIONS**

Based on the findings, the next step in the development and evaluation of the risk audit tool is to make minor adjustments to the content and presentation, based on the feedback provided by the end-users who trialled the tool. In line with the end-user feedback, it will be possible in future research to generate additional indicators and expand the tool to include a new dimension reflecting elements of organisational culture that tolerate (or inhibit) bullying. This work could be conducted using a similar process to the one
followed in this CRG Project (i.e., conducting critical incident interviews to identify new indicators, sorting the indicators into underlying domains, and rating the indicators for placement on the graphical scale).

While the predictive capacity of the tool is promising based on the outcome evaluation data gathered in this project, a core issue for future research is to examine the predictive capability over time. That is, whether scores on the risk audit tool successfully predict future exposure to bullying (e.g., after six months). In conjunction, the tool could be validated in a range of other industries, especially those at high risk industries of bullying (e.g., community services, government, transport, and energy; Potter et al., 2016).

During further validation work, it would be useful to establish evidence regarding the predictive capacity of the risk audit tool in relation to other psychosocial hazards. Given that the tool assesses nine core areas of organisational functioning, and based on the findings of this project supporting the validity of the tool for a range of health and safety indicators, the tool may be useful to diagnose risk of work overload, work pressure, harassment, violence, fatigue and emotional exhaustion, as well as workplace bullying.

Once additional validation work has been completed, efforts should be directed to developing resources to support implementation of the risk audit tool. The resources should clarify the use and interpretation of the tool, and offer guidance on the next steps. The provision of an electronic platform (e.g., app, website) for the tool is likely to enhance this process. Via interactive online capabilities, finer-grained diagnostic information could be provided to users regarding the risk level in specific work units and the priorities for action. Based on the risk profile generated in the electronic platform, relevant information, links, and other resources could be provided to guide the development of control measures.

**Conclusion**

In closing, our vision is that the workplace bullying risk audit tool will be used for the widespread, systematic risk management of bullying in Australia. This will involve a number of strands of activity: First, organisations should take a proactive risk management approach to bullying prevention by tackling the organisational risk contexts, and embed the evidence-based workplace bullying risk audit tool in that process. The risk audit tool should also be used as part of the process of handling bullying complaints in order to understand where to intervene to address the factors that enabled, motivated, and triggered the bullying incident. Second, health and safety regulators should use the workplace bullying risk audit tool when responding to bullying complaints lodged with them, to reveal work design issues that need to be addressed, to control the prevailing psychosocial hazards within the organisation. Regulators and other agencies should also use the tool in education and prevention activities regarding the risk management of bullying and other psychosocial hazards. Our data indicate that such an approach should not only help to combat bullying specifically, but also contribute to better work health and safety outcomes more broadly.
PART 8: REFERENCES


