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# Summary

## Why has this research been done?

* Workplace bullying and harassment can lead to psychological harm and negatively affect organisational processes. Collection of information on the prevalence of bullying and harassment nationally can provide an indication of the extent of this problem in Australia.
* Identifying the antecedents of bullying and harassment may enable workplaces to identify organisational and psychosocial factors in the workplace that could be addressed to prevent bullying and harassment.

## Who did we study?

* The main focus of the report is data from the 2014/15 Australian Workplace Barometer (AWB) project. Participants were randomly selected across all states and territories and the data were weighted to ensure the sample was representative of the working population in the respective states and territories.

## What did we find?

* Bullying was measured using both a widely accepted international definition and the Australian definition used by Safe Work Australia. The six-month prevalence rates using the international and the Australian definitions were similar at 9.7 per cent and 9.4 per cent of workers respectively.
* Relatively high levels of bullying were reported in the Electricity, gas and water supply; Health and community services; and Government administration and defence industries.
* Of those who reported that they were bullied, approximately 32.6 per cent were bullied at least once a week.
* The prevalence of workplace bullying in Australia has increased from 7.0 per cent in 2009─11. At this time Australia had the 6th highest rate of workplace bullying when compared to 34 European countries. Australia’s current rate now exceeds the rates measured in Europe in 2009─11. However, more recent European data are not available for comparison and it is possible that there has been a corresponding increase in the prevalence of bullying in Europe.
* Of the seven types of harassment measured, the most common forms of harassment reported were: being sworn at or yelled at (37.2 per cent); being humiliated in front of others (23.2 per cent); and being physically assaulted or threatened by patients/clients (21.8 per cent).
* Negative comments due to race or ethnicity were experienced by 7.4 per cent of respondents.
* Unfair treatment due to gender was experienced by 10.9 per cent of respondents.
* Women were more likely than men to be bullied and experience unwanted sexual advances, unfair treatment because of their gender, and experience being physically assaulted or threatened by a client or patient.
* Men were significantly more likely to experience being sworn at or yelled at in the workplace.
* As worker psychological demands and emotional demands increased so did the prevalence of bullying. In contrast, as job resources and Psychosocial Safety Climate (PSC; management commitment to psychological health and safety) increased the prevalence of bullying decreased.
* Bullying and most forms of harassment were associated with adverse psychological health outcomes including depression and emotional exhaustion.
* Poor PSC, lack of job control, and emotional demands were associated with bullying four years later.

## What do the findings suggest?

* Self-reported bullying and harassment are common in Australian workplaces and are associated with poor psychological health. PSC and psychosocial factors such as job demands, job control and job resources are also related to the occurrence of bullying and harassment.

## What can be done?

* Interventions to reduce bullying and harassment should focus on improving PSC and the priority of regard for psychological health in the workplace. One approach is awareness raising for managers and supervisors about the profound effects of bullying and harassment at work (at a personal and organisational level[[1]](#footnote-1)), as well as the causes of workplace bullying and harassment. Another is establishing worker psychological health as a core business value.
* Workplace interventions to improve PSC should focus on establishing systems to enable upwards and downwards communication about bullying and harassment, and participation of all levels of the organisation in monitoring, establishing controls, awareness raising, education and training on matters relevant to bullying, harassment, and risk factors.
* Monitoring PSC within organisations is recommended; as a leading indicator it should provide early signs of risks for bullying and harassment.
* Improving PSC can be achieved by changing work conditions that predispose bullying such as high demand, high pressure, high competition, and low control/power situations in the workplace via job redesign principles (Parker, 2015).
* Since supervisors are most commonly perceived as the source of bullying behaviours, efforts should be made to provide education and training regarding appropriate supervisory behaviours, particularly in relation to managing the performance of employees.
* Workplaces should establish policies or guidelines for respectful behaviour, particularly toward women and people from diverse ethnic backgrounds, and how to address bullying and harassment should it occur; attention should be drawn to the legal and WHS implications and organisational sanctions.

# Executive Summary

Workplace bullying and harassment cause serious harm to worker health and organisations (Bond, Tuckey, & Dollard, 2010). The costs of workplace bullying in various forms are widespread. Economically, bullying is estimated to cost up to $36 billion annually in Australia (Productivity Commission, 2010) and £13.75 billion per annum in the UK (Giga et al., 2008). At a personal level, workers experience a range of psychological and physical health problems after they are bullied. Specifically, Nielsen and Einarsen’s (2012) recent meta-analysis found a significant cross-sectional relationship between workplace bullying and a range of psychological health and well-being outcomes (anxiety, depression, post-traumatic stress, strain, psychosomatic symptoms, burnout, and physical health complaints), along with a positive lagged relationship from reported exposure to bullying at work with later mental health problems after controlling for baseline mental health.

Organisations should also take bullying consequences seriously. Nielsen and Einarsen’s (2012) meta-analytic data showed that, cross-sectionally, bullying is associated with increased intention to leave and absenteeism, and decreased job satisfaction and commitment (see also the recent review by Samnani & Singh, 2012). In addition, research has shown that the effects of observing bullying may be similar to actually being bullied (Hoel & Cooper, 2000; Vartia, 2001).

The purpose of this report is to present evidence regarding bullying and harassment in Australian workplaces based on Australian Workplace Barometer (AWB; Dollard & Bailey, 2014) data collected from telephone interviews of employees from all Australian states and territories between 2014/2015. The main aims are to ascertain national prevalence data, provide insights into the nature and extent of bullying and harassment, identify high-risk industries through the process of bench-marking, and build an explanatory model of bullying.

To assess the prevalence of bullying AWB participants were given a commonly agreed upon international definition: “*Bullying is a problem at some work-places 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).*

Safe Work Australia has adopted a slightly different definition, as specified in the *Guide for Preventing and Responding to Workplace Bullying* (Safe Work Australia, 2013): *“Workplace bullying is defined as repeated and unreasonable behaviour directed towards a worker or a group of workers that creates a risk to health and safety. Unreasonable behaviour does not include reasonable management action, such as discussions about work performance, as long as they are taken in a reasonable way”.*

Bullying incidents may include psychological acts (e.g., humiliation), physical acts (e.g., violence) or indirect behaviours (e.g., social exclusion), all of which place the target in a state of fear and inferiority.

To verify bullying rates, both definitions were presented separately in the telephone interview, and, participants were asked, given the definitions, if they had been subjected to bullying at the workplace during the last 6 months.

Both definitions characterize bullying as harmful interpersonal interactions that incorporate some sense of repetition and longevity but the international definition specifies an imbalance of power between the parties (Einarsen & Skogstad, 1996). Both definitions were used in this report to determine prevalence.

The new standard definition of harassment adopted by Safe Work Australia is unwelcome behaviour that intimidates, offends or humiliates a person. It may target personal characteristics such as race, age, gender, disability, religion or sexuality. The measure of harassment used in this study was largely consistent with this conceptualisation.

The key differentiation between bullying and harassment is that bullying is repeated, whilst harassment can be inferred from a single incident. A systematic methodological review of the literature by Neall and Tuckey (2014) revealed that workplace bullying constituted 36 per cent of the research in this field, whereas workplace harassment only constituted 10 per cent. Within the literature the terms are often used interchangeably, and share the same antecedents, however bullying is viewed as more severe than harassment. Research by Hershcovis (2011) calls for consolidation of the wealth of constructs and terms, such as bullying, harassment and incivility, stating that fragmenting constructs and distinguishing between different forms can constrain research and detract from workplace knowledge in mitigating these issues. Therefore the main emphasis should be on investigating the antecedents to adverse workplace conflicts. In predictive modelling we focus on bullying because of its severity.

Under the Model Work Health and Safety Act, all workers should receive the highest level of protection of their health and welfare against workplace hazards as is reasonably practicable, and employers are required to provide a safe working environment. Yet recent national data collected by *beyondblue* (2014) revealed that only 52 per cent of employees perceive their workplace to be mentally healthy, compared to 76 per cent for physical safety. These statistics reflect a discrepancy that is not ethically or legally sustainable and one that must be urgently addressed. In terms of legislation, workplace bullying and other psychosocial risks are covered under the Model Work Health and Safety Act.

## Prevalence

The national prevalence rate for workplace bullying is 9.7 per cent, based on population-based data (*n* = 4242) from all Australian states and territories in 2014/2015, using the international definition. Using the Safe Work Australia definition, the rate was highly consistent at 9.4 per cent. There was a high correlation between the two definitions (*r* = .69). The national average workplace bullying rate was 9.6 per cent.

Nearly one in 10 people report that they have been bullied at work using these strict definitions. This is a sizeable increase since 2009-11, where 7.0 per cent of Australian workers reported they experienced workplace bullying, using the international definition. At that time, Australia recorded the 6th highest prevalence of workplace bullying when compared with the European Conditions Survey 2010 data from 34 European countries. There is no new data on the prevalence of workplace bullying available for Europe so it is impossible to determine the current ranking of Australia’s bullying prevalence rate, suffice to say that it now exceeds the European bullying prevalence estimates of 2010.

In addition, the data revealed that, of the bullied workers, 12.2 per cent were bullied daily, 32.6 per cent per cent were bullied at least once a week and 27.9 per cent experienced bullying at least once a month. Findings also showed that 13.6 per cent had been bullied for less than one month, 38.6 per cent had been bullied for between one and six months, 12.9 per cent had been bullied for between seven and 12 months and 16.3 per cent of workers had been bullied for more than two years. In 62.3 per cent of cases, the bully was a supervisor, at more than twice the rate of the next most highly cited bully perpetrator (28.0 per cent due to coworker).

Industries with the highest levels of bullying were Electricity, gas and water supply (caveats apply); Health and community services; Government administration and defence; Transport and storage; Mining; and Education.

Increases in the prevalence of bullying were observed in most states and territories. Specifically, when comparing rates from 2009, 2010, and 2011 to the 2014/15 surveillance data, workers in Western Australia, New South Wales, Tasmania, and the Australian Capital Territory all show an increase in the prevalence of bullying. However, while the Northern Territory still records the highest prevalence of bullying (caveats apply), there has been a slight decline since 2011. South Australia has the lowest rate of workplace bullying in the country, and this has also declined since 2011.

As for workplace harassment, AWB results established that the most prominent form of harassment was being sworn at or yelled at in the workplace (37.2 per cent), and it showed the greatest impact on health and work outcomes. The other most prevalent harassment forms were humiliation in front of others (23.2 per cent), being physically assaulted or threatened by clients or patient (21.8 per cent), and experiencing discomfort listening to sexual humour (17.9 per cent).

## Impacts of Workplace Bullying and Harassment

The results clearly demonstrate the deleterious effects of bullying and harassment. In relation to health outcomes, bullying was related to emotional exhaustion, psychological distress and depression. In relation to work outcomes, it was significantly negatively associated with job satisfaction and work engagement, and positively with intention to leave the workplace.

For harassment, the majority of these relationships were mirrored; harassment forms were associated with increased emotional exhaustion, psychological distress, depression, intention to leave and reduced work engagement and job satisfaction.

These findings are consistent with the literature, which has linked bullying and harassment to a range of psychological health and well-being outcomes, including general mental health outcomes, anxiety, depression, post-traumatic stress, generalised strain, psychosomatic symptoms, burnout, and physical health problems (Nielson & Einarsen, 2012), and work outcomes such as increased intention to leave (Kieseker & Marchant, 1999; Salin, 2003).

## Reasons for Workplace Bullying and Harassment

There are various explanations as to why workplace bullying and harassment occurs. Although workplace bullying and harassment may result from the interplay between several factors such as individual, organisational, and external aspects, research reveals that organisational level factors are the most central determinants of bullying (Nielsen & Einarsen, 2012). The report reviews the following explanations for workplace bullying and harassment (explanations for discrimination are beyond the scope of the paper):

* ‘Psychosocial Safety Climate Hypothesis’ — A lack of managerial regard for workplace psychological health and safety leads to poor quality work and in turn bullying and harassment.
* ‘Productivity Hypothesis’ — Bullying and harassment are a means to obtain more productivity from workers.
* ‘Retain-and-build Personal Power Hypothesis’ — Bullying and harassment are tactics to maintain the status quo of personal power or power distribution within organisations.
* ‘Work Environment Hypothesis’ — Poor quality work, in terms of task and job design, such as high levels of demands and low levels of resources, precipitates bullying and harassment.

In considering these explanations we examined job design aspects (job demands and resources) that are consistently linked with higher incidences of bullying (Tuckey et al., 2009).

Results showed that high psychological (work pressure) and emotional job demands were related to higher levels of bullying. In addition, job resources (i.e., supervisor social support, job control, and organisational rewards) were negatively associated with bullying: i.e. increases in these resources were associated with a decrease in workplace bullying and harassment. These job design aspects were also related to different forms of harassment.

The main focus of the empirical analysis was on the ‘Psychosocial Safety Climate Hypothesis’. There was strong support for this hypothesis. Psychosocial safety climate (PSC) refers to policies, practices and procedures for the protection of worker psychological health. PSC largely reflects senior management commitment and support for stress prevention, and a priority of regard for worker psychological health in the context of productivity imperatives.

As expected PSC was significantly negatively correlated to bullying and all forms of harassment, which is also supported by prior studies (Bond et al., 2010; Law et al., 2011). PSC predicted future bullying over a four year lag. The results support PSC as a leading indicator for the occurrence of bullying; the relationship between PSC and bullying, after controlling for baseline levels of bullying, was explained by job design factors — low PSC led to high emotional demands and low job control, which led to bullying. The results highlight the value of PSC as a litmus test for identifying industries, work units, and workers at risk of bullying at work, and as a prime avenue for preventative action.

The finding that PSC predicted future bullying is strong because it was based on an analysis that controlled for initial levels of bullying. Moreover the finding is remarkable because the time lag was roughly four years and it would be reasonable to predict that those who had been bullied may have left the organisation, potentially weakening the relationship.

## Practical Implications

Since PSC is a lead indicator of bullying and harassment, cultivating a robust organisational PSC is the best target for intervention and prevention strategies. At the heart of PSC development is the premise that senior management is committed to worker psychological health. To mitigate the deleterious impact of bullying and harassment there must be a solid commitment from senior management to prioritise and communicate good work health and safety policies, practices, and procedures. In addition, management personnel must make a notable effort to create jobs with manageable work demands and concentrate resources into fostering a work environment where workers feel valued, psychologically safe, and healthy. Workplaces should establish policies or guidelines for respectful behaviour and how to address bullying and harassment should it occur; attention should be drawn to the legal and WHS implications and organisational sanctions. Furthermore there should be greater awareness raising for managers and supervisors about the profound effects of bullying and harassment at work (at a personal and organisational level), as well as the causes of workplace bullying and harassment.

Overall, strategies to address workplace bullying should emphasise organisational-level primary prevention through monitoring and modifying the risk factors for bullying in the organisational system. Strategies that focus on bullying behaviour (such as reporting mechanisms) are important complementary actions, but not sufficient for prevention. Rather, policy and regulation interventions should focus on motivating and rewarding organisations to tackle bullying as a work health and safety hazard via a risk management process. Practical tools to support the risk management of bullying as a psychosocial hazard should be developed and made widely available.

Monitoring PSC within organisations is strongly recommended; as a leading indicator it should provide early signs of risks for bullying and harassment. Recent AWB research has established PSC benchmarks (range 12–60) for low-risk (PSC at 41 or above) and high-risk (PSC at 37 or below) of employee job strain and depressive symptoms. Researchers found using the population attributable risk (PAR) that improving PSC in organisations to above 37 could reduce 14 per cent of job strain and 16 per cent of depressive symptoms in the working population (Bailey, Dollard, & Richards, 2015). These benchmarks are already being used by some Australian organisations but should be used more widely and incorporated into national policy frameworks for psychosocial risk prevention.

Improving PSC also has the added value of reducing productivity costs due to sickness absence and presenteeism; estimates are that $6 billion dollars per annum could be saved by Australian employers by improving PSC levels in organisations (Becher & Dollard, 2016).

High PSC organisations are mentally healthy workplaces (*beyondblue,* 2014), and improvements in PSC could improve the mental health status of workplaces in Australia. Workplace interventions to improve PSC should focus on establishing systems to enable upwards and downwards communication about bullying and harassment, and enable participation of all levels of the organisation in monitoring, establishing controls, awareness raising, education and training on matters relevant to bullying, harassment, and risk factors. Improving PSC should entail organisational efforts to reduce work conditions that predispose bullying such as high demand, high pressure, high competition, and low control/power situations in the workplace. This preventative organisational intervention approach also addresses a common critique that interventions are often reactive, supporting individuals and organisations in dealing with problems they experience rather than re-organising the work environment, systems and processes to prevent problems occurring in the first place.

In addition to targeting PSC as a primary intervention, organisations can also introduce secondary and tertiary interventions to tackle bullying and harassment. A secondary intervention could comprise further education for managers and supervisors on good leadership behaviours. As managers and supervisors are most commonly perceived as the source of bullying behaviours, efforts should be made to provide education and training regarding appropriate supervisory behaviours, particularly in relation to managing the performance of employees. As a tertiary measure workplaces should provide access to services such as employee assistance programs or counselling services.

Importantly, as highlighted in the WHO Health Workplace Framework and Model, the management of psychosocial issues and risks, such as bullying and harassment, is also about ethics and values—it is about awareness, responsible behaviour, and accepting a legal and moral obligation to care for employees’ wellbeing (World Health Organization, 2010). Internationally, corporate social responsibility (Jain, Leka, & Zwetsloot, 2011; Jain, Ripa, & Herrero, 2014), which also emphasises morals, values and ethics, is gaining momentum as a mechanism to prevent and manage psychosocial risks at work, and broader health and safety issues. Through education and increased social dialogue, organisations should not only shift the perception away from merely removing the harmful risks, but also promote a positive environment that internalises ethical values and behavioural practices into the organisational culture (World Health Organization, 2010). Organisations should incorporate worker psychological health as a core value, and work should become a place that promotes good health — this stance may also reduce stigma associated with workplace mental health problems. Although there has been progress in the form of laws, stop bullying orders, and guidance, revisiting the recommendations of the Australian parliamentary inquiry into bullying *Workplace Bullying, we just want it to stop* (House of Representatives Standing Committee on Education and Employment, 2012), seems warranted. The inquiry emphasised the need to invest in workplace culture – consistent with the findings of this report.

Further research is required to ascertain the specific actions required to be performed by executives, managers, employees and their representatives to produce high PSC organisations. Outcomes of research such as this could be adopted by regulators, and potentially included in guidance material.

# Introduction

Work-related bullying and harassment are severe psychosocial risks that have devastating consequences on worker psychological health and organisational processes (Hoel & Cooper, 2001). Over the past 20 years, research has consistently linked bullying and harassment to a range of psychological health and well-being outcomes, including general mental health outcomes, anxiety, depression, post-traumatic stress, generalised strain, psychosomatic symptoms, burnout, and physical health problems (Nielson & Einarsen, 2012). Furthermore, work-related bullying and harassment comprise nearly a third of mental stress compensation claims, which in turn generate the largest proportion of cost relative to all other claims (Safe Work Australia, 2013). Findings from longitudinal studies also reveal that bullying, over time, is related to mental health problems, even after accounting for the effects of any prior mental health conditions (Nielson & Einarsen, 2012). These consequences of bullying and harassment inevitably extend to the organisation, contributing to increased absenteeism, higher intentions to leave, and lower worker job satisfaction and commitment (Kieseker & Marchant, 1999; Salin, 2003). Therefore, in view of the negative social and economic effects, it is important to understand risk levels of bullying and harassment within Australia, as well as aspects that may influence their development.

Historically, most Australian bullying and harassment research has focused on specific workplaces or occupations, in particular, the nursing industry (Dollard, Tuckey, Bailey, & McLinton, 2012). Although these studies have produced valuable knowledge, occupational investigations are not able to provide insights into national prevalence rates across occupations. Obtaining representative and scientifically driven surveillance data is critical for mitigating bullying and harassment as it: (a) provides evidence-based data for the development and improvement of relevant policies; (b) best directs the focus of resources and preventative initiatives and intervention-type approaches to high-risk industries; and (c) provides baseline data against which these approaches can be evaluated for their effectiveness (Dollard & Bailey, 2014). To address a prior lack of national data within Australia, the Australian Workplace Barometer (AWB) project was established in 2009 as a national surveillance system to evaluate Australian working conditions and obtain reliable prevalence rates for workplace psychosocial factors at both the national and industry level. The aim of this report is to investigate the prevalence of bullying and harassment in Australia, its antecedents and impacts, using AWB data.

Currently the AWB is Australia’s leading method of work-related psychosocial surveillance, designed to obtain rigorous scientific evidence on work-related issues across states and territories, industries, and time-frames. As a result, AWB findings may be regarded as best-practice guidance for any national, state, organisational, or industry initiatives targeted at protecting worker health (Dollard, Skinner, Tuckey, & Bailey, 2007). A central objective of the AWB is to ascertain both national prevalence data and provide insights into psychosocial risks, and to identify high-risk industries through the process of bench-marking. Consequently, valuable resources, including prevention and intervention efforts, can be directed most effectively towards these industries.

An additional advantage of the AWB national surveillance system is that it enables investigation into relationships between psychosocial risk factors (such as bullying), and their relative impact on workers’ psychological and physical health outcomes (Bailey, Dollard, & Richards, 2015).

A major strength of the following report is that it will provide insights into the causes of bullying; a longitudinal analysis will be undertaken to predict bullying in 2014/2015 from data pertaining to potential risk factors measured in 2010/2011.

The AWB tool provides a clear definition of bullying commonly used in the international literature. This overcomes a limitation noted in the majority of research that found rates determined without bullying definitions tended to over-report exposures to bullying (see meta-analysis by Matthiesen & Einarsen, 2010). This is supported by researchers Zapf, Einarsen, Hoel and Vartia (2011), who established that when participants were presented with a precise definition, the reported prevalence rates were 1–4 per cent, as opposed to 10–24 per cent when no definition was provided.

Since bullying rates fluctuate by measurement method, the AWB tool adopted best-practice recommendations, and incorporated an international definition endorsed by leading bullying experts. In addition, the legal definition of bullying used by Safe Work Australia was also included to explore any differences between the rates produced by the two definitions. Overall, the purpose of this report is to outline the main findings on workplace bullying and harassment, based on AWB data obtained from all Australian states and territories in 2014/2015.

## Workplace Bullying and Harassment

Despite slight variations between state legislation, Safe Work Australia defines workplace bullying as ‘repeated unreasonable behaviour directed towards workers or a group of workers, that creates a risk to health and safety’. Unreasonable behaviour does not include any reasonable management actions, such as discussion about work performance, provided that these actions are conducted in an appropriate way. In particular, incidences of workplace bullying may incorporate psychological acts (e.g., humiliation), physical acts (e.g., violence) or more indirect actions (e.g., social exclusion), all of which strive to position the target(s) in a psychological state of inferiority and fear (Samnani & Singh, 2012). Within the academic literature, a fundamental characteristic of the most commonly used bullying definition is that there is an imbalance in power between the perpetrator and the victim, meaning the targeted individual encounters difficulty in protecting themselves (Einarsen & Skogstad, 1996). Furthermore, incidences of bullying are characterised as repeated or systematised attacks on the target(s), reflecting behavioural frequency and endurance (Salin, 2003). Harassment, which is similar to bullying, is also characterised by direct or indirect behaviours, as well as physical and verbal behaviours that endeavour to undermine an individuals’ self-worth in the workplace. However, harassment may be inferred from a single event, and is typically based on forms of discrimination relevant to the target’s (or targets’) personal characteristics, such as gender, sexual orientation, religion, age, race, or ethnicity (Scott-Lennon & Considine, 2008).

The new standard definition of harassment adopted by Safe Work Australia is unwelcome behaviour that intimidates, offends or humiliates a person. It may target personal characteristics such as race, age, gender, disability, religion or sexuality. The measure of harassment used in this study was largely consistent with this.

The key differentiation between bullying and harassment is that bullying is repeated, whilst harassment can be inferred from a single incident. A systematic methodological review of the literature by Neall and Tuckey (2014) revealed that workplace bullying constituted 36 per cent of the research in this field, whereas workplace harassment only constituted 10 per cent. Within the literature the terms are often used interchangeably, and share the same antecedents, however bullying is viewed as more severe than harassment. Research by Herchcovis (2011) calls for consolidation of the wealth of constructs and terms, such as bullying, harassment and incivility, stating that fragmenting constructs and distinguishing between different forms can constrain research and detract from workplace knowledge in mitigating these issues. Therefore the main emphasis should be on investigating the antecedents to adverse workplace conflicts. In predictive modelling we focus on bullying because of its severity.

Neglecting to manage harmful workplace psychosocial risk factors such as bullying and harassment is in direct conflict with the model Work Health and Safety (WHS) Act, which asserts that all workers should be given the highest level of protection against harm to their health, safety and welfare from hazards and risks arising from work as is reasonably practicable’ (s3(2)). The Commonwealth, states and territories have implemented laws based on the model WHS laws meaning health and safety requirements are harmonised (excluding Victoria and Western Australia). Under the model WHS Act employers have a legal obligation to protect workers’ physical and psychological wellbeing. The Act further states that workers’ physical and psychological health should be protected through the elimination or minimisation of work-related risks, with the legislation encouraging organisations to adopt more proactive roles in the improvement of work health and safety practices (s3(1)).

A PCBU (or employer, in Victoria or Western Australia) must manage the risks of physical or psychological harm by eliminating the risks, so far as is reasonably practicable. If elimination is not reasonably practicable, the risks must be minimised so far as is reasonably practicable. They can do this by implementing effective control measures aimed at the work environment and systems of work. Control measures aimed at individuals are usually less effective. The types of controls that should be used may vary depending on what is reasonably practicable for the PCBU (or employer) or workplace. A combination of controls may be required. A worker’s physical and psychological health can be adversely affected by exposure to a poorly designed or managed work environment, a traumatic event, workplace violence, fatigue, bullying, harassment or excessive or prolonged work pressures. Any of these factors can increase the likelihood of a worker experiencing a stress response. If job stress is excessive or prolonged, it may lead to psychological or physical injury.

At a workplace level, possible controls may include leadership commitment to a mentally healthy workplace, policies and procedures for the prevention of unreasonable behaviours such as bullying, aggression or violence, managing work-related fatigue and a process for consultation with workers.

At an organisational level, possible controls may include designing safe systems of work, workforce planning to ensure the balance between work demands and time pressures are within the workers’ capacity, role clarity, autonomy, recognition and reward and flexible work arrangements (Parker, 2015).

National and state-based bullying guidance materials are available to assist both workers and the organisation in addressing and tackling incidences of workplace bullying (Johnstone, Quinlan & McNamara, 2011). Another major legislative development also occurred through the enactment of the Crimes Amendment (Bullying) Act 2011 (Vic), known as Brodie’s Law, following an incident of relentless workplace bullying that caused 19 year-old Brodie Panlock to take her own life. At the present time, Brodie’s Law has only been legislated within Victoria, where it is now legally recognised that serious bullying is a criminal offence, and extends the application of stalking provisions in Victoria’s Crimes Act 1958. Under Brodie’s Law, serious workplace bullying results in a maximum penalty of ten years’ imprisonment. In 2010 an Australian Parliamentary Inquiry into Bullying (House of Representatives Standing Committee on Education and Employment, 2012), *Workplace Bullying, we just want it to stop*, took place and produced 23 recommendations aimed at preventing workplace bullying. The Committee received 319 submissions, of which over 200 were from those with close-hand experience of bullying. From 2014, stop bullying orders were introduced by the Fair Work Commission (2016), meaning a worker who believes they are bullied can apply to the Commission for an order to stop bullying in the workplace. In this case, the Commission chooses the best approach to resolve the matter, which may include attempting to settle the matter between the parties or facilitating formal court action if necessary. If the bullying incident involves a hearing, the Commission may make any order that is most fitting to prevent the incidence of the bullying. Such action may include providing orders that require the perpetrator to cease the bullying, to comply with (or review) the employers’ bullying policy and/or ensure workers receive more information or further support or training. The Commission cannot order any monetary compensation for the bullying victim.

## Explanations for Workplace Bullying and Harassment

Bullying and harassment are often the result of a complex interplay between various individual factors, organisational aspects, and broader environmental influences (Bowling & Beehr, 2006). However, meta-analytic evidence from 90 mostly cross-sectional studies shows that organisation-level factors are more fundamental determinants of bullying than individual target characteristics (Nielsen & Einarsen, 2012). Therefore a focus on job design and work environment factors rather than individual factors is more important (Notelaers, Naillien, De Witte, Einarsen, & Vermunt, 2012). Organisational risk factors include low psychosocial safety climate (Dollard & Bakker, 2010), higher levels of role stressors, greater organisational constraints and lower levels of job autonomy (Coyne, Smith-Lee Chong, Seigne, & Randall, 2003). These work-related aspects are most amenable to change in comparison to individual-level traits. Overall, there are four central explanations for the occurrence of bullying and harassment (excluding discrimination):

* ‘Psychosocial Safety Climate Hypothesis’ — PSC is a leading antecedent to all worker psychosocial risk factors and refers to managerial regard for workplace psychological health and safety.
* ‘Productivity Hypothesis’ — A means to obtain more productivity from workers.
* ‘Retain-and-build Personal Power Hypothesis’ — A tactic to maintain the status quo of personal power or power distribution within the organisation.
* ‘Work Environment Hypothesis’ — Poor work quality, whereby aspects of task and job design give rise to levels of demands, control and support.

## Psychosocial safety climate: A leading organisational factor

The PSC of an organisation encapsulates the value that senior management places on worker psychological health and well-being, particularly evident through the degree of communication about and commitment to psychological health and safety matters at work. It is defined as the enacted “organisational policies, practices, and procedures for the protection of worker psychological health and safety” (Dollard & Bakker, 2010, p. 580). To assess an organisations’ PSC, levels are derived through aggregating scores, based on the individual perceptions, to the level of the organisation or work group. Using aggregated scores is recommended practice, as ultimately the PSC is the shared view of employees about how the organisation prioritises psychological health versus productivity concerns. In this way, PSC is conceived as a property of the organisation.

PSC is related to bullying and harassment in two main ways; (1) indirectly, via the kinds of work conditions it creates; since PSC predicts work contexts that predict bullying and harassment it may be referred to as the ‘cause of the causes’ of bullying and harassment; or (2) directly, via policies and practices against workplace bullying and harassment.

In relation to its indirect effect, there is growing evidence to support the theory that it is an organisations’ climate, specifically the PSC, which precedes work risk factors that are themselves risk factors for bullying and harassment (Law, Dollard, Tuckey, & Dormann, 2011). Research evidence supports the notion that bullying often arises in work environments with risky job design, such as excessive job demands or a lack of resources.

Senior managers largely have the remit to influence the way jobs are designed. Their actions in relation to job design are guided by the values they hold in relation to worker psychological health. PSC theory explains how this might occur via the PSC extended Job Demands-Resources Model of work stress, and its two distinct psychological pathways (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). The first pathway, the extended health erosion pathway, theorises that organisations with poor PSC with little concern for worker psychological health, may generate work conditions that are high in job demands; excessive job demands such as work pressure may give rise to worker distress. As explained below (see the work-environment hypothesis), high demands can engender competition and conflict, that can predispose bullying and harassment. Alternatively, in high PSC contexts, it is expected that managers will create jobs that have manageable demands (with compensatory job resources), thereby preventing bullying and harassment contexts from arising, and there will be less psychological distress accordingly.

The second psychological pathway — the extended motivational pathway — links PSC to work engagement. When an organisation prioritises worker well-being it likely provides job resources such as job control, rewards, and social support that can be intrinsically motivating in their own right and increase work engagement; but resources can also help workers to handle job demands in order to meet personal and organisational goals. The other side to this is that in low PSC contexts, the level of resources is also low. Bullying and harassment are likely to occur in low resource contexts, due to competition for resources. Overall, in higher PSC contexts, the conditions that can fuel bullying behaviours (high demands, low resources) would be less likely; personal resources would not be over-taxed and worker psychological needs for meaning, control, and social connectedness would be met, leading to less stress and more work engagement.

PSC may also have *direct* effects via specific policies and practices against bullying and harassment. High PSC organisations have policies in place to prevent and manage bullying and harassment explicitly. Within high PSC contexts, bullying and harassment is not tolerated and available resources to help mitigate bullying can be safely accessed, therefore, workers generally experience less stress and more positive outcomes such as work engagement and job satisfaction. These propositions were supported in a recent study by Kwan, Tuckey, and Dollard (2015), which showed that organisations with high PSC enabled their workers to use their voice to raise bullying concerns, which led to swift resolutions of bullying. In organisations with poor PSC, the workers acquiesced to the bullying, and with no managerial support, the situation was unresolved and workers were more likely to leave the organisation (Kwan, et al., 2015).

Above other work stress theories, PSC is considered the leading indicator and major predictor for *all* work-related psychosocial factors and their consequential health outcomes (Law et al., 2011). The extent of PSC’s ability to predict incidences of bullying and harassment is evident in research that revealed that PSC in police stations predicted bullying and harassment among police officers 12 months later (Bond, Tuckey, & Dollard, 2010). Furthermore, using earlier AWB data, a longitudinal study using a sample of 1095 workers showed that PSC predicted levels of bullying, harassment and violence 12 months later, even after accounting for baseline levels of these factors. In turn, bullying, harassment, and violence predicted increased levels of compensation claims even after accounting for the compensation claims due to other mental stress. This kind of longitudinal rather than cross-sectional research enables greater certainty in drawing the conclusion that low PSC may be the root cause of bullying and harassment, which in turn lead to detrimental outcomes such as compensation claims (Bailey, Dollard, Richards, & McLinton, 2015). Therefore, rather than focusing on lagged indicators of bullying and harassment, such as compensation claims, it is more effective to focus on assessing organisations’ PSC and subsequently directing efforts towards cultivating the organisational climate, rather than simply addressing outcomes in a reactive fashion.

## The productivity hypothesis

This explanation of bullying and harassment relates to a common core objective of management, which is to attain the best possible results from worker labour (Bailey, Dollard, & Tuckey, 2014). Unfortunately, using intimidation or instilling fear in workers is a tactic often adopted to achieve greater outputs, particularly when particular workers are underperforming. However, managers accused of these bullying behaviours also report high levels of stress within their organisation, as well as staff shortages (Jenkins, Zapf, Winefield, & Sarris, 2012). Managers often then become personified as bullies, but they may also be feeling extreme stress as the critical point in the organisation that must discharge labour. In addition, managers who implement bullying as a productivity tool may not have received adequate organisational training in leadership and/or they may lack insight into the destructive nature of their actions.

## The retain-and-build personal power hypothesis

A third explanation for bullying and harassment is that it originates from attempts to protect power within the organisation (Bailey, Dollard, & Tuckey, 2014). In this case, the goal of the perpetrators may not necessarily align with strategic organisational goals, but rather, reflect their own job insecurity and fear of losing personal status (Salin, 2003). For instance, perpetrators may focus their bullying behaviours on high achieving workers, as these individuals are viewed as a threat to their personal power and level of resources. In the same fashion, this bullying behaviour may be used to repel other workers who pose a threat to the dominant organisational culture, or who may disrupt the stability of power between organisational members (Bailey et al., 2014). Therefore, those who are new to work groups, particularly through change resulting from organisational restructuring (i.e., downsizing), are especially vulnerable to workplace bullying (Bailey et al., 2014).

## The work environment hypothesis

Bullying and harassment may involve the misuse of power to increase productivity in stressful work conditions (through the Productivity Hypothesis) or to gain and maintain scarce resources (in the Retain-and-Build Personal Power Hypothesis); yet stressful work conditions themselves create hazardous workplace environments that enable, trigger, and motivate bullying and harassment (Bowling & Beehr, 2006; Tuckey, Chrisopoulos, & Dollard, 2012; Salin, 2003). This idea underscores the Work Environment Hypothesis, which posits that the quality of working conditions and the broader work environment are the major determinants of bullying at work.

Clear evidence in the literature is that job design factors are associated with workplace bullying and harassment. Relative to others, bullied individuals tend to report higher job demands (or stressors), such as time pressure, haste, and workload (Hoel & Cooper, 2000: Vartia, 2011; Zapf, Einarsen, Hoel, & Vartia, 2003) and lower job resources in the form of autonomy and job control (Vartia, 2001; Zapf et al., 2003). More recently, studies have revealed that beyond the main effects of each component, a combination of job demands and job resources is also important for bullying. For example, in a study of 716 Australian frontline police officers using both target and observer information, increased levels of bullying were related to potentially high-stress situations, where job demands increased in combination with decreasing support and control resources (Tuckey, Dollard, Hosking, & Winefield, 2009).

## The Present Study

This study used AWB data from all Australian states and territories in 2014/2015 to provide national, state, and industry-based information on workplace bullying and harassment. This report addresses three aims.

The first aim was to examine current rates of workplace bullying within Australia, at the national, state, and industry level. Assessing national prevalence data will enable a comparative analysis of bullying prevalence with 34 European countries. However it is important to note that the European prevalence data may not be a solid basis for comparison, due to the year differences in data collection between the European countries and final data collection in Australia.

To obtain the Australian prevalence data, participants were presented with two definitions: (1) a definition commonly presented within the workplace bullying literature, and (2) the legal definition provided by Safe Work Australia. As AWB data collection also occurred across three time waves it is possible to explore bullying trends since this time across states and industries. Further, figures will be presented on the frequency and duration of bullying behaviours as reported by bullied workers. To explore the prevalence of harassment in Australian workplaces, we focus on eight different forms of harassment, giving insight into the extent to which workers experienced each of these types, and possible vulnerability of targets by gender, age, and income.

The second aim was to investigate the antecedents, or key factors, that are associated with bullying exposure through evaluating aspects of job design as well as PSC. First, the role of several key job demands (psychological demands and emotional demands) and job resources (job control, supervisor social support, organisational rewards) are explored in relation to bullying. Then, the health and work impacts of bullying and harassment are explored.

The third aim was to evaluate a predictive model of bullying. Within this analysis it will be determined whether the organisational PSC can predict workplace bullying as mediated by these job design factors (shown in Figure 1). If so, this provides further evidence that bullying and harassment can be better addressed and mitigated through an organisation’s commitment and action to foster a psychologically healthy environment for its workers.

As recommended in the literature, to overcome current methodological limitations of cross-sectional research designs (Neall & Tuckey, 2014), this predictive analysis will use a longitudinal research design, using data from 2010/ 2011 to predict bullying in 2014/2015. The model (or theoretical processes) is shown in Figure 1, and demonstrates the pathway from PSC to job design factors, to health and work outcomes.

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Figure 1. Psychosocial safety climate predicting job design, bullying and harassment, health and work outcomes

The overarching purpose of the report is to address these aims outlining up-to-date prevalence data on workplace bullying and harassment within Australia in addition to presenting evidence of antecedents and impacts.

# Method

## Participants and Procedure

The AWB project used a longitudinal survey design, incorporating data collected at three time points (considering when individual states were involved): 2009/2010, 2010/2011, and 2014/2015. Participants were eligible if they were aged over 18 years, currently employed, and to ensure randomness, participants who had the most recent birthday in the household were selected. Only one participant per household could participate in the study. Participants were randomly selected through the Australian Electronic White Pages (AEWP) at each time point, and contacted through a computer-assisted telephone interviewing (CATI) system. An introductory letter was sent to participants outlining details of the study and advising them that they would be contacted. For the follow-up surveys conducted in 2010/2011 and 2014/2015, participants were contacted again with a letter and then a telephone interview. Where participants were no longer available or willing to participate, new participants were recruited to ensure an adequate sample size. To recruit new participants, random mobile phone sampling was conducted to contact new participants in addition to the AEWP method previously used (see dal Grande, Chittleborough, Campostrini, Dollard, & Taylor, 2016). These participants were randomly chosen Australia-wide with no filtering for specific states and territories. Using the latest Australian Bureau of Statistics (ABS) Labour Force Survey, weighting was applied to the data to ensure the sample was representative of the populations of the respective states and territories.

The first wave of data collection was conducted in 2009 in Western Australia and New South Wales, and then in South Australia in 2010. In 2010, a second wave of data was collected from Western Australia and New South Wales. In 2011, a second wave of data was collected from South Australia and for the first time from the Australian Capital Territory, Tasmania, and the Northern Territory. In 2014 and 2015, data were collected from all Australian states and territories. In summary, Wave 1, 2009/2010, includes NSW, WA and SA; Wave 2, 2010/2011 includes NSW, SA, WA, Tasmania, Northern Territory and the Australian Capital Territory, and Wave 3, 2014/2015, all states and territories. The total number of participants for 2014/2015 was 4242. There were 2404 females (mean age = 49.2, SD = 11.8) and 1838 males (mean age = 47.7 years, SD = 12.7).

## Measures

### Bullying

International standard definition. A clear definition of bullying was provided based on an agreed upon standard in the international literature:

*Bullying is a problem at some work-places 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).*

The following three questions were asked:

*‘Have you been subjected to bullying at the workplace during the last 6 months?’* 1 (*yes*) or 2 (*no*); then if ‘yes’

*‘How often were you exposed to these bullying behaviours overall?’* on a five-point scale from 5 (*never*) to 1 (*daily*); and

*‘How long were you exposed to these bullying behaviours overall?’* on a five-point scale from 1 (*less than one month*) to 5 (*more than 2 years*).

Safe Work Australia definition. A second definition was also used that is consistent with the national definition adopted by Safe Work Australia and the Fair Work Commission:

*Workplace bullying has recently been defined as repeated and unreasonable behaviour directed towards a worker or a group of workers that creates a risk to health and safety. Unreasonable behaviour does not include reasonable management action, such as discussions about work performance, as long as they are taken in a reasonable way.*

Following this definition, participants were asked, *‘Thinking about this definition, have you been subjected to bullying at the workplace during the last 6 months?’* 1 (*yes*) or 2 (*no*), and to identify the status of the bully (supervisor, co-worker, other).

### Organisational harassment

Organisational harassment was assessed through a seven-item scale by Richman, Flaherty and Rospenda (1996). Participants were asked to respond with the frequency that they had encountered the following harassment situations within their workplace: *‘I have experienced unwanted sexual advances’; ‘I have experienced discomfort listening to sexual humour’; ‘I have experienced unfair treatment because of my gender’; ‘Negative comments have been made regarding my ethnic or racial background’; ‘I have been sworn at and or yelled at’; ‘I have been humiliated in front of others’; ‘I have experienced being physically assaulted / threatened by members of the organisation’*. Scoring for this scale ranged from 1 (*very rarely/never*) to 5 (*very often/always*).

### Job demands

Job demands were measured using the Job Content Questionnaire (JCQ 2.0) (Job Content Questionnaire Centre, 2012; Karasek, 1985).

Psychological demands. This five item scale measured the extent to which pressure and time urgency governs the work environment (see also Dollard, Winefield, & Winefield, 2000). Example items used to measure work pressure include *‘My job requires working very hard’*. After items 3 and 4 were reversed-scored, scores could vary between 5 and 20. A high score reflected a higher degree of work pressure.

Emotional demands.This four item scale assessed the mental costs of engaging in the behaviours required by challenging organisational situations (Karasek, 1985). Scores could vary between 4 and 16. An example item is, *‘My work places me in emotionally challenging situations’.* A high score on this scale represents a high level or number of emotional demands, whereas a low score is indicative of low level of emotional demands.

### Job resources

#### Job control

Scales from the JCQ 2.0 were used to measure two job control constructs: skill discretion (six-items. e.g. *‘I have an opportunity to develop my own special abilities’*)and decision authority (four-items, e.g. *‘My job allows me to make decisions on my own’*). A Likert response format was used for all items, with responses ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). In this report an overall measure of job control was computed through adding the two subscales.

#### Organisational rewards

The Effort–Reward Imbalance scale (ERI; Siegrist, 1996) was used to measure organisational rewards. Four specific items were selected for use in the present study from the esteem reward component (1 item), the job promotion reward component (2 items), and the job security reward component (1 item). An example item from this scale is *‘Considering all my efforts and achievements, my job prospects are adequate’*. Responses are made on a four-point Likert scale to be consistent with measures used above: 1 (*strongly disagree*) to 4 (*strongly agree*).

#### Supervisor social support

Scales were taken from the JCQ 2.0 to measure supervisor social support (three-items, e.g., *‘My supervisor/manager is helpful in getting the job done’*). Responses ranged from 1 (*strongly disagree*) to 4 (*strongly agree*), plus an alternate option if the participant did not have a supervisor.

### Psychosocial safety climate (PSC)

Psychosocial safety climate was measured with the Psychosocial Safety Climate-12 Scale (PSC-12; Dollard et al.; 2009; Hall et al., 2010). The PSC-12 is comprised of four factors: management commitment (3 items), management priority (3 items), organisational communication (3 items), and organisational participation (3 items). Examples of the items include: *‘Senior management acts decisively when a concern of an employee’s psychological status is raised’* (management commitment), *‘Senior management considers employee psychological health to be as important as productivity’* (management priority), *‘There is good communication here about psychological safety issues which affect me’* (organisational communication), and *‘Employees are encouraged to become involved in psychological safety matters’* (organisational participation). Items are scored on a five-point Likert scale, ranging from 1 (*strongly disagree)* to 5 (*strongly agree*). Scores for four factors were added together to formulate an overall score for workplace PSC, high scores indicating high levels of PSC. Scores may vary between 12 and 60.

### Work outcomes

#### Work engagement

Nine items from the Utrecht Work Engagement Scale—Shortened Version (UWES-9; Schaufeli, Bakker, & Salanova, 2006) were employed to measure work engagement. The three subscales each consist of three items to measure a different facet of engagement: vigour (e.g., *‘At my work, I feel bursting with energy’*), dedication (e.g., *‘My job inspires me’)*, and absorption (e.g., *‘I get carried away when I am working’)*. These items were all measured on a 7-point scale which ranged from 1 (*never*) to 7 (*every day*).

#### Job satisfaction

To evaluate job satisfaction a single global item was taken from the Job Satisfaction scale (Warr, Cook, & Wall, 1979). The item asked *‘Taking everything into consideration, how do you feel about your job as a whole?’* The item is measured on a seven-point Likert scale, which ranged from 1 (*I’m extremely dissatisfied)* to 7 (*I’m extremely satisfied*).

#### Intention to leave

Participants were asked *‘Over this year I intended to leave this organisation’*, on a response scale reversed to, 1 (strongly disagree) to 5 (strongly agree).

### Health outcomes

#### Psychological distress

All 10 items from the Kessler 10 (K10; Kessler & Mroczek, 1994) were included to measure psychological distress; that is, the degree of anxiety and depressive symptoms that the participant has experienced over the last month. For example, *‘In the past four weeks, about how often did you feel everything was an effort?’* Responses were scored on a five-point scale, from 1 (*none of the time*) to 5 (*all of the time*).

#### Emotional exhaustion

Emotional exhaustion was assessed using the six-item Maslach Burnout Inventory General Questionnaire (MBI; Schaufeli, Leiter, Maslach, & Jackson, 1996), which measures feelings of being ‘emotionally overextended and exhausted by one's work’ (Maslach et al., 1996). Items are scored on a 6-point scale, comprising 1 *(never*), 2 (*a few times a year or less*), 3 (*a once a month or less*), 4 (*once a week*), 5 (*a few times a week*) and 6 (*everyday*). High total scores on this scale represent high levels of emotional exhaustion. An example is *‘I feel tired when I get up in the morning and have to face another day on the job’*.

#### Depression

Depression was measured using the nine-item Patient Health Questionnaire (PHQ-9; Spitzer, Kroenke, & Williams, 1999), which applies the nine criteria for clinical diagnoses of depressive episodes in the DSM-IV, for example *‘During the last month, how often were you bothered by little interest or pleasure in doing things?’* These items are all scored on a 4-point Likert scale, ranging from 1 (*not at all*) to 4 (*nearly every day*).

# Results

## Prevalence Rates for Workplace Bullying in Australia 2014/2015

In response to the international bullying definition, which emphasises power imbalance and repeated bullying behaviours, 9.7 per cent of Australian workers reported they had experienced bullying in the past six months. In response to the second definition used by Safe Work Australia, 9.4 per cent of participants reported workplace bullying in the past six months. There was minimal variation in prevalence rates based upon the different definitions. This means that nearly one in 10 Australian employees report being bullied – according to strict definitions. There was a high correlation between the two definitions (*r* = .69).

In 62.3 per cent of cases, the bully was identified as a supervisor, and in 28.0 per cent of cases the bully was identified as a co-worker. A further 8.7 per cent responded that the bully was neither, and 1.0 per cent chose not to say.

### Frequency and Duration of Bullying

Bullied employees, defined using the international definition, were asked how frequently they had been (or are currently being) subjected to workplace bullying. Frequency data showed that 12.2 per cent reported being bullied daily, 32.6 per cent at least once a week, 27.9 per cent at least once a month, 26.8 per cent rarely, and 0.5 per cent answered very rarely (Figure 2).

Figure 2. Frequency of Bullying: Percentage of Bullied Sample

The length of time bullied workers reported they had been exposed to workplace bullying is presented in Figure 3; 13.6 per cent of workers had experienced bullying for less than one month, 38.6 per cent between one and six months, 12.9 per cent between seven and 12 months, 17.7 per cent between one and two years, and 16.3 per cent at more than two years. Therefore, nearly 50 per cent of the bullied respondents had endured bullying for over six months. Even more worrying is that 16.3 per cent of workers had been a victim of bullying for more than two years, which is likely to have serious impacts on mental health.

Figure 3. Duration of Bullying: Percentage of Bullied Sample

### Trends in Bullying over Time

Rates of workplace bullying in Australia have risen since 2009/2010. Figure 4 shows the average rates of bullying at the national, state and territory level. The Australian bullying rate observed in the AWB data in 2010/2011 was 7.0 per cent whereas in 2014/2015 the rate was 9.7 per cent.

The Northern Territory remains the highest ranking state/territory with bullying at 14.0 per cent. South Australia has the lowest rate of bullying at 4.4 per cent. Western Australia, Tasmania, the Australian Capital Territory, New South Wales, Victoria, and Queensland have prevalence rates between 9 per cent and almost 11 per cent.

Consistent with the increased national average, most states and territories showed increased rates of bullying in 2014/15 relative to earlier measurements. Specifically, when comparing rates from 2009, 2010, and 2011 to the 2014/15 surveillance data, we can see that Western Australia, New South Wales, Tasmania, and the Australian Capital Territory all showed an increase in prevalence. In contrast, although the Northern Territory still shows the highest prevalence rates, there has been a slight decline since 2011. South Australian rates have also declined since 2011.

The 95 per cent confidence intervals, shown in Figure 4 as error bars, give an indication of the accuracy of the bullying rates. Confidence intervals are affected by the number of participants in the samples (i.e., nation, state or territory). Rates reported from the Northern Territory should be interpreted with caution since, as can be inferred from the graph, the confidence interval is larger than for the other samples.



Figure 4. Bullying Rates from 2009–2014/2015 in Australian States and Territories

In 2009/11, the bullying rate in Australia was 7.0 per cent, and at that time the Australian rate was the 6th highest when compared to 34 European countries (N = 41 034 workers). The European prevalence data was collected through the European Working Conditions Survey (EWCS, 2010), and determined that the average rate of bullying across the European countries in 2010 was 4.2 per cent.

Unfortunately there is no current European data on the prevalence of workplace bullying so it is not possible to determine the ‘international’ ranking of the current estimate of the prevalence of bullying in Australian workers. However, the current estimate now exceeds all prevalence rates estimated for European countries in 2009/10. It is possible that the prevalence of bullying reported in the 34 European countries has shown a similar increase to the Australian rates and the rates reflect community interest in recognising bullying (see Discussion).

Australia’s high prevalence rate estimate nevertheless is concerning, considering that European figures were likely inflated because: (a) the European Working Conditions Survey did not use a definition, and self labelling as bullying usually results in higher rates of bullying reports; bullying was assessed by asking participants: ‘And over the past 12 months, during the course of your work have you been subjected to bullying/harassment (Yes/No)’; (b) the survey items measuring bullying in the European Working Conditions Survey refer to bullying over a 12-month period whereas the AWB asks after a six-month period, which should lead to fewer reports; and (c) the European Working Conditions Survey question encompasses both bullying and harassment, whereas the Australian question is restricted to bullying. For these three reasons, the levels of bullying reported in this study are generated using a conservative method; the Australian bullying rates may have been even higher if the European Working Conditions Survey approach was used. Note that the estimate used here was based on the international definition so as to be consistent with the 2009/2011 data.

### Bullying Rates by Industry: Comparing Data by State/Territory Composition

We examined the prevalence of workplace bullying (using the international definition) within specific industries over time comparing data collected in 2009/2011 with data collected in 2014/2015. The most recent bullying data from all states and territories (Figure 5, green bars) shows industries with bullying levels above the national average (in order of prevalence) were: Electricity, gas and water supply; Health and community services; Government administration and defence; Transport and storage; Mining; and Education.

We examined how these results may have been affected by the addition of two new states, Victoria and Queensland, in the data set at 2014/2015, by examining data with these two states removed (yellow bars) since bullying rates are significantly higher in Queensland and Victoria, (*M* = .11, *SD* = .31) compared to the other states, (*M* = .08, *SD* = .27, *t* (4233) = -2.44, *p* < .02).

In each case the levels of bullying remained higher than the national average, even with the new states removed, implying substantive increases in bullying not simply due to sampling of new states. There was only one industry, Culture and recreation services where bullying rates increased when data from Victoria and Queensland were omitted implying that these states may be able to prevent bullying in the industry.

This variability between states by industry should be considered when commenting on the overall increase in bullying rates between 2009/2011 (7.0 per cent) and 2014/2015 (9.7 per cent), as although there appears to be an overall increase this may not be the case in each state, and each industry. Confidence intervals (95 per cent) applied to the two 2014/2015 bars further highlight the amount of variance not just between, but within industry, and therefore any comparison between industries with large Confidence Intervals should be made with caution.



Figure 5. Bullying Rates in Australian Industries

### Bullying Definitions and Rates by Industry

We assessed whether the two definitions, one based on the international literature and one based on the Safe Work Australia definition, produced different bullying rates by industry (see Figure 6). In the main the definitions were viewed similarly by industry. Where differences appeared to exist (for Construction and Property and business services the Safe Work Australia definition resulted in higher levels of bullying; for Government administration and defence and Cultural and recreational services the international AWB definition resulted in higher bullying levels) it should be noted that there were large confidence intervals suggesting the differences are not substantive.



Figure 6. Bullying Rates by Definition: Australian Industries 2014–2015

## Prevalence of Harassment in Australian Workplaces

To assess the prevalence of harassment in Australia, eight different kinds of harassment were presented and participants responded how often these forms were encountered (see Table 1).

To determine the most prevalent form of harassment that Australian workers experienced, we calculated the percentage of responses that indicated that this form of harassment had been experienced (Figure 7). Responses of ‘very rarely or never’ were categorised as no harassment.

Being sworn or yelled at was the most commonly reported form of harassment experienced by Australian workers. Other forms that were frequently reported included: being humiliated in front of others, being physically assaulted or threatened by clients or patients of the organisation and experiencing discomfort listening to sexual humour.

Figure 7. Prevalence of Harassment forms in Australian Workplaces

### Harassment in Australian workplaces

Table 1*.* Forms and frequency of workplace harassment in Australian workers (per cent)

|  | Unwanted sexual advances | Discomfort listening to sexual humour | Unfair treatment because of gender | Negative comments regarding my ethnic or racial background | Sworn or yelled at | Humiliated in front of others | Physically assaulted/threatened by members of the organisation | Physically assaulted/threatened by a client or patient |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Very Rarely/Never | 95.4 | 82.1 | 89.1 | 92.6 | 62.8 | 76.8 | 96.6 | 78.2 |
| Rarely | 3.1 | 10.0 | 5.1 | 4.3 | 16.9 | 12.9 | 2.0 | 9.5 |
| Sometimes | 1.3 | 6.5 | 4.0 | 2.8 | 14.9 | 8.6 | 1.3 | 9.5 |
| Often | 0.3 | 0.9 | 1.3 | 0.2 | 3.8 | 1.3 | 0.0 | 2.3 |
| Very Often/Always | 0.0 | 0.5 | 0.5 | 0.1 | 1.6 | 0.5 | 0.1 | 0.5 |

## Antecedents and Impacts of Workplace Bullying and Harassment

Bivariate correlations (*r*) were conducted to assess relationships between potential bullying and harassment antecedents (job design and organisational factors) and impacts (personal, health and work) with workplace bullying and harassment incidence (see Table 2).

Bivariate correlations may indicate a positive or negative relationship. A significant positive relationship means that higher levels of one factor correspond with higher levels of the other factor. If there is a positive relationship, for example, between demands and bullying it indicates that higher levels of job demands corresponds with higher levels of bullying. Conversely, a significant negative relationship between resources and bullying suggests that lower levels of job resources correspond with higher levels of bullying.

Effect sizes of *r* = .10 are small, .30 medium, and .50 large (Cohen, 1992). We focus our interpretations in general on effect sizes above small. Although correlational analyses cannot infer causation, the results may provide valuable insight into aspects that are closely related to bullying.

## Characteristics of those who Experience Bullying and Harassment

We considered people aspects (i.e. age, gender, and income) to determine whether certain employee demographics were more likely to be targets of bullying and harassment. Overall the demographics showed small effects in relation to the experience of bullying (Table 2). The only pattern to emerge was that gender was significantly related to bullying experienced although the effect size was very small (0.04); women experienced significantly higher levels of bullying than men, more frequently, and for longer periods. These findings have mixed support from the literature, as some studies indicate women experience more bullying while others establish an equal likelihood by gender (Bowling & Beehr, 2006).

For harassment, gender was again the prominent demographic factor although the effect sizes were small. Women were more likely to experience unwanted sexual advances, unfair treatment because of their gender, and experience being physically assaulted or threatened by a client or patient. Men were significantly more likely to experience being sworn at or yelled at in the workplace, and experience negative comments regarding ethnicity or race. Older workers were more likely to experience being physically assaulted or threatened by a client or patient. In regard to income level, higher income workers were more likely to be sworn at.

## Work and Organisational Factors Related to Bullying and Harassment

In relation to work factors, we focused on job demands and job resources as correlates of bullying and harassment, since they are aspects of the design of the work environment consistently linked with higher incidences of bullying in previous research (Tuckey et al., 2009). In this report, job demands refer to psychological demands (frequently referred to as work pressure) and emotional demands; job resources refer to job control, supervisor social support, and organisational rewards. In relation to organisational factors we examined PSC as an organisation-level factor that gives rise to work conditions (demands and resources).

For job design factors, job demands were significantly positively correlated with both bullying and harassment. As psychological demands and emotional demands increased, so too did levels of bullying and most forms of harassment experienced. These findings mirror the broader literature and the work environment hypothesis, which establishes that bullied workers are more likely to report higher job demands such as time pressure and workload (Hoel & Cooper, 2000), and is consistent with the theory that these work conditions may predispose bullying and harassment behaviours in the workplace.

As expected, job resources were mostly significantly negatively related to bullying and harassment. In particular low supervisor support, low job rewards and to a lesser degree low job control, were also likely to be reported along with bullying and harassment.

PSC was significantly and negatively related to both bullying and harassment.

## Health and Work Impacts of Bullying and Harassment

Bullying was significantly related to a number of harmful health outcomes as shown in Table 2: higher levels of bullying were significantly related to higher levels of emotional exhaustion, psychological distress, and depression. Further, bullying was significantly associated with work outcomes: higher levels of workplace bullying were related to lower job satisfaction and engagement, and higher intention to leave. These findings are consistent with other research (Hoel & Cooper, 2000; Vartia, 2001) and reviews (Nielsen & Einarsen, 2012; Samnani & Singh, 2012). Being bullied for greater lengths of time also had serious health and work outcomes.

For harassment, the impacts on health and work outcomes mirror those of bullying; the different forms of harassment were associated with psychological health (emotional exhaustion, psychological distress, depression) and work outcomes (intention to leave, reduced work engagement and job satisfaction). Being sworn at, being humiliated in front of others, and experiencing unfair treatment because of gender were the most hazardous in terms of their consequential effects.

Table 2. Cross-sectional: Bullying and harassment correlates with demographics, psychosocial risks, health and work

**Worker Job Demands PSC Job Resources Health Outcomes Work Outcomes**

**Demographics**

|  | Age | Gender | Income | Psycho-logical Demands | Emotional Demands | PSC | Supervisor Social Support | Job Control | Organisational Rewards | Emotional Exhaustion | Psycho-logical Distress | Depress-ion | Job Satis-faction | Intent to Leave | Work Engage-ment |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Subjected to bullying at the workplace during the last 6 months? | .01 | .04\*\* | .00 | .16\*\* | .21\*\* | -.27\*\* | -.26\*\* | -.01\*\* | -.23\*\* | .22\*\* | .24\*\* | .24\*\* | -.21\*\* | .13\*\* | -.11\*\* |
| How often exposed to these bullying behaviours?  | .05\*\* | .06\*\* | .00 | .11\* | .20\*\* | .15\*\* | .19\*\* | -.05 | -.11\* | .16\*\* | -.21\*\* | .18\*\* | .12\* | .04 | .03 |
| How long exposed to these bullying behaviours? | .03 | .05\*\* | .03\* | .14\*\* | .21\*\* | -.26\*\* | -.25\*\* | -.08\*\* | -.20\*\* | .19\*\* | -.22\*\* | .21\*\* | -.20\*\* | .13\*\* | -.11\*\* |
| Experienced unwanted sexual advances. | .05\*\* | .08\*\* | -.02 | .07\*\* | .10\*\* | -.11\*\* | -.11\*\* | -.06\*\* | -.10\*\* | .12\*\* | .12\*\* | .11\*\* | -.07\*\* | .05\*\* | -.04\* |
| Experienced discomfort listening to sexual humour. | .04\*\* | .04\* | .05\*\* | .13\*\* | .16\*\* | -.15\*\* | -.10\*\* | -.04\* | -.09\*\* | .11\*\* | .12\*\* | .11\*\* | -.11\*\* | .07\*\* | -.07\*\* |
| Experienced unfair treatment because of my gender. | .02 | .14\*\* | -.01 | .17\*\* | .17\*\* | -.26\*\* | -.20\*\* | -.09\*\* | -.21\*\* | .18\*\* | .17\*\* | .15\*\* | -.20\*\* | .14\*\* | -.13\*\* |
| Negative comments made regarding my ethnic or racial background. | -.04\*\* | -.08\*\* | .06\*\* | .10\*\* | .12\*\* | -.08\*\* | -.05\*\* | -.01 | -.09\*\* | .09\*\* | .07\*\* | .08\*\* | -.06\*\* | .06\*\* | .02 |
| Sworn and/or yelled at. | .00 | -.08\*\* | .08\*\* | .24\*\* | .32\*\* | -.24\*\* | -.17\*\* | -.05\*\* | -.17\*\* | .26\*\* | .18\*\* | .17\*\* | -.18\*\* | .10\*\* | -.14\*\* |
| Humiliated in front of others. | .00 | .03\* | .03\* | .26\*\* | .33\*\* | -.28\*\* | -.20\*\* | -.06\*\* | -.22\*\* | .28\*\* | .28\*\* | .28\*\* | -.24\*\* | .12\*\* | -.12\*\* |
| Experienced being physically assaulted/threatened by members of the organisation. | .03\*\* | .02 | .00 | .12\*\* | .16\*\* | -.09\*\* | -.09\*\* | -.02 | -.09\*\* | .13\*\* | .14\*\* | .12\*\* | -.09\*\* | .04\*\* | -.02 |
| Experienced being physically assaulted/threatened by a client or patient. | .08\*\* | .12\*\* | .00 | .25\*\* | .38\*\* | -.11\*\* | -.05\*\* | -.01 | -.09\*\* | .16\*\* | .07\*\* | .01\*\* | -.06\*\* | -.01 | .01 |

*Note*. \*\* Correlation is significant at the 0.01 level. N = 4242; Gender, 1 = male, 2 = female.

## Predicting Workplace Bullying: Longitudinal Logistic Regression

Since bullying rates have increased, and given that the harassment items most linked to heath and work outcomes were not on the face of it linked to gender and race (i.e., sworn at or yelled at, humiliated in front of others), and were likely also to form aspects of bullying behavior, we proceeded to conduct an analysis to specifically predict future bullying. We assessed the possible cause (antecedent) variables (job design, organisational) in 2010/2011 and we used these factors to predict bullying in 2014/2015. In the analysis we used people who were in the same organisation at both time points (*N* = 1172). Individual data were matched across time. We controlled for bullying exposure at 2010/2011, to control for personal bias in responding, and to predict change in bullying.

We used a longitudinal design to throw light on the causes of bullying. The longitudinal design is much stronger than the previous cross-sectional correlation analysis; the longitudinal study predicts change over time, whereas the bivariate analyses were conducted at only one point in time (2014/2015) so it is impossible to know which factor preceded the other. Also using a logistic regression we could consider a number of possible predictors at once (the bivariate analysis considers only one).

Following the hierarchical logic of PSC theory, that PSC is related to work factors, job demands and job resources, that in turn are associated with bullying, we first assessed the relationship between PSC and the work factors. As shown in Table 3, PSC is significantly related to all work factors.

Table 3. Correlation between PSC and job design factors

| **Work Psychosocial Risks** | **PSC**  |
| --- | --- |
| Psychological demands | -.29\*\* |
| Emotional demands | -.13\*\* |
| Supervisor social support | .51\*\* |
| Organisational rewards | .46\*\* |
| Job control | .29\*\* |

 Note. \*\*, *p* < .01.

Next we tested how PSC and the work factors predicted bullying (results are shown in Figure 7). Taking PSC and demands first, in a logistic regression, step 1 of Model 1 (see Table 4), showed PSC was significantly negatively related to bullying over time, after controlling for baseline levels of bullying. Of the two demands forward entered in step 2, emotional demands only was significant. Since the model controls for initial levels of bullying, these significant relationships predict change in bullying over time – almost over a four year period. The results show that to predict bullying over this length of time it is important to consider PSC and emotional demands.

We assessed the mediated effect of PSC on bullying through emotional demands. First PSC to emotional demands longitudinal was significant, B = -.14, SE = .03, *p* < .001. Emotional demands predicting bullying longitudinal was significant, B = .81, SE = .14, *p* < .001 (see Table 4, step 2). Combining these effects together we found the mediated effect was significant (95 per cent confidence interval [lower level, -0.18, upper level -.06]). Therefore PSC predicted bullying, in part, because of its intermediate effects on emotional demands.

Considering PSC and resources, in Model 2, (Table 4) at the first step, PSC again significantly predicted future bullying over baseline levels of bullying. The addition of job resources, job control, supervisor social support and organisational rewards did not significantly improve the prediction of bullying. Job control alone was the only resource to significantly predict bullying over time.

We assessed the mediated effect of PSC on bullying through job control. First PSC to job control (longitudinally) was significant, B = .16, SE = .03, *p* < .001. Job control predicted bullying, B = .29, SE = .12, *p* < .01. The mediated effect was supported; PSC was significantly related to bullying in part because of its effect on job control (95 per cent Confidence Interval [.009, .09]).

Table 4. Longitudinal logistic regression models predicting bullying Time 3 from PSC and job design factors

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  **Model 1 Demand factors** | B | S.E | Sig | Exp(B) |
| **Step 1** |  |  |  |  |
| Bullied Time 2 | 0.69 | 0.34 | .04 | 2.00 |
| PSC Time 2# | -0.40 | 0.12 | .002 | 0.67 |
| **Step 2** |
| Bullied Time 2 | -0.05 | 0.36 | .89 | 0.95 |
| PSC Time 2# | -0.30 | 0.13 | .02 | 0.74 |
| Psychological Demands Time 2# |  |  | ns |  |
| Emotional Demands Time 2# | 0.81 | 0.14 | .001 | 2.25 |
|  |
|  **Model 2 Resource factors** | B | S.E | Sig | Exp(B) |
| **Step 1** |  |  |  |  |
| Bullied Time 2 | 0.66 | 0.34 | .05 | 1.93 |
| PSC Time 2# | -0.40 | 0.12 | .001 | 0.66 |
| **Step 2** |  |  |  |  |
| Bullied Time 2 | 0.72 | 0.34 | .034 | 2.05 |
| PSC Time 2# | -0.52 | 0.13 | .001 | 0.60 |
| Supervisor Social Support Time 2# |  |  | ns |  |
| Job Control Time 2# | 0.29 | 0.12 | .01 | 1.34 |
| Organisational Rewards Time 2# |  |  | ns |  |

Note. #Standardised score

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 Note each path represents a 4 year lag

Figure 8. PSC, Demands and Resources Predicting Bullying

# Discussion

## Levels of Bullying

The objective of this report was to present national surveillance data on the prevalence, antecedents and impacts of workplace bullying and harassment in Australia. Based on population based evidence, the rate of bullying in Australia workplaces in 2014/2015 was determined to be 9.6 per cent. This finding was verified using two strict definitions of bullying, an international standard based on the literature (9.7 per cent), and the other used by Safe Work Australia (9.4 per cent).

Most bullied Australian workers experienced bullying at least once a week to once a month, and if bullied, it usually lasted between one to six months, with 16.3 per cent reporting exposure greater than 2 years.

The Australian national average of 9.6 per cent of workers reporting bullying in 2014/2015 increased from 7.0 per cent in 2009/2011 and is higher than all of the 34 European countries who participated in a 2010 European Working Conditions Survey. However it is important to interpret this comparison with caution due to the time variation in data collection. Since 2010 changes in work organisation, such as increased competition and work intensification, a shift towards casualisation rather than job permanency, and technological changes would also likely have an influence on European rates. Therefore more recent data are needed before any strong comparative conclusions are drawn. However, Australian rates are, nevertheless, still high.

Moreover, there is a growing awareness in Australia surrounding mental health in the workplace, and risk factors such as bullying and harassment. Campaigns and awareness from social media surrounding the nature and effects of bullying, may have created a clearer perception of bullying in the working population that has led to increased prevalence rates as people have become more readily able to recognise bullying.

Bullying rates increased in most Australian states and territories except for South Australia and the Northern Territory. South Australia has the lowest rates of bullying and the rate has declined since 2011.

The industries with the highest levels of bullying were Electricity, gas and water supply (caveats apply); Health and community services; Government administration and defence; Transport and storage; Mining; and Education. Therefore it may be most effective to funnel greater national attention, resources and/or preventive efforts into these industries with the greatest risk of bullying.

In relation to workplace harassment, the AWB results indicate that the most common exposure to harassment in Australian workplaces was being yelled at or sworn at, at 37.2 per cent. Exposure to mistreatment at work is greater than that indicated by the bullying prevalence data alone, meaning that the potential health and safety risk is also greater. Other forms of harassment that rated highly for exposure were being humiliated in front of others, being physically assaulted or threatened by clients or patients of the organisation, and experiencing discomfort listening to sexual humour.

In relation to vulnerable groups, a pattern to emerge was that women experienced significantly higher levels of bullying than men, more frequently, and for longer periods, although the effect was small. Considering how these results relate to the academic literature, most recent research has not solely focused on individual victim characteristics for some time. Despite this, a meta-analysis study by Bowling and Beehr (2006) provide some insight into these findings. In regards to victim demographics, they state that women may pose safer targets, yet there are other studies which found that both genders are equally likely to be bullied (Cortina, Magley, Williams, & Langhout, 2001). For harassment, gender was again the prominent demographic target factor, showing on average small effects. Women were more likely to experience unwanted sexual advances, unfair treatment because of their gender, and be physically assaulted or threatened by a client or patient. Unfair treatment due to gender was experienced by 10.9 per cent of respondents.

Negative comments due to race or ethnicity were experienced by 7.4 per cent of respondents. Men were significantly more likely to experience being sworn at or yelled at in the workplace, and negative comments regarding ethnicity or race.

In relation to factors that may predict bullying we focused on job design and organisational factors. Cross-sectionally we found that job demands (psychological and emotional) were related positively, and job resources (i.e., supervisor social support, organisational justice, and organisational rewards) negatively, to reports of bullying. These findings are consistent with the literature that links poor quality work such as time pressure, haste, and workload (Hoel & Cooper, 2000; Tuckey et al., 2009; Vartia, 2011; Zapf, Einarsen, Hoel, & Varita, 2003) and lower job resources in the form of autonomy and job control (Vartia, 2001; Zapf et al., 2003) to workplace bullying. Poor work quality (in all its forms) was likewise related to all aspects of harassment.

In a comprehensive test, using a longitudinal design, and controlling for initial levels of bullying, we found evidence for a ‘causal process’ whereby PSC predicted job design factors that in turn predicted bullying. In a PSC – demand process, we found that when PSC was low, higher levels of emotional demands were evident. These higher levels of emotional demands were in turn related to increased bullying (also when PSC was high, lower levels of emotional demands were evident, and bullying levels were lower). In a PSC – control (resource) process, we found that low PSC was associated with low job control which in turn led to increased bullying (and the alternative process, when PSC was high, control was high, and bullying was less). In other words, PSC predicted bullying over four years through its effect on work quality (demands and resources). Over and above these effects PSC was also directly related to bullying which may indicate the action of specific bullying policies or other unmeasured factors underpinning this relationship.

## Impacts

The results clearly demonstrated the deleterious effects of bullying. In relation to health outcomes, bullying was related to emotional exhaustion, psychological distress, depression; it also had effects on work outcomes, and was significantly negatively associated with job satisfaction and work engagement, and positively related with intention to leave the workplace. These findings are consistent with the literature, which has linked bullying and harassment to a range of psychological health and well-being outcomes, including general mental health outcomes, anxiety, depression, post-traumatic stress, generalised strain, psychosomatic symptoms, burnout, and physical health problems (Nielson & Einarsen, 2012), and work outcomes such as increased intention to leave (Kieseker & Marchant, 1999; Salin, 2003).

For harassment, the majority of these relationships were mirrored; harassment forms were associated with increased emotional exhaustion, psychological distress, depression, intention to leave, and reduced work engagement and job satisfaction.

## Explanations for Workplace Bullying

The findings of this report prompt reflection into the reasons why workplace bullying rates appear to have increased over the last few years. We consider each of the four hypotheses posed in the introduction in turn in relation to the evidence available from the AWB data.

The ‘Psychosocial Safety Climate Hypothesis’ — refers to managerial regard for workplace psychological health and safety. In organisational contexts with low PSC we expected higher levels of job demands and lower resources, which then (by mechanisms explained in the ‘Work Environment Hypothesis’) lead to bullying. There was strong support for this hypothesis. PSC was significantly negatively correlated to bullying and all forms of harassment, which is also supported by prior studies (Bond et al., 2010; Law et al., 2011). Even after considering the main job demands and job resources, and controlling for baseline levels of bullying, PSC continued to exert an effect on bullying. The results from longitudinal analysis confirm that organisational PSC is a leading indicator of workplace bullying, and support the idea that bullying is a symptom of the functioning of the organisational system. The results support PSC as a ‘cause of the causes’ of workplace bullying, as a leading indicator of workplace psychosocial risks and job design factors that contribute to bullying and harassment rates in the workplace. They highlight the value of PSC as a litmus test for identifying industries, work units, and workers at risk of bullying at work, and as a prime avenue for preventative action.

The ‘Productivity Hypothesis’ — refers to a means to obtain more productivity from workers through bullying. It is widely acknowledged that the nature of work in Australia (and globally) is continually changing, and workers are facing high levels of job insecurity and work intensification as a consequence of increasing globalisation and digitalisation (Green & McIntosh, 2001; Houtman, Goudswaard, Evers, & van de Bovenkamp, 2005). Since organisations are open systems, they are influenced by the surrounding political and economic contextual factors (Katz & Kahn, 1987). To thrive in the current economic climate, management may capitalise on worker productivity at the expense of worker psychological health and safety. In order to compete internationally, many organisations are downsizing, restructuring, and outsourcing non-core work, to become more specialised (Cooper, Dewe, & O’Driscoll, 2001). The Productivity Hypothesis corresponds to the global trend among capitalist societies for ever-increasing focus on growth and profits at the expense of worker wellbeing. With this mindset, workers may become viewed as highly disposable—replaceable—and able to be bullied into increasing their labour outputs. Furthermore, in this system, many managers or supervisors feel pressured to compete for job permanency, and strained to complete tasks or meet targets or objectives. As a result they may employ bullying tactics, under these stressful conditions and pressures, perhaps through poor performance management processes, to drive greater performance.

Since PSC reflects management priority and concern for worker psychological health over productivity, PSC theory embodies the Productivity Hypothesis. As PSC predicted future bullying this is support for the Productivity Hypothesis. It is worth noting that psychological demands, such as having to work hard and fast, was a significant predictor of bullying too, but considered in conjunction with emotional demands, was not as strong. The observation that low job control predicted bullying could result from increased competition between workers.

The ‘Work Environment Hypothesis’ — posed that poor management gives rise to poor work quality, aspects of task and job design, such as high levels of demands and low levels of resources, that create risk for bullying. This hypothesis was supported as we found high demands (psychological demands, emotional demands) and low resources (job control, rewards, supervisor support) were related to bullying. The work environment factors that predicted *future* bullying were high emotional demands and low job control.

The ‘Retain-and-build Personal Power Hypothesis’ — refers to a tactic to maintain the status quo of personal power or power distribution within the organisation. The fact that we observed that 62.3 per cent of bullying perpetrators were reported to be a supervisor lends credence to this hypothesis. Also since low job control was a predictor of future bullying this also supports the idea of a power differential in bullying; those in higher power situations keeping those in lower positions with low job control/power by bullying.

## Practical Implications

To protect and promote the psychological health and well-being of Australian workers, change must occur, as the current prevalence levels and effects of bullying and harassment are not economically, socially or ethically acceptable. As higher levels of PSC have been linked to higher levels of worker productivity, there is a strong business case to complement the ethical reasons to focus on the development of PSC in organisations and teams. Becher and Dollard (2016) estimate that costs to Australian employers for lost productivity due to sickness absence and presenteeism due to low PSC is $6 billion per year[[2]](#footnote-2). The link between PSC and productivity loss via sickness absence has been shown previously (Dollard & Bakker, 2010), and is also reported by the Australian Public Service Commission (2015), which recently assessed PSC in its annual public service census. Agency PSC levels were negatively related to average agency sick leave days per employee.

As the AWB findings indicate, the work environment has a significant impact on the occurrence of bullying and harassment. Even if personality types and other individual factors play a role in the formation of bullying and harassment incidents, the responsibility and resolution of these occurrences does not rest solely on the perpetrator or the victim. Rather, the organisation itself holds the duty of care to provide an organisational climate that creates a working context that does not provoke bullying and harassment, and that does not tolerate the use of bullying or harassment in any form. To deliver this duty of care senior management must communicate the value of wellbeing over productivity, and facilitate access to resources, processes and structures that will resolve bullying and harassment if they do arise. Whilst ideally all senior management should prioritise workers’ wellbeing this could be difficult in reality. Organisations may be hesitant to risk profits and may be reluctant to invest time or other resources in addressing their organisational climate. However the economic case for improving PSC is concrete (Becher & Dollard, 2016) and the cost benefits associated with PSC should be drawn to the attention of management.

Improving workplace PSC to reduce workplace bullying and harassment is a clear recommendation from this research, as it is a more effective target than focusing on job design factors alone. Increasing PSC can be achieved by developing clear organisational procedures, management practices and communication systems relating to bullying and harassment behaviours. Management personnel should concentrate resources into fostering a work environment in which workers feel valued, psychologically safe, and healthy. In this process, senior managers should consult with workers and their representatives to modify and promote better work structures and processes, such as organisational communication and performance management, and improve work conditions such as resourcing (job control, supervisor support, rewards), and reduce job demands. Research has also identified that establishing policies and procedures to manage interpersonal conflict is critical in prevention (Rayner & Lewis, 2011), in addition to promoting better working conditions within the organisation (Skogsad, Torsheim, Einarsen, & Hauge, 2011). Furthermore, workers should also receive information that informs them of their roles, responsibilities and rights, and the organisations’ role in dealing with any bullying or harassment incidents.

Organisational surveillance of psychosocial risk levels is regarded as best practice and would assist with determining bullying risk levels and potential contributors (high job demands, low levels of resources). Therefore annual monitoring of PSC levels is recommended within all organisations. Organisational surveillance of PSC levels is a strategy adopted by the Australian Public Service Commission and can be used as a focal point for developing health and safety strategies towards bullying prevention and intervention. Recent AWB research established PSC benchmarks for low-risk (PSC at 41 or above) and high-risk (PSC at 37 or below) of employee job strain and depressive symptoms (Bailey, Dollard, & Richards, 2015). Researchers found using population attributable risk (PAR) that improving PSC in organisations to above 37 could reduce 14 per cent of job strain and 16 per cent of depressive symptoms in the working population. Clearly some reduction in depressive symptoms could be expected because bullying and other psychosocial risks reduce as PSC increases. PSC benchmarks could be used in organisations to provide information about the different aspects of PSC that fall below national standards and help identify the domains of PSC to target for improvements.

The preventative approach of improving PSC also addresses a common critique that work health services are reactive (e.g. Employee Assistance Programs). This is because they focus on supporting individuals and organisations to deal with problems they experience rather than strategically preventing problems from occurring in the first place.

Importantly, the management of psychosocial issues and risks such as bullying also concerns ethics and values, responsible behavior, and accepting a moral obligation to care for employees’ psychological health and wellbeing. Through awareness raising (particularly of supervisors since they are perceived as the main perpetrators) of the personal and organisational costs of bullying and harassment, and increased social dialogue between interest groups (e.g., managers, health and safety, and worker representatives such as unions), organisations should shift the focus from removing harmful risks to promoting a positive environment, one which imbeds ethical values and behavioural practices into the organisational culture (World Health Organisation, 2010). Worker psychological health should be a core business value. Work should be a place that promotes good health, which may also reduce stigmatisation of mental health in the workplace.

The findings of this report provide a guide or basis for identifying which aspects of harassment in Australian organisations need to be tackled first. It is clear that yelling and swearing is the most common form of harassment, and it was also the most highly related to health and work consequences: as such this form of harassment should be given a particular focus in work health and safety and organisational policy. Further work could focus on developing practical steps in how to manage this form of harassment should it arise.

Overall, strategies to address workplace bullying and harassment should emphasise organisational-level primary prevention through monitoring and modifying the risk factors for bullying in the organisational system. Strategies that focus on bullying behaviour (such reporting mechanisms) are important complementary actions, but not sufficient for prevention. Policy and regulation interventions should focus on motivating and rewarding organisations to tackle bullying as a work health and safety hazard via a risk management process. Practical tools to support the risk management of bullying as a psychosocial hazard should be developed and made widely available.

Also, supervisors and managers should receive education and training regarding appropriate supervisory behaviours, particularly in relation to managing the performance of employees. As a tertiary measure workplaces should provide access to services such as employee assistance programs or counselling services. Workplaces should establish policies or guidelines for respectful behaviour; particularly toward women and people from diverse ethnic backgrounds, and how to address bullying and harassment should it occur. Attention should be drawn to the legal and WHS implications and organisational sanctions.

In Australia, seven jurisdictions (Australian Capital Territory, Commonwealth, New South Wales, Northern Territory, Queensland, South Australia and Tasmania) have adopted the national model Work Health and Safety (WHS) Act. The model WHS Act protects workers and other persons against harm to their health, safety and welfare by imposing a duty of care on a person conducting a business or undertaking that requires the person to eliminate or minimise risks to health and safety arising from work. ‘Health’ is defined to include psychological health as well as physical health, which means this duty of care requires the elimination or minimisation of psychosocial hazards and risks.

Safe Work Australia and work health and safety jurisdictions have published a wide range of material relating to psychosocial hazards and their health effects including the Fact Sheet on Preventing Psychological Injury under Work Health and Safety Laws, the Guide for Preventing and Responding to Workplace Bullying, Dealing with Workplace Bullying – a Worker’s Guide, the Guide for Managing the Risk of Fatigue at Work, and Fatigue Management – a Worker’s Guide (Safe Work Australia 2014; 2013,b,c,d,e) that may assist in the prevention and management or workplace bullying and harassment.

## Limitations

In making international comparisons, it is important to acknowledge there were different approaches to data collection among European countries in comparison to Australia in regard to the definitions used to estimate bullying rates. In addition, all measures included in this report were based on self-reported data collected by the AWB. As a result, these measures are susceptible to bias caused by individuals’ perceptions. Those with negative perceptions about their work environment and psychological health may also have negative perceptions about their own performance.

## Future Research

PSC is an optimal target for primary prevention and intervention approaches to mitigate workplace bullying. Further work is required to ascertain the specific actions required by managers at various organisational levels, policy makers, work health and safety personnel, and employees and their representatives to produce high PSC organisations. This evidence could be supported by work health and safety bodies and included in a national framework with accompanying guidance material to assist organisations in the prevention and management of workplace bullying and harassment. Future research on PSC risk levels for future bullying and harassment for use in organisations is required.

# References

Australian Public Service Commission. (2015). State of the service report, psychosocial safety climate. Retrieved from: http://stateoftheservice.apsc.gov.au/2015/11/psychosocial-safety-climate/

Bailey, T.S., Dollard, M.F., & Tuckey, M.R. (2014). Prevalence, antecedents and implications of workplace bullying and harassment in Australia. In Dollard, M.F. & Bailey, T. S. (Eds)., (2014). *Australian Workplace Barometer: Psychosocial Safety Climate and working conditions in Australia*, 14-181. Samford Valley QLD; Australian Academic Press).

Bailey, T. S., Dollard, M. F., & Richards, P.A. M. (2015). A national standard for psychosocial safety climate (PSC): PSC 41 as the benchmark for low risk of job strain and depressive symptoms. Journal of Occupational Health Psychology, 20(1), 15-26.

Becher, H., & Dollard, M.F. (2016). Psychosocial safety climate and better productivity in Australian workplaces. Safe Work Australia; Canberra.

*Beyondblue* (2014). https://www.headsup.org.au/docs/default-source/resources/bl1270-report---tns-the-state-of-mental-health-in-australian-workplaces-hr.pdf?sfvrsn=8

Bond, S.A.,Tuckey, M.R., & Dollard, M.F. (2010). Psychosocial safety climate, workplace bullying, and symptoms of posttraumatic stress. *Organization Development Journal, 28(1),* 37–56.

Bowling, N.A. & Beehr, T.A. (2006). Workplace harassment from the victim’s perspective: a theoretical model and meta-analysis. *Journal of Applied Psychology, 91(5*), 998–1012.

Cohen, J. (1992). A power primer. *Psychological Bulletin,* *112,* 155–159.

Cooper, C.L., Dewe, P.J., & O’Driscoll. (20001). Organisational stress. A review and critique of theory, research, and applications. California: Sage.

Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology, 6*, 64–80.

Coyne, I., Smith-Lee Chong, P., Seigne, E., & Randall, P. (2003). Self and peer nominations of bullying: An analysis of incidents rates, individual differences, and perceptions of the work environment. *European Journal of Work and Organizational Psychology, 12,* 209–228.

Dal Grande, E., Chittleborough, C. R., Campostrini, S., Dollard, M., & Taylor, A. W. (2016). Pre-Survey Text Messages (SMS) Improve Participation Rate in an Australian Mobile Telephone Survey: An Experimental Study. *PloS one*, *11*(2), e0150231.cooper

Demerouti, E., Bakker, A.B., Nachreiner, F., & Schaufeli, W. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86(3),* 499–512.

Dollard, M. F., Skinner, N., Tuckey, M. R., & Bailey, T. (2007). National Surveillance of Psychosocial Risk Factors in the Workplace: An International Overview. *Work and Stress, 21,* 1–29*.*

Dollard, M. F., Tuckey, M., Bailey, T., & McLinton, S. (2012). Parliamentary inquiry submission on workplace bullying and harassment: Results from the Australian Workplace Barometer

Dollard, M. F., Winefield, H.R., & Winefield, A.H. (2000). "Psychosocial job strain and productivity in human service workers: a test of the demand‐control‐support model." *Journal of Occupational and Organizational Psychology,* *73*(4), 501–510.

Dollard, M.F. & Bailey, T.S. (Eds)., (2014). *Australian Workplace Barometer: Psychosocial Safety Climate and working conditions in Australia*, Samford Valley QLD; Australian Academic Press).

Einarsen, S., Hoel, H., Zapf, D., & Cooper, C.L. (2003). The concept of bullying at work: the European tradition. In Einarsen, H. Hoel, D. Zapf, & C.L. Cooper (Eds), *Bullying and emotional abuse in the workplace: International Perspectives in research and practice* (pp. 3– 30). London: Taylor & Francis.

Fair Work Australia (2016), Anti-bullying. https://www.fwc.gov.au/resolving-issues-disputes-and-dismissals/workplace-issues-disputes/anti-bullying https://www.fwc.gov.au/resolving-issues-disputes-and-dismissals/workplace-issues-disputes/anti-bullying.

Giga, S., Hoel, H., & Lewis, D. (2008). *The costs of workplace bullying: A report and review for the dignity at work partnership*. Retrieved 30 March 2015 from <http://www.unitetheunion.org/resources/equalities_2011/equalities_-_legacy_content/equalities_campaigns/dignity_at_work/downloads.aspx>.

Green, F., & McIntosh, S. (2001). The intensification of work in Europe. *Labor Economics, 8***,** 291–308.

Hall, G B., Dollard, M F., Tuckey, M R., Winefield, A H., & Thompson, B M. (2010). Job demands, work-family conflict, and emotional exhaustion in police officers: A longitudinal test of competing theories. *Journal of Occupational & Organizational Psychology, 83*(1), 237–250.

Hershcovis, M. S. (2011). “Incivility, social undermining, bullying… oh my!”: A call to reconcile constructs within workplace aggression research. *Journal of Organizational Behavior*, *32*(3), 499–519.

Hoel, H., & Cooper, C. (2000). *Destructive conflict and bullying at work*. Manchester, UK: Manchester School of Management.

Hoel, H., & Cooper, C. L. (2001). Origins of bullying: Theoretical frameworks for explaining workplace bullying. In N. Tehrani (Ed.), *Building a culture of respect: Managing bullying at work* (pp.3–19). London: Taylor & Francis.

Houtman, I., Goudswaard, A., Evers, M., & van de Bovenkamp, M. (2005). *Emerging organisational, social and human risks: Expert forecasts and literature review.* Bilbao: European Agency for Safety and Health at Work.

House of Representatives, Standing Committee on Education and Employment (2012). Workplace bullying, we just want to stop it. Canberra: The Parliament of the Commonwealth of Australia.

Jain, A., Leka, S., & Zwetsloot, G. (2011). Corporate social responsibility and psychosocial risk management in Europe. *Journal of Business Ethics, 101*(4), 619–633.

Jain, A., Ripa, D. & Herrero (2014). An analysis of the coverage of psychosocial hazards at work in corporate social responsibility instruments and standards. In S. Leka & R. Sinclair (Eds.) Contemporary Occupational Health Psychology: Global perspectives on research and practice (Vol. 3, 218–240). Chichester, England: Wiley-Blackwell.

Jenkins, M.F., Zapf, D., Winefield, H., & Sarris, A. (2012). Bullying allegations from the accused bully's perspective. *British Journal of Management*, *23(4*), 489–501.

Johnstone, R., Quinlan, M., & McNamara, M. (2011). OHS inspectors and psychosocial risk factors: Evidence from Australia. *Safety Science, 49(4),* 547–557.

Karasek, R. A. (1985). Job content questionnaire and user’s guide. *Lowell: University of Massachusetts*.

Katz, D., & Kahn, R.L. (1987). *The social psychology of organisations.* New York: Wiley.

Kessler, R., & D. Mroczek. (1994). Final versions of our non-specific psychological distress scale. *Memo dated March*, *10*, 1994.

Kieseker, R. & Marchant, T. (1999). Workplace bullying in Australia: A review of current conceptualisations and existing research. *Australian Journal of Management & Organisational Behaviour, 2(5),* 61–75.

Kwan, S.S.N., Tuckey, M.R., & Dollard, M.F. (2015). The role of psychosocial safety climate in coping with workplace bullying: A grounded theory and sequential tree analysis. *European Journal of Work and Organizational Psychology.* 25(1), 133-148.

Law, R., Dollard, M.F., Tuckey, M.R., & Dormann, C. (2011). Psychosocial safety climate as a lead indicator of workplace bullying and harassment, job resources, psychological health and employee engagement. *Accident Analysis & Prevention, 43(5),* 1782–1793.

Lindström, K., Hottinen, V. & Bredenberg, K. (2000). *The healthy organization barometer.* [Työilmapiiri- ja hyvinvointibarometri.] Helsinki: Työterveyslaitos.

Maslach, Christina, Susan E. Jackson, and Michael P. Leiter. "Maslach burnout inventory." *Evaluating stress: A book of resources* 3 (1997): 191-218.

Matthiesen, S.B. & Einarsen, S. (2010). Bullying in the workplace: Definition, prevalence, antecedents and consequences. *International Journal of Organization Theory and Behavior, 13(2),* 202–248.

Neall, A. M. & Tuckey, M.R. (2014). A methodological review of research on the antecedents and consequences of workplace harassment. *Journal of Occupational and Organizational Psychology, 87,* 225–257.

Nielsen, M.B. & Einarsen, S. (2012) Outcomes of exposure to workplace bullying: A meta-analytic review, *Work & Stress, 26(*4), 309–332

Notelaers, G., Baillien, E., De Witte, H., Einarsen, S., & Vermunt, J.K. (2012). Testing the strain hypothesis of the demand control model to explain severe bullying at work. *Economic and Industrial Democracy, 34,* 69-87. Doi: 10.1177/0143831X12438742.

Parker, S. (2015). Does the evidence and theory support the good work design principles. Safe Work Australia, Canberra.

Productivity Commission. (2010). *Performance Benchmarking of Australian Business Regulation: Occupational Health & Safety*. Research Report. Canberra, Australia.

Rayner, C., & Lewis, D. (2011). Managing workplace bullying: The role of policies. *Bullying and harassment in the workplace: Developments in theory, research, and practice*, 327-340.

Richman, J.A., Flaherty, J.A., Rospenda, K.M. (1996). Perceived workplace harassment experiences and problem drinking among physicians: Broadening the stress/alienation paradigm. *Addiction, 91*, 391–403.

Safe Work Australia (2014). Preventing Psychological Injury Under Work Health and Safety Laws. Canberra: Safe Work Australia.

 Retrieved August 31, 2016. Retrieved from:

http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/855/Preventing-Psychological-Injury-Under-WHS-Laws.pdf

[Safe Work Australia. (2013a). Compendium of Workers’ Compensation Statistics 2009-10, February 2011. Retrieved April 1, 2012](http://safeworkaustralia.gov.au/AboutSafeWorkAustralia/WhatWeDo/Publications/Documents/661/Compendium%25202009_10%2520report.pdf). Retrieved from: [http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/766/Compendium%202010–11.pdf](http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/766/Compendium%202010-11.pdf)

Safe Work Australia (2013b). Guide For Preventing and Responding to Workplace Bullying, November 2013. Retrieved April 5 2016. Retrieved from: http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/827/Guide-preventing-responding-workplace-bullying.pdf

Safe Work Australia (2013c). Dealing with Workplace Bullying – A Worker’s Guide. Canberra: Safe Work Australia.

 Retrieved on 31 August, 2016.

 Retrieved from: http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/828/Workers-Guide-workplace-bullying.pdf

Safe Work Australia (2013d). Guide for Managing the Risk of Fatigue at Work. Canberra: Safe Work Australia.

 Retrieved August 31, 2016.

 Retrieved from: http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/825/Managing-the-risk-of-fatigue.pdf

Safe Work Australia (2013e). Fatigue Management: A Worker’s Guide. Canberra: Safe Work Australia.

 Retrieved on 31 August 2016.

 Retrieved from: http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/826/Fatigue-Management-A-Workers-Guide.pdf

Salin, D. (2003). Ways of explaining workplace bullying: A review of enabling, motivating and precipitating structures and processes in the work environment. *Human Relations, 56(10),* 1213–1231.

Samnani, A. & Singh, P. (2012). 20 years of workplace bullying research: A review of antecedents and consequences of bullying in the workplace. *Aggression and Violent* *Behavior, 17(6),* 581–589.

Schaufeli, W. B., Bakker, A.B., & Salanova, M (2006). The measurement of work engagement with a short questionnaire a cross-national study. *Educational and Psychological Measurement, 66(4),* 701–716.

Scott-Lennon, F., & Considine, M. (2008). *Bullying and harassment: Values and best practice responses.* Dublin: Management Briefs.

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

Skogstad, A., Torsheim, T., Einarsen, S., & Hauge, L.J. (2011). Testing the work environment hypothesis of bullying on a group level of analysis. Psychosocial factors as precursors of observed workplace bullying *Applied Psychology: An International Review, 60,* 475-496. Doi: 10.111/j.1464-0597.2011.00444

Spitzer, R. L., Kroenke, K., & Williams. J.B.W. (1999). Validation and utility of a self-report version of PRIME-MD: the PHQ primary care study. *Journal of the American Medical Association,* *282(18),* 1737–1744.

Tuckey, M. R., Chrisopoulos, S., & Dollard, M.F. (2012). Job demands, resource deficiencies, and workplace harassment: evidence for micro-level effects. *International Journal of Stress Management, 19(4),* 292–310.

Tuckey, M.R. & Neall, A.M. (2014). Workplace bullying erodes job and personal resources: between- and within-person perspectives. *Journal of Occupational Health Psychology, 19*(4), 413–424.

Tuckey, M.R., Dollard, M.F., Hosking, P.J., & Winefield, A.H. (2009). Workplace Bullying: The Role of Psychosocial Work Environment Factors. International Journal of Stress Management, 16(3). 215–232. DOI: 10.1037/a0016841

Vartia, M. (2001). Consequences of workplace bullying with respect to the well-being of its targets and the observers of bullying. *Scandinavian Journal of Work, Environment and health, 27,* 63–69.

Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological wellbeing. *Journal of Occupational Psychology, 52,* 129–148.

World Health Organisation (2010). WHO Health Workplace Framework and Model: Background and Supporting Literature and Practices. Retrieved from: http://www.who.int/occupational\_health/healthy\_workplace\_framework.pdf

Zapf, D., Einarsen, S., Hoel, H., & Vartia, M. (2011). Empirical findings on bullying in the workplace. In S. Einarsen, H., Hoel, D. Zapf & C.L. Cooper (Eds.), *Bullying and emotional abuse in the workplace: International perspectives in research and practice,* 2nd Edition (pp. 73–107). London: Taylor & Francis.

Zapf, D., Knorz, C., & Kullam M. (1996). On the relationships between mobbing factors, and job content, social work environment and health outcomes. *European Journal of Work and Organizational Psychology, 5,* 215–237.

1. The report Psychosocial safety climate and better productivity in Australian workplaces by Becher and Dollard, is published alongside this report, examining the impact of PSC, depression and psychological distress on productivity. [↑](#footnote-ref-1)
2. Refer to the report Psychosocial safety climate and better productivity in Australian workplaces by Becher and Dollardfor details regarding the calculation of lost productivity. [↑](#footnote-ref-2)