Mental health at work and the corporate climate: implications for worker health and productivity

Prepared for:

The Australian Government Productivity Commission
**Introduction**

This submission is prepared for the Australian Government Productivity Commission issues paper on The Social and Economic Benefits of Improving Mental Health launched January 2019. Our submission investigates the consequences of mental health with a focus on the workplace as the site for improvements in mental health, preventing suicides, and benefiting social and economic participation and contribution to the wider community. We explore value-for-money for improvements in corporate climates via the quantification of reduced economic costs using estimates of the extent to which mental ill-health leads to:

- a greater likelihood of being absent from work when employed (absenteeism)
- lower productivity while at work (presenteeism)

Nationally the cost of mental health conditions to Australian businesses is nearly $11 billion pa (PWC, 2014). The State of Workplace Mental Health Report (beyondblue, 2015) found that only 52% of Australian workers consider their workplace to be mentally healthy, and only 56% believe that their senior leaders value their mental health. Australian rates of workplace bullying are among the highest in the world (Potter, Dollard, & Tuckey, 2016). Australian Workplace Barometer data shows reported bullying rates increased from 7% to nearly 10% from 2010 to 2014 (Dollard et al., 2012; Potter et al., 2016). Mental disorders amongst workers have continued to increase in the frequency of serious claims since 2000-01 and on average record the greatest expense associated with serious claims (Safe Work Australia, 2017).

Psychosocial safety climate (PSC) refers to the corporate climate for worker psychological health, and is an evidence based leading indicator for working conditions, worker mental health and engagement. Building human capital through PSC will assist organisational sustainability by reducing productivity loss due to sickness absence and presenteeism. This productivity loss is estimated to cost Australian employers AUD$6 billion per annum (Becher & Dollard, 2016).

Psychosocial safety climate theory emerged following evaluation of work stress intervention programs across 18 groups over a 12-month period where PSC was found to predict worker mental health and engagement (Dollard & Bakker, 2010; Dollard & Karasek, 2010). Components of PSC include management commitment to prevent stress, management priority for worker psychological health, organisational participation to promote worker wellbeing, and organisational communication about the protection of worker mental health.

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Dollard, Dormann, & Idris (2019, in press)

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Since its conception, empirical peer reviewed studies have found PSC precedes psychosocial and physical risk factors such as:

- Work pressure, workload, emotional & physical demands (Dollard & Bakker, 2010)
- Workplace bullying & harassment (Law, Dollard, Tuckey & Dormann, 2011)
- Skill discretion, job control, work rewards (Dollard & Bakker, 2010; Law, et al., 2011)
- Supervisor & co-worker support (Dollard et al., 2012)

Studies have also linked PSC with employee health and productivity outcomes including:

- Psychological distress & emotional exhaustion (Owen, Bailey, & Dollard, 2016)
- Sickness absence, performance & engagement (Becher & Dollard, 2016; Law, et al., 2011)
- Job strain & depression (Bailey, Dollard & Richards, 2015; Dormann, Owen, Dollard & Guthier, 2018)
- Musculoskeletal Disorders & injury compensation claims (Bailey, Dollard, McLinton & Richards, 2015)

Another important aspect of PSC is that it moderates the relationship between psychosocial hazards at work and wellbeing outcomes by reducing their detrimental impact on employee health including:

- The effect of bullying on post-traumatic stress disorder (Bond, et al., 2010),
- Job demands on depression (Hall, et al., 2012)
- Emotional demands on workgroup distress (Dollard, et al., 2012)
- Bullying/harassment on engagement (Law et al., 2011)

PSC benchmarks for psychosocial risk assessment prognosis have now been established, as follows:

**Table 1. PSC-12 Benchmark Standards and Prognosis (Dollard & Bailey, 2019)**

<table>
<thead>
<tr>
<th>PSC Standards</th>
<th>Range 12 — 60</th>
<th>Prognosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low risk PSC (High PSC)</td>
<td>≥ 41</td>
<td>Performing well, improvements in PSC levels might be noted; increased leader performance in PSC</td>
</tr>
<tr>
<td>Medium risk PSC</td>
<td>41 &lt; and &gt; 37</td>
<td>Steady state, need more enacting of PSC principles</td>
</tr>
<tr>
<td>High risk PSC</td>
<td>37 ≤ and ≥ 27</td>
<td>Increasing PSC levels from low could reduce depression by 16% and job strain by 14%</td>
</tr>
<tr>
<td>Very high risk PSC</td>
<td>≤ 26</td>
<td>Urgent action required to prevent further dramatic increases in depressive periods, worsening conditions (e.g. increased bullying)</td>
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Successfully increasing PSC will provide a wide range of benefits to worker physical and mental health, which is also reflected in a variety of productivity outcomes (reduced sickness absence, reduced presenteeism).
Corporate climate, worker mental health and productivity

The following highlight specific research evidence demonstrating the relation between corporate climate, worker mental health and productivity outcomes.

1. **Safe Work Australia report titled ‘Psychosocial safety climate and better productivity in Australian workplaces: costs, productivity, presenteeism, absenteeism’**.

*Reference:*

Becher, H., & Dollard, M. F. (2016). Psychosocial and better productivity in Australian workplaces; Costs, productivity, presenteeism, absenteeism, Safe Work Australia.

**Summary**

- Workers in low PSC workplaces had significantly higher sickness absence and presenteeism than those in high PSC environments: they took 43 per cent more sick days per month and had a 72 per cent higher performance loss at work, equating to $1887 per employee per year in cost to employers.
- The total cost of depression to Australian employers through presenteeism and absenteeism is estimated to be approximately $6.3 billion per annum.
- Workers with severe depression took 20 times more sick days per month and had a 270 per cent higher performance loss than those without depression.
- Depressed workers cost employers, on average, between $2791 per year (mild depression) to $23,143 per year (severe depression).
- Workers with psychological distress took four times as many sick days per month and had a 154 per cent higher performance loss at work than those not experiencing psychological distress. This equates to an average cost of $6309 per annum in comparison with those not experiencing psychological distress.
- Relative to workers with high engagement, workers with low engagement have approximately 12 per cent more sick days per month and an average performance loss of 8 per cent, costing employers $4796 per annum. (Becher & Dollard, 2016, p.5)

2. **Corporate climate is a leading indicator of the psychosocial pathway for workers’ compensation whereby PSC predicts workplace factors (e.g., bullying, work pressure, exhaustion) that are associated with symptoms for MSDs and claims for physical injury over a 12-month period (Bailey, Dollard, McIntosh & Richards, 2015).**

*Reference:*


**Abstract**

Causal agents for workers’ compensation claims and physical injury have largely been identified as physical demands. We proposed an integrated theory of physical injury (i.e. musculoskeletal disorder symptoms [MSDs]) and workers’ compensation claims, which combined psychosocial and physical...
mechanisms. A random, population-based sample of 1095 Australian workers completed a telephone interview on two occasions 12 months apart. As expected, the physical mechanism was confirmed; physical demands were related to MSDs, which in turn predicted workers’ compensation claims. Further, a novel psychosocial mechanism was confirmed. Psychosocial safety climate (PSC; perceptions about the organisation’s climate for psychological health) was a precursor to psychosocial risks (e.g. harassment, violence, bullying and work pressure). In turn, these psychosocial risks were related to emotional exhaustion, MSDs and then workers’ compensation claims. Evidence was therefore provided for psychosocial-physical processes in explaining MSDs and workers’ compensation claims. Occupational health and safety legislators and policy makers should be aware that, beyond physical demands, factors usually associated with risk for mental stress claims (e.g. harassment, bullying, and violence) may additionally manifest in physical health problems and workers’ compensation injury claims. Focusing on modifying the PSC in an organisation, “the cause of the causes”, may be an effective injury prevention and intervention strategy.

3. **Elimination of low range PSC in the working population would reduce 14% of job strain and 13% of depression (Bailey, Dollard & Richards, 2015).**

**Reference:**

**Abstract**

Despite decades of research from around the world now permeating occupational health and safety (OHS) legislation and guidelines, there remains a lack of tools to guide practice. Our main goal was to establish benchmark levels of psychosocial safety climate (PSC) that would signify risk of job strain (jobs with high demands and low control) and depression in organizations. First, to justify our focus on PSC, using interview data from Australian employees matched at 2 time points 12 months apart (n = 1081), we verified PSC as a significant leading predictor of job strain and in turn depression. Next, using 2 additional data sets (n = 2097 and n = 1043) we determined benchmarks of organizational PSC (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. Finally, using the newly created benchmarks we estimated the population attributable risk (PAR) and found that improving PSC in organizations to above 37 could reduce 14% of job strain and 16% of depressive symptoms in the working population. The results provide national standards that organizations and regulatory agencies can utilize to promote safer working environments and lower the risk of harm to employee mental health.

4. **A 10% per cent increase in PSC would result in workers reporting a 4% decrease in demands, a 4.5% decrease in bullying, an 8% increase in resources, and a 6 % increase in engagement (Dollard et al., 2012).**

**Reference:**

Asia Pacific Centre for Work Health and Safety
From the ‘Executive summary’ (Dollard et al., 2012 pp. 6-9)

“A standout finding here is that depression costs Australian employers approximately AUD$8 billion per annum as a result of sickness absence and presenteeism and AUD$693 million per annum of this is due to job strain and bullying.”

Work related stress represents a ‘huge cost’ for worker health and productivity and is broadly regarded as an important social determinant of global health. Scholars predict that by 2020, stress-related illnesses such as depression and cardiovascular disease will be the leading causes of the global disease burden. Psychological injury claims are steadily increasing and incur the largest proportion of expense in relation to compensation claims (Safe Work Australia, 2012).

Surveillance systems that are designed to monitor workplace psychosocial risk factors are increasingly recognised as best practice to inform national approaches towards worker injury prevention and intervention. Surveillance provides a solid evidence base to support the development of prevention and intervention strategies as well as a means to evaluate the effectiveness of any implemented policies and programs. In addition, surveillance supports the vision of the Australian Work Health and Safety Strategy 2012 – 2022 to build safety by design, to protect workers from harm, and improve their health and productivity.

Understanding how workplace psychosocial risk factors interact and contribute to worker wellbeing and productivity can be obtained through systematic measurement and analysis at both the population and organisational level.

Importantly the Australian Workplace Barometer (AWB) project was developed in order to set national benchmarks and provide evidence needed to develop best practice standards in the area of worker psychological health and wellbeing and provide crucial evidence for policy development, intervention targets and the provision of resources at the national, state and industry levels. The main objectives of the AWB project are to:

- provide nationally representative data on psychosocial risk levels and working conditions
- build upon existing knowledge and understanding of psychosocial risk factors such as bullying and harassment, and work-family conflict
- investigate relationships between psychosocial risk and workplace outcomes such as employee health and productivity
- determine the cost of poor employee wellbeing to businesses based on aspects such as depression, absenteeism and presenteeism
- identify industries and occupations at risk, and
- provide evidence to support strategies for prevention and intervention.

Since organisational access to investigate work stress is often restricted and resisted, a superior approach to gain access to most employees, important for standard setting, is to use a population-based approach. The sampling approach used in the AWB project was selected to maximise access to a representative sample of employees. Computer assisted telephone interviews (N = 5743) were conducted across the population in six Australian states and territories (excluding Queensland and Victoria), to gain information from working Australians regarding their work and health conditions. Data was collected in New South Wales (NSW) (N = 1074) and Western Australia (WA) (N = 1156) in 2009. In 2010 a second wave of data was collected from NSW (N = 725) and WA (N = 804) as well as a first wave of interviews in South Australia (SA) (N = 1143). In 2011 further interviews were conducted with participants from Australian Capital Territory (ACT) (N = 255), Tasmania (TAS) (N = 416) and the
Northern Territory (NT) (N = 170). A comparison of demographic data between AWB and Australian Bureau of Statistics (ABS) workforce statistics shows that the AWB sample is representative of the national working population on a range of factors such as participation in industry, contract and work hour status, mean age by industry and other general population characteristics.

The AWB research is driven by an emerging theory, Psychosocial Safety Climate (PSC) theory (Dollard & Bakker, 2010). This theory extends other well-known job stress theories such as the Job-Demands Resources (JD-R) model (Demerouti, Nachreiner, Bakker, & Schaufeli, 2001). There is ample empirical evidence already that shows high levels of demands and low resources are a problem for worker health and poor engagement. We are adding new evidence to this stock of knowledge by proposing a new theory and empirical evidence that suggests that PSC is a ‘cause of the causes’ of work stress factors (Law et al., 2011). Crucially PSC theory answers the question “where do job demands and resources come from?”.

Psychosocial safety climate measures an organisation’s priorities and commitment in relation to the protection of worker psychological health and wellbeing, including psychosocial risk assessment. In high PSC contexts managers will be cognizant of risk factors and will help to shape jobs where demands are manageable, and resources are adequate. Therefore if PSC is assessed, levels of demands and resources can be predicted. Psychosocial safety climate also acts as a moderator, reducing the negative impact of psychosocial hazards on employee health and productivity outcomes. Importantly as a leading indicator of work conditions, employee health and productivity (Law, et al., 2011), the utility of PSC over lag indicators such as workers’ compensation claims in informing preventative policy is clear.

Australian Workplace Barometer results support the main premises of PSC theory; PSC is significantly related to all demands (negatively), resources (positively), health (positively) and productivity (positively) outcomes. Further analysis using hierarchical multiple regression showed that PSC explains nine per cent of the variance in psychological health outcomes and 13 per cent of variance in engagement. The research suggests that a 10 per cent increase in PSC within organisations would lead to a 4.5 per cent decrease in bullying, a 4 per cent decrease in demands, a 4 per cent reduction in exhaustion and a 3 per cent reduction in psychological health problems as well as an 8 per cent increase in resources and a 6 per cent increase in engagement. It was also evident that PSC is related to health and work outcome via its effect on demands and resources. In other words PSC precedes work conditions and its effects flow on to health and work outcomes. These results, along with previous empirical evidence, strongly suggest that PSC is a logical upstream target for injury prevention as it is an antecedent for demands and resources as well as health and productivity outcomes.

In prior research we established a 2009-10 benchmark for PSC (Bailey, Richards & Dollard, in review). Mean scores for PSC were assessed for NSW and WA at Time 1 (2009) and Time 2 (2010) as well as SA (2010) against clinical cut-offs for depression and levels of job strain. We determined the 2009-10 benchmark for a satisfactory level of PSC was the score of 41 out of a possible 60 on the PCS-12 scale; this is the ideal standard for optimal employee health and productivity. PSC scores between 37 and 41 suggest a moderate risk and scores below 37 indicate high risk for employee depression and job strain.

National and state based industry differences were then calibrated for levels of PSC along with high job demands, low job resources and unfavourable health outcomes. Three industries were deemed high risk across a number of states including Transport and storage, Accommodation, cafes and restaurants and Health and community services thus requiring national strategies and campaigns for injury prevention and interventions. Since industry PSC levels and health outcomes vary substantially by
state and territory results indicate that interventions need to be specific in targeting the particular industries, in each state or territory, which are identified as being high risk.

For instance, the results show industries at high risk of poor psychological health within SA are the Communications services, Personal and other services and Retail trades, and these would likely benefit from state based strategies for intervention. Results also indicate that further examination of risk to wellbeing for the Health and community services industry in NT is warranted. Tasmanian workers would benefit from interventions focusing on Health and community services, Manufacturing and Personal and other services, which showed poorer outcomes compared to other industries in Tasmania.

For WA the Accommodation, cafes and restaurants and Transport and storage; industries all reported unfavourable outcomes and PSC levels below the 2009-10 benchmark indicating a need for state based interventions to address psychosocial risk. In NSW the Accommodation, cafes and restaurants; Health and Community Services; Mining; Retail and Transport and storage industries were all identified as having unfavourable demands, resources and outcomes scores as well as PSC levels below the 2009-10 benchmark and therefore warrant state based investigations in addition to any national campaigns.

Other at risk groups included workers aged between 25 – 34 years as they show the poorest psychological health, likely due to factors such as competing work and family demands as well as entering the workforce following study, working hard and using long hours to advance in their careers, as well as experiencing low levels of skill discretion. The youngest workers (18 – 24) exhibit the lowest levels of engagement. For younger workers the results suggest that increased skill discretion would likely improve their work engagement.

Urban workers report higher psychological demands compared to rural workers, albeit with a small effect size. Rural workers report more physical demands, more work-family conflict and are more at risk for poor mental and physical health outcomes suggesting additional resources and awareness for rural workers are important for policy development.

There is a serious concern regarding levels of bullying and harassment. Results from the AWB show that levels of bullying are at 6.8 per cent, which are substantially higher than international rates. Using a similar definition international research usually shows levels of around 1 to 4 per cent (Einarsen, Hoel, & Vartia, 2003). The results are particularly alarming for women as they report significantly higher levels of bullying and for significantly longer periods of time. By international standards levels of harassment also appear high in the workplace. Nearly 42 per cent of males report that they have been sworn or yelled at in the workplace. Over 20 per cent of workers are humiliated in front of others and almost 20 per cent state experience discomfort due to sexual humour. In addition 6.9 per cent of women experience unwanted sexual advances and 14.8 per cent of females in this sample experience unfair treatment due to gender. Urgent attention is needed to address these harassment issues in Australian workplaces.

A standout finding here is that depression costs Australian employers approximately AUD$8 billion per annum as a result of sickness absence and presenteeism and AUD$693 million per annum of this is due to job strain and bullying. A prominent finding is that the cost is mostly due to workers showing mild symptoms of depression as they take twice as many sick days as those who do not show any symptoms of depression at all. The results further suggest that potentially AUD$ 17.84 billion in costs to the employer could be saved if the mental wellbeing of the 25 per cent least psychologically healthy working Australians could be raised to the level of the 25 per cent most psychologically healthy workers.
Results indicate that working hours are a major issue in the workplace with over 40 per cent of participants working more than the national standard of 38 hours and 18 per cent working longer than 48 hours per week. This is of particular importance as work-family conflict is one of the major contributors to poor health and wellbeing. For all workers, factors including PSC, emotional demands, work pressure, bullying, justice, rewards, and decision authority were significant contributors to poor psychological health, and prevention strategies should focus on addressing these aspects.

This report provides a snapshot of evidence emerging from the AWB study. By assessing leading indicators and psychosocial risk factors, an evidence basis for targeted prevention and intervention is provided and groups at risk are identified. Suggestions are also made to target specific factors focal to strategy and policy development, such as PSC, and reducing working hours and harassment as they will likely make the most impact on health and productivity outcomes. The results from this national surveillance project shifts attention away from lag indicators, such as compensation claims, and brings Australia up to international best practice standards for proactive psychosocial risk prevention and intervention policy implications, providing a science driven basis for improving working conditions and worker wellbeing. For the first time national standards, industry and occupational risks are established with important implications for Australian workers, unions, employers, employer associations, community groups, practitioners, policy makers and other key stakeholders.

5. The Australian Public Service Commission used the PSC-12 tool in 2015 and 2016 for their state of service report and found corporate climate to be related to a number of worker wellbeing and productivity outcomes for Australian Public Sector agencies.

References:


Summary of main findings

For example, their results found agencies with poor PSC are likely to have:

- Higher levels of unscheduled absence
- Lower employee engagement
- Lower levels of commitment to the organisation

In particular they found that Agencies with high PSC have:

- An average unscheduled absence rate of almost 2 days lower than the overall APS average
- Unscheduled absence rates that are 6 days lower than agencies with low PSC
- Higher levels of job engagement, team engagement, supervisor engagement, and agency engagement
6. A case study focusing on the corporate climate in a specific Agency was able to match corporate climate (PSC-12) data with unplanned sickness absence and psychological injury claims identifying a possible saving of $1.18 million per annum if workers in very high, high and moderate risk PSC environments were shifted into a low risk PSC workplace.

Reference:

Summary of main findings

- The PSC-12, subscales, and PSC benchmarks predicted unplanned absence.
- The PSC benchmarks and the specific subscale of ‘Management Priority’ predicted psychological injury claims.
- Participants in medium risk PSC work groups take 72% more unplanned leave than low risk PSC groups
- Participants in high risk PSC work groups take 93% more unplanned leave than low risk PSC groups

The study estimated that in a workplace of 1000 employees on an average wage of $440 per day, if employees moved from the high/medium to low risk PSC:

- Savings would be $1.18 million per annum based on reducing unplanned sickness absence
- This estimates still allows for 6.28 days off on average per employee in high PSC groups
Recommendations: How to Improve PSC

There is a strong evidence base for the link between corporate climate and worker mental health, and productivity. The reason for the link is because PSC signifies a lack of concern for worker mental health in relation to productivity imperatives, a lack of commitment to worker mental health issues and work stress prevention, a lack of organisational systems for communication, and a lack of opportunity for participation and coordination at all levels in the organisation to prevent work stress and improve mental health. Improvements in any of these areas would lead to an increase in PSC, and in turn mental health and productivity.

Since PSC is a systems level entity approaches that focus on the individual (such as individual resilience) are not expected to have widespread or enduring effects. Numerous tools and resources are now available to assist employers and practitioners with addressing workplace systems that impact worker mental health1.

The reason PSC is related to mental health is because of the working conditions it enables. In high PSC contexts we expect CEOs and managers are cognisant of risks to mental health such as work pressure, bullying, long working hours, social isolation and so design work to reduce these risks, or provide additional resources to workers so they can manage demands. Resources could include increased work flexibility, job control, social support and wages (this can help build personal resources). In high PSC contexts we expect workers to have good mental health, appropriate levels of sickness absence, and minimal presenteeism.

In low PSC contexts we expect that working conditions are taxing, impacting workers experience of alienation, poor mental health, withdrawal is high (increased sickness absence, presenteeism, and job turnover), worker injury and compensation claims are high, all impacting productivity.

There is some empirical evidence for PSC change with substantive changes in resourcing and work practices. Using a systems focused approach, Rickard et al. (2012) found in a quasi-experimental design that PSC increased over two years in two Australian hospitals (one significantly so) using a system/organisational level intervention involving strategies such as the development and implementation of, a nursing workload tool to assess workloads, roster audits, increased numbers of nursing personnel to address shortfall, increased access to clinical supervision and support for graduates, increased access to professional development including postgraduate and short courses, and a recruitment campaign for new graduates and continuing employees.

Moreover, in an internationally acclaimed workplace transformational policy change, a New Zealand company introduced a 4-day working week trial (reduced from 5 days with pay held at 5 days), and over the eight week period trial. PSC increased significantly along with engagement and reduced stress (Haar, 2018).

We recommend that PSC is used in national work health and safety (WHS) guidance as a corporate WHS key performance indicator so that organisations can provide evidence that they are giving equal concern to the conditions of work on offer and their implications for worker mental health, as they are to productivity.

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1 [https://www.apapfaw.org/publications.html](https://www.apapfaw.org/publications.html)

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Conclusion

Some commentators are describing a crisis in mental health globally. There is increasing awareness worldwide of the significant impact working conditions and work environments are having on psychological illness and productivity outcomes (Leak & Jain, 2010).

It is clear that PSC is a leading indicator of worker mental health and a range of outcomes including productivity. Research examinations that utilise PSC have been conducted in organisations across numerous countries including Australia, Malaysia, Japan, China, Iran, Netherlands, Norway, Germany, Denmark, Canada, South Africa, New Zealand and Spain spanning a vast range of occupations and industries.

Some of the most outstanding findings from the PSC research is that workers in high risk PSC environments report clinical symptoms of mental illness and take twice as much unplanned leave. Even those workers who are at medium risk report a 72% increase in incidence rates for unplanned leave costing employers thousands of dollars per employee in lost productivity. For Australian organisations that have at least 1000 workers the lost productivity in medium and high risk groups will equate to over a millions dollars each year.

Psychosocial safety climate helps address the challenge of how the essence of worker humanity can be centred, valued and promoted in the workplace with positive implications for society and sustainable productivity. PSC should be used as a corporate WHS indicator of the future status of worker mental health in the organisation.

Psychosocial safety climate theory and tools are being implemented by many governing agencies in Australia and internationally, including by the German Federal Institute of Occupational Health and Safety (BAuA), Mental Health Commission Canada (MHCC), and Comcare Australia.
**Reference list**


