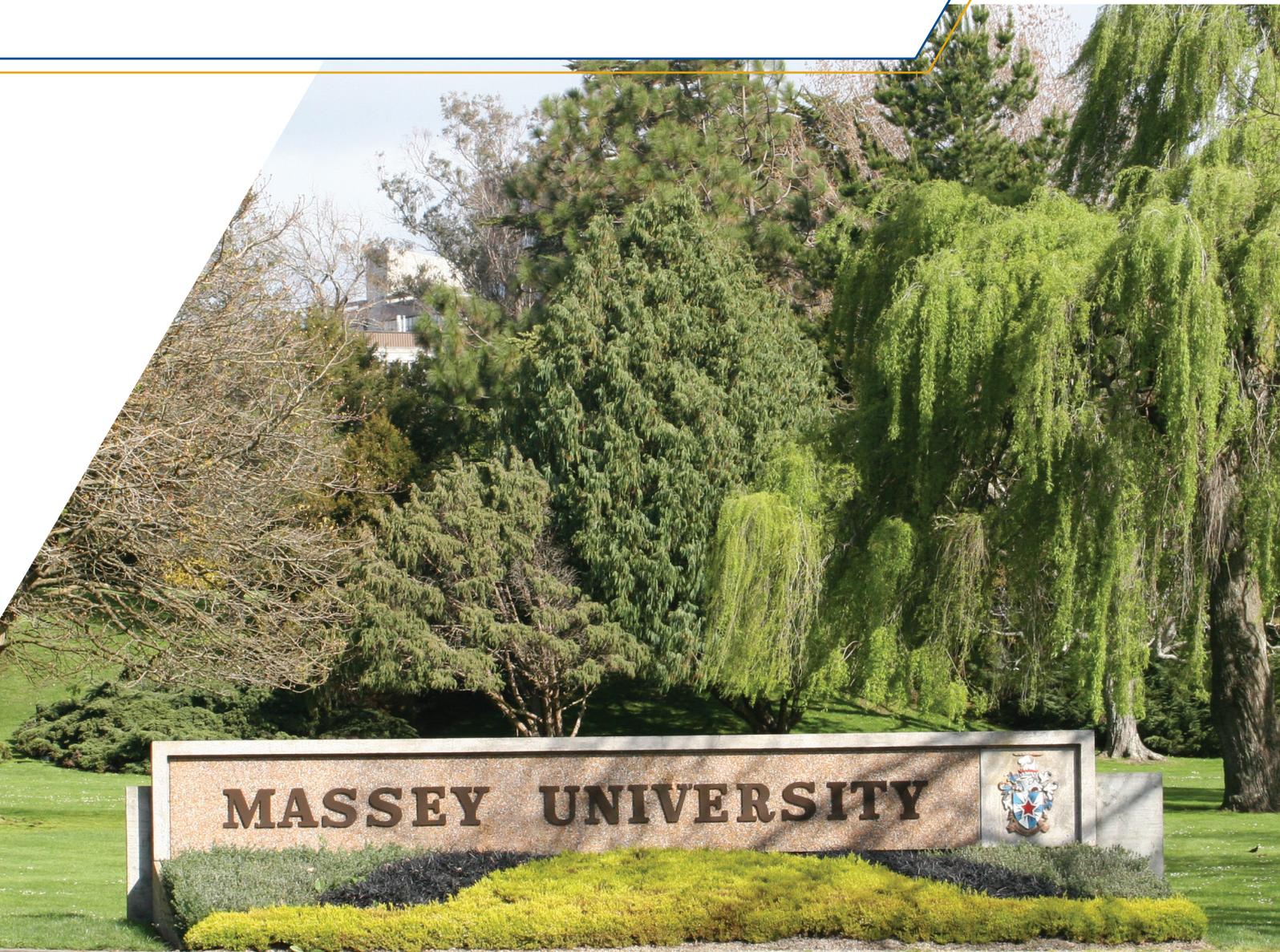


The New Zealand Workplace Barometer

A report on findings from the 2018 survey of the
New Zealand Workplace Barometer



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Contents

Executive summary	4
Introduction	5
Psychosocial risks	6
Psychosocial safety climate	7
Aims of the study	7
Method	8
Participants	8
Sample distribution	8
Demographic and employment data for the NZWB population	8
Measures	11
Procedure	11
Individual organisation reports	11
Results	12
Relationship between study variables	12
Depression and psychological distress	14
Physical health	15
Work engagement	15
Job stress	16
Bullying, cyber bullying & sexual harassment	16
Psychosocial safety climate	18
Discussion	21
Key findings	21
NZWB as surveillance tool	23
Conclusion	24
Acknowledgement	24
References	25
Appendix 1	27

Executive Summary

The New Zealand Workplace Barometer (NZWB) is designed to inform national approaches to psychosocial risk prevention at work, through the provision of leading indicators of mental health and stress-related illnesses. It eventually aims to provide longitudinal data from which the evaluation of effectiveness of implemented policies and programs can be assessed over time.

Alongside its primary aim of producing information on the prevalence, nature and impacts of psychosocial risk factors in the New Zealand workplace, the NZWB provides individualised reports for participating organisations. These reports will allow organisations to monitor their performance in this area over time and benchmark against other organisations. The NZWB also directs attention to the important concept of psychosocial safety climate (PSC) which, through this research and internationally, has been found to be the preeminent antecedent of stress-related illness.

This report provides an overview of the findings from the inaugural year of data collection from a sample of 1409 individual respondents drawn from 25 organisations.

Workplace mental health was found to be a mild to moderate problem for our sample, although more than one-quarter of respondents felt depressed much of the time and one-half had their work or non-work lives impacted to some extent by depression. Respondents in the highest quartile for psychological distress reported a lost-time rate of 3.5 times greater, on average, than for respondents in the lowest quartile, indicating workplace mental health is a considerable burden for organisations and society.

PSC was significantly negatively related to psychosocial health outcomes, with lower depression, psychological distress and physical health outcomes associated with higher PSC. Furthermore, PSC's impact on health and organisational outcomes acted through job

demands and resources. These findings are of critical importance in understanding how mental health and stress-related illnesses might be addressed through the enhancement of PSC. Workplace bullying has been found in a number of studies by these researchers over recent years to be highly prevalent in New Zealand compared to international samples. The present study found that approximately 10% of respondents reported experiencing workplace bullying, while 22% reporting having observed bullying to a colleague.

Exposure to workplace bullying as measured using the behavioural method (S-NAQ), was also high by international comparisons, with 12.2% of respondents experiencing at least two negative acts at least weekly. Although this figure is somewhat lower than the rate of between 15-18% found in previous New Zealand studies by the Healthy Work Group, bullying remains a high prevalence concern in New Zealand workplaces. This is highlighted through the strong observed relationships between bullying and respondent mental health, as well as with desirable organisational outcomes such as staff retention (assessed through leave intentions), engagement and job satisfaction.

The prevalence of sexual harassment amongst the sample was relatively modest at approximately 3%, although higher rates were experienced by females (4%), suggesting this mode of workplace ill-treatment is worthy of further attention. While 2018 was a preliminary exercise to assess the NZWB initiative and the level of engagement from New Zealand workplaces, the NZWB has been found to be fit for purpose in achieving the objectives set out in this report. It has provided a first national dataset on psychosocial risks and stress-related outcomes in the New Zealand work environment that can be expanded year-on-year as the Barometer attracts greater levels of participation and we improve our procedures. It has also provided organisations with an overview of their risk profile and has indicated where PSR prevention measures need to be implemented.

1. Introduction

Psychosocial hazards can arise from the design, organisation and management of work which may result in negative psychological, physical or social outcomes such as work-related stress, burnout, or depression. Psychosocial risk refers to the potential for psychosocial hazards to cause harm (Leka, Van Wassenhove & Jain, 2015). These psychosocial hazards and the risks they create are recognised internationally as resulting in considerable costs to organisations and employees. A recent European Union report estimated that psychosocial hazards cost as much as 25.4 billion per annum (European Agency for Safety and Health at Work (EU-OSHA), 2014). In the United Kingdom, work-related stress, depression or anxiety are responsible for 44% of cases of work-related ill health and 57% of working days lost in 2017/18 (HSE, 2018).

The World Health Organisation (WHO) recognises the workplace as a priority area for health promotion with psychosocial hazards and associated risks, considered to be a leading workplace health concern. Research indicates that New Zealand workers are highly vulnerable to psychosocial hazards, placing a considerable burden on the economic and social wellbeing of society (e.g. Bentley et al, 2009; 2012; Gardner et al., 2016; O'Driscoll et al., 2011). However, there has been no comprehensive approach to understanding or managing psychosocial risk in New Zealand. The Health and Safety at Work Act 2015 ('HSWA'), requires organisations (or more specifically, persons conducting a business or undertaking, PCBU's) to ensure that workers are not harmed by their work. WorkSafe New Zealand's (2016) *Strategic Plan for Work-Related Health* also specifies aspects of work organisation and design among work-related risks that have the potential to cause harm.

The New Zealand Workplace Barometer (NZWB) programme is designed to examine the psychosocial safety climate and the impacts of psychosocial risks on important individual and organisational outcomes. Developed in collaboration with a WHO Collaborating Centre, the *Asia-Pacific Centre for Work, Safety and Health*, the NZWB is intended to provide the means to inform national approaches to psychosocial risk through the provision of data on leading workplace indicators of mental health and stress-related illnesses. It is intended that the NZWB survey will be administered annually, and this report presents results from the inaugural survey conducted in 2018. This initial survey is intended to demonstrate the value of a national psychosocial risk surveillance and monitoring system that engages with organisations in identifying high-risk areas for intervention.

1.1 PSYCHOSOCIAL HAZARDS AND RISK

Psychosocial hazards can be defined as:

‘those aspects of work design and the organisation and management of work, and their social and environmental contexts, which have the potential for causing psychosocial or physical harm’ (Cox & Griffiths, 1995).

Psychosocial risk refers to the potential for psychosocial hazards to cause harm (Leka, Van

Wassenhove & Jain, 2015). Table 1 provides examples of psychosocial factors associated with the content and context of work as described by the European Agency for Safety and Health at Work, that managed poorly may be hazardous. Importantly, while these 10 factors have the potential to be a threat to health and safety, managed well they can be positive and enriching.

Table 1: A taxonomy of psychosocial hazards

(Adapted from Leka and Cox, 2008).

CONTENT OF WORK	
Job content	Lack of variety, fragmented or meaningless work, under use of skills
Workload and work pace	Work overload or under load, machine pacing, high levels of time pressure, continually subject to deadlines
Work schedule	Shift working, night shifts, inflexible work schedules, unpredictable hours, long or unsociable hours
Environment and equipment	Inadequate equipment availability, suitability or maintenance, poor environmental conditions such as lack of space, poor lighting, excessive noise
CONTEXT OF WORK	
Control	Low participation in decision making, lack of control over overload, pacing, shift working, etc.
Organisational culture and function	Poor communication, lack of definition of, or agreement on, organisational objectives
Interpersonal relationships at work	Social or physical isolation, poor relationships with superiors, interpersonal conflict, lack of social support, bullying/harassment/violence
Role in the organisation	Role ambiguity, role conflict, and responsibility for people
Career development	Career stagnation and uncertainty, under promotion or over promotion, poor pay, job insecurity, low social value to work
Home–work interface	Conflicting demands of work and home, low support at home, dual career problems

1.2 PSYCHOSOCIAL SAFETY CLIMATE

Psychosocial safety climate (PSC) is defined as the “policies, practices, and procedures for the protection of worker psychological health and safety” (Dollard & Bakker, 2010: p. 580). PSC comprises four key content domains (Dollard & Bakker, 2010; Hall, Dollard, & Coward, 2010; Dollard et al., 2017):

1. Senior management show support for psychological health through involvement and commitment.
2. The priority management give to employee psychological health and safety versus productivity goals.
3. How the organisation communicates about psychological health and safety to its workforce.
4. Participation and involvement throughout all levels of the organisation with the integration of stakeholders in occupational health and safety.

PSC is described as the preeminent antecedent of stress-related illness, and as an ‘upstream factor’ (Dollard & Bakker, 2010) determining job demands and resources, worker engagement and psychological health. Enhancing the PSC of organisations is therefore likely to reduce the presence of psychosocial risks (demands) and increase workplace resources and subsequently reduce the risk of psychological ill-health among employees.

1.3 STUDY AIMS

The aims of this study are to:

- Assess the prevalence, nature and impact of psychosocial risk factors in the New Zealand workplace
- Identify the prevalence of psychosocial health problems within the workforce and their nature
- Identify key workplace determinants of physical and psychosocial health outcomes
- To provide participating New Zealand organisations with data on psychosocial risk for their organisation that can be monitored over time and benchmarked against other organisations in their sector and nationally.

2. Method

2.1 PARTICIPANTS

Data were collected between May and August 2018 from a sample of workers (N=1409) employed within 25 New Zealand organisations who were willing to distribute an online survey to their workforce.

2.2 SAMPLE DISTRIBUTION

A strategy to encourage organisations and workers to participate in the project took precedence over achieving a representative sample. However, in order to consider the applicability of the NZWB results to the wider New Zealand working population, comparisons with Statistics New Zealand (SNZ) data sets (Business demography statistics, February 2018 or the 2013 SNZ Census) were made.

Organisations were geographically dispersed, and included those with employees spread across a number of locations as well as companies based on a single site. Approximately 87% of participants worked full-time, and most (94%) worked one paid job. The sample included approximately 60% females and 40% males.

2.3 DEMOGRAPHIC AND EMPLOYMENT DATA FOR THE NZWB SAMPLE

Table 2 presents individual and employment characteristics for the study participants, with comparison to Statistics New Zealand data where applicable.

Table 2: Individual and employment characteristics as a percentage of overall sample, and comparison between NZWB and Statistics New Zealand (SNZ) data sets (2018)

	NZWB (N=1409)	SNZ
<i>Individual characteristics</i>		
Gender		
Men	39.9	48
Women	60.0	52
Age (years)		
18-25	8.2	-
26-34	21.5	-
35-54	50.6	34.0
55-64	17.4	16.3
65 or over	2.3	19.9
Ethnicity		
NZ European	72.1	70.6
Māori	5.2	11.7
Pacific peoples	1.5	5.6
Asian	3.8	11.1
Other	17.4	1.6
<i>Job characteristics</i>		
Working hours		
Full-time	86.9	77.0
Part-time	13.1	23.0
Enterprise size / employee count		
Small (up to 19 employees)	13.8	28.8
Medium (20-49)	10.8	13.7
Medium (50-99)	9.6	9.7
Large (100 +)	65.8	47.7
Contract type		
Permanent	90.3	
Fixed term	4.6	
Casual	1.0	
Contractor / Self employed	2.5	
Other		
Union membership		
Current union member	21.3	
Not a current union member	78.7	

Industry classification (self-report)		
Forestry, fishing, hunting or agriculture support	4.9	5.4
Real estate or rental and leasing	1.5	1.6
Mining	0.1	0.2
Professional, scientific or technical services	18.8	7.2
Utilities	7.1	0.8
Management of companies or enterprises	0.6	
Construction	4.1	7.6
Admin, support, waste management or remediation services	1.9	
Manufacturing	2.8	11.2
Educational services	7.9	8.4
Wholesale trade	3.8	4.9
Health care or social assistance	4.1	10.7
Retail trade	3.8	9.7
Arts, entertainment or recreation	3.0	1.8
Transportation or warehousing	3.1	4.3
Accommodation or food services	3.2	7.4
Information	1.6	1.5
Other services (except public administration)	3.5	3.3
Finance or insurance	0.5	2.6
Unclassified establishments	0.3	
Veterinary services	3.8	
Not applicable/prefer not to answer	3.3	
Public administration incl. local govt organisation	16.4	6.1
Job title		
Employee/Contractor (Non-managerial)	57.9	
First-line supervisor	8.0	
Mid-level manager	17.2	
Senior manager	8.6	
Business owner	1.6	
Other	6.7	

2.4 MEASURES

The survey took participants approximately 20 minutes to complete. A selection of standardised, validated measures along with demographic and job information were included in the online survey. These included scales relating to aspects of:

- Psychosocial Safety Climate.
- Job Demands – work-family conflict, job insecurity, working hours.
- Bullying (behavioural and self-report measures), cyber-bullying & sexual harassment.
- Job resources – management competencies, co-worker support, autonomy and inclusion.
- Individual mental and physical health outcomes – depression, psychological distress and physical symptoms.
- Organisational outcomes – work engagement, job satisfaction, self-rated performance and leave intentions.

2.5 PROCEDURE

The opportunity to participate in the NZWB Programme was promoted at a launch event held in Wellington in November 2017, and through the Healthy Work Group's network. There was no cost to organisations or participants beyond the time associated with employees completing the survey. A hyperlink to the survey was provided to allow organisations to electronically distribute the survey to their employees. Participating organisations with 45 or more respondents received an anonymised organisational-level report, to allow comparison of their outcomes against sector and national data.

2.6 INDIVIDUAL ORGANISATION REPORTS

An example of an organisational report is provided in Appendix 1 (organisational identity removed). The report provided easy to understand feedback to the organisation on their psychosocial safety climate, specific psychosocial risks, demands and resources, and how they compared to the wider population. A 'traffic light' system was used to indicate the rating for the organisation on each variable throughout the report: black (severe - act with urgency) red (poor – short-term intervention required), yellow (moderate – improvement recommended), green (good – continue monitoring). Over time, these reports will develop in sophistication and value as the NZWB is developed and improved with the experience of this first year of implementation.

3. Results

3.1 RELATIONSHIPS BETWEEN STUDY VARIABLES

Table 3 shows correlations between all study variables. As with most studies with relatively large samples, significant correlations were found between most study variables. For this reason, it is helpful to consider the strength of the correlation as well as whether its relationship with other study variables is in the expected direction (positive or negative). A correlation coefficient r can be considered as weak when $r = .20$, moderate when $r = .30$, and strong when $r = .50$ (Cohen, 1992).

Strong positive and negative relationships were found for correlations between several study variables:

- PSC and inclusion (positive)
- PSC and intention to leave the organisation (negative)
- Inclusion and intention to leave (negative)
- Engagement and intention to leave (negative)
- Psychological distress and depression (positive)
- Autonomy and inclusion (positive).

Moderate to strong correlations were also found between the following variables:

- PSC and workplace bullying (negative)
- PSC and autonomy (positive)
- Work-life conflict and psychological distress (positive)
- Workplace bullying and depression (positive)
- Inclusion and engagement (positive), colleague support (positive), job insecurity (negative), depression (negative) and workplace bullying (negative).

Table 3: Correlations among study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Hours per week																				
Org. size	.01																			
Tenure in organisation	.06*	-.04																		
Tenure in job	.02	-.06*	.66**																	
Work life conflict	.14**	-.02	.07*	.08**																
Inclusion	.10**	.06*	-.01	-.08**	-.37**															
Job Insecurity	.07**	-.03	.06*	.04	.28**	-.45**														
Autonomy	.07**	.03	.00	-.06*	-.25**	.52**	-.23**													
PSC	.03	-.01	-.06*	-.08**	-.35**	.61**	-.33**	.40**												
Manager Competencies	-.03	.01	-.08**	-.10**	-.20**	.37**	-.19**	.23**	.33**											
Engagement	.11**	.02	.04	.02	-.26**	.46**	-.24**	.34**	.41**	.22**										
Performance	.01	-.04	.08**	.10**	-.26**	.29**	-.21**	.23**	.25**	.12**	.41**									
Leave intentions	-.00	-.02	-.06*	-.04	.33**	-.50**	.41**	-.30**	-.51**	.26**	-.50**	-.28**								
Colleague Support	-.01	.05	-.02	-.04	-.24**	.44**	-.26**	.23**	.34**	.21**	.28**	.20**	.31**							
Psych Distress	.04	-.04	-.09**	-.09**	.45**	-.41**	.31**	-.31**	-.36**	-.20**	-.46**	-.33**	-.40**	-.21**						
Bullying	.11**	-.07*	-.03	-.01	.32**	-.48**	.36**	-.30**	-.41**	-.29**	-.25**	-.26**	-.37**	-.36**	.46**					
Symptoms: Gastro	-.01	-.02	-.08**	-.08**	.21**	-.17**	.16**	-.15**	-.13**	-.03	-.16**	-.13**	-.19**	-.08**	.40**	.23**				
Symptoms: Other	.04	-.02	-.01	-.01	.32**	-.29**	.22**	-.22**	-.24**	-.16**	-.24**	-.18**	-.25**	-.17**	.49**	.29**	.50**			
Depression	-.01	-.01	-.10**	-.11**	.37**	-.40**	.26**	-.28**	-.36**	-.20**	-.41**	-.32**	-.38**	-.22**	.71**	.40**	.29**	.38**		

Note: $p < .05^*$, $p < .01^{**}$

3.2 DEPRESSION AND PSYCHOLOGICAL DISTRESS

Depression was measured using the Centre for Epidemiological Studies Depression Scale (CES-D). This 10-item version of the scale invites 'yes' and 'no' responses about how the respondent has felt during the last week. Further insight into impact of depression on the respondents was obtained using a single item question from the Patient Health Questionnaire (PHQ-9) which asked 'how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?'. Four responses ranged from 'not difficult at all' to 'extremely difficult'. Psychological distress was measured using the Kessler Psychological Distress Scale (K10) scale, comprising 10 questions about emotional states. Responses were based on how the respondent was feeling during the past four weeks, and scored on a five-level scale from 'none of the time' to 'all of the time'.

Key findings:

- The mean number of "YES" responses to the 10 diagnostic items was just over 3, indicating a low-moderate level of depression overall.
- 27% of respondents said that they felt depressed "most of the time".
- Over one-half of respondents said that these problems made it difficult to do their work, take care of things at home or get along with other people.
- 7% of respondents reported that depression made it "very difficult" or "extremely difficult" to do their work, take care of things at home or get along with other people.
- Restless sleep disturbance was the most prevalent symptom of depression, with 64% of respondents selecting this item.
- Respondents in the highest quartile for psychological distress reported an average lost-time rate 3.5 times greater than respondents in the lowest quartile.
- Higher rates of psychosocial health problems were found for construction, professional, scientific and technical services, and public administration, including local government, although these differences were not significant.
- Respondents who were union members, or those not working within their preferred employment contract or who didn't work remotely at least one-day per week, all reported significantly higher levels of psychological distress.
- Respondents working in casual and self-employed roles reported lower levels of psychological distress in relation to permanent and fixed-term workers, although these differences were not significant.
- Regression analysis found that the strongest predictors of depression and psychological distress were: work-family conflict, workplace bullying, inclusion and inclusion.
- Mental health problems were predicted by PSC. Where levels of psychosocial safety climate were highest, psychosocial health problems, depression and psychological distress, were lowest.
- The level of management competencies reported by respondents about their immediate manager was moderately related to psychosocial health outcomes, such that when management competencies were high, psychosocial health problems were low.
- The level of colleague support reported by respondents was moderately related to psychosocial health outcomes, such that when colleague support was high, psychosocial health problems were low.
- The level of job satisfaction was strongly negatively related to depression and psychological distress.
- The level of job stress was moderately positively related to depression and psychological distress.

3.3 PHYSICAL HEALTH

Respondents were asked to indicate 'yes' or 'no' to whether they have "at any time in the last 12 months had any trouble (ache, pain, discomfort, numbness) in any part of your body that has prevented you from carrying out normal activities (e.g. job, housework, hobbies)?" Those that answered 'yes' were asked what the total length of time (in days) was that this trouble prevented them from carrying out normal activities. A further question allowed respondents to select the parts of the body where they had experienced these symptoms.

Respondents were next asked to indicate how often they had experienced a series of thirteen symptoms during the last six months. Examples of symptoms included "an upset stomach or nausea", "trouble sleeping" and "headache", which were adapted from the job strain scale (Physical Symptoms Inventory). Respondents could choose from one of five scale options ranging from "less than once per month or never" to "several times per day".

Key findings:

- 41% of respondents reported some form of "trouble" (ache, pain, discomfort, numbness) over the previous 12 months. The mean number of lost days resulting from this trouble was 23.9 days (SD 62).
- "Neck/head" and "lower back" were the body areas most frequently reported.
- Regression analysis indicated that the strongest predictors of physical health symptoms were work-family conflict and workplace bullying.
- Physical health symptoms were moderately related to psychological distress and depression.
- Physical health symptoms were weak to moderately related to job satisfaction and job stress.
- The mean number of days off work because of physical or mental health problems was 4.7 days (SD 12.5), ranging from 0 to 301 days lost over 12 months. A total of 6,554 days were reported lost from work due to health problems.

3.4 WORK ENGAGEMENT

Work engagement has been considered a dimension of employee wellbeing within a working environment. To measure work engagement, respondents were asked how they feel at work with respect to nine statements from the Utrecht Work Engagement Scale – Shortened Version (UWES-9). The statements described feelings of engagement, such as "at my job, I feel strong and vigorous" and "I am immersed in my work". The frequency of experiencing these feelings were measured on a 7-point scale ranging from "never" to "every day".

Key findings:

- Engagement was predicted by PSC. Where levels of psychosocial safety climate were high, engagement was also report as high.
- Regression analysis found that inclusion, autonomy and work-family conflict to be the strongest predictors of engagement.
- Engagement was very strongly positively related to our other wellbeing variable, job satisfaction.
- Engagement was moderately negatively related to psychological distress and depression.
- Engagement was moderately negatively related to respondents' intentions to leave their organisation.
- Engagement was moderately positively related to performance.
- Engagement was weak to moderately negatively related to job insecurity and job stress.

3.5 JOB STRESS

Job stress was measured by asking respondents, 'How stressful do you find your work environment?' The response scale comprised seven options ranging from "very stressful" to "very unstressful".

Key findings:

- The mean level of job stress reported was 4.0 (SD: 1.6), indicating a moderate level of stress associated with work experienced by respondents.
- Females experienced notably higher levels of job stress than males, but this difference was not statistically significant.
- European/NZ workers reported markedly lower levels of job stress than other ethnicity groups, but not at a significant level.
- Respondents on permanent employment contracts reported significantly lower levels of job stress than workers with other forms of contract.
- The level of job stress was strongly positively related to psychosocial health problems.
- The level of job stress was strongly negatively related to workplace bullying
- The level of job stress was moderately-strongly positively related to work-family conflict.

3.6 WORKPLACE BULLYING, CYBERBULLYING AND SEXUAL HARASSMENT

The survey included the Short Negative Acts Questionnaire (S-NAQ) which is a behavioural approach to measuring the prevalence of workplace bullying. The questionnaire measures the frequency of exposure over a six-month period to negative interpersonal and work-related behaviours while at work. Where respondents reported at least two negative acts, at least weekly, over a six-month period, they were defined as being exposed to bullying – following international approaches to determining sample prevalence.

A self-reported measure of bullying was also included in the survey, whereby a definition of bullying was provided and respondents were asked a single question about whether they had been bullied in the past six months. Bullying was defined in the survey as:

"a situation where one or several individuals persistently over a period of time perceive themselves to be on the receiving end of negative actions from one or several persons, in a situation where the target of bullying has difficulty in defending him or herself against these actions. We do NOT refer to a one-off incident as bullying".

Table 5 shows the proportion of self-reported bullying, cyberbullying and sexual harassment within the sample.

Table 5: Reported bullying, as a percentage of overall sample

	Total reporting yes (%)
Observed bullying towards other people	22.9
Bullied themselves (self-report)	9.8
Observed cyberbullying towards other people	4.0
Cyberbullied themselves	2.4
Observed sexual harassment towards other people	5.2
Subjected to sexual harassment themselves	2.9

Key findings:

- The sample had a workplace bullying prevalence rate of approximately 10% (self-reported rate), and 12.2% (behavioural exposure rate).
- Nearly one-quarter (23%) of respondents witnessed the bullying of others.
- The most frequently reported negative behaviours (reported at least monthly or more frequently) were of someone withholding information (20.5%) and being ignored (15.4%).
- Highest workplace bullying rates were found for construction, forestry, education and local government – all with prevalence rates over 10%.
- Higher bullying rates were reported by union members (union member: 13.1%; non- union member: 8.6). Union members also reported significantly higher rates of cyberbullying than non-members.
- Females were significantly over-represented amongst those observing bullying behaviour (25.1% compared with 19.6% males) and over-represented, but at an insignificant level, in their reported experience of being bullied (11.1% compared with 7.9% males).
- Bullied respondents reported higher levels of psychosocial health problems.
- 2.4% of respondents reported that they had experienced cyberbullying.
- Those working more than one paid job experienced significantly more cyberbullying than those with one job (5.6% compared with 2.2%, and 2.4% overall).
- Approximately 5% of respondents witnessed sexual harassment towards others and 4% of female respondents reported personally experiencing sexual harassment.
- Workplace bullying was strongly negatively related to job satisfaction and moderately related to job stress.
- Workplace bullying was strongly negatively related to inclusion.
- Workplace bullying was moderately negatively related to management competencies, leave intentions and colleague support.
- Workplace bullying was moderately to strongly positively related to psychological distress and depression.
- Where levels of psychosocial safety climate were high, rates of workplace bullying were lowest.

3.7 PSYCHOSOCIAL SAFETY CLIMATE

Psychosocial Safety Climate (PSC) was measured using the PSC-12, a survey questionnaire designed to consider the influence of senior management practices on the psychosocial health of employees. Four domains, which each include three items, invite responses about:

1. Management commitment and support for psychological health and safety (e.g., senior management acts decisively when a concern of an employee's psychological status is raised);
2. Management prioritisation of psychological health and safety (e.g., senior management considers employee psychological health to be as important as productivity);
3. Employee participation in psychological health and safety (e.g., employees are encouraged to become involved in psychological safety matters);
4. Organisational communication with employees about psychosocial health and safety (e.g., there is good communication about psychological safety issues which affect workers) (Hall et al., 2010).

Respondents provided responses on a five-point Likert scale ranging from "strongly disagree" to "strongly agree".

The mean for each item from the PSC scale is presented in Table 6. The lowest means were for PSC items and domains relating to communication and participation with employees.

Key findings:

- Respondents working in Educational Services reported a significantly lower PSC mean compared with those working in Healthcare or Social Assistance.
- Respondents who were employed in part-time work reported significantly lower PSC means than those employed as full-time workers.
- PSC means were significantly lower among those working on permanent contracts compared with those who identified as contractors or self-employed.
- Respondents who indicated that they worked remotely had significantly higher PSC means than those who did not.
- Union members reported significantly lower PSC means than non-union members.
- A significant difference was identified between PSC means according to age group, with higher values for younger (19-25 years) and older (>65 years) respondents compared to those in other age groups.

Table 6: Overall mean for PSC items

PSC Item	Mean (SD)
In my workplace senior management acts quickly to correct problems/ issues that affect employees' psychological health	3.14 (1.26)
Senior management acts decisively when a concern about an employee's psychological status is raised	3.27 (1.16)
Senior management show support for stress prevention through involvement and commitment	3.26 (1.22)
Psychological well-being of staff is a priority for the organisation	3.29 (1.26)
Senior management clearly considers the psychological health of employees to be of great importance	3.32 (1.19)
Senior management considers employee psychological health to be as important as productivity	3.08 (1.21)
There is good communication here about psychological safety issues which affect me	3.00 (1.16)
Information about workplace psychological well-being is always brought to my attention by my manager/supervisor	2.93 (1.17)
My contributions to resolving occupational health and safety concerns in the organisation are listened to	3.51 (1.03)
Participation and consultation in psychological health and safety occurs with employees', unions and health and safety representatives in my workplace	3.24 (1.08)
Employees are encouraged to become involved in psychological safety and health matters	3.33 (1.09)
In my organisation, the prevention of stress involves all levels of the organisation	2.99 (1.22)



PSC was found to be a strong predictor of psychosocial health and organisational outcomes, and to be also be the distal antecedent of health outcomes, mediated through job demands and resources.

- PSC was negatively related to individual physical and mental health outcomes, and positively related to work engagement.
- PSC acted on psychosocial health and organisational outcomes through the job demands and resources present in the work environment - PSC affects job demands and resources that in turn carry this effect to psychosocial health and work engagement.
- There is a significant indirect relationship between PSC and psychological distress, mediated by workplace bullying.

4. Discussion

Developed in collaboration with a WHO Collaborating Centre, the Asia-Pacific Centre for Work, Safety and Health, the NZWB project is designed to provide the means to inform national approaches to psychosocial risk prevention at work, through the provision of leading indicators of mental health and stress-related illnesses. It also aims to provide longitudinal data from which the evaluation of effectiveness of implemented policies and programs can be assessed over time.

This study represents the first national-level psychosocial risk surveillance scheme in New Zealand. Alongside its primary aim of producing information on the prevalence, nature and impacts of psychosocial risk factors in the New Zealand workplace, the NZWB has provided individual reports for participating organisations from which they can monitor their performance in this area over time and benchmark against other organisations. It has also directed attention for where intervention should be targeted: first and foremost at enhancing the psychosocial safety climate as, consistent with previous research, a poor climate has been found to be the preeminent antecedent of stress-related illness – or the ‘cause of the causes’ (Dollard et al., 2012). Indeed, the closer interventions can get to the root cause of stress-related illness, the better likelihood of influencing negative health outcomes and other unwanted impacts of psychosocial risk factors.

This report has given a snapshot of the findings from the initial year of data collection. Organisational responses to the data and the advice given have been positive and all participating organisations, to our knowledge, wish to continue their participation in the scheme. In 2018, we achieved a sample of some 25 organisations, and 1409 individual respondents. It is intended that the scheme be extended in 2019, subject to funding and the willingness of organisations to take part,

to increase the number of respondents and participating organisations providing data from which to determine the leading indicators of stress-related illnesses,

4.1 SUMMARY OF KEY FINDINGS

- Workplace mental health was found to be a mild to moderate problem for our sample. However, more than one-quarter of respondents felt depressed “most of the time” and one-half reported that their work or non-work lives had been impacted to some extent by depression.
- Respondents in the highest quartile for psychological distress reported a lost-time rate of 3.5 times greater, on average, than for respondents in the lowest quartile, indicating that poor workplace mental health is a considerable burden for organisations and society.
- We found no significant differences for psychosocial health outcomes by industry sector, although high levels (ns) were found in public sector roles and construction.
- Working remotely (teleworking/telecommuting/flexible working from home) at least one-day per week appeared to be beneficial to work-related psychosocial health, consistent with previous research in New Zealand that has found enhanced wellbeing outcomes from teleworkers (e.g. Bentley et al., 2016)
- Working within an individual’s preferred contractual arrangement appeared to be a protective factor. Interestingly, respondents working in casual and self-employed roles reported notably lower levels of psychological distress in relation to permanent and fixed-term workers. One potential explanation for this is that higher levels of psychosocial risk appear to lie to public sector roles, which tend to employ staff on on-going contracts.

- PSC was significantly negatively related to psychosocial health outcomes, with lower depression, psychological distress and physical health outcomes associated with higher PSC. Regression analyses showed PSC to influence both psychosocial health and organisational outcomes through its relationship with workplace bullying, job demand variables and job resource variables. It is also noted that PSC predicted physical health outcomes. These findings reflect previous research in the Asia-Pacific region and beyond (Dollard and Bakker, 2010; Dollard et al., 2012; Idris et al., 2012; Idris and Dollard, 2014; Law et al., 2011; Zadow et al., 2017), and indicate the critical importance of PSC in addressing mental health and stress-related illnesses.
- Various forms of workplace ill-treatment were considered in the study. Workplace bullying has been found in a number of studies over recent years to be highly prevalent in New Zealand compared to international samples (e.g. Bentley et al., 2009; 2012; Gardner et al., 2016; O’Driscoll et al., 2011). The present study found that approximately 10% self-labelled as having been bullied at work with highest rates in construction, forestry, education and local government – all with prevalence of over 10%. Much higher rates were reported for having observed workplace bullying, with some 22% of respondents reporting seeing a colleague being bullied. This high prevalence of observed bullying is of concern as New Zealand research has found witnesses to workplace bullying experience similar negative health and organisational outcomes as actual targets of bullying (Cooper-Thomas et al., 2014). Perhaps most concerning, given the insidious nature of the harm from bullying (Bentley et al., 2012), over 37% of respondents who experienced bullying in the workplace reported that it had continued for over a year, and for more than 20%, more than two years.
- Exposure to workplace bullying as measured by the behavioural method (S-NAQ) was high by international comparisons, with 12.2% of respondents experiencing at least two negative acts at least weekly. This figure is somewhat lower than the rates of between 15- 18% found in previous New Zealand studies by the Healthy Work Group and others (Bentley et al., 2009; Gardner et al., 2016; O’Driscoll, 2011). Bullying should remain as a high health & safety and performance concern in New Zealand workplaces. This is highlighted by the strong observed relationships between bullying and psychosocial health, and desirable organisational outcomes such as staff retention (assessed through leave intentions), engagement and job satisfaction.
- Cyberbullying is an emerging risk, with just under 3% of respondents reporting experiencing cyberbullying, although marked differences were observed between industry sectors. The prevalence of sexual harassment amongst our sample was relatively modest at approximately 3%, although significantly higher rates were experienced by females (4%), suggesting this form of workplace ill-treatment continues to persist.
- The NZWB has identified a number of job demands and resources as having particularly strong influence on individual health and organisational outcomes. As noted above, these demands and resources were strongly influenced by PSC, suggesting that prevention attention should focus as close to the source as possible.
- This study examined the role of two constructs that have not previously been used in psychosocial risk research in the New Zealand context, but present as potentially fertile fields for managing psychosocial risk. Management competencies were found to be significantly correlated with the majority of our individual health and organisational

outcomes, and further research of the Healthy Work Group is looking more closely at the role of management competencies in tackling workplace bullying. Inclusion had a strong or moderately strong negative relationship with reported job satisfaction, job stress, job insecurity, leave intentions, workplace bullying and depression, and a positive relationship with engagement, suggesting greater attention to diversity and inclusion within organisations will enhance workers' experience of work, their retention, and their psychosocial health. Inclusion also mediated the PSC and psychosocial health and organisational outcomes. Males, those working in larger organisations and full-time workers all experienced greater levels of inclusion. This construct has received relatively little attention within psychosocial risk research to date and will be the focus of more detailed studies by the Healthy Work Group.

4.2 NZWB AS SURVEILLANCE TOOL

While 2018 was a preliminary exercise to assess the NZWB initiative and the level of engagement from New Zealand workplaces, the NZWB has been found to be fit for purpose in achieving the objectives set out in this report. It has provided a first national dataset on psychosocial risks and stress-related outcomes in the New Zealand work environment that can be expanded year-on-year as the Barometer attracts greater levels of participation and we improve our procedures. It has also provided organisations with an overview of their risk profile and has indicated where psychosocial risk prevention measures need to be implemented.

In 2019, the NZWB will retain PSC as its pre-eminent antecedent as it has been found in the present study to be a strong predictor of both demands and resources, as well as our individual health and organisational outcomes. We also argue that PSC is something that organisations can advance through the application of senior level commitment, support and resources to managing psychological health and safety. Moreover, involving workers in psychological safety is critical to the prevention and management of psychosocial hazards. This will return significant improvements in the health outcomes of workers and better organisational outcomes.

5. Conclusion

This preliminary round of data collection using the NZWB survey has found low to moderate levels of depression and psychological distress amongst the study sample. However, over one-half of the study sample found depressive symptoms to impact their daily work and non-work activities, while psychological distress was found to have a marked impact on worker absenteeism. Participants' mental and physical health was predicted by PSC, suggesting that top management commitment to managing psychological health and safety and prioritisation of psychological safety over productivity concerns, along with communication and involvement on psychosocial risks, are critical for the prevention and management of stress-related illnesses.

A number of job demands have been shown to increase the likelihood of depression and psychological distress, including workplace bullying. Indeed, workplace bullying rates remain relatively high in New Zealand and also warrant further attention from both government and organisations. Furthermore, the implementation of flexibility programmes and a greater focus on diversity and inclusion can be expected to return improvements in work-related psychosocial health, along with improvements to engagement and retention. These initiatives can be supported through policy, as well as organisational practices.

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References

- Bentley, T., Catley, B., Cooper-Thomas, H., Gardner, D., O'Driscoll, M., & Trenberth, L. (2009). *Understanding stress and bullying in New Zealand workplaces: Final report to OH&S steering committee*. Wellington, New Zealand.
- Bentley, T.A., Gardner, D.H., Dale, A., O'Driscoll, M.P., Catley, B., Cooper-Thomas, H. & Trenberth, L. (2012). Workplace Bullying in the New Zealand Travel Industry: Prevalence and Management Strategies. *Tourism Management*, 33(2), 351-360.
- Bentley, T.A., Teo, S.T., McLeod, L., Bosua, R., Gloet, M., & Tan, F. (2016). The role of organisational support in teleworker wellbeing: A socio-technical systems approach. *Applied Ergonomics*, 52, 207215.
- Cohen, J. (1992). A power primer. *Psychological bulletin*, 112(1), 155.
- Cox, T., & Griffiths, A. (1995). The assessment of psychosocial hazards at work. In M. J. Shabracq, J. A. M. Winnubst, & C. L. Cooper (Eds.), *Handbook of work and health psychology* (pp. 127-146): Wiley & Sons, Chichester.
- Dollard, M., Bailey, T., McLinton, S., Richards, P., McTernan, W., Taylor, A., & Bond, S. (2012). *Australian Workplace Barometer: Report on psychosocial safety climate and worker health in Australia*. University of South Australia, Magill SA 5072: Safe Work Australia.
- Dollard, M., & Bakker, A. B. (2010). Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement. *Journal of Occupational and Organizational Psychology*, 83(3), 579-599.
- European Agency for Safety and Health at Work (EU-OSHA). (2014). *Calculating the cost of work-related stress and psychosocial risks. European Risk Observatory Literature Review*. Luxembourg: Publications Office of the European Union.
- Gardner, D., O'Driscoll, M., Cooper-Thomas, H., Roche, M., Bentley, T., Catley, B., Teo, S. & Trenberth, L. (2016). Predictors of workplace bullying and cyber-bullying in New Zealand. *International Journal of Environmental Research and Public Health*, 13(5), 448.
- Hall, G. B., Dollard, M. F., & Coward, J. (2010). Psychosocial safety climate: Development of the PSC-12. *International Journal of Stress Management*, 17(4), 353.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. NY, USA: The Guilford Press.
- HSE. (2018). Work Related Stress, Depression or Anxiety Statistics in Great Britain 2018: Health and Safety Executive (HSE).
- Idris, M.A. and M.F. Dollard, *Psychosocial safety climate, emotional demands, burnout, and depression: A longitudinal multilevel study in the Malaysian private sector*. *Journal of occupational health psychology*, 2014. 19(3): p. 291.
- Idris, M.A., et al., *Psychosocial safety climate: Conceptual distinctiveness and effect on job demands and worker psychological health*. *Safety science*, 2012. 50(1): p. 19-28.
- Law, R., et al. (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.
- Leka, S. and T. Cox (2008). *PRIMA-EF- Guidance on the European Framework for Psychosocial Risk Management: a resource for employers and worker representatives*. World Health Organization.
- Leka, S., Van Wassenhove, W., & Jain, A. (2015). Is psychosocial risk prevention possible? Deconstructing common presumptions. *Safety Science*, Vol 71, pp 61-67.



O'Driscoll, M. P., Cooper-Thomas, H. D., Bentley, T., Catley, B. E., Gardner, D. H., & Trenberth, L. (2011). Workplace bullying in New Zealand: A survey of employee perceptions and attitudes. *Asia Pacific Journal of Human Resources, 49*(4), 390-408.

O'Driscoll, M. P., Brough, P., & Kalliath, T. J. (2004). Work/family conflict, psychological well-being, satisfaction and social support: A longitudinal study in New Zealand. *Equal opportunities international, 23*(1/2), 36-56.

WHO. (2002). World Health Organization Health and Performance Questionnaire (HPQ): Clinical trials baseline version *Geneva (Switzerland): World Health Organization: WHO, World Health Organization.*

WorkSafe New Zealand. (2016). *WorkSafe's Strategic Plan for Work-Related Health 2016 to 2026*. Retrieved from ISBN: 978-0-908336-51-7 (print), ISBN: 978-0-908336-52-4 (online).

Appendix 1

EXAMPLE OF AN ORGANISATIONAL REPORT (ALL DATA ARE FABRICATED)

NEW ZEALAND WORKPLACE BAROMETER ORGANISATIONAL REPORT (NO NAME BUSINESS)

INTRODUCTION

Psychosocial risk factors include aspects of the design and management of work, and its social and organisational contexts, that have the potential to cause psychological or physical harm. Research in New Zealand and internationally has clearly demonstrated the association between psychosocial hazards and negative outcomes for individual and organisational wellbeing and performance. Research shows that improvements to the psychological health and safety of workers produces a significant return on investment for organisations.

THE NEW ZEALAND WORKPLACE BAROMETER (NZWB) SCHEME

The NZWB Scheme is a means of engaging with organisations to promote improvements in the psychosocial climate and psychological health and safety of organisational members. The NZWB Scheme involves participating organisations providing access to an organisation's staff for survey data collection in exchange for reports on psychosocial risk and related outcomes within the organisation for use for monitoring and benchmarking purposes. We recommend annual participation in the NZWB Scheme so the performance of your organisation can be tracked over time.

YOUR ORGANISATION'S RESULTS

The following report provides an overview summary of your member organisations' psychosocial risk profile based on the responses of 150 organisational members who participated in the 2018 NZWB survey. These figures can assist your members' decision-making in terms of where to direct resources and focus attention in relation to potential areas of psychosocial risk, and in the prevention of stress-related illnesses that arise from these psychosocial risk factors. You will also be able to benchmark your organisation's profile against the national sample. Furthermore, should you elect to participate in the 2019 NZWB (and beyond) you will be able to look at changes in your performance over time.

We have used a colour system to indicate the rating for your organisation on each variable throughout the report: black (severe - *act with urgency*) red (poor – *short-term intervention required*), yellow (moderate – *improvement recommended*), green (good – *continue monitoring*) to indicate the rating for your organisation on each variable. Please note these are indicative only and are for use as a guide to where to place attention.

*It is important to note that these findings will not necessarily be representative of your organisation as a whole. The higher the proportion of your members who participated the more confidence you can have that these findings accurately reflect the level of psychosocial risk in your organisation.

A brief demographic breakdown of your respondents is provided at the start of this report to help you determine how representative-ness of the respondents in relation to your overall organisation.

1. DEMOGRAPHIC AND JOB-RELATED PROFILE OF RESPONDENTS

Gender	N	%
Male	70	46.7
Female	80	53.3
Age range		
18-25	11	7.3
26-34	33	22.0
35-54	61	40.7
55-64	32	21.3
65 or over	13	8.7

2. PSYCHOSOCIAL SAFETY CLIMATE RATING

Psychosocial Safety Climate (PSC) measures the perceived high-level organisational concern for the psychological health and safety of workers – including worker wellbeing and work stress. It measures PSC across four aspects: management commitment and support for psychological health and safety; management prioritisation of psychological health and safety; organisational participation in psychological health and safety; and organisational communication about psychological health and safety. The ‘good range’, ‘moderate’ and ‘poor range’ ratings are a guide to your climate only. The higher your PSC score, the more likely your climate will predict good psychological health and safety outcomes for the organisation. The third column states the mean score for your organisation and allows you to compare your PSC against that of the whole sample (higher scores mean better PSC).

PSC rating (your organisation)	PSC rating (whole sample)	Mean score (your organisation)	Mean score (whole sample)
Moderate	Poor range 4% Moderate to Good range 96%	Scoring range: 0 - 100 Your score: 63	64

Comment on PSC rating and score: our organisation has a moderate rating, with the score for your sample very close to that of the overall sample. Efforts to maintain and further enhance PSC and therefore individual and organisational outcomes should include:

- an increasing focus and prioritisation at senior levels of the organisation on psychosocial health and safety
- effective and timely two-way communication around psychological health and safety
- initiatives that enhance the level of worker involvement in psychological health and safety
- strengthening of assessment, management, communication and support for work stress and psychological demands within the organisation.

3. JOB DEMANDS

The following variables are potential psychosocial demands and risk factors for your organisational members. We have presented the scores for the sample from your organisation and those of the whole sample for comparison. Higher scores mean greater psychosocial job demands.

Job Demand variable	Your organisation's score	Whole sample score
Workplace bullying – self reported	16.2%	9.7%
Cyber-bullying	5.4%	2.4%
Sexual harassment	4.1%	3.0%
Work-family conflict	Scoring range: 1 - 5 Mean: 2.84 (sd: 1.12)	Mean: 2.81 (1.12)
Job insecurity	Scoring range: 1 - 7 Mean: 2.40 (sd: 1.40)	Mean: 2.63 (1.43)

Comments on job demands: For job demands, your organisation needs to pay particular attention to three areas: workplace bullying, cyber-bullying and sexual harassment – each requiring immediate intervention. All three scores are notably higher than that of the whole sample. The self-reported level of bullying is very high. Improving performance on workplace bullying is recommended through the development of a strong culture of respect, establishing strong management competencies, good reporting systems, and training and awareness around workplace bullying and cyber bullying across your organisation/s. You will be able to track performance in each of these demand fields in future iterations of the NZWB, and compare your advancement in each area with national data.

JOB RESOURCES

The following variables are potential psychosocial job resources for your organisational members. We have presented the scores for the sample from your organisation and those of the whole sample for comparison. Higher scores mean greater psychosocial job resources.

Job Resource variable	Your organisation's score	Whole sample score
Management competencies	Scoring range: 0 - 100 Competency score: 71	Competency score: 73
Co-worker support	Scoring range: 1 - 5 Mean: 4.01 (sd: 0.96)	Mean: 4.11 (sd: 0.92)
Autonomy	Scoring range: 1 - 7 Mean: 5.02 (sd: 1.17)	Mean: 5.13 (sd: 1.2)
Inclusion	Scoring range: 1 - 6 Mean: 4.12 (sd: 0.88)	Mean: 4.24 (sd: 0.90)

Comments on job resources: Your organisation's scores are somewhat below the mean scores for the whole sample on all of the job resources variables. Further focus on these areas of resources is likely to positively impact the working experience and wellbeing of your workforce, along with your organisational outcomes.

4. INDIVIDUAL MENTAL HEALTH AND WELLBEING OUTCOMES

The following variables are individual wellbeing outcomes for your organisational members. We have presented the scores for the sample from your organisation and those of the whole sample for comparison. Higher scores mean poorer mental health and wellbeing.

Individual outcomes	Your organisation's score	Whole sample score
Depression (note, this is a clinical scale and is provided to allow comparison with the wider sample – lower score = better outcome)	Scoring range: 0 - 10 Mean: 3.47 (sd: 2.60)	Mean: 3.06 (sd: 2.55)
Psychological distress	Scoring range: 10 - 50 Mean: 19.65 (sd: 7.73)	Mean: 18.47 (sd: 6.89)

Comments on wellbeing outcomes: The individual wellbeing outcomes suggest that the general mental health and wellbeing of the sample of respondents from your organisation are in the 'moderate' range. Depression level is higher than for the whole sample and should be the focus of attention. Further investment into PSC and managing demands and resources is likely to result in improvements to these outcomes for your workers.

5. ORGANISATIONAL OUTCOMES

The following variables are organisational outcomes for your organisational members. We have presented the scores for the sample from your organisation and those of the whole sample for comparison. Unless indicated, higher scores mean better outcomes.

Organisational outcomes	Your organisation's score	Whole sample score
Engagement	Scoring range: 1 - 7 Mean: 5.46 sd: 1.25	Mean: 5.35 sd: 1.31
Job satisfaction	Scoring range: 1 - 7 Mean: 5.08 sd: 1.50	Mean: 4.96 sd: 1.50
Self-rated performance	Scoring range: 1 - 10 Mean: 7.47 sd: 1.42	Mean: 7.58 sd: 1.44
Leave intentions (lower is better)	Scoring range: 1- 7 Mean: 3.37 sd: 1.97	Mean: 3.55 sd: 1.93

Comments on organisational outcomes: Your organisation scored favourably than the whole sample on all organisational outcomes, except self-rated performance. Improvements to PSC and job demands and resources is likely to enhance/improve these outcomes.

A full report on the NZWB will be sent to your organisation once it has been prepared. This report will provide great detail on the nature of the variables employed in this study and will examine the structural relationship between study variables.

Thank you again for your participation and we look forward to your involvement in the 2019 NZWB.

Legend: Ratings

	Good – continue monitoring
	Moderate – improvement initiatives recommended
	Poor – short-term intervention required
	Severe - act with urgency



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