The New Zealand Workplace Barometer

Psychosocial safety climate and worker health – findings from the 2020 NZ Workplace Barometer

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Report prepared:

June 2021

Executive Summary

The New Zealand Workplace Barometer (NZWB) is designed to provide data to inform national, industry, and organisational approaches to psychosocial risk prevention at work, by identifying workplace indicators of mental health, stress-related conditions and some aspects of physical health. The NZWB represents the first national-level psychosocial risk surveillance scheme in New Zealand and was launched in 2018. Psychosocial hazards and their associated risks 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. Importantly, improvements to the psychosocial work environment has been shown to produce a significant return on investment for organisations.

Data were collected between September and October 2020 from a sample of workers (N=1430) employed within 21 New Zealand organisations. Overall, the 2020 results appear remarkably similar to those of 2019, suggesting that the COVID-19 pandemic which dominated (and continues to dominate) many aspects of the world of work had little effect on the extensive range of variables measured by this barometer. However, we contend that is not an accurate reflection of the impacts of COVID-19 on New Zealand workplaces generally (this will be discussed further in the report summary).

Four key features of the work environment were associated with positive outcomes for both individuals and organisations in this study: (1) **organisational justice**, (2) **inclusion**, (3) a **positive (high levels of) psychosocial safety climate** and (4) **perceived management competence**. These four elements of healthy work appear to be the key resources which organisations, industries and policy makers should prioritise for developing and sustaining worker health and wellbeing, and positive individual and organisational outcomes generally.

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1. Introduction

Work-related psychosocial factors arise from the design and management of work, and the social and organisational contexts in which work occurs (Cox, Griffiths & Leka, 2005). These factors can influence the health, safety, general satisfaction and work performance of people either positively or negatively. On the one hand, work can be uplifting, rewarding and enjoyable, while on the other it can be stressful, toxic and damaging. Negative psychosocial factors (i.e. psychosocial hazards) include issues such as work overload, lack of control, role conflict, and poor relationships at work, among others. The current COVID-19 pandemic and the more general ongoing changes to the nature of work such as reduced job security and blurred work/non-work boundaries can also contribute to these potential hazards. The presence of psychosocial hazards can result in negative psychological, physical or social outcomes such as work-related stress, burnout, depression, or musculoskeletal disorders (MSDs). Psychosocial hazards can also affect individuals differentially; what results in harm to one person may not harm another. Additionally, the effect of various psychosocial hazards can be cumulative, and these effects can build up over time.

Psychosocial hazards and the risks they create are recognised internationally as resulting in considerable costs to organisations and employees. A 2014 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 and/or anxiety were responsible for 44% of cases of work-related ill health and 57% of working days lost in 2017/18 (HSE, 2018). Recent survey data from Europe also highlights that the awareness of psychosocial hazards is often low, and that in sectors attempting to manage them, the process of doing so is considered to be difficult (EU-OSHA, 2020).

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. The WHO defines mental health as "a state of wellbeing in which every individual realises their own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (WHO, 2018).

Research indicates that New Zealand workers are highly vulnerable to psychosocial hazards which places 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). The need to address psychosocial hazards at work and reduce psychological harm for all workers is also a legal requirement. The Health and Safety at Work Act 2015 ('HSWA'), requires organisations (or more specifically, persons conducting a business or undertaking, PCBUs) to ensure the safety of their workers' mental health as well as their physical health, a statement reaffirmed in the NZ Government's Health and Safety at Work Strategy (2018-2028).

The intention of the New Zealand Workplace Barometer (NZWB) is to provide organisations with information to help them assess potential psychosocial hazards and to promote improvements in the psychosocial work environment. The survey measures psychosocial safety climate (PSC) as well as other psychosocial factors that impact on individual and organisational wellbeing and performance. Developed in collaboration with a WHO Collaborating Centre, the Asia-Pacific Centre for Work, Safety and Health, the NZWB is intended to inform national approaches to psychosocial risk through the provision of data on leading workplace indicators of mental health, stress-related conditions and some aspects of physical health. Organisations participating in the NZWB provide access for data collection in exchange for a report summarising the psychosocial hazards and associated risks within their organisation (where more than 50 people complete the survey). Organisations who participate annually can use their results to understand and monitor their performance with respect to their psychosocial environment. The NZWB survey is administered annually, and this report presents results from the third year of conducting the survey following the inaugural survey in 2018.

It is important to note that the 2020 data were collected in the context of COVID-19 which has had diverse and ongoing impacts across workplaces and everyday life. The true effect that COVID-19 has had on the present results is difficult to isolate, not least because, not surprisingly, we found it difficult to recruit organisations from the most-affected industry sectors such as the Health, Education, or Tourism sectors. This has resulted in a significantly different mix of industry sectors from that of previous years. Although the overall 2020 results are broadly similar to those of 2019, we believe this isn't a true reflection of the general state of workplaces during this difficult period. We make further comments on this issue in Section 4.

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, 2005).

Psychosocial risk refers to the potential for psychosocial hazards to cause harm (Leka, Van Wassenhove & Jain, 2015). Table 1 briefly describes 10 psychosocial factors recognised by a large body of research as those which, if managed poorly, may be hazardous to people's health and wellbeing. Importantly, while these 10 factors have the potential to be a threat to health and safety, if managed well, they can be positive and enriching for both the organisation and workers.

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, being 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 workload, 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). PSC comprises four key content domains: management commitment and support; priority for psychological health; organisational participation; and organisational communication (Dollard & Bakker, 2010; Hall, Dollard & Coward, 2010; Dollard et al., 2017).

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 likelihood of psychosocial risks (demands) and increase workplace resources and subsequently reduce the risk of psychological ill-health among employees.

The NZWB findings help direct attention to 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 the likelihood of influencing negative health outcomes and other unwanted impacts of psychosocial hazards.

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 and nature of psychosocial health problems within the workforce
- Identify key workplace determinants of poor psychosocial health outcomes
- Provide participating New Zealand organisations with data on psychosocial risk for their organisation that can be monitored over time and compared against other organisations in their sector and nationally.

2. Method

2.1 Participants

Data were collected between September and October 2020 from a sample of workers (N=1430) employed within 21 New Zealand organisations who were willing to distribute an online survey to their workforce.

2.2 Sample distribution

The ultimate goal of this barometer is to be able to report on a representative sample of New Zealand employees. However, it is important to note that we were wholly reliant on the generosity of participating organisations and their workers for collecting the data. The resulting convenience sample was comprised of organisations that were geographically dispersed and included those with employees spread across a number of locations as well as companies based on a single site. To help the reader assess the applicability of the NZWB results to the wider New Zealand working population, comparisons with Statistics New Zealand (SNZ) data sets are provided in Table 2.

2.3 Demographic and employment data for the NZWB sample

The sample included approximately 38% females and 62% males, with 91% working at least 40 hours per week.

All but one of the organisations (which had 90 employees) were 'large' (100 or more employees).

Table 2 presents demographic data for the sample, with comparison to Statistics New Zealand (SNZ) data where applicable and the previous NZWB data.

Overall, the demographics and employment data are very similar to that of the 2019 NZWB. However, the industry sectors represented are quite different, which may have been at least partly due to the COVID-19 pandemic reducing the likelihood of organisations from some sectors participating. For example, we had no participating organisations from the Health, Education, or Tourism sectors.

Table 2: Individual and employment characteristics as a percentage of overall sample

	NZWB 2019 (N=1210)	NZWB 2020 (N=1430)	SNZ
Individual characteristics			
Gender[1]			
Men	50.2	62.2	52
Women	49.3	37.6	48
Gender diverse	0.5	0.2	6
Age (years)[1]			
25 or under	7.5	3.6	14.2
26-34	22.2	17.7	20.7
35-54	49.7	51.0	41.7
55-64	18.2	23.1	17.0
65 or over	2.4	4.6	6.3
Ethnicity[1]			
NZ European	72.1	72.5	70.9
Māori	7.3	9.9	14.0
Samoan		1.5	3.2
Cook Island Māori		0.5	1.3
Tongan	0.3	0.1	1.3
Niuean	0.2	0.3	0.5
Chinese	3.6	1.7	5.3
Indian	3.7	3.1	5.1
Other[2]	19.3	18.0	1.2
Job characteristics			
Contract type			
Permanent	93.7	93.8	
Fixed-term	4.7	4.3	
Casual	0.6	0.4	
Contractor / Self-employed	0.7	1.0	
Other	0.3	0.5	
Satisfaction with contract type			
Satisfied	94.4	94.5	
Dissatisfied	5.6	5.5	
Usual hours worked per week			
0-39	9	9	
40-45	74	67	
Over 45	17	24	
Satisfaction with usual hours worked per week			
Happy with the current working hours arrangement	69	70	
Would prefer to work fewer hours	29	27	
Would prefer to work more hours	2	3	
Industry classification (ANZSIC level 1)[2]			
Transport, Postal & Warehousing	22.0	51.5	4.3

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[1] Statistics NZ data are from the 2018 census (note slight differences in age categories with census data)

[2] Statistics NZ data from Business Demography Statistics – Enterprises by Industry February 2020

Construction	4.9	14.3	7.8
Professional, Scientific and Technical Services	16.4	13.2	7.3
Electricity, Gas, Water and Waste Services	6.3	12.3	0.9
Information Media and Telecommunications	15.0	5.0	0.1
Manufacturing	0.2	0.8	10.8
Public administration and safety	21.3	2.3	6.5
Retail Trade	4.0	0.6	9.6
Job title			
Employee / Contractor (Non-managerial)	62.9	54.3	
Mid-level manager	15.4	19.2	
First-line supervisor / Team leader	13.0	15.4	
Senior manager	6.0	8.0	
Other	2.7	3.1	

2.4 Measures

A selection of standardised, validated measures along with demographic and job information were included in the online survey which took approximately 20 minutes to complete.

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 (Hall et al., 2010).:

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).

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

The overall PSC score was calculated as the sum of the 12 items. The higher the overall PSC score, the more likely the psychosocial safety climate will be associated with favourable psychological and physical health and safety. Published benchmarks for PSC indicate that a score of 41 and over is a 'best-practice standard' threshold which is associated with a low risk of employee job strain and depressive symptoms (Bailey, Dollard & Richards, 2015). A PSC score of 37 and below is associated with a higher psychosocial risk, and negative outcomes such as employee job strain and depressive symptoms.

Job demands and Harm

Work life balance
Six items measured work–family and family-work conflict, using statements about the balance between work and personal life (Matthews, Kath & Barnes-Farrell, 2010). Respondents were asked the extent to which they agreed (using a Likert scale from 1, "strongly disagree", to 7, "strongly agree") with three items assessing work-family conflict and three items assessing family-work conflict.

Job insecurity

The Job Insecurity Scale (JIS) (Vander Elst, De Witte & De Cuyper, 2014) was used to ask respondents to express the extent to which they agreed or disagree with four statements about their job security. This provides insight into their perception about current and future job loss. The validity and reliability of the JIS scale has been demonstrated across five European countries.

Job demands: Mental and physical

Respondents were asked to indicate the extent to which they agreed with five statements about the physical demands of their work, and five statements about the mental demands. Their agreement with the statements was indicated using a 5-point scale (1, "strongly disagree" to 5, "strongly agree") (Choi et al., 2012).

Sickness presenteeism: working even though you are unwell

This scale measured the degree to which people went to work even though they were unwell. Respondents were asked how frequently (never, once, two to four times or more than five times) during the last six months they had gone to work feeling unwell, despite having symptoms such as a headache or backache (Lu et al, 2013).

Negative acts

The Short Negative Acts Questionnaire (S-NAQ) was used to indicate the frequency of exposure, over a six-month period, to negative interpersonal and work-related behaviours while at work. Respondents were asked how often (never, now and then, monthly, weekly or daily) they had been subjected to negative acts at work, using nine items relating to person-oriented, work-related, and social exclusion negative behaviours found to be associated with bullying situations (Notelaers & Einarsen, 2008).

Workplace bullying, cyber-bullying and sexual harassment

Workplace bullying, cyber-bullying and sexual harassment were measured using self-reporting questions whereby respondents were asked if they had observed (witnessed) these behaviours towards other people, or if they had been subjected to these behaviours at the workplace themselves in the past six months (Hauge, Skogstad & Einarsen, 2007; Farley et al., 2016; Nielson et al., 2010). Definitions of bullying, cyber-bullying and sexual harassment were provided to reduce possible variations on respondents' interpretation. The participants selected one response from the following options: no; yes, but only rarely; yes, now and then; yes, several times a week; and yes, almost daily, to being subjected to the behaviours indicated by the definition over a six-month period.

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".

Cyberbullying was defined 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 conducted through technology (e.g. phone, email, websites and social media) which are related to their work context. In this situation, the target of workplace cyberbullying has difficulty defending themselves against these actions".

Sexual harassment was defined as:

> "unwanted sex-related behaviours at work that are perceived as offensive, exceed your coping resources, or threaten your wellbeing. This includes unwelcome verbal and non-verbal sexual behaviours, as well as undesired physical behaviours".

Job Resources

Job flexibility
Job flexibility was measured using a 9-item scale drawing on method ('how') autonomy, scheduling ('when') autonomy and criteria ('what') autonomy (Breaugh, 1999).

Inclusion
Inclusion was measured with a 14-item instrument (Mor-Barak & Cherin, 1998). Respondents were asked the extent to which they "feel a part of critical organisational processes" with respect to 14 statements encompassing three domains: work group involvement, influence in decision making, and access to communications and resources.

Perceived management competence
In order to understand respondents' perceptions of management competencies, 12 statements asked the extent to which they agreed (from strongly disagreed to strongly agreed) that their immediate manager demonstrated particular management qualities. These were based on a "management competencies for preventing and reducing stress at work" (MCPARS) framework (Yarker, Lewis & Donaldson-Feilder, 2008), which included participant perceptions of their managers' competencies such as integrity, problem-solving skills and conflict management.

Co-worker support
Respondents were asked about the support that they receive from colleagues at work, including helpful information or advice, sympathetic understanding and concern, clear and helpful feedback, and practical assistance (O'Driscoll, Brough & Kalliath, 2004). Their agreement with the four statements was indicated using a 6-point scale (1, "never" to 6, "all the time").

Perceived organisational justice
A six-item scale asked respondents about their experience of fairness within their organisation (Ambrose & Schminke, 2009).

Worker health and wellbeing

Psychological distress
A sub-scale of the K6 scale, comprising six questions about emotional states, was used to measure psychological distress (Kessler et al., 2003). Responses were based on how the respondent was feeling in the past four weeks and scored on a five-point scale from "none of the time" to "all of the time".

Further insight into the impact of psychological distress was obtained using a single item question from the Patient Health Questionnaire (PHQ-9, Kroenke & Spitzer, 2002) which asked, "how difficult have these feelings made it for you to do your work, take care of things at home, or get along with other people?". Four response options ranged from "not difficult at all" to "extremely difficult".

Mental wellbeing
The World Health Organisation Five Wellbeing Index (WHO-5) was used to measure mental wellbeing over the last two weeks (World Health Organization, 1998). Respondents were asked how they had been feeling (using a Likert scale from "at no time" to "all the time") with respect to five statements, for example "I have felt cheerful and in good spirits." The total raw score of 0 to 25 is multiplied by 4 to give a final score of 0-100, with 0 representing the worst imaginable wellbeing.

Physical symptoms
Questions about physical symptoms were based on the Standardised Nordic questionnaires for the analysis of musculoskeletal symptoms (Kuorinka et al., 1987). Respondents were asked to indicate "yes" or "no" to whether they have "at any time in the last 12 months had trouble (ache, pain, discomfort, numbness) in any part of your body." Those who answered "yes" were asked to indicate which parts of the body they have had trouble with in the last 12 months, and in the last 7 days.

A further question asked respondents about the extent to which these physical symptoms had prevented them from carrying out their normal activities during the last 12 months, using a scale from 1, "not prevented at all" to 5, "prevented to a significant extent".

Indicators of organisational wellbeing

Job satisfaction
Overall job satisfaction was measured by asking respondents to rate how they felt about their job, "taking everything into consideration", using a scale ranging from 1, "extremely dissatisfied" to 7, "extremely satisfied" (Warr, Cook & Wall, 1979).

Engagement
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; Schaufeli, Bakker & Salanova, 2006). 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 1, "never" to 7, "every day".

Intention to leave
An indication of the commitment of respondents to their organisation was measured by asking for their level of agreement to three items about their intention to leave (Meyer, Allen & Smith, 1993), using a 7-point scale from 1, 'strongly agree' to 7, 'strongly disagree'.

Absenteeism
A single item from the World Health Organisation Work Performance Questionnaire (HPQ; Kessler et al., 2003) was used to measure absenteeism. This item asked respondents to report the number of entire work days missed because of problems with physical or mental health.

Productivity presenteeism: Effect on productivity due being unwell at work
The Stanford Presenteeism Scale 6 (SPS-6) was used to measure health status and employee productivity by asking the extent to which respondents agreed with six statements about their work experiences in the past month (Koopman et al., 2002). Items were scored 1-5 and summed. The SPS-6 measures potential productivity losses due to people being unwell at work. A higher score means that the person is less likely to have performance issues even though they are unwell at work.

Stress
A single item asked respondents to rate the amount of stress felt in their job between 1 and 10, where 1 is "no stress" and 10 is "extreme stress" (Stanton et al., 2001).

2.5 Procedure

The opportunity to participate in the 2020 NZWB survey was promoted through the Healthy Work Group's network in addition to contacting organisations that participated in 2019. There was no cost to participate for organisations or respondents beyond the time associated with completing the survey. A link to the survey was provided by the research team to allow organisations to electronically distribute the survey to their employees. Participating organisations with 50 or more respondents received an anonymised organisational-level report to allow comparison of their outcomes against national data.

2.6 Individual organisation reports

An example of an organisational report is provided in Appendix 1 (organisational identity removed). The report provides easy to understand feedback to the organisation on their psychosocial safety climate and specific psychosocial hazards. Firstly, PSC mean scores were presented and compared with published industry benchmarks for best practice. Secondly, the means and standard deviations (sd) or self-reported percentages for the remaining variables were presented. This allowed organisations to compare their scores with the entire 2020 sample of respondents. In addition, mean scores for the organisation were rated, using a 'traffic light' system (Table 3), relative to the mean scores of the entire 2020 NZWB sample (i.e. one sd either side of the mean scores from all 2020 NZWB respondents).

Table 3: Rating used to compare mean scores of the organisation with the entire 2020 sample

	Indicates that the results from your organisation are *significantly more favourable* than the results from the entire 2020 NZWB sample.
	Indicates that the results from your organisation are *broadly comparable* with the results from the entire 2020 NZWB sample.
	Indicates that the results from your organisation are *significantly less favourable* than the results from the entire 2020 NZWB sample.

3. Results

The following sections outline results from the 2020 NZWB, comprised of 21 organisations and 1430 individual respondents.

3.1 Relationships between study variables

Appendix 2 shows correlations between all continuous study variables. As with most studies with relatively large samples, statistically 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 weak when r is less than or equal to 0.20, moderate when $r = 0.30$, and strong when r is equal to or greater than 0.50 (Cohen, 1992). <u>Given the large sample size, correlations were only considered important if r was greater than 0.30</u>. See Appendix 2 for the full table of correlation coefficients.

High levels of PSC was associated with higher levels of:
- Perceived management competence
- Co-worker support
- Inclusion
- Flexibility
- Perceptions of organisational justice
- Mental wellbeing
- Employee engagement, and
- Job satisfaction.

PSC was also associated with lower levels of:
- Work-family conflict
- Bullying
- Psychological distress, and
- Intention to leave.

This is consistent with the wider research on PSC that indicates its associations with higher levels of workplace resources and lower levels of distress.

Furthermore, the three other variables which appear to be most strongly related to key variables in the NZWB were perceived management competence, inclusion and organisational justice. Higher levels of perceived management competence were very strongly related to higher levels of psychosocial safety climate, co-worker support, inclusion, job satisfaction, and lower levels of bullying.

Similarly, feelings of inclusion were related to higher levels of co-worker support, perceived organisational justice, job flexibility, mental wellbeing, engagement, job satisfaction, and to less intention to leave and bullying.

Taken together these findings indicate the importance of a positive workplace psychosocial environment for individual and organisational wellbeing.

3.2 Psychosocial safety climate

As described in Section 2.4, PSC comprises four domains: senior management support; management priority for employee psychological health and safety, communication about psychological health and safety, and participation and involvement. Each domain was computed as the sum of three items on scales from 1-5, so the minimum possible score for each domain was 3, and the maximum possible score was 15.

The overall PSC scale was computed as the sum of 12 items. The minimum overall PSC score was therefore 12, and the maximum possible score was 60.

Overall PSC ratings and the four individual domains of PSC were acceptable (Table 4), indicating moderate levels of psychosocial safety climate in the participating organisations. With respect to the published benchmarks for PSC, the overall score was below the 'best-practice standard' threshold of 41, which is associated with a low risk of employee job strain and depressive symptoms (Bailey, Dollard & Richards, 2015), but above 37. A score below 37 is associated with negative outcomes such as employee job strain and depressive symptoms. All scores were very similar to the 2019 NZWB.

Table 4: Psychosocial safety climate subscales and overall scale: means and standard deviations.

Domain	Minimum possible score	Maximum possible score	Mean	Standard deviation
Management support	3	15	9.80	3.24
Management priority	3	15	9.85	3.31
Communication	3	15	9.70	2.87
Participation	3	15	9.86	2.92
Overall psychosocial safety climate	12	60	39.20	11.38

- There were no significant differences in PSC by participant gender, hours worked, or among those who were permanent, fixed term, casual or self-employed.

- PSC varied as a function of age, with employees under 26, and those 65 and over, reporting the highest average PSC. Those aged between 26 and 54 reported the lowest average PSC.

- Senior managers and mid-level managers reported higher PSC than those in other roles, regardless of their reported job security.

- The overall PSC mean score was 39.2. In relation to the published benchmarks for PSC:

  - 48.6% of respondents indicated scores greater than or equal to 41, suggesting a *low risk* of negative psychosocial outcomes to these workers.

  - 42.4% of respondents reported scores 37 and below, which can indicate *high psychosocial risk* to these workers and negative outcomes such as job strain and depression.

- Higher PSC was associated with lower levels of work-family conflict and bullying.

- Higher PSC was associated with increased perceptions of management competence, co-worker support, inclusion, job flexibility and perceptions of justice.

- In terms of individual wellbeing, higher levels of PSC were associated with less psychological distress and better mental wellbeing.

- For organisational wellbeing, higher PSC was associated with higher levels of employee engagement, job satisfaction, and lower intentions to leave.

3.3 Additional job resources

Perceived organisational justice
- Older (65+) and younger (under 26) participants reported the highest levels of organisational justice, whereas 'casual' workers reported the lowest.

- In relation to individual's role within the organisation, perceptions of organisational justice varied in a linear fashion with non-managerial workers reporting the lowest levels and senior managers the highest levels.

- Organisational justice was strongly related to many of the key variables in the barometer. Higher perceptions of justice were most strongly related to higher levels of PSC, management competence, inclusion, mental wellbeing, engagement, job satisfaction and lower levels of work to family conflict, intentions to leave, and bullying.

Inclusion
- Causal workers reported significantly less inclusion than all other work arrangements.

- In relation to role, perceptions of inclusion varied in a linear fashion with non-managerial workers reporting the lowest levels and senior managers the highest levels.

- Like many of the job resources included in this barometer, inclusion was strongly related to many of the key variables. It was most strongly related to PSC, perceived management competence, co-worker support, organisational justice, job flexibility, mental wellbeing, engagement, job satisfaction, and lower levels of intentions to leave and bullying.

Perceived management competence
- Mid-level and senior-level management participants reported significantly higher management competence than non-managerial participants.

- Those aged 35-54 reported the lowest levels of perceived management competence. Female participants reported significantly higher management competence than their male counterparts.

- Higher levels of perceived management competence were associated with higher levels of PSC and all the measured job resources including co-worker support, inclusion, and perceived organisational justice. It was also associated with more engagement and job satisfaction and with less bullying, work-family conflict, and intentions to leave.

Co-worker support
- The highest levels of co-worker support were reported by female respondents.

- In relation to work arrangement, the highest levels of co-worker support were reported by casual workers.

- Higher co-worker support was associated with higher PSC, management competence, inclusion, engagement and job satisfaction, and less bullying.

Job flexibility
- Female workers reported significantly greater job flexibility than males, whereas those aged under 25 reported significantly less job flexibility than older workers.

- Job flexibility was greatest for fixed-term and contractors/self-employed and lowest for permanent and casual employees.

- In relation to role, perceptions of job flexibility varied in a linear fashion with

non-managerial workers reporting the lowest and senior managers the highest levels.

- Higher levels of job flexibility were related to higher PSC and inclusion, and less work to family conflict.

- Roles which have high physical demands were associated with less job flexibility.

3.4 Job demands and harm

Job demands- mental
- Significantly lower mental job demands were reported by those over 65 years of age compared to younger groups.

- Respondents in non-managerial positions had the lowest mental job demand scores, with managers reporting the highest.

- High mental job demands were associated with higher work-to-family conflict and job stress, and lower levels of mental wellbeing.

Job demands- physical
- Male respondents reported significantly greater physical job demands than females.

- Significantly lower physical job demands were reported by those over 65 years of age.

- While senior managers reported the lowest levels of physical job demands, first-line managers/team leaders reported levels significantly higher than non-managerial staff.

- High levels of physical job demands were associated with less job flexibility.

Work-family and family-work conflict
- Overall, work 'causing' conflict with family was strongly related to many of the variables measured. However, the inverse tended not to be the case (i.e., family 'causing' conflict with work) - which is somewhat surprising given the increase of 'working from home' during the data collection period.

- Male respondents reported significantly higher work-to-family and family-to-work conflict than female respondents.

- Work-family conflict and family-work conflict were lowest for the youngest (25

& under) and oldest (65+) groups.

- Family-to-work conflict was highest for first-line managers/team leaders and lowest for senior managers.

- The level of work-to-family conflict (as opposed to family-to-work conflict) was associated with many of the key variables in this barometer. It was most strongly related to mental job demands, sickness presenteeism, psychological distress, intentions to leave stress, and lower PSC, inclusion, management competence, organisational justice, job flexibility, mental wellbeing, engagement, job satisfaction, and productivity presenteeism.

Job insecurity
- Female respondents reported significantly higher levels of job insecurity, than males.

- Permanent workers reported the lowest levels of job insecurity and causal employees the highest.

- Job insecurity was associated with more psychological distress and intention to leave and with lower inclusion and job satisfaction.

Sickness Presenteeism
- Female respondents were more likely than males to report coming into work when they felt unwell.

- Those over 65 years of age reported significantly lower rates of going to work when unwell, than all other age groupings.

- First-line managers/team leaders reported the highest rates of going to work when unwell. Senior managers reported the lowest levels.

- Sickness presenteeism was associated with higher levels of work-to-family conflict, psychological distress, and bullying, and lower organisational justice and mental wellbeing.

Workplace bullying, cyber-bullying and sexual harassment
Table 5 shows the proportion of self-reported bullying, cyberbullying and sexual harassment within the sample. It shows the percentage of participants who reported 'yes' (rarely or more frequently) to witnessing or experiencing these behaviours.

The results across all six categories are very similar to the percentages reported in the 2019 barometer (note however there was a significantly different sample composition between the present and 2019 barometer).

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

	Total reporting Yes (%)
Experienced bullying themselves (self-report)	17.8
Observed bullying towards other people	39.9
Experienced cyberbullying themselves	5.2
Observed cyberbullying towards other people	9.4
Had been subjected to sexual harassment themselves	2.0
Had observed sexual harassment of other people	7.1

- The sample had a workplace bullying prevalence rate of approximately 18% (self-reported rate). Almost forty percent (39.9%) of respondents reported having witnessed others being bullied.

- Similarly to 2019, the most frequently reported negative behaviours associated with bullying were "someone withholding information which affects your performance" and "being ignored by people at work (being ignored, excluded)."

- There was an increased likelihood for first line managers/team leaders to report more negative behaviours associated with bullying than those respondents in other roles.

- Respondents aged 25 and under, and those age 65 and older, reported the least amount of negative behaviours associated with bullying.

- Workplace bullying was most strongly related to low perceptions of management competence, inclusion, organisational justice, and high levels of psychological distress.

3.5 Worker health and wellbeing

Psychological distress
- Psychological distress, and the impact of distress, was higher among female respondents and among younger workers. They were also higher for those in non-managerial roles compared with managers.

- Lower levels of distress and its impact were reported by those respondents working in their preferred employment arrangement.

- Higher levels of psychological distress were associated with many of the variables in this barometer. Psychological distress was most strongly related

to high levels of sickness presenteeism, intentions to leave, and bullying, and low levels of mental wellbeing, engagement, and job satisfaction.

Mental wellbeing
- Levels of mental wellbeing were higher among males, and older workers. It was also higher for those respondents in managerial roles compared to non-managerial roles.

- As with psychological distress (but in the reverse direction), mental wellbeing was associated with many of the variables in this barometer. It was most strongly related to high levels of PSC, organisational justice, engagement, job satisfaction, inclusion, and productivity presenteeism, and lower levels of sickness presenteeism, psychological distress, and intentions to leave.

Physical symptoms
- Of the almost 72 percent (71.9%) of respondents who reported physical trouble (aches, pain, discomfort, numbness) during the previous 12 months, just over 62 percent (62.7%) reported that it prevented them from carrying out normal activities to at least a certain extent. An additional 4.5 percent of this group reported that it prevented them from carrying out their normal activities to a significant extent.

- The most frequently reported symptoms were in the lower back, shoulders and neck.

3.6 Indicators of organisational wellbeing

Engagement
- Older participants were significantly more engaged in their jobs than younger participants.

- Respondents on casual contracts reported less engagement than those on other work arrangements.

- In relation to respondents' roles, engagement levels tended to vary in a linear fashion with non-managerial employees reporting the least engagement while senior managers reported the highest levels.

- Levels of engagement were strongly related to many key variables in this barometer. Higher levels of engagement were most strongly related to PSC, inclusion, organisational justice, mental wellbeing, job satisfaction, lower psychological distress, and intention to leave. However, higher levels of engagement were also related to higher levels of productivity presenteeism.

Job satisfaction
- Older (65+) and young (under 26) participants reported the highest levels of job satisfaction with the lowest levels reported by those aged between 26 – 54 years of age.

- In relation to respondents' roles, job satisfaction tended to vary in a linear fashion with non-managerial employees reporting the least job satisfaction while senior managers reported the highest.

- Like engagement, job satisfaction was strongly related to many of the key variables in this barometer. Higher job satisfaction was most strongly related to PSC, management competence, inclusion, organisational justice, mental wellbeing, engagement, low levels of psychological distress, intention to leave. As with job engagement, higher job satisfaction was also related to higher levels of productivity presenteeism.

Intention to leave
- Respondents on casual contacts reported significantly higher intentions to leave than all other work arrangement groups.

- A higher intention to leave was strongly associated with many key variables including less perceived organisational justice, job satisfaction, a less favourable psychosocial safety climate, lower mental health, psychological distress, management competence, engagement, and less productivity presenteeism.

Absenteeism
- Around half the respondents (49.7%) reported an absence from work during the last 12 months due to 'physical or mental health'.

- Of those respondents who reported being absent, 75 percent reported having had five or fewer days absent from work during the last 12 months due to 'physical or mental health'.

- There were no significant differences across age groups, gender, employment arrangements or role in relation to reported absenteeism.

- Absenteeism was largely unrelated to the main study variables.

Productivity presenteeism
- Older respondents reported that they were less likely to have reduced performance even though they were unwell at work.

- In relation to respondents' roles, productivity presenteeism tended to vary in a linear fashion with non-managerial employees reporting that they were most likely to have reduced performance while unwell at work while senior managers reporting the lowest impact on their performance.

Job related stress
- Stress levels were consistent across all age groups, except for those aged over 65 who reported significantly lower levels of stress than other groups.

- In relation to work arrangements, contractors or self-employed participants reported significantly higher levels of stress than respondents in all other work arrangements.

- Higher levels of work related stress were related to higher mental job demands, work to family conflict, psychological distress (and its impact) and lower levels of mental wellbeing.

4. Summary

The NZWB is designed to inform national, industry, and organisational approaches to psychosocial risk prevention at work, by identifying workplace indicators of mental health, stress-related conditions and some aspects of physical health. It also aims to provide annual data from which the evaluation of effectiveness of implemented policies and programs can be assessed over time.

The NZWB 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 hazards in New Zealand workplaces, the NZWB provides individual reports for participating organisations. These reports encourage organisations to develop measures to address psychosocial hazards in their workplaces and monitor their performance over time as well as benchmark against other organisations.

Psychosocial hazards and their associated risks 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. Improvements to the psychosocial environment within which individuals work have been shown to produce a significant return on investment for organisations.

Overall, the 2020 results appear remarkably similar to those of 2019. On the surface this might seem to suggest that the COVID-19 pandemic which dominated (and continues to dominate) many aspects of the world of work during 2020 had little effect on the extensive range of variables measured in this barometer. However, we would suggest that is almost definitely not the case. It appears that the organisations which were able and willing to be involved in the 2020 Barometer were those that were affected to a lesser extent by COVID-19. For example, unlike in previous years, we had no participating organisations from the Health, Education, or Tourism sectors (all badly hit by COVID-19). Furthermore, only people who were employed at the time of the administration of this survey could participate, potentially skewing the results towards an appearance of 'business as usual'. Another potential factor at play is that several of the significant contributing regular organisations have actively been using the results of past NZWBs to direct their healthy work initiatives. It is reasonable to expect that the increases in organisational resources developed by these organisations have helped offset some of the challenges brought by COVID-19. We therefore suggest that caution is required in making direct comparisons between 2019 and 2020 results.

Notwithstanding the challenges associated with COVID-19, organisational responses to the 2020 data and the advice given to participating organisations in the feedback reports have been positive, and most organisations have indicated that they wish to continue participating in the barometer in 2021. The focus of the 2021 barometer will be on increasing the sample size and representativeness with respect to key demographic and employment indicators, especially in relation to the industries represented.

4.1 Key findings: The 4 features of healthy work

Our analyses point to several key findings which we believe should be the primary focus of healthy work initiatives to address psychosocial hazards and their associated risks, as well as to improve wellbeing.

Overall, **four key features of the work environment** were associated with positive outcomes for individuals and organisations. These are listed in order of the strength of their relationships with key outcome variables (identified through multiple regression analyses). The results of the 2020 NZWB point to the following 4 'elements' of healthy work being important.

1. Perceptions of **organisational justice** or being treated fairly across all areas of the organisation and aspects of the employment relationship.

2. Feelings of **inclusion** or being involved in the decisions affecting work and having access to information which affects work, including having the required resources to get the job done.

3. A positive, thriving **psychosocial safety climate (PSC)** which involves management's visible, substantive and on-going commitment and prioritisation of psychological health and safety.

4. Perceptions of **management competence** which include management qualities such as integrity, empowerment, conflict management, being empathetic and being accessible.

These four variables appear to be the key resources which organisations, industries and policy makers should focus on for developing and sustaining worker health and wellbeing, and for positive individual and organisational outcomes more generally.

An additional trend worth reflecting on is that, especially in relation to job resources (such as those highlighted above), respondents in managerial roles tended to have more favourable evaluations than non-managerial workers. This trend was generally linear with non-managerial workers reporting the least positive and senior managers the most positive perceptions.

Organisations might want to consider what this trend means. There are three likely scenarios: either (1) these roles actually have access to different levels of resources; or (2) management is unjustifiably optimistic about the levels of organisational resources; or (3) employees are unaware of resources available to them. We would argue that all of these scenarios warrant further investigation and potential intervention.

An additional demographic trend worth noting is that participants aged between 26 and 54 tended to report less favourable perceptions of organisational resources (e.g., lower PSC), job demands and harm (e.g., work to family & family to work conflict & negative behaviours associated with bullying), and outcomes (e.g., lower job satisfaction), than both older and younger participants.

Lastly, the toxic effects of **bullying** and **work to family conflict** were evident in their strong relationships with reduced **job satisfaction, inclusion,** and **mental wellbeing**, and increased **distress** and **intentions to leave**. These results strongly suggest that, wherever possible, organisations need to prioritise healthy workplace relationships and effective work-life balance.

Overall, although organisational leaders are themselves under pressure and may feel less able to prioritise healthy work initiatives in this ongoing, often uncertain, COVID-19 influenced economy, the results reported here strongly indicate that employee and organisational productivity and sustainability will be enhanced by increasing inclusion, organisational justice and management competence and by promoting a positive psychosocial safety climate.

Acknowledgements

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Appendix 1: Example of an organisational report
(all data are fabricated)

New Zealand Workplace Barometer
Organisational Report (exemplar)

Introduction
Psychosocial hazards and their associated risks 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. Improvements to the psychosocial environment within which individuals work have been shown to produce a significant return on investment for organisations.

The New Zealand Workplace Barometer (NZWB)
The NZWB is a survey that provides organisations with information to assess psychosocial hazards and to promote improvements in the psychosocial work environment. The survey measures psychosocial safety climate (PSC) as well as other psychosocial factors that impact on outcomes for individual and organisational wellbeing and performance. Organisations participating in the NZWB provide access for data collection in exchange for a report summarising the psychosocial hazards and associated risks within their organisation. Organisations who participate annually can use their results to understand and monitor their performance with respect to their psychosocial environment. The following table provides a demographic breakdown of the entire 2020 NZWB sample of 1430 respondents, against which your organisation's results have been compared.

Table 1. Individual and employment characteristics of all 2020 NZWB survey respondents

	N	%		N	%
Gender			*Age range*		
Male	890	62.2	18-25	52	3.6
Female	537	37.6	26-34	253	17.7
Gender diverse	3	0.2	35-44	360	25.2
Ethnicity[3]			45-54	369	25.8
NZ European	1037	72.5	55-64	330	23.1
Māori	141	9.9	65+	66	4.6
Samoan	21	1.5	*Employment arrangement*		
Cook Island Māori	11	0.8	Permanent	1341	93.8
Tongan	2	0.1	Fixed-term	62	4.3
Niuean	4	0.3	Casual	6	0.4
Chinese	25	1.7	Contractor/self-employed	14	1.0
Indian	44	3.1	Other	7	0.5
Other	258	18.0	*Job title*		
			Employee / Contractor	776	54.3
			First-line supervisor / Team leader	220	15.4
			Mid-level manager	275	19.2
			Senior manager	115	8.0
			Other	44	3.1

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[3] Some respondents identified with more than one ethnic group

Your organisation's results

The following sections provide the results of your organisation's psychosocial safety climate (PSC) and your psychosocial risk profile based on the responses from 150 respondents from your organisation who participated in the 2020 NZWB survey. These results can assist in your decision-making about where to direct resources and focus attention with respect to psychosocial hazards and associated risks. Should you elect to participate in the 2021 NZWB survey (and beyond) you will be able to develop an understanding of changes to your organisation's psychosocial environment over time. We have provided your results as mean scores (and standard deviation (sd) to indicate the variation in responses) or as percentages. You can consider where <u>your results sit within the scoring range</u>, and also compare your results for each variable with the <u>entire 2020 NZWB sample</u>. It is important to note that your findings will not necessarily be representative of your organisation as a whole and will only indicate the views of those that responded. The higher the proportion of your employees who participated, the more confidence you can have that these findings accurately reflect the psychosocial environment in your organisation.

1. **Psychosocial Safety Climate (PSC)**

PSC measures the perception of the organisation's concern for the psychological health and safety of its workers – including worker wellbeing and work stress. The 12-item PSC tool measures PSC across four aspects: 1) management commitment and support for psychological health and safety; 2) management prioritisation of psychological health and safety; 3) organisational participation in psychological health and safety; and 4) organisational communication about psychological health and safety.

Published benchmarks for PSC indicate that a score of 41 and over is a 'best-practice standard' threshold which is associated with a low-risk of employee job strain and depressive symptoms. A PSC score of 37 and below is associated with negative outcomes such as employee job strain and depressive symptoms.

<u>The higher your overall PSC score, the more likely your climate will be associated with favourable psychological and physical health and safety.</u>

PSC variable	Your organisation's score	Entire 2020 NZWB sample
PSC-12 Scoring range: 12-60	Your mean score: 35.99 (sd: 10.50)	Mean score: 39.20 (sd: 11.38)

Comment on PSC score:

Your results were below the published benchmark of 37, reflecting a high-risk of employee job strain and depressive symptoms. Measures you can take to address the psychological health and safety of workers and to improve PSC and individual and organisational outcomes include:

- Encouraging workers to be involved in discussing the mental health aspects of their work and helping to identify any hazards and ways to address them.
- Strong commitment and support at senior levels of the organisation for psychosocial health and safety.
- Strengthening of assessment, management, communication and support for work stress and psychological demands within the organisation.
- Ensure that known psychosocial hazards are carefully monitored so that early intervention occurs. Consider using any such occurrences as a means of increasing awareness and understanding of psychological health and safety.

2. Psychosocial risk profile

The following tables present your results for each of the variables. You can consider where your scores sit within the scoring range for each variable. Also, a colour system, as outlined below, has been used to rate your mean scores relative to the mean scores of the entire 2020 NZWB sample (i.e. 1 sd either side of the mean scores from all 2020 NZWB respondents). Please note these ratings are indicative only, aimed at assisting you in where to focus your attention.

   	Indicates that the results from your organisation are *significantly more favourable* than the results from the entire 2020 NZWB sample.
   	Indicates that the results from your organisation are *broadly comparable* with the results from the entire 2020 NZWB sample.
   	Indicates that the results from your organisation are *significantly less favourable* than the results from the entire 2020 NZWB sample.

Job demands and harm

The following results relate to some aspects of the job that place demands on workers.
Higher scores mean greater psychosocial job demands or harm.

Job Demand variable	Your organisation's score	Entire 2020 NZWB sample
Work-family conflict Scoring range: 1-5	Mean: 2.73 (sd: 0.98)	Mean: 2.79 (sd: 1.03)
Family-work conflict Scoring range: 1-5	Mean: 2.05 (sd: 0.71)	Mean: 2.02 (sd: 0.76)
Job insecurity Scoring range: 1-5	Mean: 2.67 (sd: 0.97)	Mean: 2.97 (sd: 0.94)
Job demands - mental Scoring range: 1-5	Mean: 3.34 (sd: 0.79)	Mean: 3.34 (sd: 0.77)
Job demands - physical Scoring range: 1-5	Mean: 1.78 (sd: 0.98)	Mean: 1.76 (sd: 0.99)

Harm variable	Percentage (%) your organisation (percentage entire 2020 NZWB sample)					
	Yes, almost daily	Yes, several times a week	Yes, now and then	Yes, but only rarely	**YES (total)**	**NO**
Workplace bullying – self reported	1.9 (0.6)	1.9 (1.3)	4.9 (6.9)	8.8 (9.0)	**117.5** (17.8)	**882.5** (82.2)
Workplace bullying – witnessed	1.0 (1.0)	3.5 (3.8)	19.5 (15.2)	18.0 (19.8)	**42.0** (39.9)	**58.0** (60.1)
Cyber-bullying – self reported	0.5 (0.1)	(0.1)	2.8 (1.5)	2.0 (3.5)	**5.3** (5.2)	**94.7** (94.8)
Cyber-bullying – witnessed	1.0 (0.1)	0.5 (0.6)	2.5 (3.1)	2.8 (5.6)	**6.8** (9.4)	**93.2** (90.6)
Sexual harassment – self reported	(0.1)	0.2 (0.1)	(0.4)	0.7 (1.4)	**0.9** (2.0)	**99.1** (98.0)
Sexual harassment – witnessed	(0)	(0.1)	0.5 (1.7)	3.7 (5.2)	**4.2** (7.1)	**95.8** (92.9)

Comments:

Your results are comparable with the whole 2020 sample, with some demands scoring somewhat more favourably, such as physical job demands and job security. A high proportion of respondents reported being on the receiving end of, or witnessing negative behaviours, workplace bullying in particular. A focus on mental job demands and negative behaviours to improve these outcomes is likely to positively impact your workforce, for example by developing a strong culture of respect, strong management competencies, good reporting systems, and training and awareness around workplace bullying, cyber bullying and sexual harassment across your organisation.

Job resources

Job resources are aspects of the job that help workers in meeting the demands on them to do the work. Higher scores mean *more favourable* psychosocial job resources.

Job Resource variable	Your organisation's score	Entire 2020 NZWB sample
Management competencies Scoring range: 1-5	Mean: 3.81 (sd: 0.91)	Mean: 3.85 (sd: 0.89)
Co-worker support Scoring range: 1-5	Mean: 4.41 (sd: 1.13)	Mean: 4.35 (sd: 1.17)
Work Group Involvement Scoring range: 1-6	Mean: 4.50 (sd: 0.95)	Mean: 4.50 (sd: 1.02)
Influence in Decision Making Scoring range: 1-6	Mean: 3.81 (sd: 1.21)	Mean: 3.78 (sd: 1.31)
Access to Communications and Resources Scoring range: 1-6	Mean: 4.21 (sd: 1.01)	Mean: 4.20 (sd: 1.06)
Fairness (Perceived organisational justice) Scoring range: 1-7	Mean: 5.01 (sd: 1.24)	Mean: 5.26 (sd: 1.26)
Flexibility Scoring range: 1-7	Mean: 4.99 (sd: 1.31)	Mean: 4.32 (sd: 1.65)

Comments:

Your organisation's scores are broadly comparable with the results from all 2020 respondents, and scores for co-worker support, access to resources and work group involvement are encouraging. A focus on supporting workers to do their job, for example by developing management competencies and involving workers in decision making, could improve this area.

Worker mental health and wellbeing

The table below reports on a number of 'general' measures of health/ill-health. Although these indicators represent a person's overall current status (work and non-work), typically the work environment is a significant determiner of these 'general' health indictors. Higher scores mean poorer outcomes in terms of psychological distress and physical symptoms, unless indicated.

Individual variable	Your organisation's score	Entire 2020 NZWB sample
Psychological distress Scoring range: 1-5	Mean: 1.89 (sd: 0.75)	Mean: 1.79 (sd: 0.72)
Impact of psychological distress Scoring range: 1-4	Mean: 1.63 (sd: 0.70)	Mean: 1.57 (sd: 0.68)
Mental wellbeing (higher score is better) Scoring range: 0-100	Mean: 49.50 (sd: 23.23)	Mean: 57.33 (sd: 22.23)
Physical symptoms – reported 'trouble' Yes/No in 12 months	76.1% reported Yes	71.9% reported Yes
Physical symptoms – impact of trouble Scoring range: 1-5	Mean: 2.15 (sd: 1.12)	Mean: 2.12 (sd: 1.14)

Comments:

Your scores were comparable but somewhat poorer than the whole 2020 sample, and over 75 of respondents reported physical 'trouble'. There is a strong association between physical injuries and mental wellbeing, and efforts to effectively manage psychosocial risks is likely to be reflected in improvements overall. Measures include offering accessible and suitable support and good communication about work stress and psychological demands.

Indicators of organisational wellbeing
The following results are indicators of the culture and psychosocial wellbeing of the organisation.
Higher scores mean better outcomes, unless indicated.

Organisational wellbeing variable	Your organisation's score	Entire 2020 NZWB sample
Engagement Scoring range: 1-7	Mean: 5.29 (sd: 1.20)	Mean: 5.50 (sd: 1.16)
Job satisfaction Scoring range: 1-7	Mean: 5.00 (sd: 1.40)	Mean: 5.04 (sd: 1.42)
Leave intentions (lower score is better) Scoring range: 1-7	Mean: 3.38 (sd: 1.79)	Mean: 2.98 (sd: 1.78)
Presenteeism (lower score is better) Scoring range: 1-4	Mean: 2.45 (sd: 0.99)	Mean: 2.44 (sd: 1.04)
Productivity and absenteeism Yes/No days missed in 12 months Number of entire missed days in 12 months	Yes: 58.0% Mean: 6.90 days Median: 3.00 days Range: 1 – 76 days	Yes: 49.7% Mean: 7.35 days Median: 3.00 days Range: 1 – 190 days

Comments:
Whilst comparable with the 2020 sample, your results suggest value in putting measures in place to address the psychological health and safety of workers. Developing effective communication channels and demonstrating commitment from senior managers are examples of measures to improve worker engagement and job satisfaction as well as positively impact productivity. Ensure effective monitoring of the psychological wellbeing to reduce both absenteeism and presenteeism.

Thank you again for your participation and we look forward to your involvement in the 2021 NZWB.

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

You are welcome to contact the Healthy Work Group by emailing Liz Ashby (L.Ashby@massey.ac.nz) or the Healthy Work Group (healthyworkgroup@massey.ac.nz).

Appendix 2: Table of correlation coefficients

		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
1.	PSC	--																			
2.	WFC	-.437**	--																		
3.	FWC	-.169**	.410**	--																	
4.	Insecurity	-.218**	.142**	.222**	--																
5.	Mental demands	-.272**	.462**	.150**	0.042	--															
6.	Physical demands	-.213**	.200**	.129**	0.028	0.046	--														
7.	Sickness Presenteeism	-.297**	.357**	.216**	.169**	.282**	.162**	--													
8.	NAQ9	-.378**	.337**	.163**	.243**	.254**	.211**	.321**	--												
9.	Job Flexibility	.351**	-.329**	-.111**	0.015	-.085*	-.421**	-.170**	-.280**	--											
10.	Inclusion	.608**	-.384**	-.235**	-.324**	-.170**	-.241**	-.272**	-.512**	.425**	--										
11.	Mgt. competence	.592**	-.360**	-.116**	-.226**	-.156**	-.245**	-.179**	-.410**	.366**	.637**	--									
12.	Co-worker Support	.399**	-.283**	-.187**	-.167**	-.136**	-.151**	-.196**	-.395**	.237**	.517**	.413**	--								
13.	POJ	.664**	-.440**	-.234**	-.307**	-.268**	-.214**	-.316**	-.463**	.307**	.606**	.561**	.391**	--							
14.	Psych. Distress	-.308**	.367**	.298**	.322**	.257**	0.017	.413**	.411**	-.119**	-.377**	-.230**	-.241**	-.364**	--						
15.	Impact of psych distress	-.304**	.375**	.319**	.296**	.238**	-0.010	.369**	.327**	-.091**	-.333**	-.216**	-.202**	-.316**	.711**	--					
16.	Mental Wellbeing	.431**	-.399**	-.292**	-.284**	-.327**	-0.010	-.419**	-.312**	.150**	.411**	.290**	.320**	.427**	-.641**	-.583**	--				
17.	Job Satisfaction	.531**	-.397**	-.243**	-.339**	-.224**	-.061*	-.277**	-.361**	.231**	.568**	.463**	.384**	.580**	-.478**	-.430**	.564**	--			
18.	Engagement	.467**	-.307**	-.257**	-.268**	-.092**	-0.042	-.264**	-.227**	.244**	.499**	.345**	.344**	.463**	-.438**	-.384**	.576**	.704**	--		
19.	Intentions to leave	-.419**	.347**	.205**	.398**	.227**	0.030	.257**	.359**	-.122**	-.429**	-.372**	-.260**	-.515**	.418**	.380**	-.445**	-.629**	-.493**	--	
20.	Productivity Presenteeism	.287**	-.304**	-.336**	-.241**	-.184**	-.111**	-.290**	-.248**	.130**	.339**	.190**	.221**	.339**	-.560**	-.547**	.506**	.410**	.438**	-.317**	--
21.	Stress	-.234**	.395**	.171**	.117**	.528**	-0.018	.290**	.232**	-.053*	-.152**	-.142**	-.113**	-.239**	.383**	.315**	-.383**	-.274**	-.168**	.273**	-.295**

** correlation is significant at the 0.01 level (2-tailed)
* correlation is significant at the 0.05 level (2-tailed)