

New Zealand Psychosocial Survey 2021

OVERVIEW

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EXECUTIVE SUMMARY

Psychosocial factors (hazards) in the workplace have been acknowledged as an important risk to workers' health and wellbeing. Many studies internationally measure worker exposure to psychosocial risks using a tool called the Copenhagen Psychosocial Questionnaire (COPSOQ). Developed by the Danish National Research Center for the Working Environment, COPSOQ has been designed for workplace psychosocial risk assessment and organisational development in a broad range of domains, including Demands at Work, Work Organisation and Job Contents, Interpersonal Relations and Leadership, Work-Individual Interface, Social Capital, Health, and Offensive Behaviours. While there is some understanding of work-related psychosocial risk factors in New Zealand, WorkSafe New Zealand needed a more robust and updated evidence-base of work-related psychosocial risks, within the context of the changing nature of work in New Zealand.

The New Zealand Psychosocial Survey (NZPS) was conducted from January to June 2021. It was administered to 3612 respondents aged 18 years and over who were employees working for wages or salary, or people working without pay in a family business. Weighting by gender within industry, ethnicity, and age was applied to ensure the results were representative of the entire New Zealand workforce. The NZPS comprised 31 scales from the COPSOQ in total. Each scale was scored using five-point Likert scales ranging from 0 to 100. The reliability of each scale was checked for internal consistency of responses.

Key findings of the survey

Demands at work are the most common psychosocial risk across the New Zealand workforce.

- Work Pace (speed and intensity of work), Demands for Hiding Emotions (the need to conceal feelings from other people at work), and Quantitative Demands (workload) are the most common sources of psychosocial risk for workers in New Zealand. New Zealand workers report higher Quantitative Demands than workers in other countries for which we have data (Spain, Sweden, and Turkey).

The survey has identified the most common protective factors supporting the mental wellbeing of New Zealand workers.

- These are security over working conditions (security of work hours, work location, and pay), Sense of Community at Work (feeling part of the team or community), Role Clarity (workers' understanding of their role at work), and Meaning of Work (understanding of the purpose and context of their work). New Zealand workers report higher security over their working conditions than those in other countries for which we have data (Spain, Sweden, and Turkey).
- New Zealand workers seem to report higher job satisfaction than other countries with obtained data (Spain and Turkey).

Over one third of workers (35%) report being exposed to at least one offensive behaviour in the last 12 months.

- In the survey, workers were asked whether they were exposed to offensive behaviours at work. Note, 'exposure' could include personal experience of or witnessing the behaviour of others at work. Bullying is the most common hostile act reported by workers (23%), followed by cyberbullying (16%), threats of violence (14%), sexual harassment (11%) and physical violence (11%).
- Workers most often report that their colleagues and managers are responsible for bullying and cyberbullying incidents. However, physical violence and threats of violence are most often received by customers or clients.

- Workers who work more than 61 hours per week, in businesses with 50 to 99 employees, or those working in their industry from 4 to 9 years are more likely than all workers to report experiencing bullying, cyberbullying, and threats of violence at work.

Māori and Pacific workers face greater risk from certain psychosocial working conditions than other workers, but there are also some positives.

- Compared to all workers, Māori and Pacific workers report higher Insecurity over Working Conditions and Illegitimate Tasks (threats to professional identity). Additionally, Māori workers are more likely than all workers to report exposure to bullying (28%), cyberbullying (21%), sexual harassment (15%), threats of violence (20%), and physical violence (17%) in the past 12 months. However, compared to all workers, Māori and Pacific workers report higher Possibilities for Development, Meaning of Work, Recognition, Role Clarity, Quality of Leadership, Sense of Community at Work, Job Satisfaction, and Organisational Justice (fair treatment at work).

The results show that psychosocial working conditions differ by other socio-demographic variables, such as age, gender, and migrant status.

- Compared to their female colleagues, male workers are more likely to report exposure to cyberbullying, threats of violence and physical violence. They also report higher Quantitative Demands, Work Pace, Role Conflicts, Job Insecurity, Insecurity over Working conditions, and Illegitimate Tasks. However, male workers are more likely than females to self-rate their health as 'very good' or 'excellent' (48.5% compared to 44.5%).
- On the other hand, female workers are more likely to report higher Work Pace, Emotional Demand, Demand for Hiding Emotions. They seem to report less Influence at Work, Control over Working Time and Predictability.
- Workers aged 60 years and over appear to face lower than average risk on many psychosocial risk factors.

Industry plays a role in shaping workplace psychosocial environments.

In New Zealand, some sectors seem to perceive better health and psychosocial factors, while others appear to confront some potential psychosocial risks at work.

- Healthcare and social assistance (HCSA) workers report the highest scores of Demands for Hiding Emotions (the need to conceal feelings from other people at work) and Emotional Demands (dealing with other people's feelings or being placed in emotionally tricky situations). Of all industries, workers in HCSA are most likely to report exposure to bullying (30%) and threats of violence (22%). However, their scores for meaning of work and social support from colleagues appear to be the highest.
- Forestry workers report the highest scores of Influence at Work (ability to decide the order of tasks), Predictability (ability to avoid uncertainty by receiving the correct information at the right time) and Job Clarity (workers' understanding of their role at work). Additionally, they score highly on Job Satisfaction and Quality of Work (experience of the immediate output of one's work), Vertical Trust (the trust in communication between management and employees), and Horizontal Trust (the trust built among employees).
- Construction workers report the highest scores for Recognition and Quality of Leadership, while workers from Agriculture sector perceive the highest level of Organisational Justice and self-rated health.

- Workers from Transport, Postal and Warehousing (TPW) sector report the lowest scores for Quantitative Demands, Emotional Demands, Influence at Work, Role Conflicts and Illegitimate Tasks. In the case of offensive behaviour, TPW workers also report the lowest exposure to bullying (16%) and cyberbullying (10%).
- The highest scores for Role Conflicts and Job Insecurity are seen in Information Media and Telecommunication workers. In addition, workers in this sector report higher Quantitative Demands, Work Pace, and Illegitimate Tasks than all workers. Of all industries, workers in this sector are most likely to report exposure to cyberbullying (25%), sexual harassment (20%) and physical violence (16%).

The results indicate the many different ways in which psychosocial risks impact workers in New Zealand. These findings will inform new evidence-based interventions to improve psychosocial health in New Zealand working environments and help achieve the goal of health and safety for every worker regardless of their social economic status. A deeper analysis of the survey data is needed to better understand workplace offensive behaviours and how outcomes differ between workers in the context of psychosocial factors at work.

1.0 Background

Psychosocial factors at work are considered an important occupational health and safety issue (WorkSafe New Zealand, 2019).

The International Labour Organisation (2016) defines psychosocial factors as 'interactions between and among work environment, job content, organizational conditions and workers' capacities, needs, culture, personal extra-job considerations that may, through perceptions and experience, influence health, work performance and job satisfaction'. In New Zealand, the Government *Health and Safety at Work Strategy 2018–2028* emphasises the role of the health and safety system in addressing psychosocial risks to ensure workers' health and wellbeing (Ministry of Business, Innovation and Employment, 2021).

The Copenhagen Psychosocial Questionnaire (COPSOQ) is a tool to assess a wide range of psychosocial factors present in modern working environments. Developed by the Danish National Research Center for the Working Environment, COPSOQ is recognised by the EU Occupational Safety and Health Agency and cited in reference documents of the World Health Organization and International Labour Organization. COPSOQ informs the assessment of workplace psychosocial risk and areas for organisational development through the measurement of domains including Demands at Work, Work Organisation and Job Contents, Interpersonal Relations and Leadership, Work-Individual Interface, Social Capital, Offensive Behaviours, and Health and Wellbeing (Burr *et al.*, 2019). COPSOQ is a general tool that can be applied to workplaces of all varieties, no matter the industry, nature of work, or size of organisation. COPSOQ can be used to identify the psychosocial risk factors of greatest concern within and across workplaces, supporting the development of targeted interventions to improve worker health and wellbeing. Several studies on workplace psychosocial conditions using the short, middle, and long version of the COPSOQ I and II have been carried out in Europe (Burr *et al.*, 2019; Francioli *et al.*, 2018; Stauder *et al.*, 2017), Brazil (Gonçalves *et al.*, 2021), Canada (Ramkissoon *et al.*, 2019) and New Zealand (Johnson *et al.*, 2010; Riley *et al.*, 2021).

COPSOQ III, the current version of the questionnaire, builds on previous versions and has been updated and validated to reflect the changing nature of work (for example globalisation, automation or computerisation of work and working conditions), the evolution of theories on job demands-resources, social capital and stress-as-offence-to-self, and international experience in the use of the COPSOQ in many countries (Burr *et al.*, 2019; Berthelsen *et al.*, 2020; Lincke *et al.*, 2021).

While there is some understanding of the psychosocial conditions in New Zealand workplaces from a previous study conducted in 2010 by the Department of Labour (Johnson *et al.*, 2010), WorkSafe New Zealand recognised the need for updated evidence on workplace psychosocial risks, within the context of the changing nature of work in New Zealand.

The New Zealand Psychosocial Survey 2021 (NZPS) aims to improve understanding of the psychosocial working environment in New Zealand. It will inform evidence-based interventions and provide important system performance indicators to chart progress of the Government *Health and Safety at Work Strategy 2018–2028*. Additionally, WorkSafe will be able to compare psychosocial working conditions in New Zealand to those in other jurisdictions. Ultimately, this research will support WorkSafe to achieve its vision of ensuring everyone who goes to work comes home healthy and safe.

2.0 Methodology summary

IN THIS SECTION:

- 2.1 Population of interest
- 2.2 Fieldwork dates
- 2.3 Sample size and source
- 2.4 Weighting
- 2.5 Questionnaire

This section is a high-level summary of the NZPS methodology.

For a detailed explanation of the methodology, see Appendix 2.

2.1 Population of interest

The population of interest includes people aged 18 or over who are:

1. employees working for wages or salary, or
2. people working without pay in a family business.

Self-employed people not employing others were not within the survey's population of interest.

2.2 Fieldwork dates

Fieldwork was conducted between 3 March and 30 May 2021.

2.3 Sample size and source

In total, 3,612 respondents completed the survey.

Most respondents (n=3,018) were sourced from online research panels. To increase the representativeness of the sample, additional respondents were sourced from:

- street-intercept interviews in high deprivation areas
- the New Zealand Electoral Roll (certain occupations were targeted)
- a Facebook community for recent migrants, and
- a Maritime New Zealand database of fishing and shipping operators.

All surveys were completed online using a web-based surveying platform.

2.4 Weighting

The data have been weighted so the overall sample is representative of the population of interest by gender within industry, ethnicity, and age, according to Stats NZ population counts.

2.5 Questionnaire

The COPSOQ item pool contains 152 items divided into Core, Middle and Long items. Core items are mandatory when using the COPSOQ. A mixture of Middle and Long version items can be selected to suit the focus of the survey.

The questionnaire includes all Core and Middle items of the COPSOQ III with the following changes:

- HE4 (middle) from 'Demands for hiding emotions' was excluded
- RE2 and RE3 (both long) from 'Recognition' were added
- JU2 (long) from 'Organisational justice' was added
- HSM1 and HSM2 (both long) from 'Cyberbullying' were added
- SH1 and SH2 (both long) from 'Sexual harassment' were added
- TV1 and TV2 (both long) from 'Threats of violence' were added
- PV1 and PV2 (long) from 'Physical violence' were added
- BU1, BU2, and BU3 (long) from 'Bullying' were added.

The full questionnaire is provided in Appendix 6.

3.0

How to read this report

IN THIS SECTION:

- 3.1 Interpreting COPSOQ results
- 3.2 Accuracy
- 3.3 Differences between groups

3.1 Interpreting COPSOQ results

The COPSOQ largely consists of questions in five-point Likert format, wherein respondents state how frequently or to what extent they experience certain conditions at work. Each question is referred to as an **item**.

The COPSOQ assigns a score between 0 and 100 for each possible response to the item.

<p>WPI: Do you have to work very fast?</p> <p>Always (100)</p> <p>Often (75)</p> <p>Sometimes (50)</p> <p>Seldom (25)</p> <p>Never/hardly ever (0)</p>

FIGURE 1:
Example of COPSOQ item (corresponding score in parentheses)

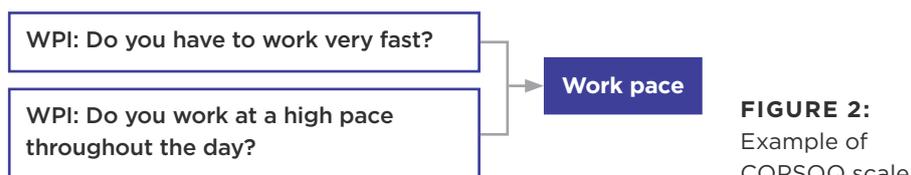
Each item is located with a **scale** of items with a similar focus. Scales consist of between one and five items each.

The scale measures the respondent's overall level of exposure to a risk factor or condition. Scales are reported as a score between 0 and 100 representing the mean (average) score of the items within it.

The item given as an example in Figure 1 contributes to the 'Work Pace' scale. This scale contains three items (two Core and one Long). In the current survey we only used the two Core items from this scale (Figure 2).

Note: All NZPS scales passed a statistical test of internal consistency.¹

In this report we have analysed results at the scale level. Scores for individual items are not reported.



To contextualise the results, this report divides scores into three levels:

- scores below 40 are reported as 'low'
- scores from 40 to 70 are reported as 'medium'
- scores above 70 are reported as 'high'.

It's important to note that the directionality of the scales varies. For some scales, like Work Pace, a high score indicates high or frequent exposure to risk, whilst a low score indicates low or infrequent exposure. In other scales, like Influence at Work, it is the opposite. Figure 4 summarises the directionality of all scales included within the NZPS.

¹ All scales in the NZPS returned a Cronbach's alpha above 0.7 (lowest 0.71, highest 0.89). This means that each scale is a reliable measure of its risk factor. See Appendix 3 for further detail.

The Offensive Behaviour scales² are an exception to the reporting conventions outlined above. For these items respondents are asked to indicate whether they have been exposed to a particular behaviour during a specified time, usually the last 12 months. Exposure to each is reported as a simple proportion, that is, the percentage of workers who were exposed to the act in the time period.

In the literature, scales (risk factors) are often grouped and discussed in combination due to their relationship or similarity to each other (for example, Burr *et al.*, 2019). These groups of scales are known as **domains** (Figure 3). This report discusses each scale in the context of its domain as categorised in Burr *et al.* (2019), namely, Demands at Work, Work Organisation and Job Contents, Interpersonal Relations and Leadership, Work-Individual Interface, Social Capital, and Offensive Behaviours. Figure 4 summarises how the scales within the NZPS are categorised to domains.

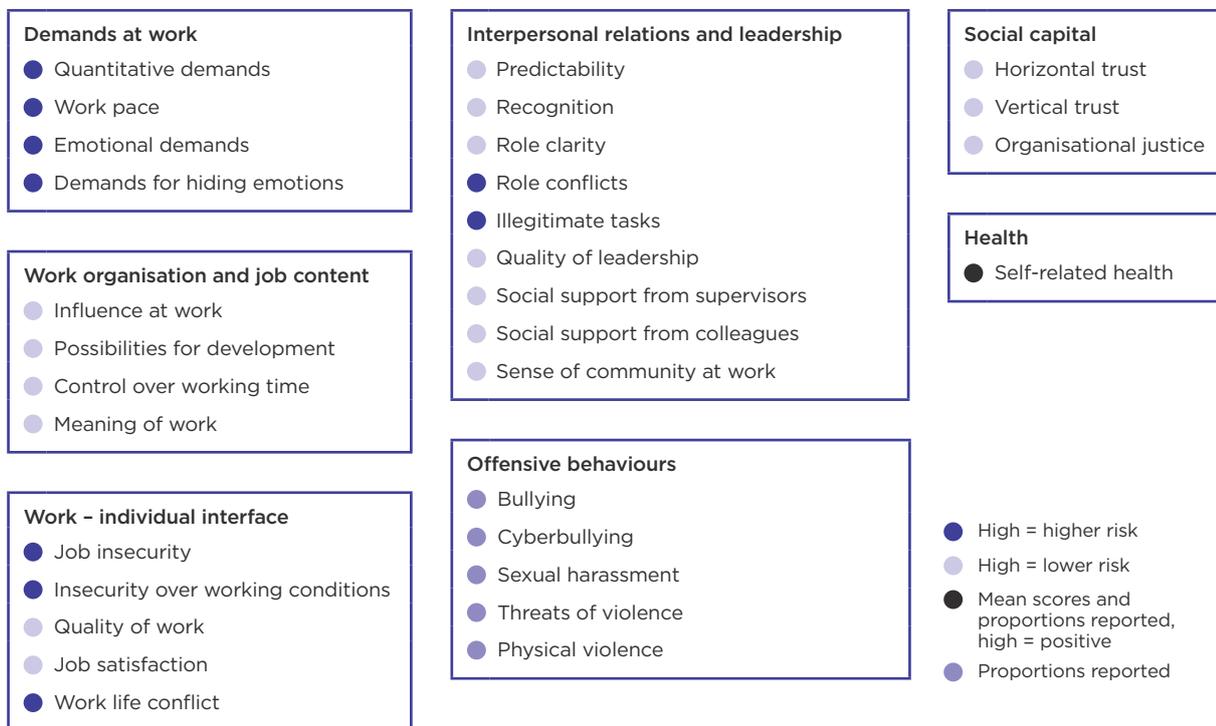
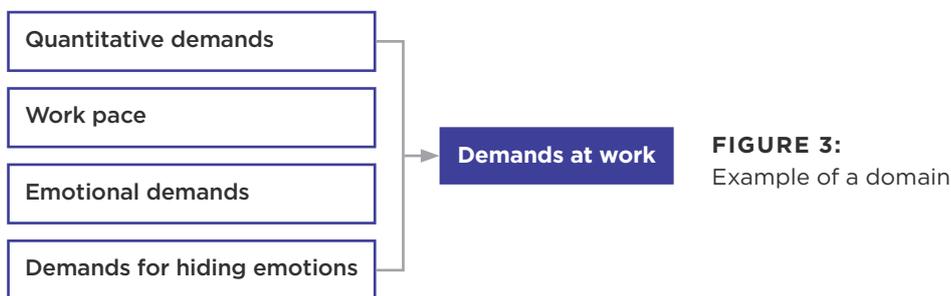


FIGURE 4: Overview of scales within the New Zealand Psychosocial Survey

² Includes Bullying, Cyberbullying, Sexual Harassment, Threats of Violence, and Physical Violence.

3.2 Accuracy

Margins of error

It's important to consider the margin of error when interpreting the results in this report. The maximum margins of error at the 95% confidence level for various base sizes are reported in Table 1 below.³

BASE SIZE (n)	MEANS (SCORES) ⁴ +/-	PERCENTAGES +/- percentage points
3,612 (total sample)	0.8	1.6
1,800	1.1	2.3
1,000	1.5	3.1
750	1.8	3.6
500	2.1	4.4
400	2.4	4.9
300	2.8	5.7
200	3.4	6.9
100	4.8	9.8
50	6.8	13.6

TABLE 1:
Maximum margins
of error at 95%
confidence level

Limitations

Every effort was made to ensure the results of the NZPS are robust and representative. However as with all surveys of this nature, inherent limitations can impact on the accuracy of the findings. The authors would like to highlight two key limitations readers should consider:

1. Despite extensive validation of the COPSOQ internationally, there remains variation in the way individuals comprehend and interpret the questions both within and between jurisdictions. The NZPS involved cognitive pre-testing of the questionnaire with New Zealand participants (see Appendix 3 for further detail). Consequently, and where appropriate, some questions were adapted to suit the New Zealand context. However, this process further highlighted the variation in understanding of the questions between individuals, which may contribute to differences in results between groups alongside actual differences in the psychosocial working environment.
2. Results for sub-groups, like workers within particular industries or demographic groups, should be interpreted with care. The sampling process ensures that the total sample is representative of the population on important variables, however the same may not be true of sub-groups within the sample. For example, we have limited information to know whether the sample of workers in Healthcare and Social Assistance aligns with the true distribution of workers across its four component sectors (Hospitals, Medical Services, Residential Care Services, and Social Assistance) nor the true distribution of occupations within the industry.

3.3 Differences between groups

Reported differences between groups (or between a certain group and the average) are statistically significant at the 95% confidence level ($p < 0.05$) unless stated otherwise.

³ **Note:** Simple margins of error are reported which do not account for any survey design effects.

⁴ The average standard deviation of scales was used (24.46).

4.0

Sample overview

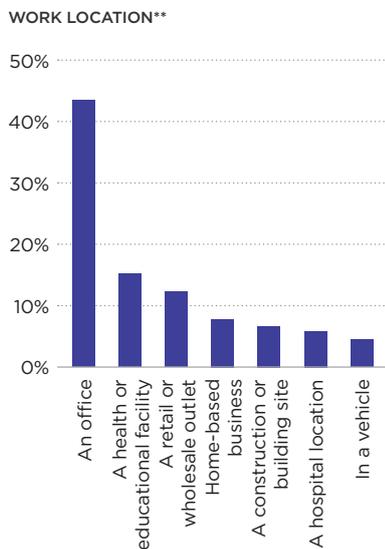
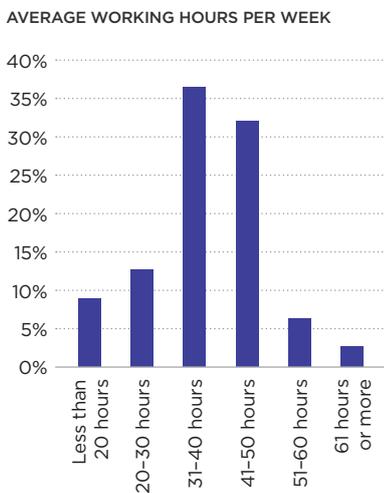
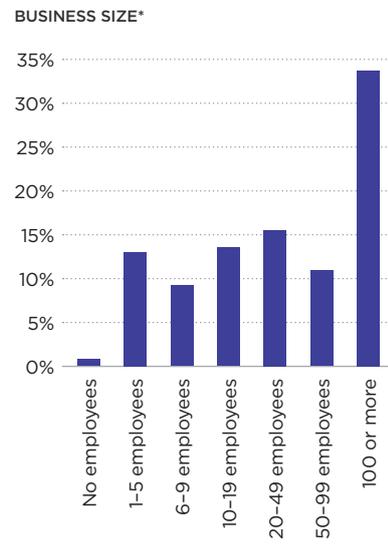
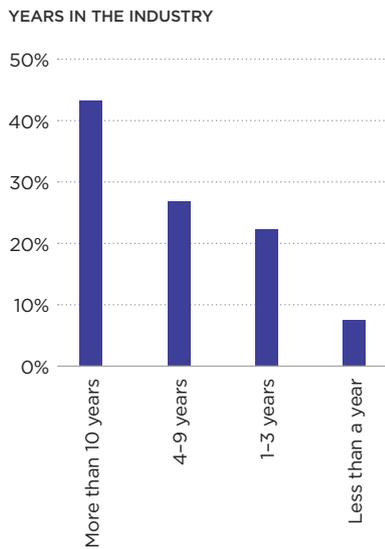
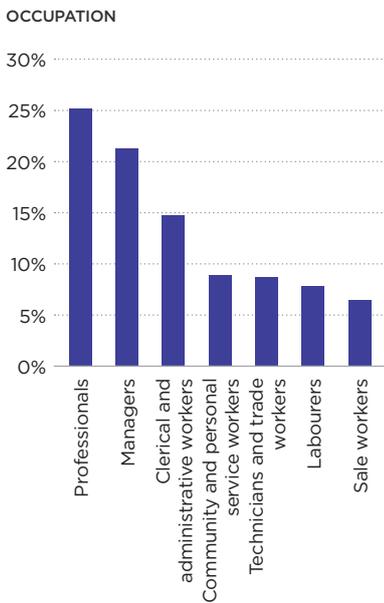
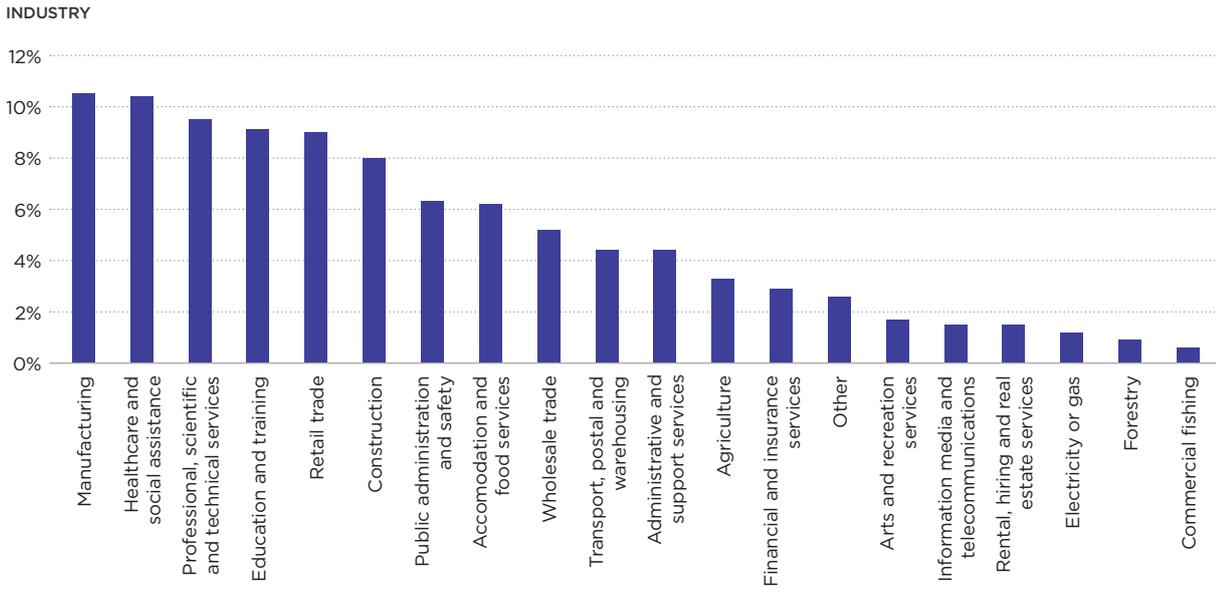
This section reports the sample composition for key demographic and grouping variables. Weighted results are reported.



Note: Weighted data
 Less than 0.5% of the survey population are gender diverse.

FIGURE 5: Demographic characteristics of the sample (%)

* Workers can identify with multiple ethnicities.



Note: Weighted data
Less than 0.5% of the survey population are gender diverse.

FIGURE 6:
Work-related characteristics of the sample (%)

* This is not comparable to Statistics NZ as the survey question asked about the number of employees at the business site if the business has multiple sites.

** Workers can identify with multiple locations.

5.0

Detailed findings

IN THIS SECTION:

- 5.1 Demands at work
- 5.2 Work organisation and job contents
- 5.3 Interpersonal relations and leadership
- 5.4 Work-individual interface
- 5.5 Social capital
- 5.6 Offensive behaviours
- 5.7 Self-rated health
- 5.8 Comparing psychosocial working conditions in New Zealand to other countries
- 5.9 Demographic comparisons

5.1 Demands at work

The Demands at Work domain covers four scales:⁵

- **Quantitative Demands** (workload)
- **Work Pace** (speed and intensity of work)
- **Emotional Demands** (dealing with other people's feelings or being placed in emotionally difficult situations)
- **Demands for Hiding Emotions** (the need to conceal one's own feelings from other people at work).

Job demands refer to any physical, psychological, social, or organisational aspects of a job that require constant physical or psychological effort on the employee's part (Riley *et al.*, 2021). Studies have shown that high Demands at Work may contribute to cognitive stress symptoms, including concentration problems and difficulties making decisions (Elfering *et al.*, 2017).

In the NZPS, New Zealand workers report a medium level of Demands at Work (see Figure 7).

Workers in the following industries report higher scores on more than one scale

- Public Administration and Safety (Quantitative Demands, Emotional Demands, Demands for Hiding Emotions)
- Education and Training (Quantitative Demands, Emotional Demands, Demands for Hiding Emotions)
- Healthcare and Social Assistance (Emotional Demands, Demands for Hiding Emotions)
- Accommodation and Food Services (Work Pace, Demands for Hiding Emotions)

Workers in the following industries report lower scores on more than one scale

- TPW (all four scales)
- Agriculture (Emotional Demands, Demands for Hiding Emotions)
- Manufacturing (Emotional Demands, Demands for Hiding Emotions)
- Construction (Emotional Demands, Demands for Hiding Emotions)
- Wholesale Trade (Emotional Demands, Demands for Hiding Emotions)
- Retail Trade (Quantitative Demands, Emotional Demands)
- Professional, Scientific and Technical Services (Emotional Demands, Demands for Hiding Emotions)

Detailed results by industry are reported in Figure 7.

⁵ Scale descriptions adapted from Burr *et al.* (2019).

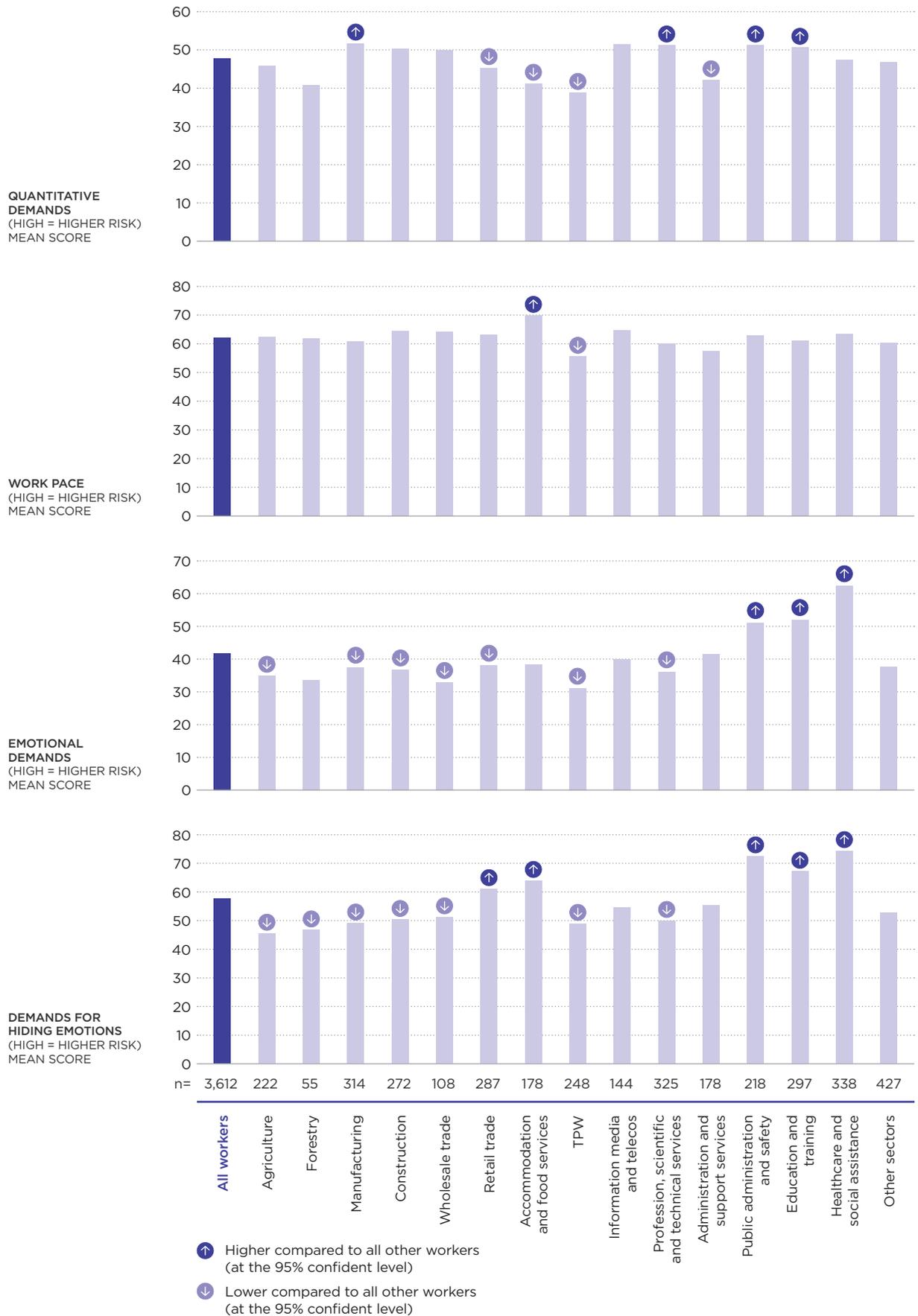


FIGURE 7: Demands at work by industry

5.2 Work organisation and job contents

The Work Organisation and Job Contents domain covers four scales:⁶

- **Meaning of Work** (worker understanding of the purpose and context of their work)
- **Possibilities for Development** (opportunities for learning and development not only in the job, but also at the personal level, plus whether tasks are challenging for the employee)
- **Control over Working Time** (influence over conditions surrounding work, for example, breaks, length of the working day, or work schedule)
- **Influence at work** (ability to influence aspects of work itself such as the planning of work, or deciding the order of tasks).

Research shows a link between Work Organisation and Job Contents and the emergence of mental health problems among employees (Marchand *et al.*, 2011). A high level of Influence at Work and Control over Working Time may buffer against health problems in employees (Ala-Murshula *et al.*, 2002). On the other hand, a lack of development in the workplace can create apathy, helplessness, and passivity among employees (Burr *et al.*, 2019).

In the NZPS, New Zealand workers report medium Influence at Work (55.3), Possibilities for Development (64.7), and Control over Working Time (60.9). Meaning of Work scores are high (70.7).

Workers in the following industries report higher scores on more than one scale

- Professional, Scientific and Technical Services (all four scales)
- Construction (Possibilities for Development, Control over Working Time, Influence at Work)
- Public Administration and Safety (Meaning of Work, Control over Working Time)
- Education and Training (Meaning of Work, Possibilities for Development)
- Healthcare and Social Assistance (Meaning of Work, Possibilities for Development)

Workers in the following industries report lower scores on more than one scale

- Retail Trade (all four scales)
- Accommodation and Food Services (Meaning of Work, Possibilities for Development, Control over Working Time)
- TPW (Meaning of Work, Possibilities for Development, Influence at Work)
- Manufacturing (Meaning of Work, Possibilities for Development)
- Wholesale Trade (Meaning of Work, Possibilities for Development)

Detailed results by industry are reported in Figure 8.

⁶ Scale descriptions adapted from Burr *et al.* (2019).

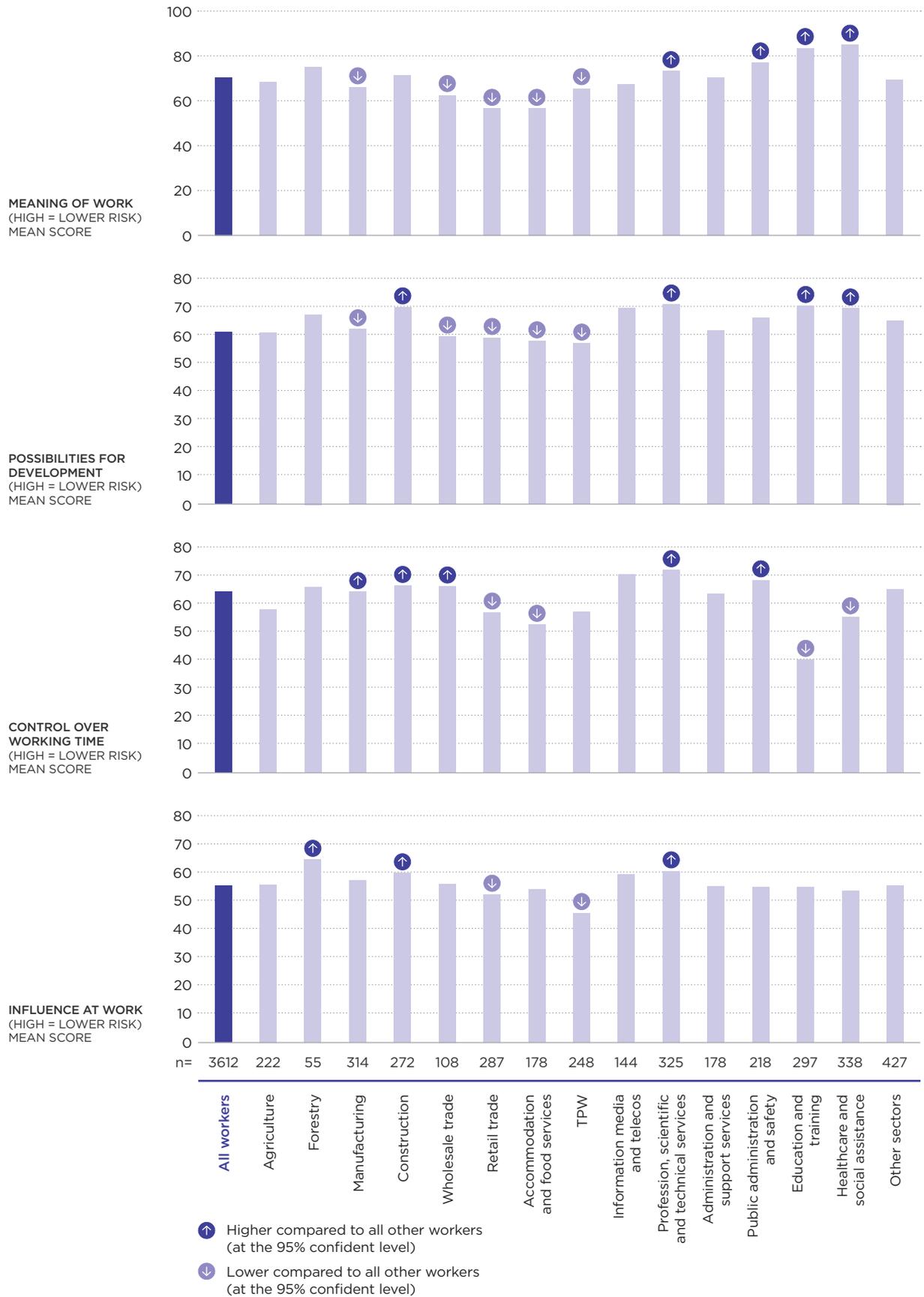


FIGURE 8: Work organisation and job contents by industry

5.3 Interpersonal relations and leadership

The Interpersonal relations and leadership domain covers nine scales:⁷

- **Predictability** (ability to avoid uncertainty and insecurity, facilitated by receiving the right information at the right time)
- **Recognition** (the management acknowledges worker contributions)
- **Role Clarity** (worker understanding of their role at work, for example, content of tasks, expectations to be met, and responsibilities)
- **Role Conflicts** (possible conflicts when prioritising different tasks)
- **Illegitimate Tasks** (being asked to perform tasks that the workers perceived to be unnecessary or unreasonable)
- **Quality of Leadership** (next higher manager's leadership capability)
- **Social Support from Supervisors** (support from the immediate superior if needed)
- **Social Support from Colleagues** (possibility to obtain support from colleagues if needed)
- **Sense of Community at work** (feeling of being part of the team/community or sense of belonging to a group of co-workers at work).

The role of Interpersonal Relations and Leadership in the working environment has been explored in many studies. Workers have perceived better mental health following an increase in Recognition at work (Angelopoulou & Panagopoulou, 2020), less Role Conflicts (Spector & Bruk-Lee, 2007) and higher Role Clarity (Thomson *et al.*, 2021). Poor Quality of Leadership is associated with higher rates of workplace bullying. Community support at work is found to be an important mediator between leadership and bullying at work (Francioli *et al.*, 2018).

In the NZPS, New Zealand workers report medium scores for Quality of Leadership (55.5), Predictability (60.1), Recognition (64.6), Role Conflicts (43.4), and Illegitimate Tasks (41.0). Social Support from Supervisors (68.3) and Social Support from Colleagues (68.4) are at the upper end of the medium range. However, they report high levels of Role Clarity (75.1) and a high Sense of Community at Work (76.1).

Workers in the following industries report higher scores on more than one scale

- Construction (Predictability, Recognition, Role Conflicts, Illegitimate Tasks, Quality of Leadership)
- Healthcare and Social Assistance (Predictability, Role Clarity, Social Support from Colleagues)
- Retail Trade (Role Conflicts, Illegitimate Tasks)
- Public Administration and Safety (Role Conflicts, Illegitimate Tasks)
- Education and Training (Recognition, Quality of Leadership)

Workers in the following industries report lower scores on more than one scale

- TPW (Recognition, Role Conflicts, Illegitimate Tasks, Quality of Leadership)
- Agriculture (Role Conflicts, Illegitimate Tasks)
- Professional, Scientific and Technical Services (Role Conflicts, Illegitimate Tasks)

Detailed results by industry are reported in Figure 9 and Figure 10.

⁷ Scale descriptions adapted from Burr *et al.* (2019).

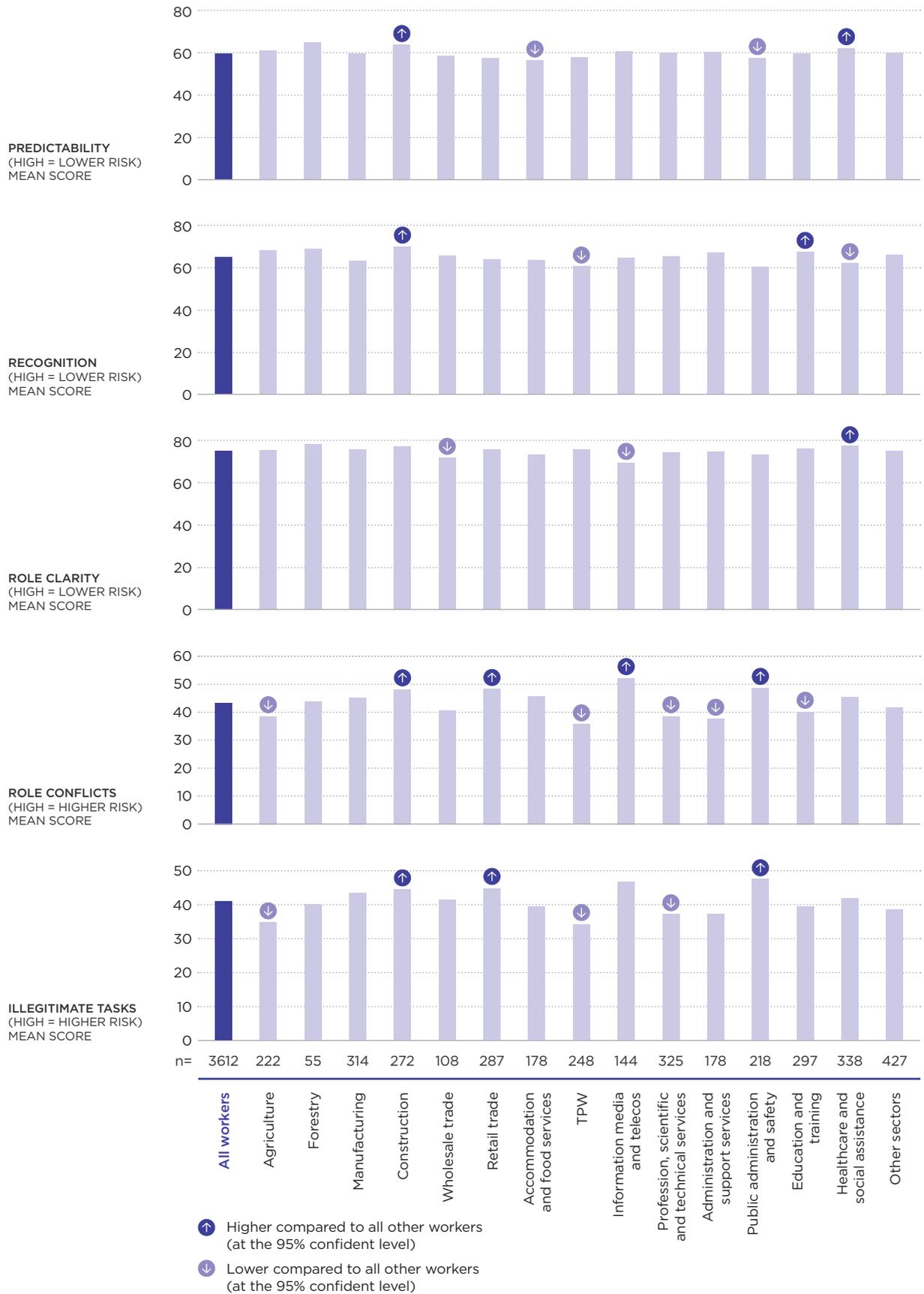


FIGURE 9: Interpersonal relations and leadership by industry (1 of 2)

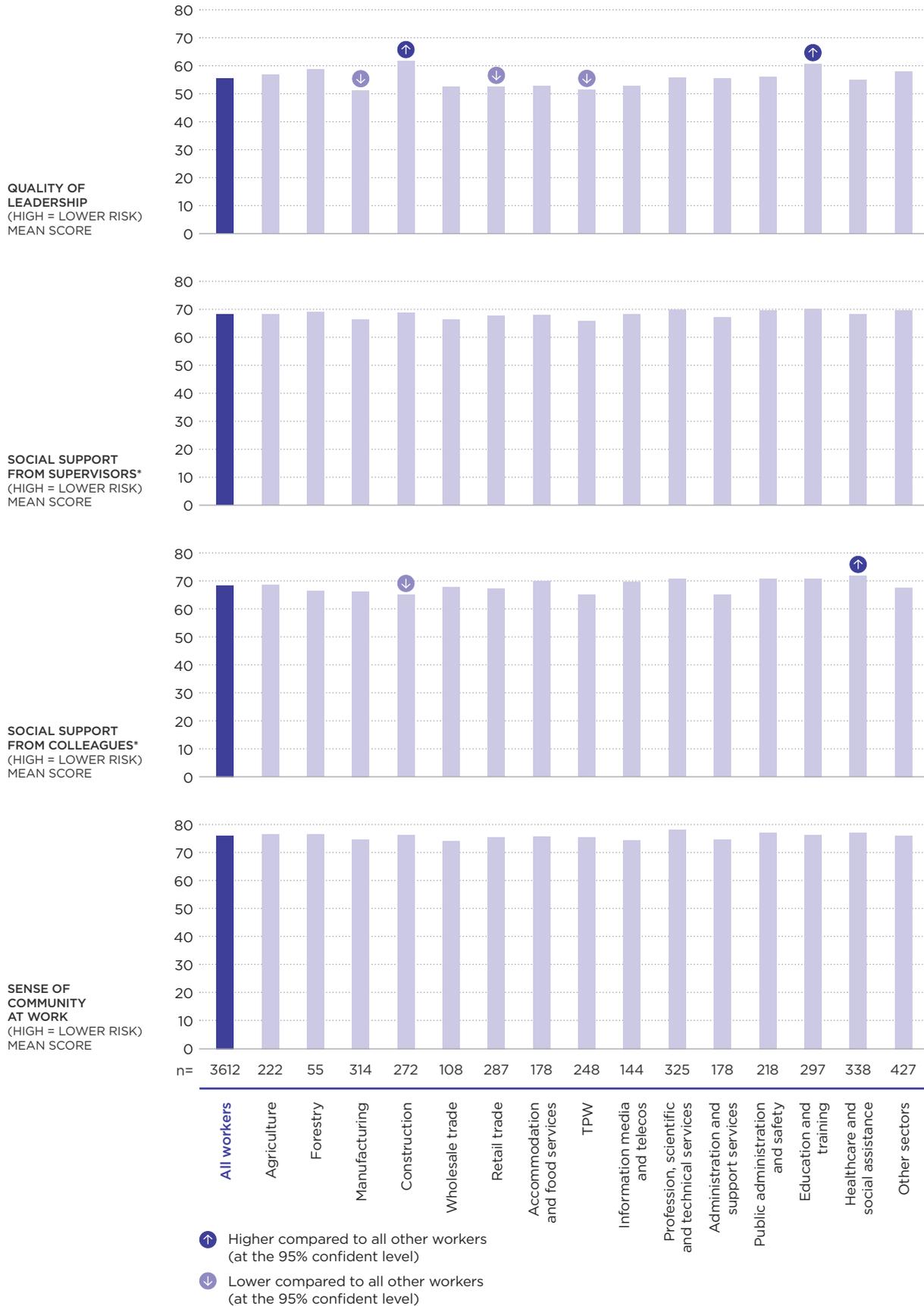


FIGURE 10: Interpersonal relations and leadership by industry (2 of 2)

* Not answered if the respondent did not have a supervisor/colleagues

5.4 Work-individual interface

The Work-Individual Interface domain covers five scales:⁸

- **Work-life Conflict** (work's effect on privacy or on personal or family life)
- **Quality of Work** (experience of the immediate output of one's work)
- **Job Insecurity** (employment insecurity for the employee)
- **Job Satisfaction** (work-related satisfaction)
- **Insecurity over Working Conditions** (lack of security on working conditions within job, such as working hours, work location, pay etc).

High job insecurity appears to increase workers' stress at work (McDonough, 2000) and harm their health (McDonough, 2000; László *et al.*, 2010). Studies also suggest a link to health problems such as headache, skin disease, and eyestrain (Caroli & Godard, 2016). The Whitehall II study found that prolonged job dissatisfaction may result in psychological illness (Stansfeld *et al.*, 1999). Decades of research have demonstrated that Work-Life Conflict is associated with workers' psychological and physical health (Gisler *et al.*, 2018).

In the NZPS, New Zealand workers report medium Job Insecurity (40.0) and low Insecurity Over Working Conditions (24.3). Job Satisfaction (67.0) and Quality of Work (65.6) scores are within the medium range. Workers also report medium levels of Work-Life Conflict (43.5).

Workers in the following industries report higher scores on more than one scale

- Retail Trade (Job Insecurity, Insecurity over Working Conditions)

Workers in the following industries report lower scores on more than one scale

- Accommodation and Food Services (Quality of Work, Job Satisfaction)
- Education and Training (Job Insecurity, Insecurity over Working Conditions)

Detailed results by industry are reported in Figure 11.

⁸ Scale descriptions adapted from Burr *et al.* (2019).

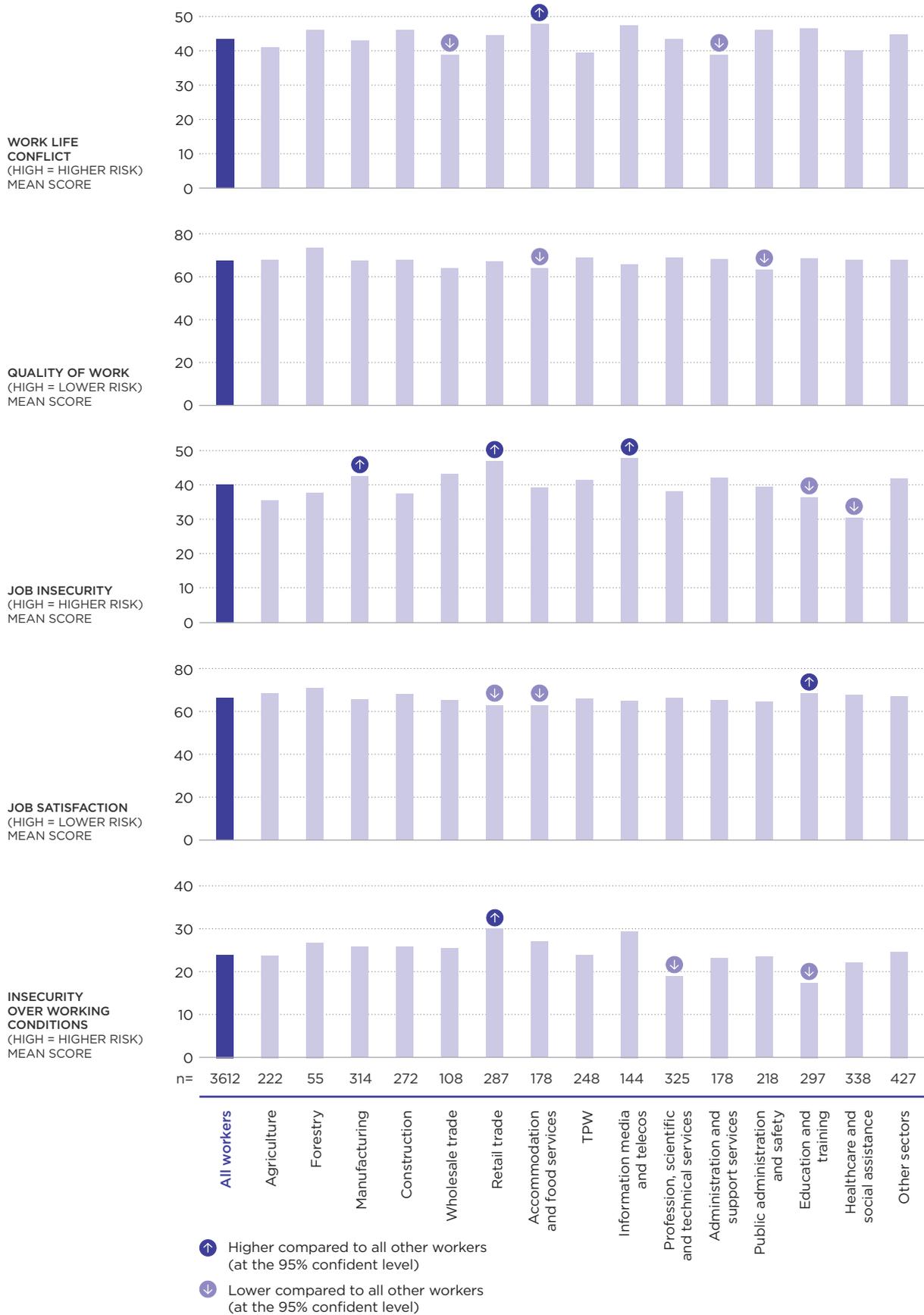


FIGURE 11: Work-individual interface by industry

5.5 Social capital

The Social Capital domain covers three scales:⁹

- **Vertical Trust** (the trust in communication between management and employees)
- **Horizontal Trust** (the trust built among employees)
- **Organisational Justice** (if the workers are treated fairly in their workplace).

As an indicator of organisational resources, Social Capital is gaining increasing attention in practice and research because it is an important feature of the working environment which impacts not only the well-being of employees, but also productivity, quality, and customer satisfaction (Burr *et al.*, 2019, Kiss *et al.*, 2014, Maurer *et al.*, 2011).

In the NZPS, New Zealand workers report medium levels of Horizontal Trust (66.4), Vertical Trust (65.2), and Organisational Justice (60.5) in their workplaces.

Workers in the following industries report lower scores on more than one scale

- Public Administration and Safety (all three scales)
- Manufacturing (Vertical Trust, Horizontal Trust)

⁹ Scale descriptions adapted from Burr *et al.* (2019).

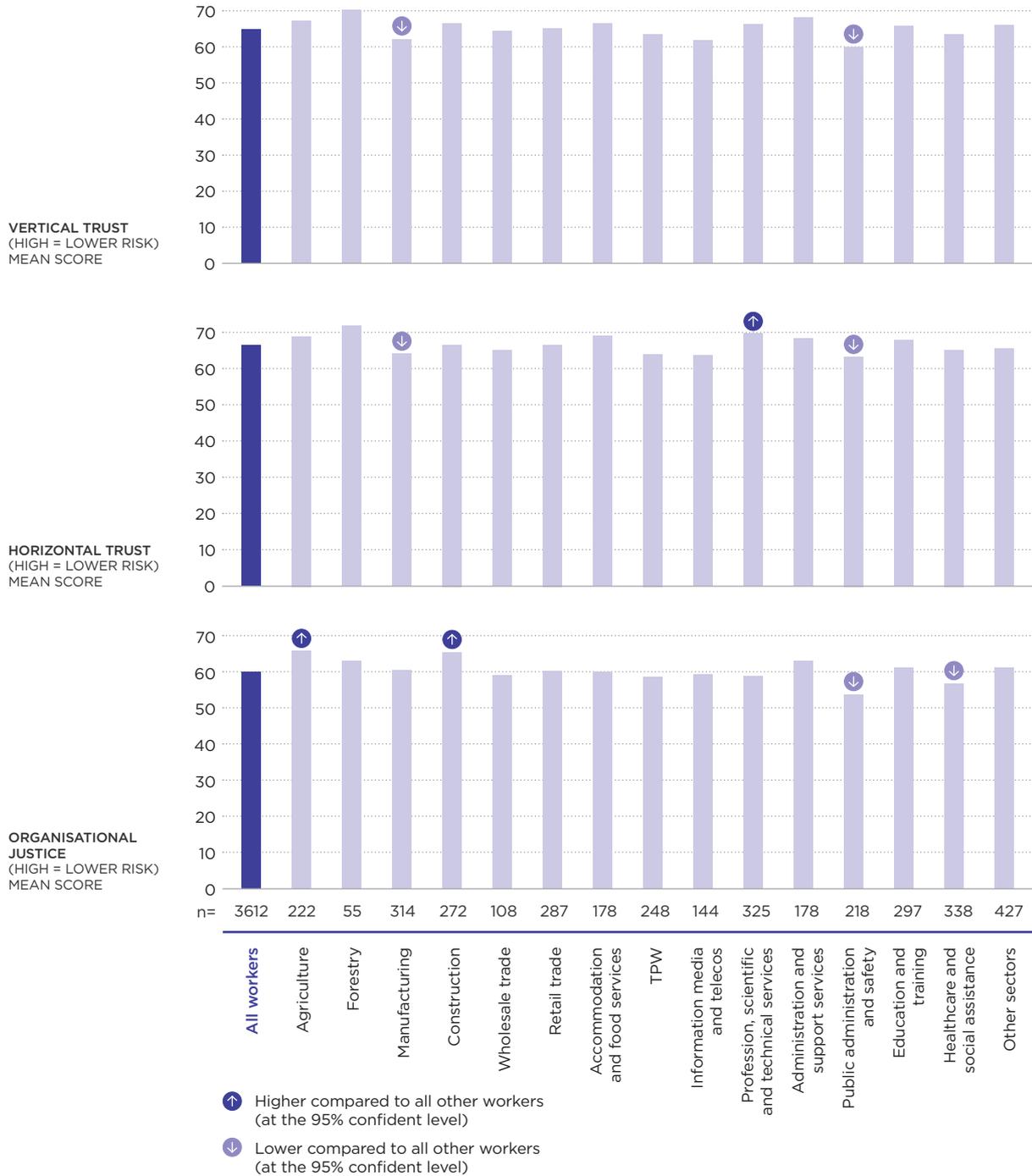


FIGURE 12: Social capital by industry

5.6 Offensive behaviours

The NZPS focused on five Offensive Behaviours:

- **Bullying**
- **Cyberbullying**
- **Sexual Harassment**
- **Threats of Violence**
- **Physical Violence.**

According to research, exposure to Offensive Behaviours at work can lead to psychosocial stress that is harmful to the wellbeing of employees. Therefore, in recent years, workers, organisations, unions and government agencies have viewed them with increasing concern (Clausen *et al.*, 2012, O'Driscoll *et al.*, 2011).

Over one third of workers (35.2%) report being exposed to at least one of the five Offensive Behaviours in the last 12 months ('exposure' may have been interpreted by respondents as personal experience of the behaviour or witnessing it occurring between other people at work).

Of the five Offensive Behaviours, respondents were most likely to report exposure to Bullying (22.6%), followed by Cyberbullying (15.7%), and Threats of Violence (14.0%). Exposures to Sexual Harassment (11.1%), and Physical Violence (10.6%) were reported less frequently.

Workers most often report that their colleagues and managers are responsible for Bullying and Cyberbullying incidents. However, Threats of Violence and Physical Violence are most often committed by clients and customers.

Looking across industries, worker exposure to Offensive Behaviours varies:

- Workers in Healthcare and Social Assistance, Forestry, Administrative and Support services, Manufacturing, Public Administration and Safety, and Information Media and Telecommunication workers are more likely than average to report experiencing **Bullying**.
- Workers in Construction and Public Administration and Safety are more likely than average to report they have been exposed to **Cyberbullying**.
- Workers in Accommodation and Food Services, Information Media and Telecommunications, and Retail Trade are more likely than average to report exposure to incidents of **Sexual Harassment**.
- Workers in Healthcare and Social Assistance, and Public Administration and Safety are more likely than average to report exposure to **Threats of Violence** and **Physical Violence**.

Detailed results by industry are reported in Figure 13.

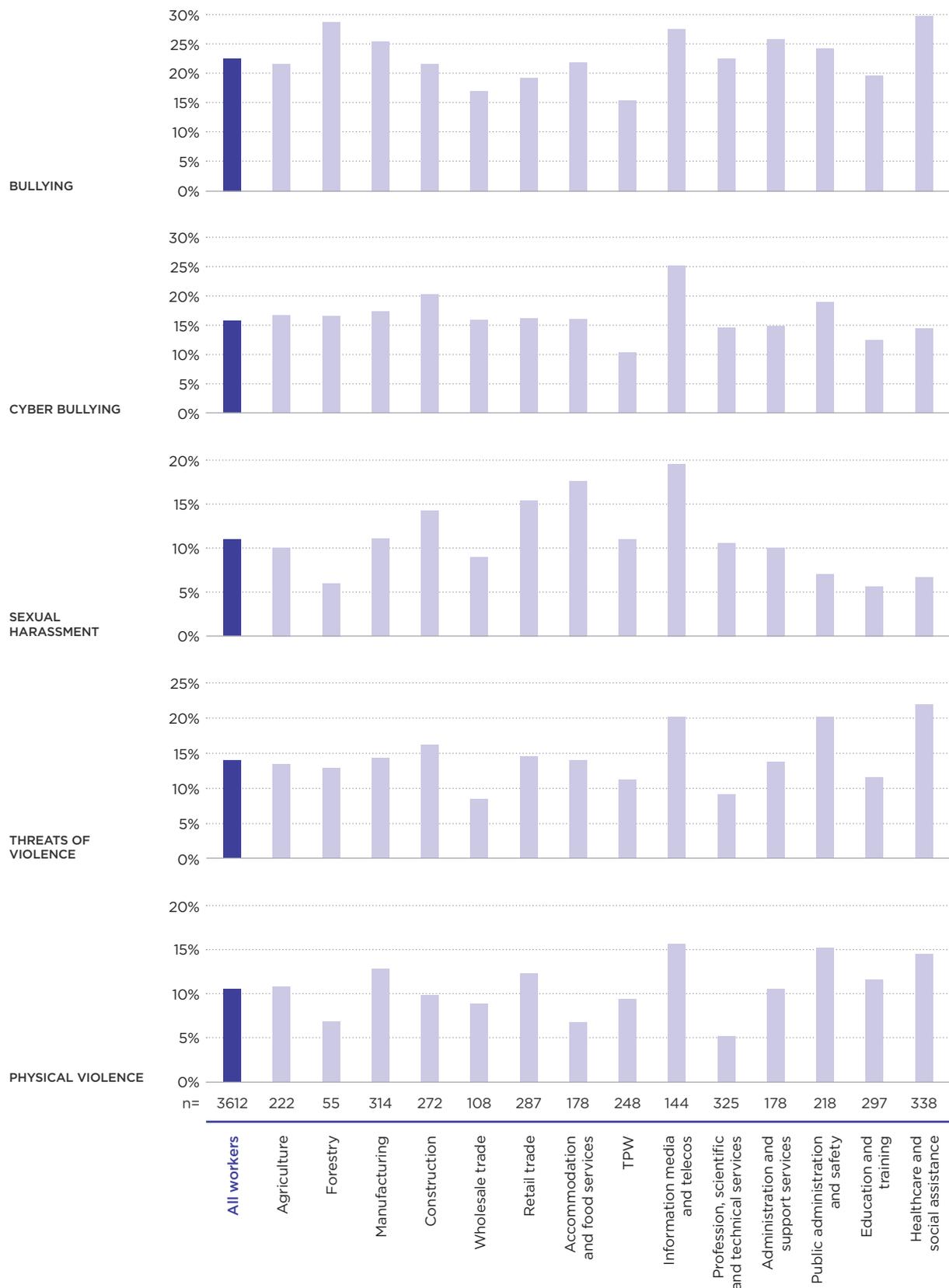


FIGURE 13: Offensive behaviours (% of workers who were exposed to the behaviour at least once in the past 12 months) by industry

Reports of exposure to Offensive Behaviours also vary by occupation group (see Table 2). Of all occupation groups, Technicians and Trade Workers, and Clerical and Administrative workers are most likely to report exposure to Bullying (23.9% and 23.3%, respectively).

Sales Workers are more likely than average to report exposure to Sexual Harassment (16.1%, compared to 11.1%) as were managers (12.1%, compared to 11.1%).

Community and Personal Service workers are more likely than average to report exposure to Threats of Violence (23.3%, compared to 14.0%) and Physical Violence (20.3%, compared to 10.6%).

Of all occupation groups, Managers are most likely to report exposure to Cyberbullying (20.1%). This finding supports that of Gardner *et al.* (2016), which sought to identify predictors of exposure to workplace Bullying and Cyberbullying.

	BULLYING	CYBERBULLYING	SEXUAL HARASSMENT	THREATS OF VIOLENCE	PHYSICAL VIOLENCE
All workers (n=3,612)	22.6	15.7	11.1	14.0	10.6
Labourers (n=315)	17.9	13.9	9.8	15.5	9.6
Machinery operators and drivers (n=169)	19.7	14.4	11.0	13.5	12.0
Sales workers (n=208)	20.0	13.2	16.1	14.4	10.8
Clerical and administrative workers (n=584)	23.3	12.4	7.4	7.7	5.4
Community and personal service workers (n=298)	22.2	14.8	10.6	23.3	20.3
Technicians and trades workers (n=287)	23.9	12.3	8.4	9.4	5.3
Professionals (n=884)	21.8	12.6	8.6	11.9	7.5
Managers (n=763)	21.5	20.1	12.1	14.0	11.4

TABLE 2: Offensive Behaviours (% who were exposed at least once in the past 12 months) by occupation group

People who work more than 61 hours per week, those working in businesses with 50 to 99 employees, and those working in their industry from 4 to 9 years are more likely than average to report exposure to Bullying, Cyberbullying, and Threats of Violence (see Table 3).

	BULLYING	CYBERBULLYING	SEXUAL HARASSMENT	THREATS OF VIOLENCE	PHYSICAL VIOLENCE
All workers (n=3,612)	22.6	15.7	11.1	14.0	10.6
Business size¹⁰					
1-5 (n=488)	17.0	12.3	9.4	9.3	6.8
6-9 (n=337)	19.5	16.1	13.0	16.1	12.2
10-19 (n=465)	24.9	17.9	14.7	17.0	14.2
20-49 (n=538)	23.7	17.5	14.3	15.5	14.2
50-99 (n=386)	28.0	18.9	13.1	19.4	14.8
100+ (n=1,245)	23.1	14.4	8.2	11.8	7.7
Years in the industry					
<1 year (n=250)	16.7	12.6	13.0	13.1	8.9
1-3 years (n=754)	23.8	20.1	16.4	16.6	13.0
4-9 years (n=943)	26.5	20.5	15.6	17.5	12.8
10 years + (n=1,657)	20.5	10.8	4.9	10.3	8.1
Average working hours per week					
<20 hours (n=311)	15.4	11.1	11.2	10.4	7.1
20-30 hours (n=465)	20.1	14.3	12.7	15.9	14.3
31-40 hours (n=1,309)	22.8	16.3	12.0	12.4	9.9
41-50 hours (n=1,152)	24.3	15.2	9.2	13.6	9.4
51-60 hours (n=237)	25.5	20.4	9.2	18.8	11.7
61 hours + (n=104)	27.3	23.2	15.2	11.7	26.2

TABLE 3: Offensive Behaviours (% who were exposed at least once in the past 12 months) by worker characteristics

¹⁰ This indicates the number of workers at the respondent's **work location**, rather than the organisation in total if it has multiple sites.

5.7 Self-rated Health

The World Health Organization acknowledges Self-rated Health as a key indicator for monitoring quality of life and population health. Self-rated health is the most common question asked in health surveys (De Bruin *et al.*, 1996).

Results from self-rated health questions can be used to assess and predict health among vulnerable groups (Wuorela *et al.*, 2020; Stanojević Jerković *et al.*, 2017). A Self-rated Health question was added to the COPSOQ-III to better understand how workers' perceived health relates to their working environment (Burr *et al.*, 2019).

In the NZPS, more than 8 in 10 workers rate their health as being 'good' or above, with half (47%) rating their health as 'very good' or 'excellent'.

Looking across industries, mean scores of self-rated health are highest in Agriculture (66.0), followed by Manufacturing (63.1), Wholesale Trade (62.2), TPW (61.2) and Forestry (61.1). Workers in Public Administration and Safety report the lowest mean score for self-rated health (54.2).

Detailed results by industry are reported in Figure 14.

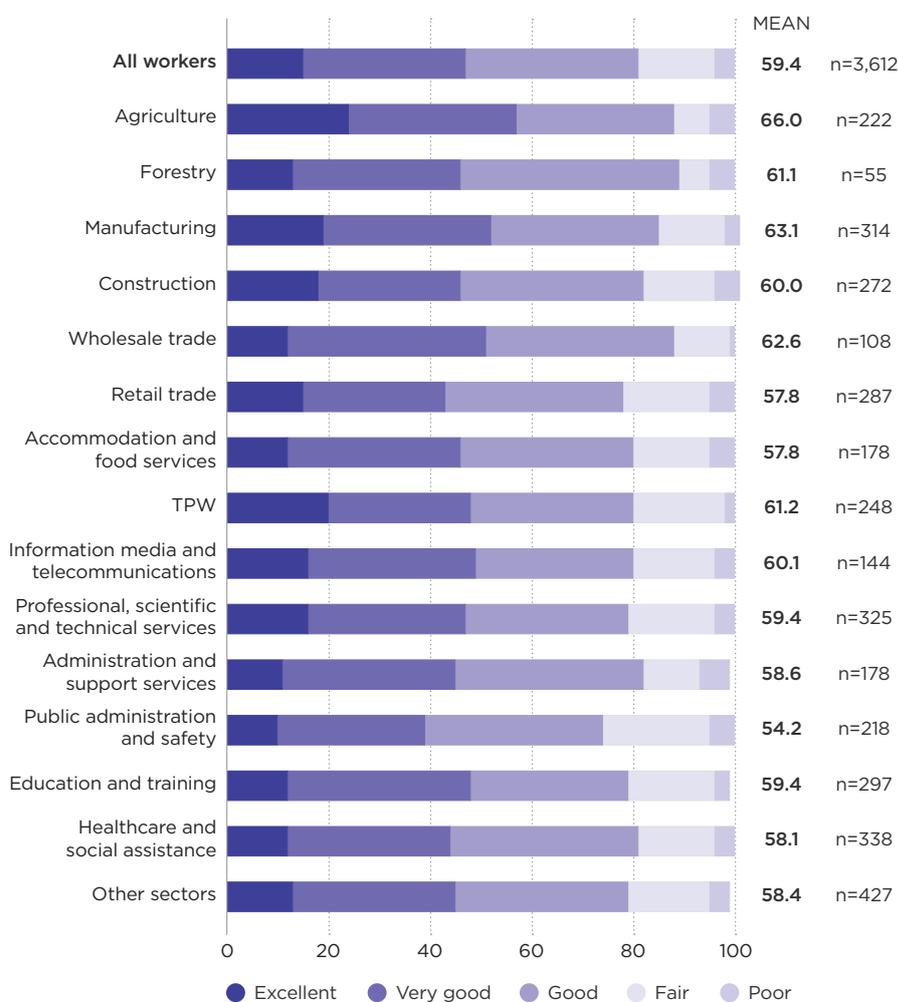


FIGURE 14:
Self-rated health
by industry

5.8 Comparing psychosocial working conditions in New Zealand to other countries

The generalisable nature of the COPSOQ allows comparisons to be made within and between workforces. Burr *et al.* (2019) reports aggregated results from COPSOQ-III surveys with nationally representative samples undertaken in Canada, France, Germany, Spain, Sweden, and Turkey.¹¹

Figure 15 compares New Zealand workers to the international benchmarks reported in Burr *et al.* (2019).

Overall, psychosocial working conditions in New Zealand appear to be similar to those in other jurisdictions. However, there are some notable differences.¹² New Zealand workers appear to be at greater risk from:

- Quantitative Demands
- Quality of Leadership.

However, New Zealand workers appear to face less risk on the scales of:

- Emotional Demands
- Demands for Hiding Emotions
- Recognition
- Influence at Work
- Control over Working Time
- Insecurity over Working Conditions
- Horizontal Trust.

Additionally, New Zealand workers report higher job satisfaction compared to those in other countries.

¹¹ The international benchmarks reported do not all incorporate data from all the listed countries. See 11.3 for further detail.

¹² Differences in mean score of at least five points are listed. Tests of statistical significance have not been carried out, therefore findings should be interpreted with care.

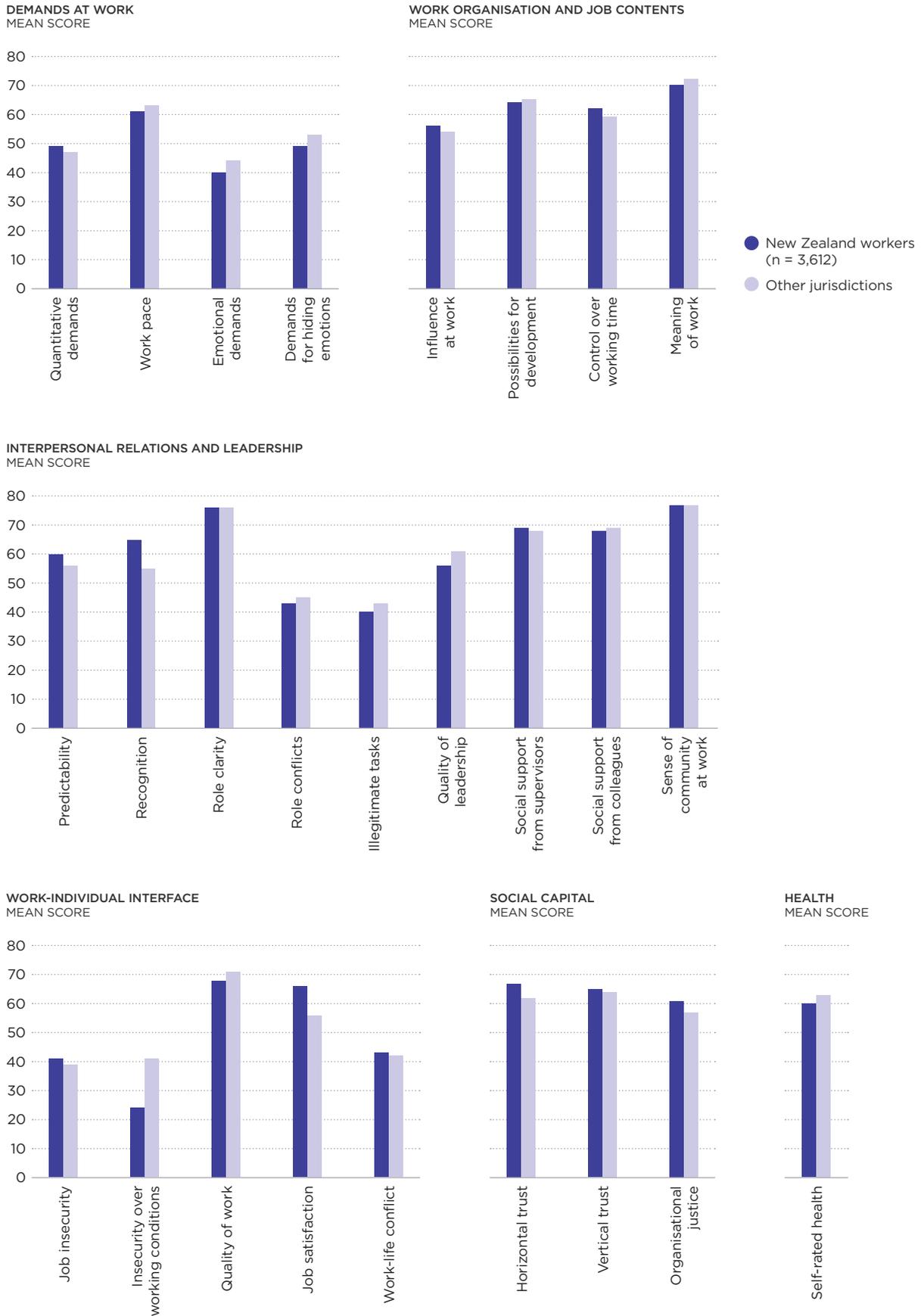


FIGURE 15: New Zealand workers compared to other countries

5.9 Demographic comparisons

This section compares psychosocial working conditions by gender, age, ethnicity, and worker origin.

Gender

Experiences of the psychosocial working environment differ by gender. Compared to male workers, **female workers** report:

- higher Work Pace
- higher Emotional Demands
- higher Demands for Hiding Emotions
- less Influence at Work
- less Control Over Working Time
- less Predictability.

Compared to female workers, **male workers** report:

- higher Quantitative Demands
- higher Role Conflicts
- higher risk from Illegitimate Tasks
- higher Job Insecurity
- higher Insecurity Over Working Conditions
- higher Work-life Conflict
- lower Meaning of Work
- lower Social Support (from both colleagues and supervisors)
- lower Sense of Community at Work
- lower Quality of Work.

Male workers are more likely than females to rate their health as 'very good' or 'excellent' (48.5% compared to 44.5%). See Figure 16 for detailed results.

Male workers are more likely than females to report exposure to Cyberbullying, Threats of Violence, and Physical Violence. Reported frequency of exposure to Bullying and Sexual Harassment are similar across genders. See Figure 17 for further detail.

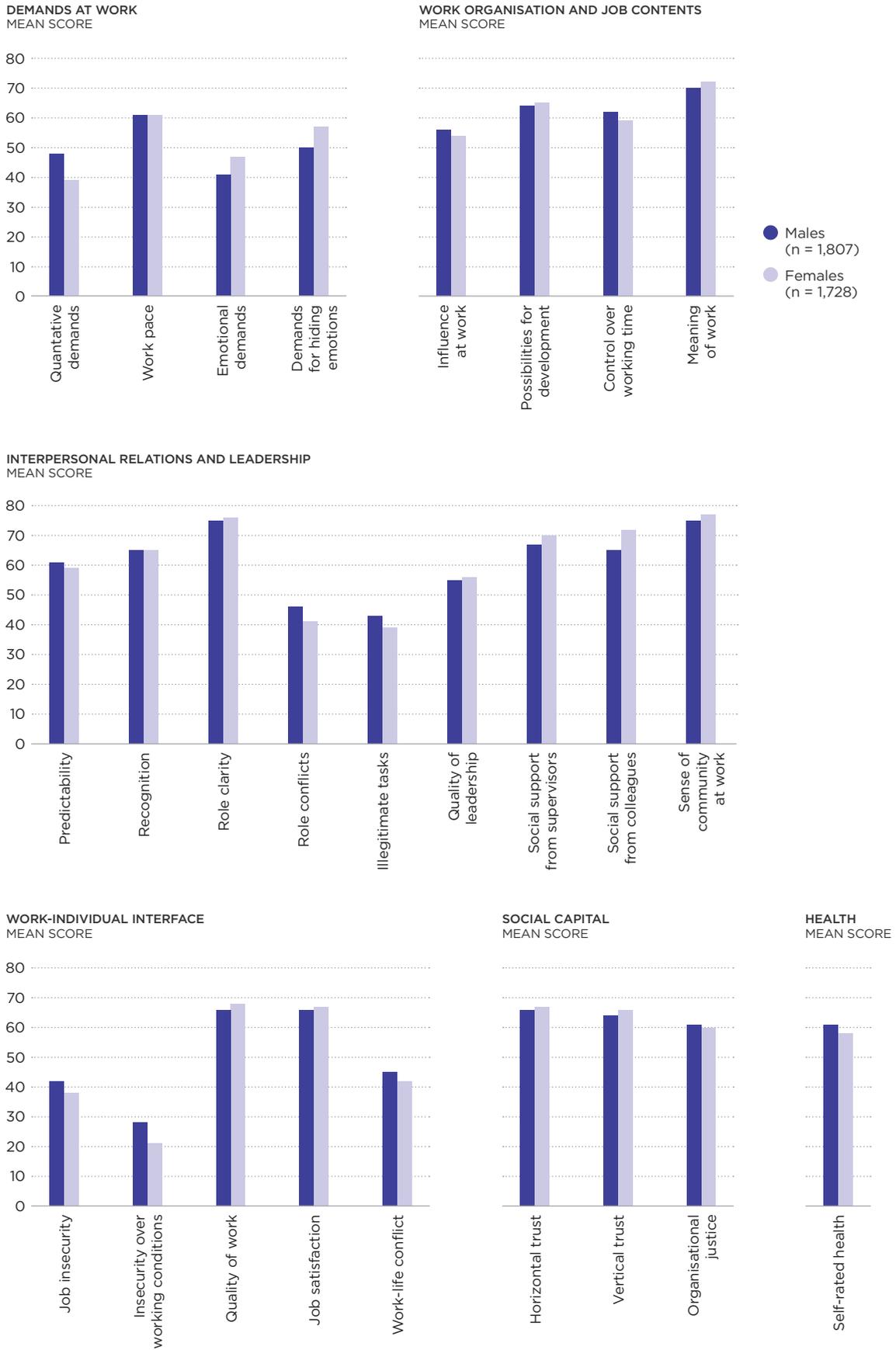


FIGURE 16: Scales by gender

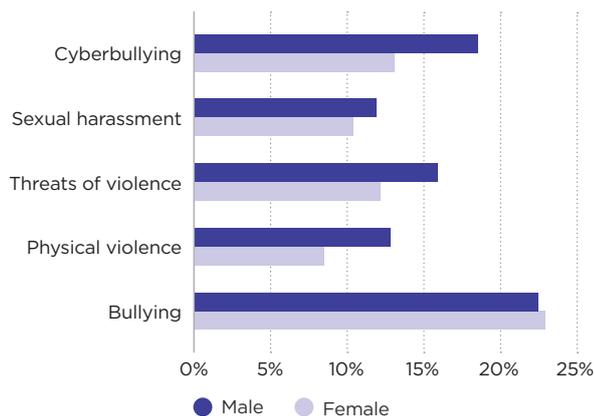


FIGURE 17:
Offensive behaviours
(% exposed at least
once in the past 12
months) by gender

Age¹³

Psychosocial working conditions vary by age group.

Compared to the average, workers **under 30 years of age** report:

- higher Possibilities for Development
- higher Quality of Leadership
- higher Social Support from Colleagues
- higher Social Support from Supervisors.

Compared to the average, workers **aged 30 to 39 years** report:

- higher Demands at Work (all scales)
- higher Role Conflicts
- higher Illegitimate Tasks
- higher Job Insecurity
- higher Work-life Conflict.

Workers **aged 60 years and over** appear to face lower than average risk on many psychosocial risk factors. Compared to the average, they report:

- higher Predictability
- higher Recognition
- higher Role Clarity
- higher Meaning of Work
- higher Social Support from Supervisors
- higher Sense of Community at Work
- higher Quality of Work
- higher Job Satisfaction
- higher Horizontal Trust
- higher Organisational Justice.

They also rate their health higher than the average worker.

¹³ We are carrying out further analysis to understand the differences we see by age. This report will be updated with the results of that analysis.

Domain	Scale	All workers (n=3,612)	AGE GROUP				
			18-29 (n=805)	30-39 (n=733)	40-49 (n=808)	50-59 (n=767)	60+ (n=499)
Demands at work	Quantitative Demands	47.8	45.6	50.3	50.3	48.3	43.3
	Work Pace	62.0	64.2	64.9	63.2	60.2	52.6
	Emotional Demands	41.9	42.3	44.8	42.0	42.1	35.1
	Demands for Hiding Emotions	50.6	50.6	50.9	49.8	51.8	49.3
Work organisation and job contents	Influence at Work	55.3	54.2	56.1	56.8	55.0	54.5
	Possibilities for Development	64.7	66.8	65.0	64.6	62.4	62.9
	Control Over Working Time	60.9	56.7	62.9	63.6	61.0	61.9
	Meaning of Work	70.7	67.2	68.3	71.5	73.6	77.0
Interpersonal relations and leadership	Predictability	60.1	60.3	59.3	59.8	59.5	62.2
	Recognition	64.6	65.1	64.0	63.8	63.1	68.1
	Role Clarity	75.1	73.0	72.4	75.5	77.6	80.3
	Role Conflicts	43.4	48.5	48.2	45.2	37.2	30.3
	Illegitimate Tasks	41.0	45.2	45.4	42.9	35.1	29.5
	Quality of Leadership	55.5	57.6	55.3	54.6	53.8	55.6
	Social Support from Supervisors	68.3	68.8	68.2	67.9	66.9	70.5
	Social Support from Colleagues	68.4	70.3	68.6	68.0	65.9	67.9
Work - individual interface	Sense of Community at Work	76.1	75.2	73.2	75.5	78.1	80.9
	Job Insecurity	40.0	39.5	43.8	41.9	39.8	31.4
	Insecurity over Working Conditions	24.3	27.7	28.5	24.8	20.6	14.4
	Quality of Work	67.0	65.6	64.4	66.6	68.8	72.3
	Job Satisfaction	66.1	65.4	64.3	67.1	66.2	68.4
Social capital	Work-life Conflict	43.5	47.5	48.2	44.5	39.6	30.7
	Horizontal Trust	66.4	68.0	65.6	65.1	65.3	68.2
	Vertical Trust	65.2	67.3	63.9	63.5	64.1	67.0
Health	Organisational Justice	60.5	62.0	59.5	59.4	59.3	62.9
	Self-rated Health	59.5	58.4	57.9	60.2	60.2	62.1

TABLE 4: Scales by age group

Reports of exposure to Sexual Harassment, Cyberbullying, Threats of Violence, and Physical Violence are highest among workers under 30 years old (about 20% each). Workers aged 40 to 49 years are most likely to report exposure to Bullying (over 25%). Workers aged 60 years and over are less likely than average to report exposure to Offensive Behaviours (Figure 18).

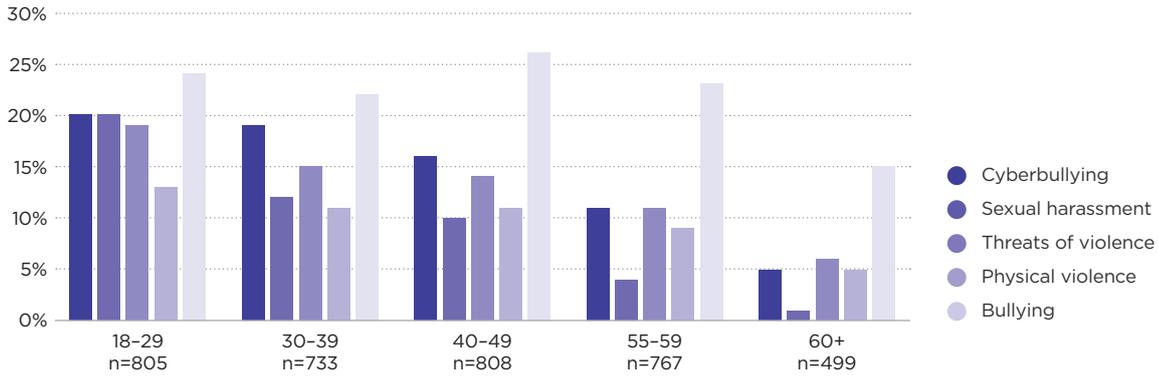


FIGURE 18: Offensive behaviours (% exposed at least once in the past 12 months) by age group

ETHNICITY¹⁴

Both Māori and Pacific workers report higher than average Possibilities for Development, Meaning of Work, Recognition, Role Clarity, Quality of Leadership, Sense of Community at Work, Job Satisfaction and Organisational Justice.

However, Māori and Pacific workers report higher exposure to Insecurity over Working Conditions and Illegitimate Tasks. In addition, Pacific workers report higher than average Role Conflicts and Job Insecurity than all workers.

Detailed results are provided in Table 5.

Compared to average, Māori workers are more likely to report exposure to Bullying, Cyberbullying, Sexual Harassment, Threats of Violence, and Physical Violence.

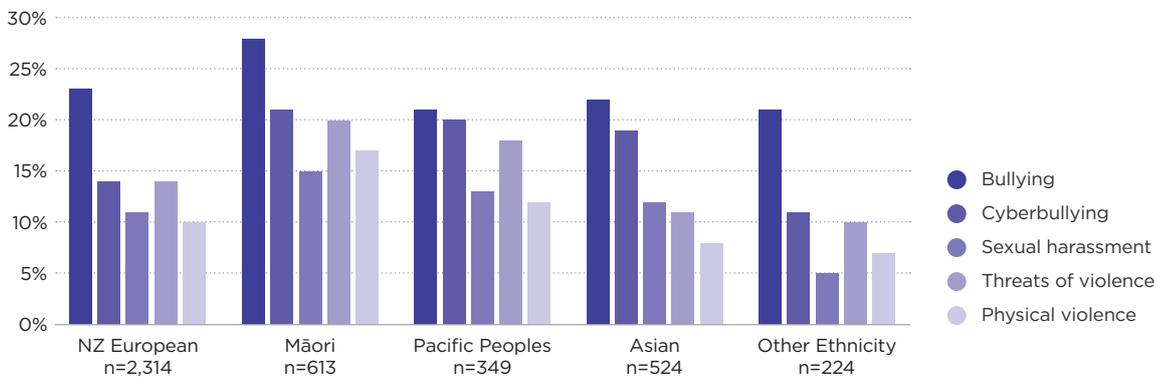


FIGURE 19: Offensive behaviours (% exposed at least once in the past 12 months) by ethnic group

¹⁴ We are carrying out further analysis to understand the differences we see by ethnicity. This report will be updated with the results of that analysis.

Domain	Scale	All workers (n=3,612)	ETHNIC GROUP				
			NZ European (n=2,314)	Māori (n=613)	Pacific Peoples (n=349)	Asian (n=524)	Other groups (n=224)
Demands at work	Quantitative Demands	47.8	47.4	48.0	46.9	46.8	46.9
	Work Pace	62.0	62.4	61.3	62.0	61.8	59.4
	Emotional Demands	41.9	41.8	44.8	44.1	40.2	39.6
	Demands for Hiding Emotions	50.6	50.9	51.4	51.2	49.3	50.4
Work organisation and job contents	Influence at Work	55.3	55.2	58.3	57.4	53.7	53.8
	Possibilities for Development	64.7	64.3	68.6	69.7	63.4	61.1
	Control Over Working Time	60.9	62.7	59.6	53.4	58.7	60.4
	Meaning of Work	70.7	69.6	73.9	78.1	70.2	69.9
Interpersonal relations and leadership	Predictability	60.1	58.5	63.2	65.6	61.8	57.7
	Recognition	64.6	63.9	68.1	68.6	63.2	63.4
	Role Clarity	75.1	74.9	77	78.3	73.1	73.5
	Role Conflicts	43.4	41.2	45.6	52.3	48.5	39.7
	Illegitimate Tasks	41.0	39.2	45.4	46.3	45.3	38.7
	Quality of Leadership	55.5	54.5	59.1	61.9	54.9	55.5
	Social Support from Supervisors	68.3	68.4	70.8	71.3	65.4	68.9
	Social Support from Colleagues	68.4	67.7	70.2	74.1	66.9	68.5
	Sense of Community at Work	76.1	76	78.7	81.4	72.8	76
Work - individual interface	Job Insecurity	40.0	37	40.9	46.8	47.9	41.4
	Insecurity over Working Conditions	24.3	20	28.2	34.2	35.1	19.7
	Quality of Work	67.0	67	68.1	69.5	64.1	67.9
	Job Satisfaction	66.1	66.3	68.6	68.9	63.3	62.6
	Work-life Conflict	43.5	42.4	44.4	46.1	46.4	42.8
Social capital	Horizontal Trust	66.4	66.6	67.4	66.1	65.1	66.7
	Vertical Trust	65.2	64.7	67.5	67.1	63.9	65.4
	Organisational Justice	60.5	59.8	63.2	64.2	58.9	61.2
Health	Self-rated Health	59.5	59.2	58.8	59.1	60.5	56.2

TABLE 5: Scales by ethnicity

Worker origin

Workers who were not born in New Zealand report lower Influence at Work, Control Over Working Time, Possibilities for Development, Recognition, Role Clarity, Social Support from Supervisors, Sense of Community at Work, and Job Satisfaction than those who were born in New Zealand. They also report higher Role Conflicts, Job Insecurity, Insecurity Over Working Conditions, and Work-life Conflict.

Workers who recently arrived in New Zealand experience greater risk from certain psychosocial working conditions than those who have been in New Zealand for longer. Compared to workers who have been in New Zealand at least five years, those who arrived in New Zealand less than five years ago report higher Work Pace, Role Conflicts, Job Insecurity, Insecurity Over Working Conditions and Work-life Conflict. These workers report lower Influence at Work, Control Over Working Time, Meaning of Work, Sense of Community at Work and Job satisfaction.

Table 6 includes detailed results by worker origin.

Domain	Scale	All workers (n=3,612)	BORN IN NZ		ARRIVED IN NZ	
			Yes (n=2,575)	No (n=1,037)	<5 years (n=158)	5 years + (n=879)
Demands at work	Quantitative Demands	47.8	48.0	48.0	46.1	47.6
	Work Pace	62.0	62.3	61.3	65.6	60.5
	Emotional Demands	41.9	42.5	40.2	39.7	40.3
	Demands for Hiding Emotions	50.6	51.1	49.2	48.0	49.5
Work organisation and job contents	Influence at Work	55.3	56.0	53.7	50.5	54.3
	Possibilities for Development	64.7	65.2	63.4	59.8	64.1
	Control Over Working Time	60.8	61.4	59.5	55.8	60.3
	Meaning of Work	70.7	70.2	70.6	65.8	71.6
Interpersonal relations and leadership	Predictability	60.1	60.0	60.3	60.7	60.2
	Recognition	64.6	65.2	63.1	62.9	63.2
	Role Clarity	75.1	75.7	73.9	71.2	74.4
	Role Conflicts	43.4	42.5	45.5	50.0	44.6
	Illegitimate Tasks	41.0	40.9	41.2	44.5	40.6
	Quality of Leadership	55.5	55.9	54.7	53.1	55.0
	Social Support from Supervisors	68.3	69.0	66.8	63.6	67.4
	Social Support from Colleagues	68.4	68.2	68.7	68.3	68.8
	Sense of Community at Work	76.1	76.7	74.6	70.6	75.4
Work - individual interface	Job Insecurity	40.0	38.4	43.8	50.0	42.6
	Insecurity over Working Conditions	24.3	22.9	27.6	33.7	26.4
	Quality of Work	67.0	67.3	66.3	63.7	66.8
	Job Satisfaction	66.1	66.8	64.4	59.1	65.4
	Work-life Conflict	43.5	42.7	45.4	51.3	44.3

Domain	Scale	All workers (n=3,612)	BORN IN NZ		ARRIVED IN NZ	
			Yes (n=2,575)	No (n=1,037)	<5 years (n=158)	5 years + (n=879)
Social capital	Horizontal Trust	66.4	66.7	65.5	68.5	64.9
	Vertical Trust	65.2	65.6	64.1	65.9	63.8
	Organisational Justice	60.5	60.9	59.7	61.4	59.4
Health	Self-rated Health	59.5	59.8	58.7	59.5	58.6

TABLE 6: Scales by worker origin

Workers who were not born in New Zealand are less likely to report exposure to all the listed Offensive Behaviours (Figure 20). This finding may reflect an unwillingness to speak up because of fear of losing their jobs (Stringer and Michailova, 2019; Ministry of Business, Innovation and Employment, 2020). More analysis will be conducted to further investigate the differences within workers' origin.

Despite this finding, compared to those who have been in New Zealand five years or more and workers born in New Zealand, workers who arrived in New Zealand less than five years ago are more likely to report exposure to Bullying, Cyberbullying, Sexual Harassment, Threats of Violence, and Physical Violence (Figure 21).

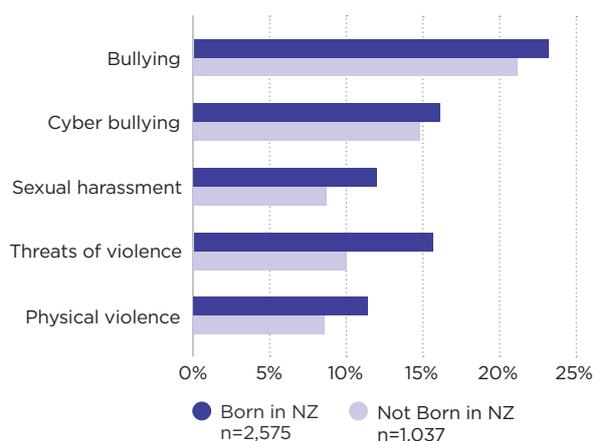


FIGURE 20: Offensive behaviours (% exposed at least once in the past 12 months) by place of birth

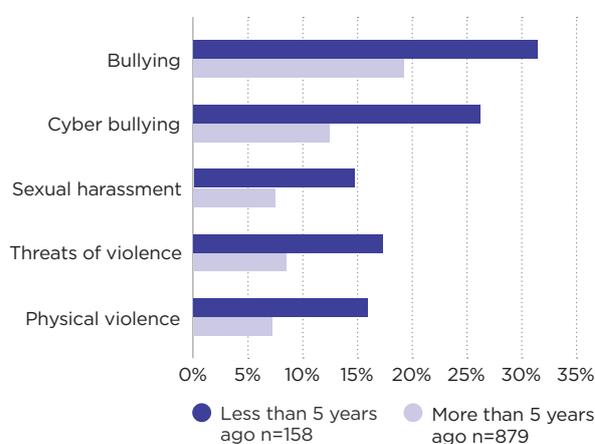


FIGURE 21: Offensive behaviours (% exposed at least once in the past 12 months) by arrival in New Zealand

6.0 Conclusion

The NZPS is designed to measure self-reported exposure to psychosocial factors in the working environment in New Zealand, by identifying a range of workplace indicators of Demands at Work, Work Organisation and Job Contents, Interpersonal Relations and Leadership, Work-Individual Interface, Social Capital, Health, and Offensive Behaviours. It aims to update evidence-based data on psychosocial risks from which interventions and policies can be designed and their effectiveness can be assessed. The same scale/domain scores can also be used to identify relative strengths, for example, circumstances or exposures at work that help a worker feel part of a community at work

The Copenhagen Psychosocial Questionnaire (COPSOQ) has been recognised as a valid and reliable measure of psychosocial factors at work by the EU Occupational Safety and Health Agency and cited in reference documents of the World Health Organization and International Labour Organization. It has been translated into 28 languages and applied in 38 COPSOQ country members. The current COPSOQ III used in NZPS 2021 has been tested in six countries (Germany, Canada, Spain, France, Turkey, and Sweden) covering over 23,000 workers. It has been proved as a robust instrument for the assessment of psychosocial factors and health promotion in the working environment.

The survey has several findings that could be used to develop psychosocial health initiatives to promote positive workplace health and safety attitude of workers and employers, and help address psychosocial risks and negative acts at work.

Results from the NZPS will be used to inform the WorkSafe work-related health surveillance system and the strategic outcome framework, develop new evidence-based interventions to improve psychosocial health across occupations and industries, and provide a baseline for future iterations of the COPSOQ with specific sectors and national surveys. It will enable the comparison of key workplace psychosocial indicators for New Zealand with other jurisdictions, and facilitate the design of future international collaborative research with other country members in the COPSOQ network. Ultimately, it will contribute to the goal of health and safety for every worker regardless of their social economic status.

The survey data reported here was collected at the height of the COVID pandemic in New Zealand, during which time work systems and practices were significantly disrupted and had been since the end of 2019. COVID had elicited a big change in the way New Zealand workers normally worked. As most items in the survey ask respondents to report exposures within the previous 12-months the reporting period would fall entirely within this period of disruption. The popular media continually reported public concern over job security, changes in work practice, and the breakdown of work communities during this time. The results reported here paint a slightly different picture with concern over Security of Working Conditions (work hours, location of work, pay) being relatively low, and the Sense of Community at Work remaining high. This is even more positive when noting that the international benchmark data reported by Burr *et al.* (2019) was collected prior to the COVID pandemic. Therefore, caution might be required when comparing results between NZPS and other COPSOQ surveys before COVID time.

It is of note that almost without exception the mean Scale scores indicating higher risk were reported by the same handful of sectors, these being – Public Administration and Safety; Information, Media and Telecommunications; Accommodation and Food Services; Transport, Postal and Warehousing. These sectors are different from those that have traditionally been the focus of health and safety interventions. These are sectors where workers are spending a greater part of their working time interacting with others, rather than engaged in more physical activities. While it seems obvious that a change in activity type is associated with a change in risk type we will need to ensure that, (a) any interventions take account of specific sector characteristics, and (b) we do not lose sight of the fact that psychosocial factors can present a risk to any worker, working in any industry, at any point in time.

WorkSafe will be conducting further analysis to better understand psychosocial risks in New Zealand working environments by socio-demographic characteristics, industry and occupational settings; and identify any interactions among psychosocial scales for optimising our interventions.

Appendix

IN THIS SECTION:

Appendix 1: References

Appendix 2: Detailed methodology

Appendix 3: Summary of scale reliability and descriptive statistics

Appendix 4: Summary of New Zealand Psychosocial Survey results

Appendix 5: Further details on international benchmarks from Burr et al. (2019)

Appendix 6: NZPS Questionnaire

Appendix 1: References

- Ala-Mursula, L., Vahtera, J., Kivimäki, M., Kevin, M. V., & Pentti, J. (2002). Employee control over working times: Associations with subjective health and sickness absences. *Journal of Epidemiology & Community Health*, 56(4), 272-278. <https://doi.org/10.1136/jech.56.4.272>
- Angelopoulou, P., & Panagopoulou, E. (2020). Is wellbeing at work related to professional recognition: A pilot intervention. *Psychology, Health & Medicine*, 25(8), 950-957. <https://doi.org/10.1080/13548506.2019.1707239>
- Berthelsen, H., Westerlund, H., Bergstrom, G., & Burr, H. (2020). Validation of the Copenhagen Psychosocial Questionnaire version iii and establishment of benchmarks for psychosocial risk management in Sweden. *International Journal of Environmental Research and Public Health*, 17(9), 3179. <https://doi.org/10.3390/ijerph17093179>
- Burr, H., Berthelsen, H., Moncada, S., Nübling, M., Dupret, E., Demiral, Y., Oudyk, J., Kristensen, T. S., Llorens, C., Navarro, A., Lincke, H-J., Bocéréan, C., Sahan, C., Smith, P., & Pohrt, A. (2019). The third version of the Copenhagen Psychosocial Questionnaire. *Safety and Health at Work*, 10(4), 482-503. <https://doi.org/10.1016/j.shaw.2019.10.002>
- Caroli, E., & Godard, M. (2016). Does job insecurity deteriorate health? *Health Economics*, 25(2), 131-147. <https://doi.org/10.1002/hec.3122>
- Clausen, T., Hogh, A., & Borg, V. (2012). Acts of offensive behavior and risk of long-term sickness absence in the Danish elder-care services: A prospective analysis of register-based outcomes. *International Archives of Occupational and Environmental Health*, 85(4), 381-387. <https://link.springer.com/article/10.1007/s00420-011-0680-1>
- De Bruin, A, Picavet, H. S. J., & Nossikov, A (Eds.). (1996). *Health interview surveys: Towards international harmonization of methods and instruments*. WHO Regional Publications: European Series. 58.
- Elfering, A., Grebner, S., Leitner, M., Hirschmüller, A., Kubosch, E. J., & Baur, H. (2017). Quantitative work demands, emotional demands, and cognitive stress symptoms in surgery nurses. *Psychology, Health & Medicine*, 22(5), 604-610. <https://doi.org/10.1080/13548506.2016.1200731>
- Francioli, L., Conway, P. M., Hansen, Å. M., Holten, A.-L., Grynderup, M. B., Persson, R., Mikkelsen, E. G., Costa, G., & Høgh, A. (2018). Quality of leadership and workplace bullying: The mediating role of social community at work in a two-year follow-up study. *Journal of Business Ethics*, 147(4), 889-899. <https://doi.org/10.1007/s10551-015-2996-3>
- Gardner, D., O'Driscoll, M., Cooper-Thomas, H. D., Roche, M., Bentley, T., Catley, B., Teo, S. T. T., & Trenberth, L. (2016). Predictors of workplace bullying and cyberbullying in New Zealand. *International Journal of Environmental Research and Public Health*, 13(5), 448. www.mdpi.com/1660-4601/13/5/448
- Gisler, S., Omansky, R., Alenick, P. R., Tumminia, A. M., Eatough, E. M., & Johnson, R. C. (2018). Work-life conflict and employee health: A review. *Journal of Applied Biobehavioral Research*, 23(4), e12157. <https://doi.org/10.1111/jabr.12157>
- Gonçalves, J. S., Moriguchi, C. S., Chaves, T. C., & Sato, T. d. O. (2021). Cross-cultural adaptation and psychometric properties of the short version of COPSOQ II-Brazil. *Revista de Saúde Pública*, 55, 69. <https://doi.org/10.11606/s1518-8787.2021055003123>
- International Labour Organisation (2016, April 28). *Workplace stress: A collective challenge*. www.ilo.org/wcmsp5/groups/public/@ed_protect/@protrav/@safework/documents/publication/wcms_473267.pdf

- Johnson, M., Hickey, L., & Fink-Jensen, K. (2010). *The psychosocial work environment: A survey of New Zealand workers* (Unpublished report) prepared for the Department of Labour. Research New Zealand.
- Kiss, P., De Meester, M., Kristensen, T. S., & Braeckman, L. (2014). Relationships of organizational social capital with the presence of 'gossip and slander,' 'quarrels and conflicts,' sick leave, and poor work ability in nursing homes. *International Archives of Occupational and Environmental Health, 87*(8), 929-936. <https://doi.org/10.1007/s00420-014-0937-6>
- László, K. D., Pikhart, H., Kopp, M. S., Bobak, M., Pajak, A., Malyutina, S., Salavec, G., & Marmot, M. (2010). Job insecurity and health: A study of 16 European countries. *Social Science & Medicine, 70*(6), 867-874. <https://doi.org/10.1016/j.socscimed.2009.11.022-021-00331-1>
- Lincke, H-J., Vomstein, M., Lindner, A., Nolle, I., Häberle, N., Haug, A., & Nübling, M. (2021). COPSOQ III in Germany: Validation of a standard instrument to measure psychosocial factors at work. *Journal of Occupational Medicine and Toxicology, 16*(1), 1-15. <https://occup-med.biomedcentral.com/articles/10.1186/s12995-021-00331-1>
- Marchand, A., & Blanc, M-È. (2011). Occupation, work organisation conditions and the development of chronic psychological distress. *Work, 40*(4), 425-435. <https://doi.org/10.3233/WOR-2011-1254>
- Maurer, I., Bartsch, V., & Ebers, M. (2011). The value of intra-organizational social capital: How it fosters knowledge transfer, innovation performance, and growth. *Organization Studies, 32*(2), 157-185. <https://doi.org/10.1177/0170840610394301>
- McDonough, P. (2000). Job insecurity and health. *International Journal of Health Services, 30*(3), 453-476. <https://doi.org/10.2190/BPFG-X3ME-LHTA-6RPV>
- Ministry of Business, Innovation and Employment. (2020). *Bullying and harassment at work: Issues paper: A summary*. www.mbie.govt.nz/dmsdocument/11516-bullying-and-harassment-at-work-issues-paper-summary
- Ministry of Business, Innovation and Employment. (2021). Health and safety at work strategy: 2018-2028. www.mbie.govt.nz/dmsdocument/3453-health-safety-at-work-strategy-2018-2028-pdf
- 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. <https://doi.org/10.1177/1038411111422140>
- Ramkissoon, A., Smith, P., & Oudyk, J. (2019). Dissecting the effect of workplace exposures on workers' rating of psychological health and safety. *American Journal of Industrial Medicine, 62*(5), 412-421. <https://doi.org/10.1002/ajim.22964>
- Riley, P., Rahimi, M., & Arnold, B. (2021). *The New Zealand primary principal occupational health, safety and wellbeing survey: 2020 data*. https://principalhealth.org/reports/NZ%20Primary_Principals_H&W%202020.pdf
- Spector, P. E., & Bruk-Lee, V. (2008). Conflict, health, and well-being. In C. K. W. De Dreu & M. J. Gelfand (Eds.), *The psychology of conflict and conflict management in organizations* (pp. 283-304). Psychology Press.
- Stanojević Jerković, O., Sauliūnė, S., Šumskas, L., Birt, C. A., & Kersnik, J. (2017). Determinants of self-rated health in elderly populations in urban areas in Slovenia, Lithuania and UK: Findings of the EURO-URHIS 2 survey. *European Journal of Public Health, 27*(suppl. 2), 74-79. https://academic.oup.com/eurpub/article/27/suppl_2/74/2907861

Stansfeld, S. A., Fuhrer, R., Shipley, M. J., & Marmot, M. G. (1999). Work characteristics predict psychiatric disorder: Prospective results from the Whitehall II Study. *Occupational & Environmental Medicine*, 56(5), 302-307. <https://doi.org/10.1136/oem.56.5.302>

Stauder, A., Nistor, K., Zakor, T., Szabó, A., Nistor, A., Ádám, S., & Konkoly Thege, B. (2017). Quantifying multiple work-related psychosocial risk factors: Proposal for a composite indicator based on the COPSOQ II. *International Journal of Behavioral Medicine*, 24(6), 915-926. <https://link.springer.com/article/10.1007/s12529-017-9651-6>

Stringer, C., & Michailova, S. (2019). *Understanding the exploitation of temporary migrant workers: A comparison of Australia, Canada, New Zealand and the United Kingdom* (Report). www.mbie.govt.nz/dmsdocument/7110

Thomson, B., Rank, J., & Steidelmüller, C. (2021). The Individual job impact of change and employees' well-being: Role clarity and interpersonal justice as leadership-related moderators. *Journal of Change Management*, 21(4), 391-411. <https://doi.org/10.1080/14697017.2021.1888771>

WorkSafe New Zealand. (2019). *Psychosocial hazards in work environments and effective approaches for managing them* (Report). worksafe.govt.nz/research/psychosocial-hazards-in-work-environments-and-effective-approaches-for-managing-them

Wuorela, M., Lavonius, S., Salminen, M., Vahlberg, T., Viitanen, M., & Viikari, L. (2020). Self-rated health and objective health status as predictors of all-cause mortality among older people: A prospective study with a 5-, 10-, and 27-year follow-up. *BMC Geriatrics*, 20(1), 1-7. <https://bmcgeriatr.biomedcentral.com/articles/10.1186/s12877-020-01516-9>

Appendix 2: Detailed methodology

This section provides additional technical information about the survey methodology and data processing.

Population of interest

The population of interest includes people aged 18 or over who are:

1. employees working for wages or salary, or
2. people working without pay in a family business.

Self-employed people not employing others were not within the population of interest.

Questionnaire development and testing

CONTENT

WorkSafe's Mentally Healthy Work Team Lead reviewed and provided technical advice on the survey questionnaire. The questionnaire includes all 'core' and 'middle' items of the [COPSOQ III](#) with the following changes:

- HE4 (middle) from 'Demands for hiding emotions' was excluded.
- RE2 and RE3 (both long) from 'Recognition' were added.
- JU2 (long) from 'Organisational justice' was added.
- HSM1 and HSM2 (both long) from 'Cyberbullying' were added.
- SH1 and SH2 (both long) from 'Sexual harassment' were added.
- TV1 and TV2 (both long) from 'Threats of violence' were added.
- PV1 and PV2 (long) from 'Physical violence' were added.
- BU1, BU2, and BU3 (long) from 'Bullying' were added.

It also includes demographic and screening questions. The full questionnaire is provided in Appendix 6.

COGNITIVE TESTING

Fifteen cognitive interviews were conducted with people in paid employment to test the COPSOQ III questionnaire in a New Zealand context. Fieldwork ran from 16 to 22 February, 2021. All cognitive interviews were administered online due to interviews occurring during a period of heightened COVID-19 Alert Levels.

Quotas were set to ensure the participants represented a range of age groups, genders, ethnicities, and occupations.

The insights from the cognitive testing interviews resulted in the following changes to the COPSOQ III questionnaire. The question numbers referenced here align with those used in the NZPS questionnaire (see Appendix 6).

- **Large to small extent scale:** To a very large extent/To a large extent/Somewhat/To a small extent/To a very small extent. The lowest end of this scale was used inconsistently both within and between respondents. At times, respondents used 'To a very small extent' to reflect weak agreement, whereas at other times they use this same scale point to reflect a 'never' or 'not at all' response. Respondents also commented that they could not disagree using this scale, and some required additional explanation to know how to respond (for example, 'a very small extent' could mean that you are not at all worried).

Due to the inconsistent nature of responses and difficulty using this scale, an adjustment was made to the lowest scale option to include never or not at all responses. All other scale points remained the same. 'To a very small extent/Not at all'.

- **Demands for hiding emotions 2 (Q19):** 'To' was added to reflect the way that respondents read it naturally. 'Does your work require you to hide your feelings?'
- **Influence at work 3 (Q23):** 'The' was removed before 'work' to reflect the way that respondents read it naturally. 'Can you influence the amount of the work assigned to you?'
- **Influence at work 4 (Q24):** Some respondents queried what was meant by 'what you do at work' and the uncertainty resulted in many answers of 'somewhat'. The additional explanation below was added to capture what other respondents said came to mind when they think about what they can influence in terms of what they do at work. 'Do you have any influence on what you do at work? By 'what you do', we mean the tasks or activities you do at work, whether you can influence what you do in a day or how you prioritise your work tasks'.
- **Control over working time 3 (Q31):** Respondents had varied interpretations of what is meant by 'leaving work' ('Can you leave your work to have a chat with a colleague?'). Some respondents interpreted this as leaving the building or work premises, while others interpreted it as leaving their desk or workstation. To promote consistent understanding across respondents, leaving work was reframed as taking a break. 'Can you take a break from your work to have a chat with a colleague? By take a break, we mean stopping your work for a short period of time to talk to a colleague.'
- **Role conflicts 2 (Q44):** Respondents found this question easier to understand when 'should' was used instead of 'ought to'. This switch in wording was made to aid interpretation. 'Do you sometimes have to do things which should have been done in a different way?'
- **Quality of leadership (Q46), and Social support from supervisor 1 and 2 (Q47, Q48):** In these questions the term 'superior' is not well understood and it also is not common language in New Zealand workplaces. For workers in some roles, a superior can describe a range of people and positions, which makes the questions hard for respondents to answer. In these questions the term 'superior' has been replaced with 'your immediate manager'. This change in language was also tested in cognitive interviews and was easily understood.
- **Sense of community at work (Q52):** Respondents who worked in small teams felt they could not be part of a community as this implied a larger group of people. People found it easier to answer when community was replaced with 'team'. 'Do you feel part of a team at your place of work?'
- **Insecurity over working conditions 4 (Q57) and Job satisfaction (Q59):** Respondents who earned wages rather than a salary needed clarification. For this reason, 'or wages' have been added after salary is mentioned. 'Salary or wages'.
- **Job satisfaction (Q59):** Some respondents did not understand the term prospects and required an explanation in order to answer. To clarify work prospects a definition was added in brackets: 'Work prospects (by this, we mean your likely success with future work)'
- **Cyberbullying 1 (Q72):** Some respondents seemed not to notice wording after parentheses. This wording was moved to the end of the question text to ensure the whole question was read. 'During the last 12 months, have you been exposed to work-related harassment by email or text message, or on social media (for example, Facebook)?'
- **Cyberbullying 2 (Q73), Sexual harassment 2 (Q75), Threats of violence 2 (Q77), Physical violence 2 (Q79), Bullying 2 (Q81):** Subordinates is not a commonly used term in New Zealand workplaces and additional explanation in brackets helps with interpretation. 'Subordinates (people who report to you)'.

INTERVIEW METHOD

A flexible and multi-method approach was used to survey 3,612 workers.

The table below summarises the methods used and key methodological parameters. All methods allowed for a dynamic survey – respondents were only shown the questions they needed to answer, and were therefore forced to answer a question before seeing the subsequent questions. More detailed descriptions of each method follow the table.

SAMPLE SOURCE/ TARGET GROUP	SURVEY METHOD	FIELDWORK PERIOD	ACHIEVED SAMPLE SIZE n	RESPONSE RATE	RESPONDENT INCENTIVE
Online panel interviews	Online survey	3 March – 30 May 2021	3,018	28% (Kantar panel)	Agreed panel incentives
Face-to-face intercept interviews in high deprivation areas	Online self- completion survey using tablet	12 March – 30 May 2021	501	41%	\$20 cash or voucher
Electoral roll of forestry and fishing workers	Mail out to complete online survey	15 March – 30 May 2021	43	11%	\$25 Prezzy card for first 100 respondents, and entry into \$500 prize draw
Recent migrant workers sourced through community and social media groups	Open-link to online survey	17 March – 30 May 2021	23	Unknown	Entry into \$500 prize draw, plus \$200 charitable donation to organisation
Maritime NZ database of fishing/shipping workers to online survey	Open-link	15 April – 30 May 2021	26	Unknown	Entry into \$500 prize draw

The average interview length was 15-minutes for the online methods and 30-minutes for the face-to-face interviews.

Detailed response rate calculations

		KANTAR ONLINE PANEL ¹⁵	FACE-TO-FACE	LETTER
A	Refused (F2F) or No response (all other methods)	14,924	1,137	753
B	Non-Qualifier screen outs	3,552	689	70
C	Language difficulties	0	564	0
D	Completed interviews	2,391	501	43
	Total number of contacts	20,867	2,891	866
E	Proportion eligible = D/ (B+D)	0.40	0.42	0.38
F	Total estimated number of eligible contacts = (E*(A+C))+D)	8,395	1,217	330
	Response rate = D/F	28	41	13

¹⁵ Response rate information for the Dynata panel (also used), was not available.

ONLINE PANEL SURVEY (MAIN METHOD)

3,019 workers were surveyed and sourced from the Kantar and Dynata online panels. Fieldwork was conducted in two phases .

Phase 1: The first step involved a proportional sample of 900 workers across sectors, with care taken to ensure the sample was broadly representative by region, age by gender, and household income by household size (as a proxy for socio-economic status). Another approximately 997 workers were then surveyed targeting and boosting key industry sectors and Māori.

Phase 2: This involved a proportional sample of 1,121 workers across sectors, with care taken to ensure the sample was broadly representative by region, age by gender, and household income by household size.

SUPPLEMENTARY METHODS

Face-to-face interviews in high deprivation areas

Workers living in New Zealand's most vulnerable communities are less likely to take part in online panel or mail-out surveys (even paper based) due to lack of online engagement and/or literacy issues.

501 face-to-face intercept interviews were therefore conducted with workers in areas of high deprivation (NZDep 8, 9, or 10) in South Auckland (Ōtara, Manurewa and Māngere), Bay of Plenty (Te Puke and Greerton), Manawatū (Palmerston North Central), Wellington (Kilbirnie and Miramar), Christchurch (New Brighton) and Dunedin (the Gardens and Dunedin Central). Broad age and gender quotas were set to ensure a broadly representative sample.

The respondent completed the survey using the interviewer's iPad giving them a degree of confidentiality. The interviewer was on hand to assist in answering queries or explaining what was required, as needed.

Mail-out method

A supplementary mail-out methodology was used, with sample sourced from the Electoral Roll. The open occupation field in the Electoral Roll was used to identify 324 likely Forestry workers and 542 likely Commercial Fishing workers. Respondents were sent a letter inviting them to visit a website to complete the survey online.

Letters were sent in three batches (15 March, 31 March, and 6 May 2021) so that early in the fieldwork everyone who received a letter was guaranteed a \$25 Prezzy card, whereas later in the fieldwork a \$25 Prezzy card was offered on the condition that they were one of the first 100 to complete the survey. Postcard reminders were sent to batches 1 and 2 on 19 April.

Forty three respondents completed the survey using this approach: 31 in the Forestry sector and 12 in the Commercial Fishing sector.

Maritime NZ database

To boost the number of respondents in the Commercial Fishing industry, Maritime NZ sent invites (with an open link to the online survey) to 780 operators on their operator database. One reminder email was sent to encourage response. Operators were encouraged to pass the survey link onto their workers.

Twenty six respondents completed the survey from this approach. When asked in the survey which industry they work for, 11 of the 26 respondents selected Commercial Fishing while the remaining 15 selected another industry.

Recent migrant workers sourced through community and social media groups

Recent migrants were targeted through networking with two Facebook groups ('Skilled migrant group' and 'Working Holiday New Zealand') and two migrant community groups/networks (Belong Aotearoa and an Asian International community contact). These groups facilitated the distribution of the survey through their networks.

Twenty-three migrant workers completed the survey through this approach.

LIMITATIONS OF INTERVIEW METHOD

The primary limitations of the main survey methods used are:

- The online panel method cannot be said to be wholly representative of the New Zealand worker population because not everyone in the population had a chance of being surveyed. It can be said to be demographically representative of the New Zealand worker population on the key demographic variables used in the weighting. However, it under-represents those unlikely to join online panels. The face-to-face intercept method was used to counter this effect.
- Face-to-face intercept interviews are restricted to a relatively small number of high deprivation locations and cannot be said to be nationally representative. Further the 'intercept' nature of the interviews introduces a bias towards workers who frequent these busy locations.

DATA PROCESSING, WEIGHTING, AND SAMPLING ERRORS

Coding and data processing

Free text answers given for industry (Q2), ethnicity (Q5), work location (Q88), visa type (Q93), and education (Q94) were coded post-fieldwork.

Occupation was coded using the Australian and New Zealand Standard Classification of Occupations (ANZSCO) v12 codes to Classification Level 5 (six digits) where possible.

To assure quality of coding, 10% of coding was peer-checked.

Weighting

As with all general population surveys, this survey will have some inherent biases relating to:

- Disproportionate sample selection – for example, some industries were oversampled to ensure adequate base sizes for analysis.
- Sampling frames used – all sampling frames have biases. The primary sampling frame (online panels) is biased towards respondents on online panels (although this was countered through face-to-face interviews in high deprivation areas).

Demographic biases can be corrected in the survey results to accurately reflect the wider population through weighting.

The survey data have been weighted by gender within industry, ethnicity, and age. A simple cell-based weighting approach was adopted. Weights were prepared using 2018 Census Data of people who stated their employment status as paid employee or unpaid family worker.

Eight gender diverse respondents were given a weight in line with their unweighted proportion of the total industry sample. The gender within industry weights were then reweighted to account for this.

The minimum and maximum weighting factors were 0.04 and 2.88 respectively.

The weighting matrices are detailed in the next page.

Gender within industry weighting matrix

INDUSTRY	MALE	FEMALE	GENDER DIVERSE
Agriculture, Forestry and Fishing	67%	33%	0.03%
Manufacturing	70%	30%	
Construction	85%	15%	
Wholesale trade	64%	36%	
Retail trade	43%	57%	
Accommodation and food services	39%	61%	0.06%
Transport, postal and warehousing	71%	29%	0.03%
Information media and telecommunications	55%	45%	
Financial and insurance services	43%	57%	
Rental, hiring and real estate services	48%	52%	
Professional, scientific, and technical services	50%	50%	
Administrative and support services	49%	51%	
Public administration and safety	49%	51%	0.03%
Education and training	26%	74%	0.03%
Healthcare and social assistance	18%	82%	0.03%
Arts and recreation services	48%	52%	
Other services ¹⁶	55%	45%	0.03%

Ethnicity weighting matrix

ETHNICITY	YES	NO
Māori	14.36%	85.64%
Pacific Peoples	7.25%	92.75%

Age weighting matrix

AGE GROUP	
18-29 years	27.33%
30-39 years	20.96%
40-49 years	20.51%
50-59 years	19.03%
60-69 years	10.07%
70+ years	2.09%

¹⁶ Other includes Mining, Water and Waste, Electricity and Gas, and Other.

Design effect and sampling errors

Each step in the sampling and weighting scheme affects the sampling error of a survey question proportion in some way. Some of the weighting steps may have reduced bias in the survey estimates (for example, by adjusting for designed unequal selection probabilities of different respondents, or even by adjusting for unequal coverage and response probabilities). But to achieve these bias reductions, the sampling error for survey estimates is increased above the sampling error of a simple random sample without weighting.

For the purposes of the NZPS, a simplified approximation from heterogeneity of weights was used to indicate the design effect (hereafter 'deff') – in other words, how much sampling error has been increased by each stage in the weighting procedure.

Equation 1

Calculation of design effect (deff)

$$deff(wgt) = n \frac{\sum_i wgt_i^2}{(\sum_i wgt_i)^2}$$

The design effect for this survey was calculated to be 1.174.

Appendix 3: Summary of scale reliability and descriptive statistics

Scale reliability and descriptive statistics

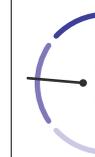
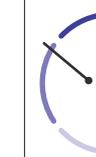
DOMAIN	SCALE	CRONBACH'S ALPHA**	MEAN	SD
Demand at work	Quantitative Demands	0.72	47.80	22.14
	Work Pace	0.77	61.98	22.42
	Emotional Demands	0.83	41.85	26.55
	Demands for Hiding Emotions	0.75	50.59	25.51
Work organisation and job content	Influence at Work	0.77	55.31	21.51
	Possibilities for Development	0.81	64.66	22.79
	Control over Working Time	0.81	60.88	25.30
	Meaning of Work	0.85	70.70	25.34
Interpersonal relations and leadership	Predictability	0.73	60.05	23.08
	Recognition	0.88	64.61	24.24
	Role Clarity	0.81	75.13	18.85
	Role Conflicts	0.76	43.39	25.52
	Illegitimate Tasks*		40.95	28.14
	Quality of Leadership	0.79	55.53	26.45
	Social Support from Supervisors	0.82	68.31	26.74
	Social Support from Colleagues	0.78	68.35	24.35
	Sense of Community at Work	0.79	76.07	22.19
Work - individual interface	Job Insecurity	0.74	39.97	29.63
	Insecurity Over Working Conditions	0.81	24.28	26.66
	Quality of Work*		66.98	24.73
	Job Satisfaction	0.77	66.05	20.37
	Work-Life Conflict	0.89	43.49	29.16
Social capital	Horizontal Trust*		66.40	23.32
	Vertical Trust	0.85	65.16	22.33
	Organisational Justice	0.83	60.53	22.79
Health	Self-rated Health*		59.46	25.88

* No reliability test is applied for single item scales.

** Measuring the scale reliability. Cronbach's alpha over 0.7 means that the scale is of at least acceptable reliability in relation to measuring its dimension.

^{SD} Standard deviation; Offensive behaviours where proportions are produced are not included in the table.

Appendix 4: Summary of New Zealand Psychosocial Survey results

DOMAIN	SCALE	MEAN SCORE/ PROPORTION*	DIFFERENCES BY INDUSTRY	NZ COMPARED TO INTERNATIONAL JURISDICTIONS ¹⁷
Demands at work	Quantitative demands	 47.8	<p>Highest in:</p> <ul style="list-style-type: none"> - Manufacturing - Information Media and Telecommunication - Professional Scientific and Technical Services <p>Lowest in:</p> <ul style="list-style-type: none"> - Transport, Postal and Warehousing - Forestry - Accommodation and Food Services 	Higher
	Work pace	 62.0	<p>Highest in:</p> <ul style="list-style-type: none"> - Accommodation and Food Services - Information Media and Telecommunication - Construction <p>Lowest in:</p> <ul style="list-style-type: none"> - Transport, Postal and Warehousing - Administrative and Support Services - Professional, Scientific and Technical Services 	Similar
	Emotional demands	 41.8	<p>Highest in:</p> <ul style="list-style-type: none"> - Healthcare and Social Assistance - Education and Training - Public Administration and Safety <p>Lowest in:</p> <ul style="list-style-type: none"> - Transport, Postal and Warehousing - Wholesale Trade - Forestry 	Lower
	Demands for hiding emotions	 50.6	<p>Highest in:</p> <ul style="list-style-type: none"> - Healthcare and Social Assistance - Public Administration and Safety - Education and Training <p>Lowest in:</p> <ul style="list-style-type: none"> - Agriculture - Forestry - Transport, Postal and Warehousing 	Lower
Work organisation and job contents	Influence at work	 55.3	<p>Highest in:</p> <ul style="list-style-type: none"> - Forestry - Professional Scientific and Technical services - Construction <p>Lowest in:</p> <ul style="list-style-type: none"> - Transport, Postal and Warehousing - Retail Trade - Healthcare and Social Assistance 	Higher
	Possibilities for development	 64.7	<p>Highest in:</p> <ul style="list-style-type: none"> - Professional Scientific and Technical services - Education and Training - Construction <p>Lowest in:</p> <ul style="list-style-type: none"> - Transport, Postal and Warehousing - Accommodation and Food Aervices - Retail Trade 	Lower

● Low ● Medium ● High

* Proportions are calculated for offensive behaviours.

¹⁷ See 8.8 and 11.3 for further information about international comparisons.

DOMAIN	SCALE	MEAN SCORE/ PROPORTION*	DIFFERENCES BY INDUSTRY	NZ COMPARED TO INTERNATIONAL JURISDICTIONS ¹⁷
Interpersonal Relations and Leadership	Control over working Time	 60.9	Highest in: - Professional Scientific and Technical Services - Information Media and Telecommunication - Public Administration and Safety Lowest in: - Education and Training - Accommodation and Food Services - Healthcare and Social Assistance	Higher
	Meaning of work	 70.7	Highest in: - Healthcare and Social Assistance - Education and Training - Public Administration and Safety Lowest in: - Accommodation and Food Services - Retail Trade - Wholesale Trade	Similar
	Predictability	 60.0	Highest in: - Forestry - Construction - Healthcare and Social Assistance Lowest in: - Accommodation and Food Services - Public Administration and Safety - Retail Trade	Higher
	Recognition	 64.6	Highest in: - Construction - Forestry - Agriculture Lowest in: - Public Administration and Safety - Transport, Postal and Warehousing - Healthcare and Social Assistance	Higher
	Role clarity	 75.1	Highest in: - Forestry - Healthcare and Social Assistance - Construction Lowest in: - Wholesale Trade - Public Administration and Safety - Accommodation and Food Services	Similar
	Role conflicts	 43.4	Highest in: - Information Media and Telecommunication - Public Administration and Safety - Retail Trade Lowest in: - Transport, Postal and Warehousing - Administration and Support Services - Agriculture	Lower
	Illegitimate tasks	 41.0	Highest in: - Public Administration and Safety - Information Media and Telecommunication - Retail Trade Lowest in: - Transport, Postal and Warehousing - Agriculture - Professional Scientific and Technical Services	Lower

DOMAIN	SCALE	MEAN SCORE/ PROPORTION*	DIFFERENCES BY INDUSTRY	NZ COMPARED TO INTERNATIONAL JURISDICTIONS ¹⁷
	Quality of leadership	 55.5	<p>Highest in:</p> <ul style="list-style-type: none"> - Construction - Education and Training - Forestry <p>Lowest in:</p> <ul style="list-style-type: none"> - Manufacturing - Transport, Postal and Warehousing - Retail Trade 	Lower
	Social support from supervisors	 68.3	<p>Highest in:</p> <ul style="list-style-type: none"> - Education and Training - Public Administration and Safety - Professional Scientific and Technical Services <p>Lowest in:</p> <ul style="list-style-type: none"> - Transport, Postal and Warehousing - Wholesale Trade - Manufacturing 	Similar
	Social support from colleagues	 68.4	<p>Highest in:</p> <ul style="list-style-type: none"> - Healthcare and Social Assistance - Education and Training - Professional Scientific and Technical Services <p>Lowest in:</p> <ul style="list-style-type: none"> - Administration and Support Services - Transport, Postal and Warehousing - Construction 	Similar
	Sense of community at work	 76.1	<p>Highest in:</p> <ul style="list-style-type: none"> - Professional Scientific and Technical Services - Healthcare and Social Assistance - Public Administration and Safety <p>Lowest in:</p> <ul style="list-style-type: none"> - Wholesale Trade - Manufacturing - Administration and Support Services 	Similar
	Job insecurity	 40.0	<p>Highest in:</p> <ul style="list-style-type: none"> - Information Media and Telecommunication - Retail Trade - Wholesale Trade <p>Lowest in:</p> <ul style="list-style-type: none"> - Healthcare and Social assistance - Agriculture - Education and Training 	Higher
Work – individual interface	Insecurity over working conditions	 24.3	<p>Highest in:</p> <ul style="list-style-type: none"> - Retail Trade - Information Media and Telecommunication - Accommodation and Food Services <p>Lowest in:</p> <ul style="list-style-type: none"> - Education and Training - Professional Scientific and Technical Services - Healthcare and Social Assistance 	Lower
	Quality of work	 67.0	<p>Highest in:</p> <ul style="list-style-type: none"> - Forestry - Professional Scientific and Technical Services - Transport, Postal and Warehousing <p>Lowest in:</p> <ul style="list-style-type: none"> - Public Administration and Safety - Accommodation and Food Services - Wholesale Trade 	Lower
	Job satisfaction	 66.0	<p>Highest in:</p> <ul style="list-style-type: none"> - Forestry - Agriculture - Education and Training <p>Lowest in:</p> <ul style="list-style-type: none"> - Retail Trade - Accommodation and Food Services - Public Administration and Safety 	Higher

DOMAIN	SCALE	MEAN SCORE/ PROPORTION*	DIFFERENCES BY INDUSTRY	NZ COMPARED TO INTERNATIONAL JURISDICTIONS ¹⁷
Social capital	Work-life conflict	 43.5	Highest in: - Accommodation and Food Services - Information Media and Telecommunication - Education and Training Lowest in: - Wholesale Trade - Administrative and Support Services - Transport, Postal and Warehousing	Similar
	Horizontal trust	 66.4	Highest in: - Forestry - Professional Scientific and Technical Services - Accommodation and Food Services Lowest in: - Public Administration and Safety - Information Media and Telecommunication - Transport, Postal and Warehousing	Higher
	Vertical trust	 65.2	Highest in: - Forestry - Administrative and Support Services - Agriculture Lowest in: - Public Administration and Safety - Manufacturing - Information Media and Telecommunication	Higher
	Organisational justice	 60.5	Highest in: - Agriculture - Construction - Administrative and Support Services Lowest in: - Public Administration and Safety - Healthcare and Social Assistance - Transport, Postal and Warehousing	Higher
	Self-rated health	 59.5	Highest in: - Agriculture - Manufacturing - Wholesale Trade Lowest in: - Public Administration and Safety - Accommodation and Food Services - Retail Trade	Lower
Offensive behaviours	Bullying	 22.5%	Highest in: - Healthcare and Social Assistance - Forestry - Information Media and Telecommunication Lowest in: - Transport, Postal and Warehousing - Wholesale Trade - Retail Trade	NA
	Cyberbullying	 15.7%	Highest in: - Information Media and Telecommunication - Construction - Public Administration and Safety Lowest in: - Transport, Postal and Warehousing - Education and Training - Healthcare and Social assistance	NA
	Sexual harassment	 11.1%	Highest in: - Information Media and Telecommunication - Accommodation and Food Services - Retail Trade Lowest in: - Education and Training - Forestry - Healthcare and Social Assistance	NA

DOMAIN	SCALE	MEAN SCORE/ PROPORTION*	DIFFERENCES BY INDUSTRY	NZ COMPARED TO INTERNATIONAL JURISDICTIONS ¹⁷
Threats of violence	14.0%		<p>Highest in:</p> <ul style="list-style-type: none"> - Healthcare and Social Assistance - Information Media and Telecommunication - Public Administration and Safety <p>Lowest in:</p> <ul style="list-style-type: none"> - Wholesale Trade - Professional Scientific and Technical Services - Education and Training 	NA
Physical violence	10.6%		<p>Highest in:</p> <ul style="list-style-type: none"> - Information Media and Telecommunication - Public Administration and Safety - Healthcare and Social Assistance <p>Lowest in:</p> <ul style="list-style-type: none"> - Professional Scientific and Technical Services - Accommodation and Food Services - Forestry 	NA

Appendix 5: Further details on international benchmarks from Burr *et al.* (2019)

DOMAIN	DIMENSION (SCALE)	NZ SURVEY 2021		OTHER INTERNATIONAL JURISDICTIONS (BURR <i>ET AL.</i> , 2019)				
		Cronbach's alpha**	No of items in the scale	Mean	Cronbach's alpha**	No of items in the scale	Mean	Countries tested
Demand at work	Quantitative demands	0.72	3	47.80	0.77	3	39	Spain, Sweden, Turkey
	Work pace	0.77	2	61.98	0.80	2	61	Canada, France, Germany, Spain, Sweden, Turkey
	Emotional demands	0.83	3	41.85	0.80	3	47	Spain, Turkey
	Demands for hiding emotions	0.75	3	50.59	0.66	3	57	Spain, Turkey
	Influence at work	0.77	4	55.31	0.80	4	42	Spain, Turkey
Work organisation and job content	Possibilities for development	0.81	3	64.66	0.82	3	66	Spain, Sweden, Turkey
	Control over working time	0.81	4	60.88	0.69	4	39	Spain, Turkey
	Meaning of work	0.85	2	70.70	0.81	2	72	Canada, France, Germany, Spain, Sweden, Turkey
	Predictability	0.73	2	60.05	0.73	2	56	Canada, France, Germany, Spain, Sweden, Turkey
	Recognition	0.88	3	64.61	0.88	3	64	Canada, France, Germany, Spain, Sweden, Turkey
Interpersonal relations and leadership	Role clarity	0.81	3	75.13	0.82	3	75	Spain, Germany, Sweden, Turkey
	Role conflicts	0.76	2	43.39	0.73	2	45	Canada, Spain, Germany, Sweden, Turkey
	Illegitimate tasks*		1	40.95		1	43	Spain, Germany, Sweden, Turkey
	Quality of leadership	0.79	3	55.53	0.87	3	61	Spain, Germany, Sweden, Turkey
	Social support from supervisors	0.82	2	68.31	0.87	2	68	France, Germany, Spain, Sweden, Turkey

* No reliability test is applied for single item dimensions.

** Measuring the scales' reliability. Cronbach's alpha over 0.7 means that the scale is highly reliable in relation to measuring its dimension.

Appendix 6:

New Zealand Psychosocial Survey

● Begin block ● End block ● Single coded ● Multi coded ● Open

B1 Demographics

● 1. Work status

Are you:

- An employee working for wages or salary
- Working without pay in a family business
- Self-employed (and not employing others) → (go to screen out)
- None of the above → (go to screen out)

● 2. Industry

Which industry do you work in:
(select the one that best fits your main job)

- Agriculture
- Forestry
- Commercial fishing
- Mining
- Manufacturing
- Electricity or gas
- Water and waste
- Construction
- Wholesale trade
- Retail trade
- Accommodation and food services
- Transport, postal and warehousing
- Information media and telecommunications
- Financial and insurance services
- Rental, hiring and real estate services
- Professional, scientific and technical services
- Administrative and support services
- Public administration and safety
- Education and training
- Healthcare and social assistance
- Arts and recreation services
- Other: (please tell us)

● 3. Gender

Are you:

- Male Female Another gender

● 4. Age

Which age group are you in:

- 18-19 45-49 70-74
- 20-24 50-54 75 or over
- 25-29 55-59
- 30-34 60-64
- 40-44 65-69

● 5. Ethnicity

Which of these ethnic groups best describe you:
(you can choose more than one)

- New Zealand European Māori
- Samoan Cook Island Māori
- Tongan Niuean
- Chinese Indian
- Another ethnic group: (please tell us)
- Don't know

● 6. Household income

This question just helps to ensure we survey a wide range of people.

Which of the following best describes your annual household income, before tax?

Please consider all sources of income including any salary or wages, self-employed income, child support payments, money from the Government, and investments etc.

If you're unsure, your best estimate is fine.

- \$20,000 or less \$50,001-\$70,000 Over \$150,000
- \$20,001-\$30,000 \$70,001-\$100,000
- \$30,001-\$50,000 \$100,001-\$150,000

7. Household size

Including yourself, how many people usually live in your household:

- One Three Five
 Two Four Six or more

8. Region

What region or regions do you mostly work in?

- Northland Wellington-Wairarapa
 Auckland Tasman
 Waikato Nelson
 Bay of Plenty Marlborough
 Gisborne West Coast
 Hawke's Bay Canterbury
 Taranaki Otago
 Manawatu-Whanganui Southland

9. Time in industry

For how long have you been working in the industry:
(industry from Q2)

- Less than a year More than 10 years
 1-3 years Can't remember
 4-9 years

10. Occupation

What is your current job title:
(if you have more than one job, please answer about your main job)

What are the main tasks and duties of your job?:
(if you have more than one job, please answer about your main job)

B1 Demographics

11. Quantitative demands QD1

Is your workload unevenly distributed so it piles up:

- Always Sometimes Never/hardly ever
 Often Seldom

12. Quantitative demands QD2

How often do you not have time to complete all your work tasks:

- Always Sometimes Never/hardly ever
 Often Seldom

13. Quantitative demands QD3

Do you get behind with your work:

- Always Sometimes Never/hardly ever
 Often Seldom

14. Work pace WP1

Do you have to work very fast:

- Always Sometimes Never/hardly ever
 Often Seldom

15. Work pace WP2

Do you work at a high pace throughout the day:

- To a very large extent To a small extent
 To a large extent To a very small extent/
Not at all
 Somewhat

16. Emotional demands ED1

Does your work put you in emotionally disturbing situations:

- Always Sometimes Never/hardly ever
 Often Seldom

17. Emotional demands ED2

Do you have to deal with other people's personal problems as part of your work:

- To a very large extent To a small extent
 To a large extent To a very small extent/
Not at all
 Somewhat

18. Emotional demands ED3

Is your work emotionally demanding:

- Always Sometimes Never/hardly ever
 Often Seldom

● **19. Demands for hiding emotions** HE2

Does your work require you to hide your feelings:

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent/
Not at all

● **20. Demands for hiding emotions** HE3

Are you required to be kind and open towards everyone - regardless of how they behave towards you:

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent/
Not at all

● **21. Demands for hiding emotions** HE4

Does your work require that you **do not** state your opinion:

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

● **22. Influence at work** IN1

Do you have a large degree of influence on the decisions concerning your work:

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

● **23. Influence at work** IN3

Can you influence the amount of work assigned to you:

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

● **24. Influence at work** IN4

Do you have **any influence on what you do** at work:
(by 'what you do', we mean the tasks or activities you do at work, whether you can influence what you do in a day or how you prioritise your work tasks)

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

● **25. Influence at work** IN6

Do you have any influence on **how** you do your work:

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

● **26. Possibilities for development** PD2

Do you have the possibility of learning new things through your work:

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent/
Not at all

● **27. Possibilities for development** PD3

Can you use your skills or expertise in your work:

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent/
Not at all

● **28. Possibilities for development** PD4

Does your work give you the opportunity to develop your skills:

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent/
Not at all

● **29. Control over working time** CT1

Can you decide when to take a break:

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

● **30. Control over working time** CT2

Can you take holidays more or less when you wish:

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

● **31. Control over working time** CT3

Can you **take a break from your work** to have a chat with a colleague:
(by take a break, we mean stopping your work for a short period of time to talk to a colleague)

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

● **32. Control over working time** CT4

If you have some private business is it possible for you to leave your place of work for half an hour without special permission:

- Always
- Often
- Sometimes
- Seldom
- Never/hardly ever

● **33. Meaningful work** MW1

Is your work meaningful:

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent/
Not at all

● **34. Meaningful work** MW2

Do you feel that the work you do is important:

- To a very large extent
- To a large extent
- Somewhat
- To a small extent
- To a very small extent/
Not at all

35. Predictability PR1

At your place of work, are you informed well in advance concerning for example important decisions, changes or plans for the future:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

36. Predictability PR2

Do you receive all the information you need in order to do your work well:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

37. Recognition RE1

Is your work recognised and appreciated by the management:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

38. Recognition RE2

Does the management at your workplace respect you:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

39. Recognition RE3

Are you treated fairly at your workplace:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

40. Role clarity CL1

Does your work have clear objectives:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

41. Role clarity CL2

Do you know exactly which areas are your responsibility:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

42. Role clarity CL3

Do you know exactly what is expected of you at work:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

43. Role conflicts CO2

Are contradictory demands placed on you at work:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

44. Role conflicts CO3

Do you sometimes have to do things which should have been done in a different way:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

45. Illegitimate tasks IT1

Do you sometimes have to do things which seem to be unnecessary:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

46. Quality of leadership QLT

To what extent would you say that your immediate manager or supervisor.

Your immediate manager is the person you usually report to.

Makes sure that the members of staff have good development opportunities:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | <input type="radio"/> I do not have a supervisor |

Is good at work planning:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | <input type="radio"/> I do not have a supervisor |

Is good at solving conflicts:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | <input type="radio"/> I do not have a supervisor |

● **47. Social support from supervisor** SSX1

How often is your immediate manager willing to listen to your problems at work, if needed:

- Always Sometimes Never/hardly ever
 Often Seldom I do not have a supervisor

● **48. Social support from supervisor** SSX2

How often do you get help and support from your immediate manager, if needed:

- Always Sometimes Never/hardly ever
 Often Seldom I do not have a supervisor

● **49. Social support from colleagues** SCX1

How often do you get help and support from your colleagues, if needed:

- Always Sometimes Never/hardly ever
 Often Seldom I do not have colleagues

● **50. Social support from colleagues** SCX2

How often are your colleagues willing to listen to your problems at work, if needed:

- Always Sometimes Never/hardly ever
 Often Seldom I do not have colleagues

● **51. Sense of community at work** SW1

Is there a good atmosphere between you and your colleagues:

- Always Sometimes Never/hardly ever
 Often Seldom I do not have colleagues

● **52. Sense of community at work** SW2

Do you feel part of a team at your place of work:

- Always Sometimes Never/hardly ever
 Often Seldom I do not have colleagues

● **53. Job insecurity** J11

Are you worried about becoming unemployed:

- To a very large extent To a small extent
 To a large extent To a very small extent/
 Somewhat Not at all

● **54. Job insecurity** J13

Are you worried about it being difficult for you to find another job if you became unemployed:

- To a very large extent To a small extent
 To a large extent To a very small extent/
 Somewhat Not at all

● **55. Insecurity over working conditions** IW1

Are you worried about being transferred to another job against your will:

- To a very large extent To a small extent
 To a large extent To a very small extent/
 Somewhat Not at all

● **56. Insecurity over working conditions** IW3

Are you worried about the timetable being changed (shift, weekdays, time to enter and leave) against your will:

- To a very large extent To a small extent
 To a large extent To a very small extent/
 Somewhat Not at all

● **57. Insecurity over working conditions** IW4

Are you worried about a decrease in your salary or wages (reduction, variable pay being introduced):

- To a very large extent To a small extent
 To a large extent To a very small extent/
 Somewhat Not at all

● **58. Quality of work** QW

Are you satisfied with the quality of the work performed at your workplace:

- To a very large extent To a small extent
 To a large extent To a very small extent/
 Somewhat Not at all

● **59. Job satisfaction** JS

Regarding your work in general. How pleased are you with:

Your work prospects (by this, we mean your likely success with future work):

- Very satisfied Unsatisfied
 Satisfied Very unsatisfied
 Neither/nor

Your job as a whole, everything taken into consideration:

- Very satisfied Unsatisfied
 Satisfied Very unsatisfied
 Neither/nor

Your salary or wages:

- Very satisfied Unsatisfied
 Satisfied Very unsatisfied
 Neither/nor

60. Work life conflict ^{WFT}

The next questions concern the ways in which your work affects your private life.

61. Work life conflict ^{WF2}

Do you feel that your work drains so much of your **energy** that it has a negative effect on your private life:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

62. Work life conflict ^{WF3}

Do you feel that your work takes so much of your **time** that it has a negative effect on your private life:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

63. Trust and justice intro ^{TJ}

The next questions concern the ways in which your work affects your private life.

64. Horizontal trust ^{TE3}

Do the employees in general trust each other:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

65. Vertical trust ^{TM1}

Does the management trust the employees to do their work well:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

66. Vertical trust ^{TM2}

Can the employees trust the information that comes from the management:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

67. Vertical trust ^{TM4}

Are the employees able to express their views and feelings:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

68. Organisational justice ^{JU1}

Are conflicts resolved in a fair way:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

69. Organisational justice ^{JU2}

Are employees appreciated when they have done a good job:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

70. Organisational justice ^{JU4}

Is the work distributed fairly:

- | | |
|--|---|
| <input type="radio"/> To a very large extent | <input type="radio"/> To a small extent |
| <input type="radio"/> To a large extent | <input type="radio"/> To a very small extent/
Not at all |
| <input type="radio"/> Somewhat | |

71. Negative acts

Some of the questions that follow are of a sensitive nature. You may wish to answer these in private. Please remember that all of your answers will be kept confidential.

72. Cyberbullying ^{HSM1}

During the last 12 months, have you been exposed to work-related harassment by email or text messages, or on social media (for example, Facebook):

- | | |
|------------------------------------|--|
| <input type="radio"/> Yes, daily | <input type="radio"/> Yes, a few times |
| <input type="radio"/> Yes, weekly | <input type="radio"/> No |
| <input type="radio"/> Yes, monthly | |

Ask only if not question 72 ^{HSM1 5}

73. Cyberbullying ^{HSM2}

If yes, from whom: (you may select more than one)

- | | |
|--|---|
| <input type="radio"/> Colleagues | <input type="radio"/> Subordinates (people who report to you) |
| <input type="radio"/> Manager/superior | <input type="radio"/> Clients/customers/patients |

74. Sexual harassment ^{SH1}

Have you been exposed to undesired sexual attention at your workplace during the last 12 months:

- | | |
|------------------------------------|--|
| <input type="radio"/> Yes, daily | <input type="radio"/> Yes, a few times |
| <input type="radio"/> Yes, weekly | <input type="radio"/> No |
| <input type="radio"/> Yes, monthly | |

Ask only if not question 74 SH1 5

● **75. Sexual harassment** SH2

If yes, from whom: (you may select more than one)

- Colleagues Subordinates (people who report to you)
 Manager/superior Clients/customers/patients

● **76. Threats of violence** TV1

Have you been exposed to threats of violence at your workplace during the last 12 months:

- Yes, daily Yes, a few times
 Yes, weekly No
 Yes, monthly

Ask only if question 76 TV1 1,2,3,4

● **77. Threats of violence** TV2

If yes, from whom: (you may select more than one)

- Colleagues Subordinates (people who report to you)
 Manager/superior Clients/customers/patients

● **78. Physical violence** PV1

Have you been exposed to physical violence at your workplace during the last 12 months:

- Yes, daily Yes, a few times
 Yes, weekly No
 Yes, monthly

Ask only if question 78 PV1 1,2,3,4

● **79. Physical violence** PV2

If yes, from whom: (you may select more than one)

- Colleagues Subordinates (people who report to you)
 Manager/superior Clients/customers/patients

● **80. Bullying** BU1

Bullying means that a person repeatedly is exposed to unpleasant or degrading treatment, and that the person finds it difficult to defend himself or herself against it. Have you been exposed to bullying at your workplace during the last 12 months:

- Yes, daily Yes, a few times
 Yes, weekly No
 Yes, monthly

Ask only if not question 80 BU1 5

● **81. Bullying** BU2

If yes, from whom: (you may select more than one)

- Colleagues Subordinates (people who report to you)
 Manager/superior Clients/customers/patients

● **82. Bullying** BU3

How often do you feel unjustly criticized, bullied or shown up in front of others by your colleagues or your superior:

- Always Sometimes Never/hardly ever
 Often Seldom
 I do not have a superior/colleagues

83. Intro health

The following question is about your own health and well-being. Please do not try to distinguish between symptoms that are caused by work and symptoms that are due to other causes. The task is describe how you are in general.

● **84. Self-related health** GH1

The question is about your health and well-being during the last four weeks. In general, would you say your health is:

- Excellent Good Poor
 Very good Fair

B2 Demographics classification variables

● **85. Average work hours**

On average, **not** counting travel time, about how many hours do you work a week: (include time at all paid jobs if you have more than one, and include any unpaid hours you work at these jobs)

- Less than 20 hours 51-60 hours
 20-30 hours 61 hours or more
 31-40 hours Don't know
 41-50 hours

● **86. Business size**

How many employees usually work in the business or organisation: (if your business operates from more than one site in New Zealand, please answer with how many employees usually work at the site you are currently working from. If you're not sure, your best guess is fine)

- No employees 20-49
 1-5 50-99
 6-9 100 or more
 10-19 Don't know

New Zealand Psychosocial Survey

● Begin block ● End block ● Single coded ● Multi coded ● Open

87. Direct reports

How many (if any) people currently report directly to you at work:
(by direct reports we mean people you immediately manage or supervise and you are responsible for managing their workload and performance)

- None, no one reports to me directly
- 1 person
- 2-3 people
- 4-5 people
- 6-10 people
- Over 10 people
- Don't know

88. Work location

Which of the following types of locations do you mostly work in:
(choose locations you mostly work in under Alert level 1, that is, no impact due to COVID-19)

- An office
- A health or educational facility
- A hospitality location (for example, hotel, restaurant)
- A retail or wholesale outlet
- In a vehicle (for example, taxi, travelling salesperson)
- Home-based business (or working from home)
- At other people's homes
- A construction or building site
- On or in the water
- On agricultural or forestry land
- Somewhere else:

89. Work alone or with others

Do you usually work alone, or with other people:

- I usually work alone
- About half the time I work alone and half the time I work with other people
- I usually work with other people
- Don't know

90. Migrant status

Were you born in New Zealand: Yes No

Ask only if question 90 MIGRANT STATUS 2

91. Recent migrant

When did you first arrive to live in New Zealand?

- Less than a year ago
- 1-5 years ago
- More than 5 years ago

Ask only if question 90 MIGRANT STATUS 2

92. Visa

When did you first arrive to live in New Zealand?

- New Zealand Citizen
- New Zealand Permanent Resident
- New Zealand Resident
- Don't know
- Another visa type:

93. Education

What is the highest education qualification that you have?

Alternative wording for respondents not born in New Zealand:
What is the New Zealand equivalent of the highest education qualification that you have:

- No qualification
- School Certificate or NCEA Level 1
- Sixth Form Certificate or NCEA Level 2
- Bursary, Scholarship, University Entrance or NCEA Level 3 or 4
- A trade qualification
- A certificate or diploma that does not require a degree
- A polytech degree
- A university degree
- A postgraduate qualification (for example, Honours, Masters, Doctorate, Fellowship, Postgraduate Diploma)
- Unsure
- Other:

94. Carer responsibilities

Outside of work, do you care for:

- A child at home that you look after
- A friend, family member or someone else who needs help with day-to-day living due to health or disability needs
- Neither of these

Disclaimer

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