



**Educator
Health & Wellbeing**

The New Zealand Secondary Principal Occupational Health, Safety and Wellbeing Survey

2021 Data



April 2022



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1 Research Summary



Working hours

Secondary school leaders work long hours. Over 81% of secondary school leaders reported working more than 50 hours per week and 36% reported working more than 60 hours per week.



Demands at Work

Secondary school leaders' reported an increase in their workload and work pace between 2020 and 2021.



Job resources and source of support

In this year's survey school leaders reported a decline in the quality of leadership but an increase in social support from colleagues.



Work-family conflict

School leaders experience significant conflict between their work and family lives. This conflict increased between 2020 and 2021.



Job satisfaction

School leaders report that they are satisfied with their work.



Health and wellbeing

On average school leaders experience symptoms of burnout, stress and sleeping troubles 'part of the time'.



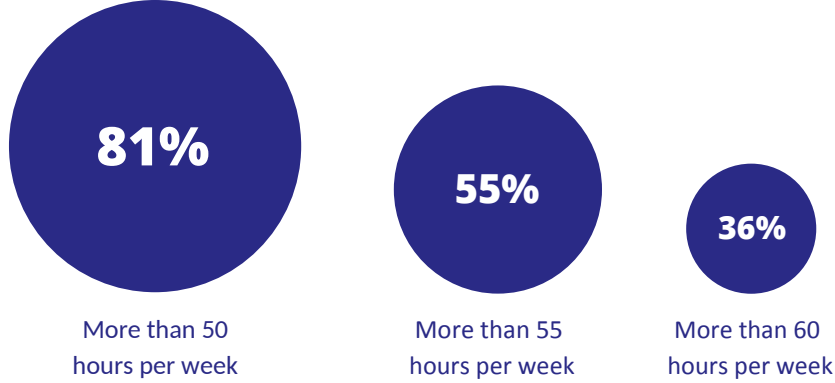
Source of Stress

The two major sources of stress at work are 'sheer quantity of work' and 'lack of time to focus on teaching and learning'.

2 Key Findings

Working hours (school term)

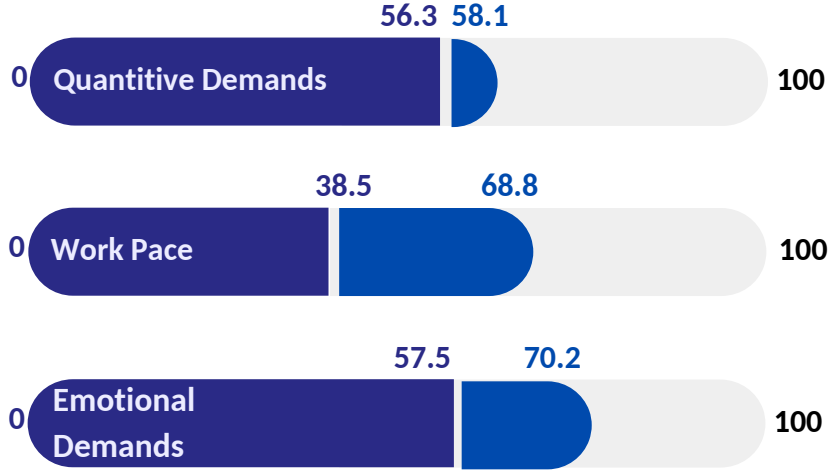
In 2021, over 81% of school leaders reported working more than 50 hours per week. Approximately 55% reported working more than 55 hours a week and over one third (36%) reported working 60 hours or more per week.



Demands at Work

School leaders reported that they regularly faced the major demands at work. Compared to the general working population of New Zealand, secondary school leaders more regularly experienced having more work than they could manage (quantitative demands), working at a fast pace and emotional demands.

- NZ working population
- NZ Secondary leaders



Health and Wellbeing of School Leaders: Key Facts

Secondary school
leaders
self-rated health

64

N.Z. working population

71 (out of 100)

Secondary school
leaders
burnout

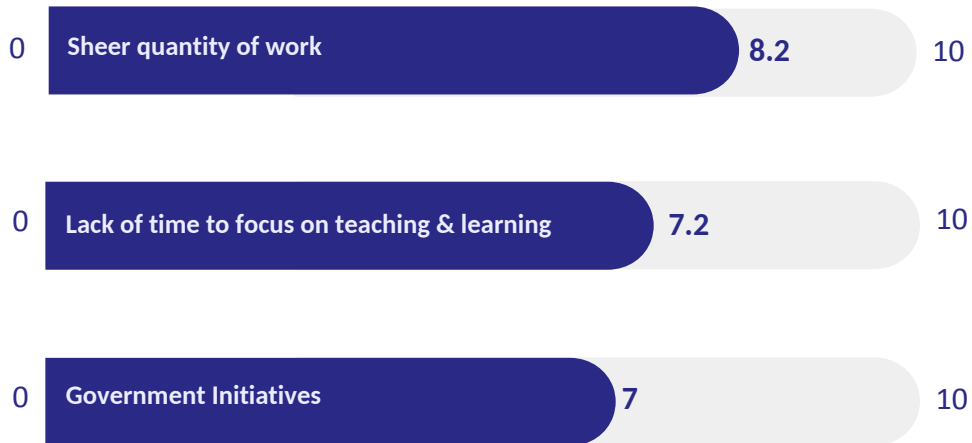
59

N.Z. Working Population

57 (out of 100)

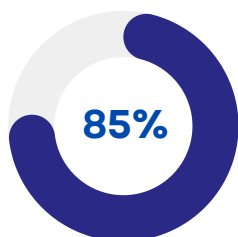
Major Sources of Stress

In 2021, school leaders reported that sheer quantity of work was the biggest source of stress. 'Lack of time to focus on teaching and learning' was reported as the second biggest stressor and 'government initiatives' was the third biggest source of stress.

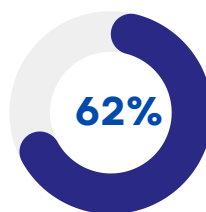


Access to social support

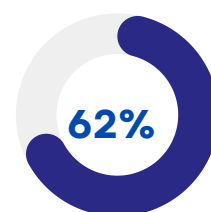
85% of school leaders reported that their partner was a source of support. Friends and colleagues were also reported as a source of support by a significant proportion of school leaders.



Partner



Friend



Colleague in
workplace

3 Introduction

During 2021, New Zealand experienced its longest lockdown and its highest daily Covid-19 case numbers. In mid-August 2021, New Zealand went into a short nationwide lockdown and Auckland then remained locked down for over 100 days. During lockdowns, schools were closed to all students for onsite learning. Throughout 2021, secondary school leaders were required to respond rapidly to the public health crisis and lead in the context of change and uncertainty. School leaders were required to take on new responsibilities and maintain a sense of security and stability for school communities.

These new challenges have added to concerns about the impact of school leaders' work on their health, safety and wellbeing. Challenging working conditions and environments increase the risk of school leaders experiencing psychological or physical harm. Heavy workloads, low levels of autonomy, limited support and poor workplace relationships are all factors associated with negative mental and physical health outcomes. Evidence about the challenges that school leaders face at work can inform the development of policies and strategies to promote their health, safety and wellbeing.

This report summarises the key findings of the 2021 New Zealand Secondary Principal Occupational Health, Safety and Wellbeing Survey. Participants completed the survey between August and December 2021 during a period when the Covid-19 outbreak had led to extended school closures in some parts of the country. The survey covers the following key dimensions of leaders' wellbeing at work:

- The psychosocial work environment
- School leaders' experiences of work
- School leaders' mental and physical health and wellbeing

The survey instrument is largely based on the Copenhagen Psychosocial Questionnaire (COPSOQ-II). This questionnaire is regarded as a robust measure of psychosocial work environments and employee health, safety and wellbeing. COPSOQ-II consists of higher order domains and subdomains/scales. These have been found to be very robust and stable measures different aspects of the psychosocial work environment and health and wellbeing (Burr, Albertsen, Rugulies, & Hannerz, 2010; Dicke et al, 2018; Kiss, De Meester, Kruse, Chavee, & Braeckman, 2013; Thorsen & Bjorner, 2010). All scores for COPSOQ measures are converted to 0-100 to aid comparisons across domains and scales.

This report presents the average scores for all New Zealand secondary school leaders on the key components of the psychosocial work environment and mental and physical health and wellbeing. Where possible, leaders' responses in 2021 are compared with the average scores for the New Zealand working population and a healthy working population. To analyse changes over time, we also compare leaders' responses in 2021 with the responses of leaders in previous rounds of the survey (2020).

Due to the small sample size in this round of data collection, this report is both brief and general in nature and the results must be interpreted with caution. The survey does not include any data on structural or organisational factors impacting school functioning or community issues, both of which are extremely important to consider. Further, we cannot analyse policy settings which set the conditions for work in schools, as we do not collect data on this important aspect of leadership.

4 Research Aim and Survey Participants

Aim: To track secondary school leaders' experiences of their work environments and their health, safety and wellbeing

This research project aims to track secondary school leaders' work, health, safety and wellbeing over time. The research team seeks to collect robust evidence about secondary school leaders' working conditions and work-related health and wellbeing. The evidence generated through our analysis is intended to inform policies and strategies to promote safe, healthy work environments and appropriate support for New Zealand secondary school leaders.

Survey Participants

In 2021, 45 secondary school leaders completed the survey. The remainder of this section provides a brief breakdown of the survey sample.

Role

²

Of the 35 participants that completed the survey 19 (54%) were Principals and 17 (46%) were Deputy / Assistant/ Associate / Acting Principals (see Figure 1).

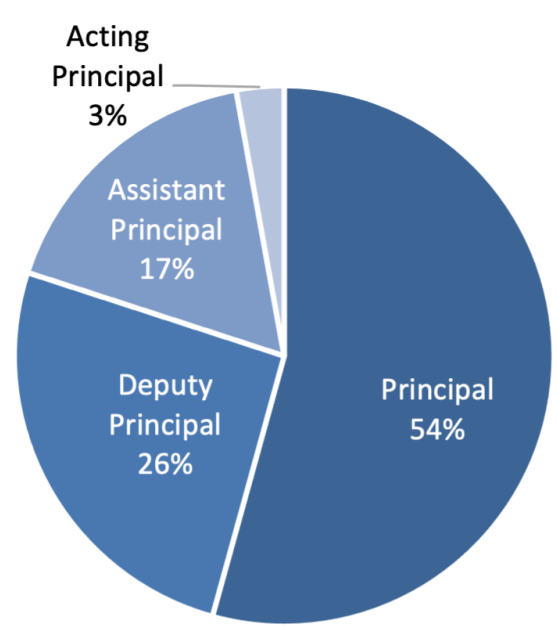


Figure 1: Sample distribution by role

² The COVID-19 pandemic is likely to have negatively impacted on participation rates.

Gender

When broken down by gender, the sample consisted of 24 (56%) females and 19 males (44%) (see Figure 2).

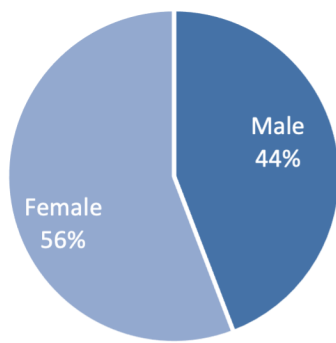


Figure 2. Sample distribution by gender

School Type

7 school leaders worked in secondary schools for students in Year 7-9 and 25 worked in secondary schools for students in Year 9-15. 7 school leaders worked in composite/area schools and 2 participants worked in intermediate/ middle schools (see Figure 3).

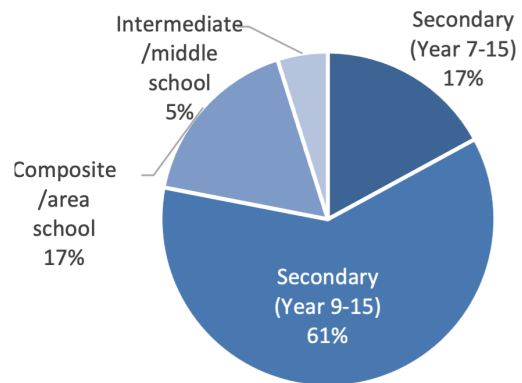


Figure 3. Sample distribution by school type

Ethnicity

34 school leaders (83%) were not of Māori/Pasifika descent and 7 school leaders (17%) were of Māori/Pasifika descent (see Figure 4).

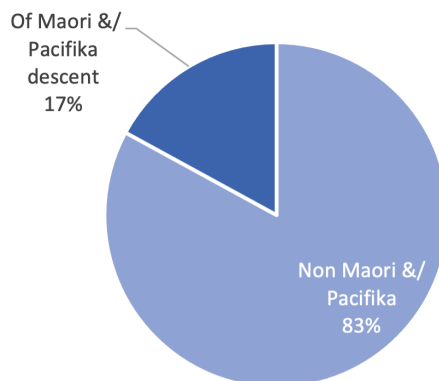


Figure 4. Sample distribution by ethnicity

School leader experience

A significant proportion of the sample had extensive leadership experience. 44% of school leaders had more than 13 years of experience in a leadership position (see figure 5).

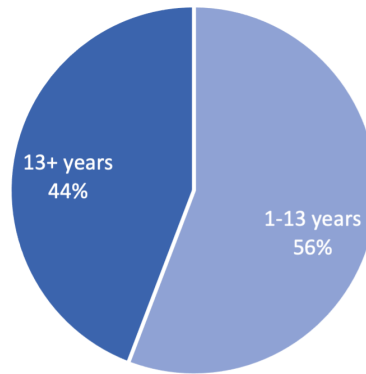


Figure 5. Sample distribution by years of experience in a leadership role

43% of school leaders had worked in their current role for over 5 years and 42% of leaders had gained over 12 years of teaching experience prior to commencing their leadership role (see figure 7).

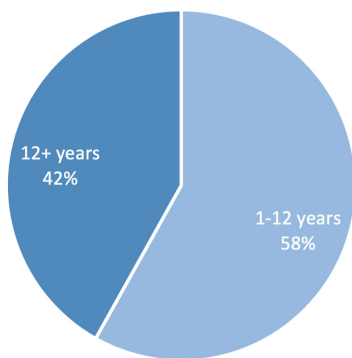


Figure 6: Sample distribution by years of working in a teaching role prior to undertaking a leadership role

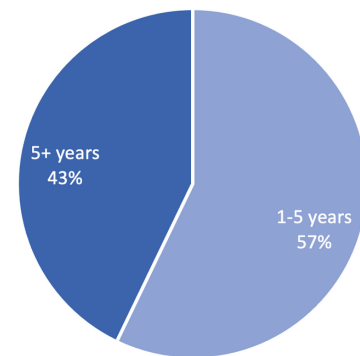


Figure 7: Sample distribution by years in current role

5 Secondary school leaders psychosocial work environments

The psychosocial work environment refers to the set of conditions under which school leaders perform their work in schools, such as job demands, work organisation, content of work or social relations at work. Psychosocial working conditions in schools are experienced by individual- and groups of- school leaders, and elicit cognitive and emotional responses that lead to mental and physical health outcomes.

In this section, we present our analysis of secondary school leaders' psychosocial work environments. We commence with a review of school leaders average working hours and then analyse the major demands that leaders' face and the resources that are available to them. We compare school leaders results in 2021 to the data collected in the 2020 survey, a 'healthy working population' (Denmark) and the general working population of New Zealand (where New Zealand data is available).

Secondary school leaders' work environments: average working hours

Teaching professionals in New Zealand are reported to work some of the longest hours in the world (OECD, 2018). In this year's survey, approximately 81% of secondary school leaders reported working more than 50 hours per week, 55% report working more than 55 hours a week and one in three school leaders (36%) report working more than 60 hours per week (see Figure 8).

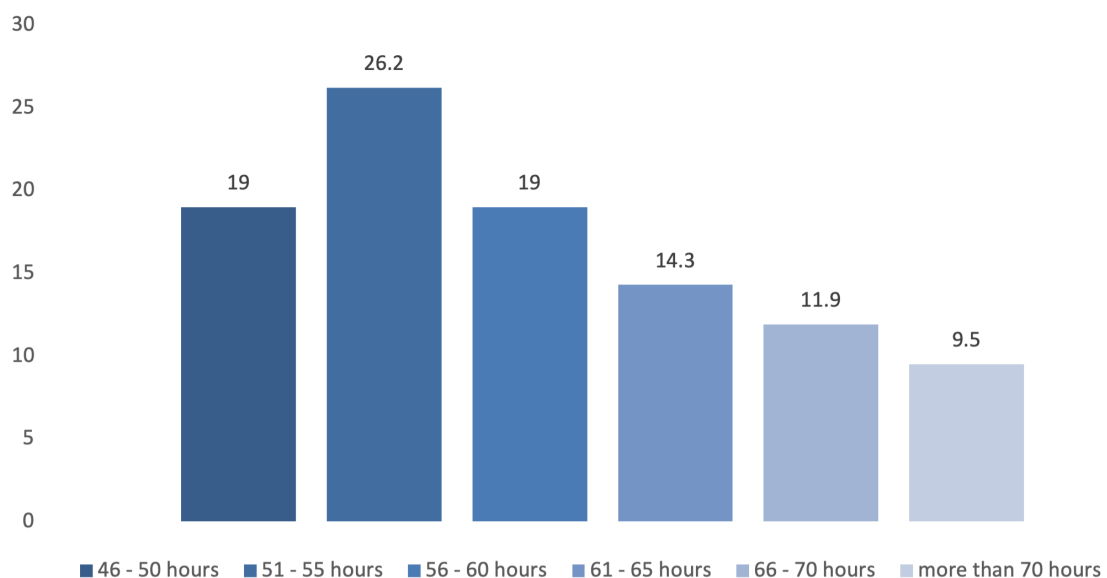


Figure 8: Secondary school leaders average working hours per week (term time)

Secondary school leaders' work environments: job demands

Job demands are the physical, psychological, social or organisational aspects of a job that require continuous physical and/or psychological (cognitive and emotional) effort. In the survey, school leaders were asked about their experiences of five major job demands: quantitative demands, work pace, cognitive demands, emotional demands and demands for hiding emotions.

Table 2: Survey measures of school leaders' job demands

Quantitative Demands reflect the amount of work an individual experiences relative to their ability to complete that work. They can be assessed as an incongruity between the number of tasks and the time available to perform the tasks in a satisfactory manner.

Work Pace assesses the speed at which tasks must be performed. It is a measure of the intensity of work.

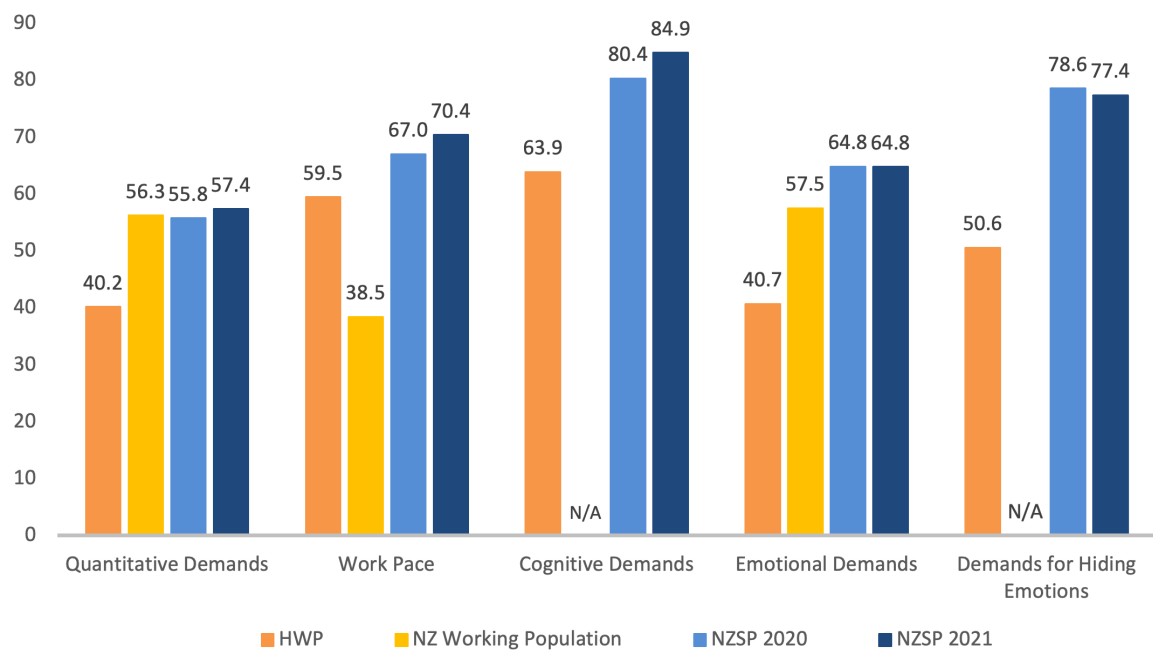
Cognitive Demands assesses demands involving the cognitive abilities of school leaders. The relationship between Cognitive Demands and wellbeing is complex. Facing new tasks or overcoming new challenges triggers strain but because it involves task variation or learning, it can also increase job satisfaction and facilitate personal development.

Emotional Demands assesses when school leaders must deal with or are confronted with other people's feelings at work or placed in emotionally demanding situations. Other people comprise both people not employed at the workplace (e.g., parents and students) and people employed at the workplace (e.g., colleagues, superiors or subordinates).

Demands for Hiding Emotions assesses when an employee must conceal their own feelings at work from other people. Other people comprise both people not employed at the workplace (e.g., parents and students) and people employed at the workplace (e.g., colleagues, superiors, or subordinates). The scale shows the amount of time individuals spend in surface acting (pretending an emotion that is not felt) or down-regulating (hiding) felt emotions.

In 2021, secondary school leaders reported that they frequently experienced all five job demands. They experienced more work than they could manage (quantitative demands) ‘sometimes’, they frequently worked at a fast pace and very frequently engaged in cognitively demanding work. School leaders reported that they regularly dealt with the emotions of others (emotional demands) and very frequently had to manage their own emotions. Secondary school leaders reported work pace, cognitive demands and emotional demands were more frequent than the healthy working population (HWP) and the New Zealand general working population (Johnson Hickey, and Fink-Jensen, 2010), (see Figure 9).

The findings demonstrate that New Zealand secondary school leaders work in very demanding environments where they are required to contend with a large volume of work, frequently work at a fast pace, very frequently engage in mentally taxing tasks/activities, and regularly engage in emotionally demanding work.



*0 indicates that leaders never/hardly ever experience these demands and 100 indicates that they always experience them

Figure 9: Secondary school leaders job demands (2021)

³ Measures for NZ working population were extracted from Johnson, Hickey, and Fink-Jensen (2010).

Secondary school leaders work environments: job resources

Job resources support school leaders to achieve their work goals, and stimulate personal growth and development. They are the physical and social resources at work and can include strong work relationships, clear leadership and trust, among many other factors. In this section, we report secondary school leaders experiences of the following job resources: quality leadership, social support from colleagues, social community at work, trust and justice.

Table 2: Survey measures of job resources

Quality of Leadership assesses the leadership quality of school leaders' superiors.

Social Support from Colleagues Inside and Outside of School assesses school leaders' the extent to which school leaders can obtain support from colleagues if they need it.

Social Community at Work assesses whether there is a feeling of being part of the group of employees at the workplace (e.g., if employee's relations are good and if they work well together).

Trust Regarding Management (Vertical Trust) assesses whether employees can trust management and vice versa. Vertical trust can be observed in the communication between the management and the employees.

Mutual Trust between Employees (Horizontal Trust) assesses whether employees can trust each other in daily work or not. Trust can be observed in the communication in the workplace, e.g., if one freely can express attitudes and feelings without fear of negative reactions.

Justice assesses whether workers are treated fairly or not.

Secondary school leaders in New Zealand reported experiencing quality of leadership and social support from colleagues to 'some extent' during 2021. During the same period, they experienced four job resources, social community at work, trust regarding management, trust regarding employees and justice to 'a large extent'. Secondary school leaders experienced most job resources at a similar level to the general working population of New Zealand and the healthy working population. The only resource that they experienced less than the general population was social support from colleagues (see Figure 10). Between 2020 and 2021, secondary school leaders experienced a significant increase in social support from colleagues but a decrease in quality of leadership at work.

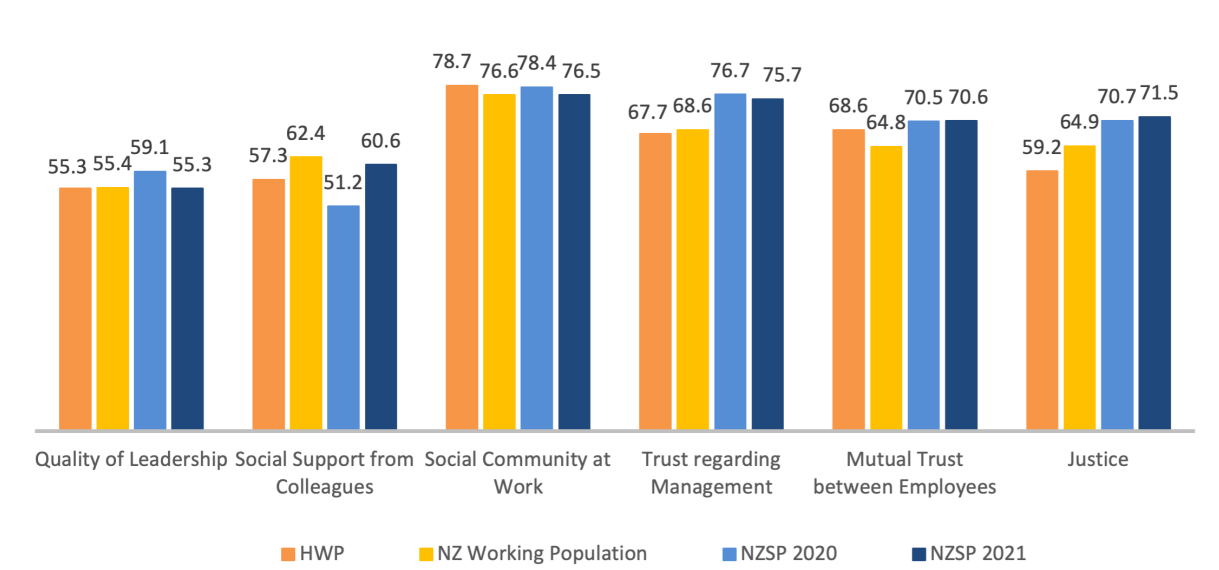


Figure 10: Secondary school leaders job resources

Overall, the results indicate that secondary school leaders enjoy high levels of trust and a strong sense of community at work.

Secondary school leaders sources of support

Most secondary school leaders (85%) reported that their partner was a source of support. Other important sources of support included friends, colleagues from their place of work, and leaders or colleagues that they had a professional relationship with, were also reported as a source of support by a large proportion of school leaders.

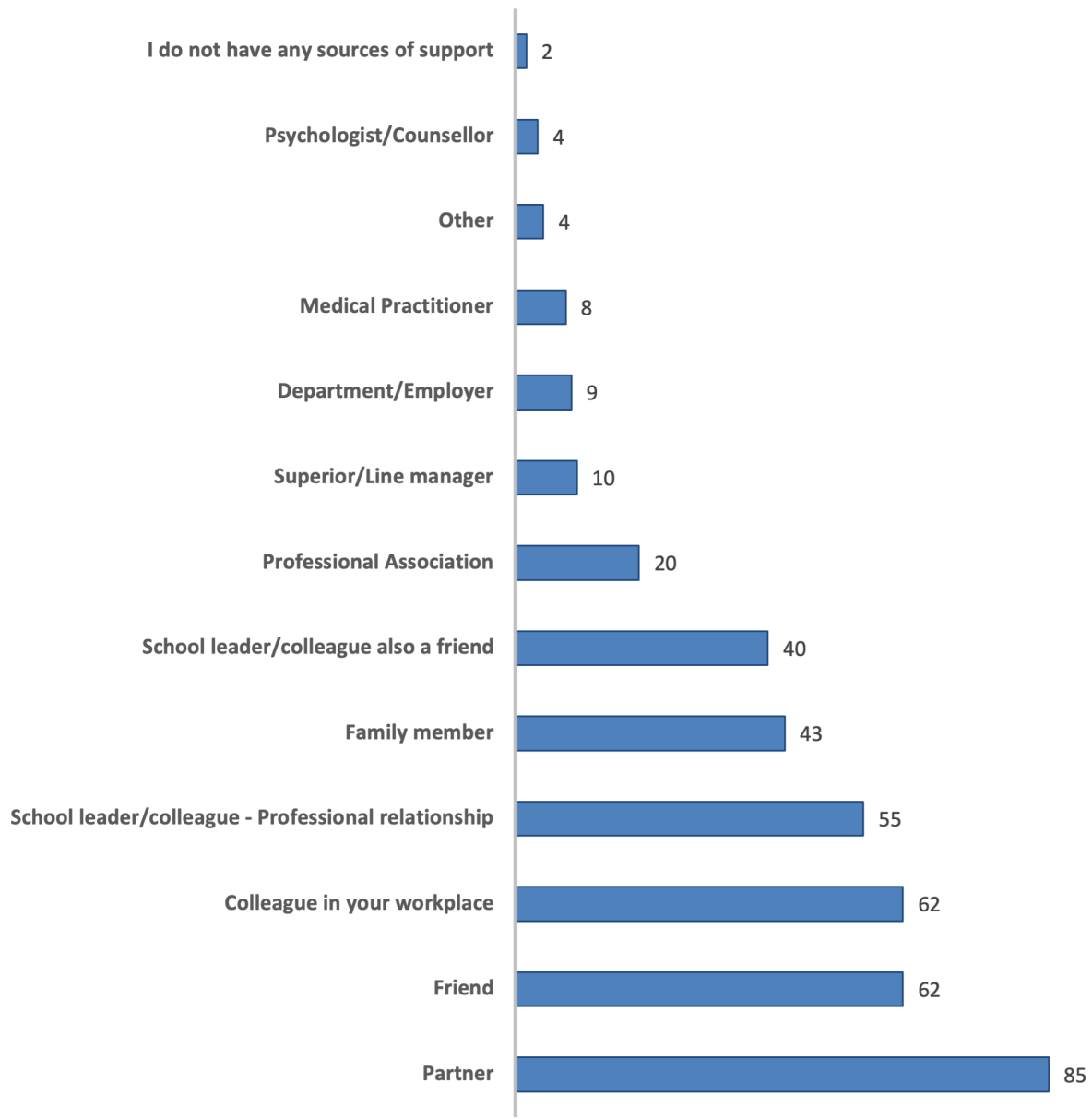


Figure 11: Secondary school leaders sources of support (%)

The proportion of school leaders receiving support from a family member has increased over the last year while the proportion of school leaders receiving support from colleagues, Department/employers, professional associations and medical practitioners has decreased.

Summary

Secondary school leaders in New Zealand continue to work long hours with over one third of participants working in excess of 60 hours per week. Working long hours is associated with increased psychosocial risk, burnout and other personal, physical and psychological difficulties (Caruso, Hitchcock, Dick, Russo, & Schmit, 2004). It is important to consider how to make school leaders workloads more manageable to reduce the number of hours that leaders are spending at work.

When job demands and resources are in balance school leaders are more likely to experience positive mental and physical health outcomes at work. In the last year, secondary school leaders report that work pace, workload and cognitive demands have increased. During the same period, some job resources have increased (social support from colleagues) while others have decreased (quality of leadership).

6 Secondary school leaders' health and wellbeing

The Covid-19 pandemic has raised awareness about the work, health and wellbeing of the education workforce. School leaders have faced multiple intersecting challenges over the last two years as they have led school communities through lockdowns and the return to in-school learning. In this section, we report on secondary school leaders' mental health and wellbeing during 2021. We begin by considering key measures of school leaders' experiences of work before analysing the main school leader health and wellbeing outcomes included in the survey.

Secondary school leaders' mental health and wellbeing: experiences of work

School leaders' experiences of their work refers to how school leaders' feel about their work and how their work impacts on their lives outside of work. In this section of the survey, we report on two key measures of school leaders' work experience: job satisfaction and work-family conflict (see Table 7).

Table 3: Survey measures of experiences of work

Job Satisfaction assesses the degree of pleasure or positive emotions that school leaders experience as a result of their work.

Work-family conflict measures the consequences of work on family/personal life.

Secondary school leaders' reported similar levels of job satisfaction to last year. School leader job satisfaction is significantly higher than the level of job satisfaction for both the healthy working population and the New Zealand working population. Over last year school leaders have also experienced increased work-family conflict. Compared to both the healthy working population and the New Zealand working population, school leaders work has a significantly greater negative effect on their family lives.

Table 4: Secondary school leaders experiences of work (2020-2021)

Sources of stress	HWP	NZ pop	2020	2021
Job Satisfaction	65.3	65.1	71.4	71.4
Work-family conflict	33.5	58.2	69.2	72.2

Secondary school leaders' mental health and wellbeing: key outcomes

School leaders' experiences at work elicit cognitive and emotional processes that lead to mental and physical health outcomes (see Table 9). This section summarises school leaders' experiences of four health and wellbeing outcomes: self-rated health, burnout, sleeping troubles and stress.

Table 5: Survey measures of mental health and wellbeing

Self-rated Health is the school leader's overall assessment of their own general health.

Burnout assesses the degree of physical and mental fatigue/exhaustion of the employee.

Stress assesses a reaction of the individual, or the combination of tension or strain, resulting from exposure to adverse or demanding circumstances.

Sleeping troubles assesses sleep length and interruptions during sleep.

In 2021, secondary school leaders in New Zealand rated their overall state of health as approximately 6 out of 10 (63.8 out of 100). On this scale, 10 is the best possible state of health and 0 the worst. On average, secondary school leaders reported that they experienced sleeping troubles, stress and burnout 'some of the time'.

Compared to the average for the New Zealand working population, school leaders reported significantly lower levels of general health and experienced symptoms of burnout slightly more frequently. School leaders experienced symptoms of stress and sleeping troubles less frequently than the New Zealand working population but significantly more frequently than the healthy working population (see Figure 12).

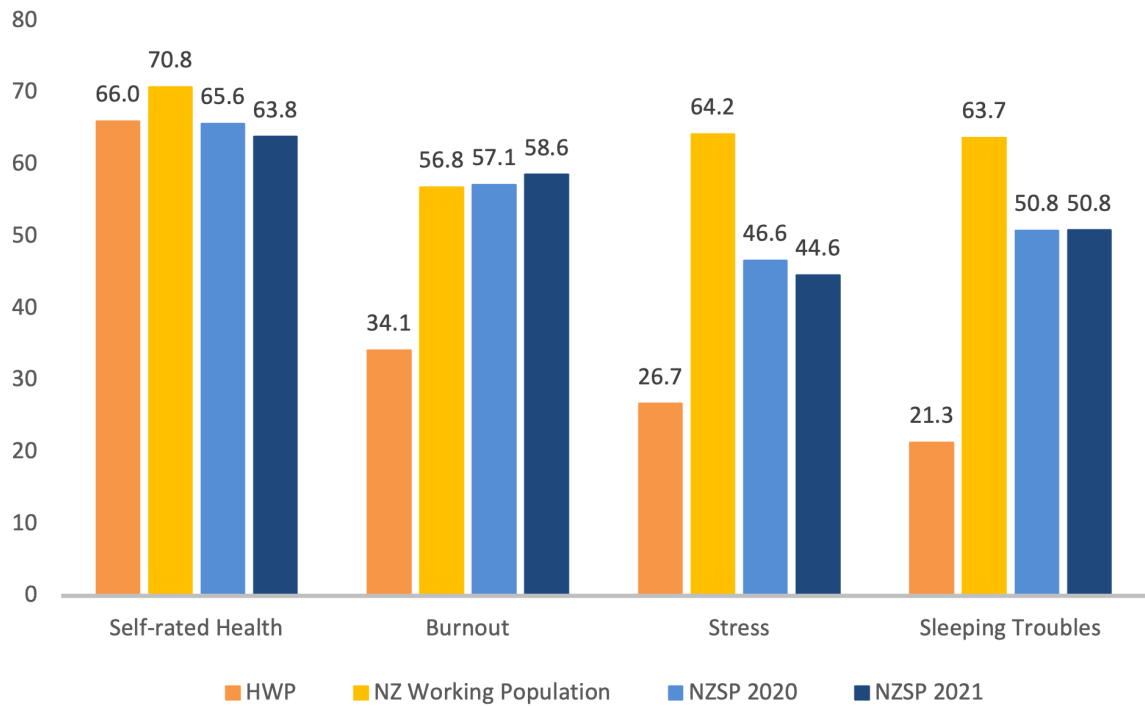


Figure 12: School leaders health and wellbeing (2021)

Secondary school leaders' health and wellbeing: major sources of stress

In this year's survey, sheer quantity of work was reported as the biggest source of stress for secondary school leaders (figure 13). Lack of time to focus on teaching and learning was reported as the second biggest stressor. Government initiatives and student mental health issues were other significant sources of stress for school leaders.

Since the launch of the school leader survey in 2020, sheer quantity of work and lack of time to focus on teaching and learning have been reported as the two major sources of stress for school leaders. Over the last year, several sources of stress (sheer quantity of work, government initiatives has increased. Over the last year, several sources of stress (sheer quantity of work, government initiatives and student and staff mental health issues) have increased.



Figure 13: School leaders sources of stress at work (average out of 10)

Table 6: Secondary school leaders' sources of stress (2020-21, average out of 10)

Sources of stress	2020	2021
Sheer quantity of work	7.8	8.3
Lack of time to focus on teaching & learning	7.3	7.2
Government initiatives	6.1	7.0
Mental health issues of students	6.7	6.9
Resourcing needs	6.6	6.6
Poorly performing staff	6.7	6.6
Mental health issues of staff	6	6.5
Student Related Issues	6.5	6.1
Parent Related Issues	5.9	5.5

Summary

Compared to a healthy working population, New Zealand secondary school leaders experienced higher levels of job satisfaction but worse outcomes on the key dimensions of health and wellbeing measured in the survey. In 2021, secondary school leaders in New Zealand reported that their work had a significant negative impact on their family lives, that their general health had decreased and symptoms burnout had increased slightly.

School leaders' report that the sheer quantity of work they face in their roles causes them considerable stress. The degree of stress caused by quantity of work has increased over the last year. Several other factors, including a lack of time to focus on teaching and learning government initiatives and student mental health issues, also cause school leaders considerable stress. These results illustrate that secondary school leaders face considerable challenges at work and that policymakers and administrators must consider how to address these issues. To promote the health and wellbeing of school leaders, it is important reduce the burden on them and provide additional resources.

7 Offensive Behaviours against school leaders

There is evidence that disruptive and extreme behaviour from students is a growing cause for concern for school leaders and teachers in New Zealand (Wylie and Macdonald, 2020). In this section, we report on three key aspects of offensive behaviour experienced by school leaders in the workplace: threats of violence, physical violence and bullying. School leaders are asked to report their experiences of these behaviours at work during the last 12 months. The three key aspects of offensive behaviour are defined in Table 12.

Table 7: Survey measures of offensive behaviours

Threats of Violence is the exposure to the threats of physical violence in the workplace.

Physical Violence is exposure to physical violence in the workplace.

Bullying refers to the repeated exposure to unpleasant or degrading treatment at work.

Offensive Behaviours

During the last 12 months of their work approximately 37% of New Zealand secondary school leaders who participated in the survey reported they experienced bullying at work, 39% experienced threats of violence and 24% experienced physical violence (see Figure 14). The proportion of leaders experiencing each type of offensive behaviour has increased since 2020. These figures are around four to six times higher than the averages for the healthy working population.

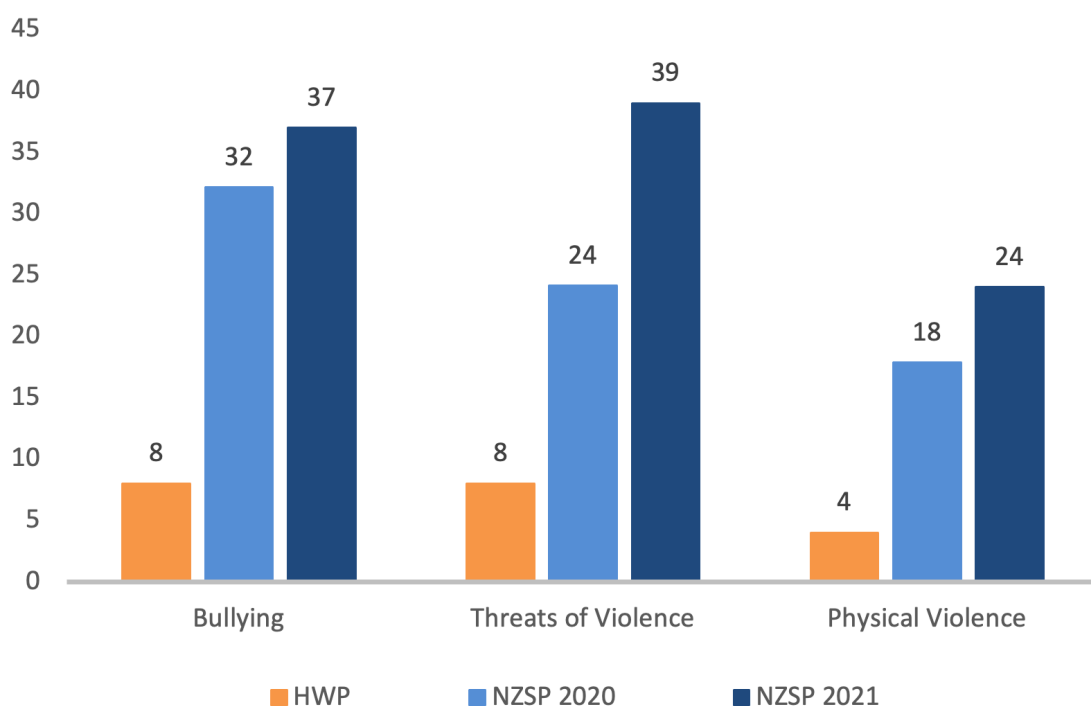


Figure 14: School leaders experiences of offensive behaviours

Summary

The prevalence of offensive behaviours against leaders is a cause for concern. Offensive behaviours can lead to a variety of negative outcomes for school leaders, including negative psychological and physical health outcomes, time off, and increased difficulty at work. To address these issues, policymakers need to build evidence about the prevalence and causes of offensive behaviours against school leaders and develop targeted interventions to reduce these incidents.

8 References

- Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). AUDIT: The alcohol use disorders identification test. Guidelines for use in primary care (W. H. Organization Ed. 2nd ed.). Geneva.
- Bakker, Arnold, B., and Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*.
- Burr, H., Albertsen, K., Rugulies, R., & Hannerz, H. (2010). Do dimensions from the Copenhagen Psychosocial Questionnaire predict vitality and mental health over and above the job strain and effort—reward imbalance models? *Scandinavian Journal of Public Health*, 38(3_suppl), 59-68.
- Caruso, C. C., Hitchcock, E. M., Dick, R. B., Russo, J. M., & Schmit, J. M. (2004). Overtime and extended work shifts: Recent findings on illnesses, injuries, and health behaviors. Cincinnati: U. S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.
- Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268. DOI: 10.1207/S15327965PLI1104_01.
- Dicke, T., Marsh, H. W., Riley, P., Parker, P. D., Guo, J., & Horwood, M. (2018). Validating the Copenhagen Psychosocial Questionnaire (COPSOQ-II) using set-ESEM: Identifying psychosocial risk factors in a sample of school principals. *Frontiers in Psychology*, 9, DOI: 10.3389/fpsyg.2018.00584.
- Johnson, M, Hickey, L, and Fink-Jensen, K, (2010). *The Psychosocial Work Environment A Survey of New Zealand Workers*, Research New Zealand, (Unpublished).
- Kiss, P., De Meester, M., Kruse, A., Chavée, B., & Braeckman, L. (2013). Comparison between the first and second versions of the Copenhagen Psychosocial Questionnaire: psychosocial risk factors for a high need for recovery after work. *International Archives of Occupational and Environmental Health*, 86(1), 17-24. DOI: 10.1007/s00420-012-0741-0.
- Pejtersen, J. H., Kristensen, T. S., Borg, V., & Bjorner, J. B. (2010). The second version of the Copenhagen Psychosocial Questionnaire. *Scandinavian Journal of Public Health*, 38(Suppl 3), 8-24.
- Price Waterhouse Coopers (2014) *Creating a mentally healthy workplace, Return on investment analysis*. Retrieved on 1 March 2021 from https://www.headsup.org.au/docs/default-source/default-document-library/research-by-pricewaterhouse-coopers.pdf?sfvrsn=3149534d_2.
- Richardson, J., Khan, M., Iezzi, A., Sinha, K., Mihalopoulos, C., Herrman, H., et al. (2009). *The AQoL-8D (PsyQoL) MAU Instrument: Overview September 2009*. Melbourne: Centre for Health Economics, Monash University.
- Richardson, J., Iezzi, K. M. A., & Maxwell, A. (2014). Validity and reliability of the Assessment of Quality of Life (AQoL)-8D multi-attribute utility instrument. *The Patient - Patient-Centered Outcomes Research*, 7(1), 85-96.
- Thorsen, S. V., & Bjorner, J. B. (2010). Reliability of the Copenhagen psychosocial questionnaire. *Scandinavian Journal of Public Health*, 38(3_suppl), 25-32. DOI: 10.1177/1403494809349859.
- Trepanier, S.-G., Fernet, C., Austin, S., Forest, J., & Vallerand, R. J. (2014). Linking job demands and resources to burnout and work engagement: Does passion underlie these differential relationships? *Motivation and Emotion*, 38(3), 353-366. DOI: 10.1007/s11031-013-9384-z.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063. DOI: 10.1037/0022-3514.54.6.1063.
- Wylie, C., & MacDonald, J. (2020). *What's Happening in Our English-Medium Primary Schools: Findings from the NZCER National Survey 2019*. New Zealand Council for Educational Research. Wellington.

Appendix

Participant care

Each participant received an interactive, user specific report of their survey responses benchmarked against responses of their peers and members of the general population upon their completion of the survey. Returning participants were also provided with a comparison of their 2021 results against their results from previous years.

The survey included the assessment of three “red flag” risk indicators: Self-harm; Quality of Life; and Occupational Health. The red flag indicators are calculated as follows:

- Self-harm – a participant response of “sometimes”, “often” or “all the time” to the question “Do you ever feel like hurting yourself?”
- Quality of Life – when aggregate scores on quality of life items fell two standard deviations below the mean for the school leader population.
- Occupational Health – when the composite psychosocial risk score fell into the high or very high-risk groups.

The report of any individual or combination of the three triggers resulted in the participant receiving a red flag notification, informing them of the indicator(s). The notification also included links to Employee Assistance Programs and local support services.

The survey

The survey captured three types of information drawn from existing robust and widely used instruments.

1. Comprehensive school demographic items drawn from:
 - a. The Trends in International Mathematics and Science Study (TIMSS; Williams, et al., 2007).
 - b. Program for International Student Assessment (PISA; Thomson, et al., 2011).
 - c. International Confederation of Principals surveys were used to capture differences in occupational health and safety (OH&S) associated with the diversity of school settings and types.
2. Personal demographic and historical information.
3. School leaders’ quality of life and psychosocial coping were investigated by employing two widely used measures:
 - The Assessment of Quality of Life – 8D (AQoL-8D; Richardson, et al., 2009; Richardson, Iezzi & Maxwell, 2014).
 - The Copenhagen Psychosocial Questionnaire-II (COPSOQ-II; Pejtersen, et al., 2010).

Other measures used in the survey include:

- a. The Alcohol Use Disorders Identification Test (AUDIT: Babour et al., 2001), developed for the World Health Organization.
- b. Passion (Trepanier, Fernet, Austin, Forest & Vallerand, 2014; Vallerand, 2015).
- c. The Positive and Negative Affect Scale (PANAS: Watson, Clark, and Tellegen, 1988).
- d. Basic Psychological Needs at Work Scale (BPNWS: Deci & Ryan, 2004; Van den Broeck, Ferris, Chang, & Rosen, 2016).
- e. 'Life Events'.
- f. COVID-19 related questions were added.

The combination of items from these instruments allows for a comprehensive analysis of variation in both occupational health, safety, and wellbeing, as a function of geolocation, school type, sector differences and the personal attributes of the school leaders themselves.

Our survey instrument relies heavily on the Copenhagen Psychosocial Questionnaire (COPSOQ-II). This questionnaire is regarded as the “gold standard” in occupational health and safety self-report measures. It has been translated into more than 25 languages and is filled out by hundreds of thousands of workers each year. The structure of the COPSOQ-II consists of higher order domains and contributing subdomains/scales. These have been found to be very robust and stable measures, by both ourselves (Dicke et al., 2018) and others (Burr, Albertsen, Rugulies, & Hannerz, 2010; Kiss, De Meester, Kruse, Chavee, & Braeckman, 2013; Thorsen & Bjorner, 2010). All COPSOQ domain scores are transformed to 0-100 aiding comparisons across domains.

To maintain the participant anonymity, aggregate data is reported at demographic grouping levels. Some subgroups were unable to be reported due to insufficient sample size. Reporting results of subgroups of insufficient size may not provide a true reflection of the subgroup; and risk identifying secondary school leaders if reported by the small subgroup. As some participants only partially completed the survey, some of the participant numbers for domains and subscales may vary. Subgroup distributions will be reported as a percentage of the data sample size.



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