

The New Zealand Early Childhood Educator and Kōhanga Reo Hauora Health and Wellbeing Survey

2021 Data









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Summary

In 2021, NZEI Te Riu Roa and the Educator Health and Wellbeing research group at Deakin University started a partnership to deliver the New Zealand Early Childhood Education and Kōhanga Reo Hauora Health and Wellbeing Survey. The survey provides a picture of the work environments, working conditions, work experiences and health and wellbeing of the early childhood education and Kōhanga Reo Hauora workforce (respondents) in New Zealand. This report provides a summary of the main findings from the 2021 survey.



Working conditions

Respondents reported higher levels of all major job demands when compared with a healthy working population except work pace. Job demands lead to increases in strain such as stress and consequent burnout, and also reduce job satisfaction.



Caring for those with additional needs

The vast majority (88%) of respondents reported working in services that have children with additional needs. A key stressor they identified was the lack of resources or expertise to cater to the additional needs of their students.



Passion for work, attrition, and recruitment

The majority of respondents (80%) are passionate about their work – a significant difference to the global working population average of 11-13%. This passion may justify the low levels of reported attrition (half of the ECE centre managers reported only needing to replace up to 5% of their staff per year). Most of these managers, however, reported having difficulty finding replacement staff.



Health and wellbeing

Respondents report significantly higher levels of burnout, stress, and sleeping troubles when compared with the general working population.

Musculoskeletal issues

Respondents reported high levels of musculoskeletal issues, with 73% reporting experiencing lower back issues, and 58% reporting shoulder issues during the last 12 months.



Comparisons between groups in the ECE sector

The report findings indicate the most significant differences between groups in the ECE sector were associated with service type, employment experience, and regulatory environment.



Differences between service types

Respondents working at privately owned education and care services reported the lowest levels of all job resources and job satisfaction, and highest levels of work-family conflict, stress, and burnout when compared to other service types. Such respondents reported higher levels of bullying, cyber bullying, and physical violence. Conversely, those working at community based education and care services reported the highest levels of job resources.



Impact of employment experience

Respondents with fewer than 4 years of experience reported lower selfrated health when compared with those that have worked for more than 4 years. The proportion of respondents experiencing offensive behaviours is more prevalent in all forms for those with fewer than 4 years of experience when compared with those with 4 or more years of experience.



Impact of regulatory environment

Respondents working in services with better than minimum adult to child ratios reported experiencing lower levels of all job demands, and workfamily conflict compared with those working in services at minimum ratios. They also reported significantly higher levels of self-rated health, lower levels of burnout, and lower levels of sleeping problems when compared to those working in services at minimum ratio.

Besides the prevalence of cyber bullying, all forms of offensive behaviour were more likely to be experienced by those working in centres at minimum adult: child ratio compared with those working in centres with better than minimum ratios. Notably, the likelihood of experiencing physical violence was more than double in centres at minimum ratio for respondents.



Recommendations

Overall respondents reported experiencing far higher job demands when compared with a healthy working population, and consequently higher levels of burnout, stress, and lower levels of job satisfaction. This must be addressed, either by reducing the extent of job demands, or increasing job resources to act as a buffer. With the majority of those responsible for centres and services reporting challenges to fill vacancies. Improvements such as providing additional supports to assist with, and reduce, current ECE educator workloads, and greater entitlements associated with leave and remuneration, would assist in reducing the current stress and burnout reported, increase job satisfaction, and entice more people to enter the sector.

The significant differences in metrics and outcomes for respondents working in services with better than minimum adult: child ratios strongly suggests the current set of regulations are not adequate to meet ECE educators' needs, and may be placing them at additional psychosocial and physical risk.

The privately owned education and care services are performing poorly on a multitude of metrics when compared to the other service types. As such, further scrutiny by those managing these services is strongly needed. It may be useful to direct attention to other services types, notably those that are community based, to determine what works well in these services and try replicating the successes.

The high levels of offensive behaviours against respondents are a serious cause for concern. The high proportion of respondents experiencing offensive behaviours underscores that this is an issue in need of urgent policy attention. The consequences of offensive behaviours in ECE workplaces are likely to become costly for employers, through time lost to ill health, Health, Safety, Security, and Environment claims against employers' responsibility for not providing a safe working environment, and reduced functioning while at work because of the high levels of offensive behaviour in the workplace. Considering the difficulties service managers are having with filling staff vacancies, it is important to foster a welcoming workplace environment in particular for these new employees.



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Introduction

The COVID-19 pandemic has presented early childhood education educators working in early childhood education and Kōhanga Reo (ECE educators) with new challenges and required them to adapt to frequent change and uncertainty. These new pressures have added to concerns about ECE educator workloads and the adverse effects of early childhood work on ECE educator health and wellbeing.

This report summarises the key findings of The New Zealand Early Childhood Education and Kōhanga Reo Hauora Health and Wellbeing Survey (ECE Survey). The ECE survey covers key dimensions of wellbeing at work, including:

- · The psychosocial work environment
- · School leaders' experiences of work
- . Key measures of school leaders' health and wellbeing

A key instrument of the ECE survey is the Copenhagen Psychosocial Questionnaire (COPSOQ-III). This questionnaire is regarded as the "gold standard" in occupational health and safety self-report measures. The structure of the COPSOQ-III consists of higher order domains (e.g., job demands) and contributing subdomains/scales (e.g., quantitative demands). These have been found to be very robust and stable measures 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 COPSOQ domain scores are transformed to 0-100 aiding comparisons across domains.

This report presents the average scores for the surveyed New Zealand ECE educators on the main dimensions of the psychosocial work environment and health and wellbeing. Where possible, ECE educator responses are compared with the average scores from a healthy general working population (see next page) to illustrate the similarities and/or unique challenges of ECE educator work.

Please refer to the Appendix for the survey sample demographic information, survey caveats, and additional information regarding the measures and methodology used.



1. Research Aim and Group Comparisons

The aim of this longitudinal research project is to track ECE educator experiences, work environments, and their health and wellbeing annually. 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 ECE professionals.

Sub-Groups

To best understand the experiences of ECE educators in different environments and between different demographics, in this report we have also analysed the differences between some key sub-groups where feasible, such as: Service Type, Employment Arrangement, and Regulatory Environment.

Service Type

ECE educator responses were compared between those working in Kindergarten (54% of the survey sample), those in community based education and care services (20%), and those in privately owned education and care services (26%).

Employment Experience

The responses from ECE educators that had been in their current employment agreement for 4 or more years were compared with those from respondents that were part of their agreement for fewer than 4 years.

Regulatory Environment

Respondents working in services meeting minimum adult: child ratios were compared with those working in services that were better than minimum adult: child ratios.

Population Comparison

We were able to compare a number of the responses from the respondents with responses from a general working population considered one of the 'healthiest' in the world. We note, however, these data were collected in 2010 in a country with different legal and cultural environments to that of New Zealand (in Demark). As such, interpreting the comparisons should be taken with caution. As this is the first year of data collection on NZ ECE educators, we were unable to compare this year's responses to a prior year. From the 2022 report onwards such a comparison will be possible and will provide insight into trends over time.



2. ECE Educator Psychosocial Work Environments

The psychosocial work environment refers to the set of conditions under which ECE educators perform their work in services, such as job demands, work organisation, content of work or social relations at work. Psychosocial working conditions in the ECE sector are experienced by individual- and groups of- ECE educators and elicit cognitive and emotional responses that lead to mental and physical health outcomes. In this section of the report, we consider ECE educator psychosocial work environments. We begin by reviewing ECE educator respondent average working hours before considering the major demands that they face and the resources that they have available to them.

ECE Educator Work Environments: Employment and Average Working Hours

Three quarters of respondents (78%) have full-time positions. Of these respondents, 74.3% worked on average between 36 and 45 hours a week. 22% of full-time respondents reported working over 45 hours on average per week.

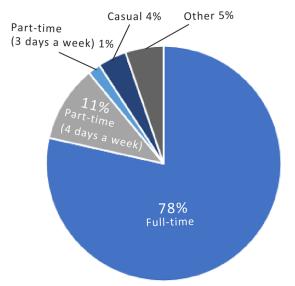


Figure 1: Respondents' employment basis

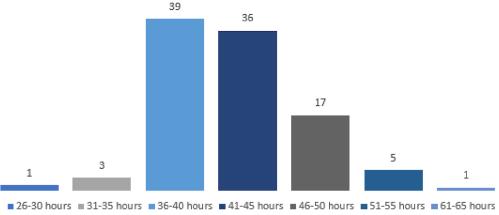


Figure 2:Full-time respondents' average working hours per week (%)



Educating those with Additional Needs

Of the total survey sample, 88% of respondents reported working in centres that have children with additional needs.

The most prevalent additional needs were associated with speech and language (82%) closely followed by behavioural issues (76%).

This large proportion of respondents reporting educating children with additional needs likely explains why one of the highest reported stressors for respondents is from a lack of specialist support for dealing with children with additional needs (see page 27).

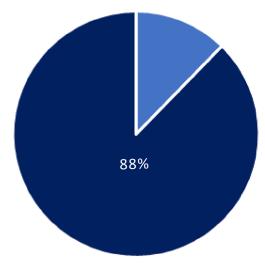


Figure 3: Respondents educating children with additional needs

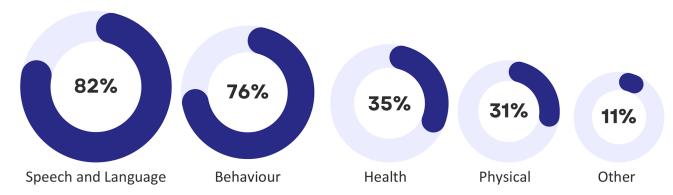


Figure 4: Types of additional need

Passion for Work

The majority of respondents were invested in their work, with 80% considered passionate. This is in substantial contrast to the 11-13% of people deemed passionate about their work in the global working population. Indeed, passionate workers are more dedicated to their professions, and typically report higher levels of job satisfaction. With that said, passionate workers may be more willing to tolerate greater job demands or poor working conditions, placing them at greater risk of illbeing such as burnout.



Figure 5: Percentage of respondents passionate about work



Attrition and Recruitment

The respondents responsible for centres and services (72) were asked "What percentage of employees leave your service in an average year?", with half (50%) responding that less than 5% of employees leave their service on average each year. This low level of attrition may be a result of the high levels of reported work passion.

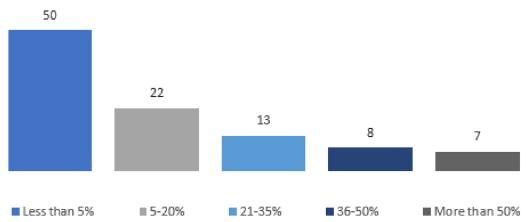


Figure 6: ECE educators who leave their service in an average year (%)

Although most respondents did not report experiencing an issue with attrition, respondents responsible for centres and services reported experiencing challenges when trying to fill staff vacancies, with 36% reporting it being very difficult, and 31% reporting it being somewhat difficult. This suggests there is a shortage of ECE educators to meet demand.

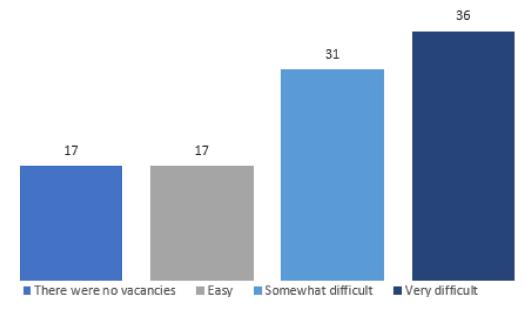


Figure 7: Respondent difficulty to fill staff vacancies (%)



Musculoskeletal Issues

Resondents were also asked whether as a result of their work activities, had they at any time during the last 12 months had musculoskeletal issues (such as ache, pain, discomfort, numbness). Concerningly, issues with their lower backs and shoulders were reported by over half of all respondents.

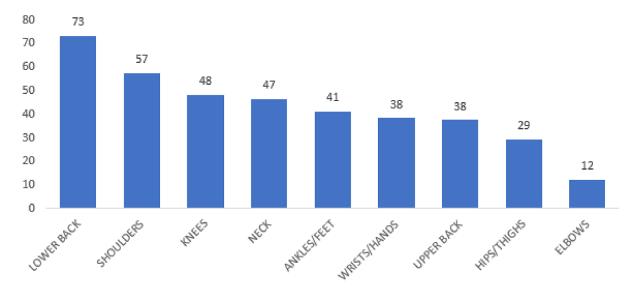


Figure 8: Respondents who reported musculoskeletal issues (%)



ECE Educator Work Environments: Job Demands

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

Table 1: Survey measures of ECE educator's 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 ECE educators. 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 ECE educators 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.

Respondents reported regularly experiencing all five major demands at work (see Table 1). They also regularly dealt with emotionally challenging situations (emotional demands) and frequently had to conceal their emotions at work (see Figure 9). Compared to a healthy working general population, Respondents more frequently experienced major demands at work.



The findings suggest that on average New Zealand ECE educators work in very demanding environments where they are required to contend with a large volume of work, very frequently engage in mentally taxing tasks/activities, and are regularly required to deal with the emotions of others and manage their own emotions. Respondents were found to report experiencing substantially higher levels of all major demands when compared with the general population except work pace.

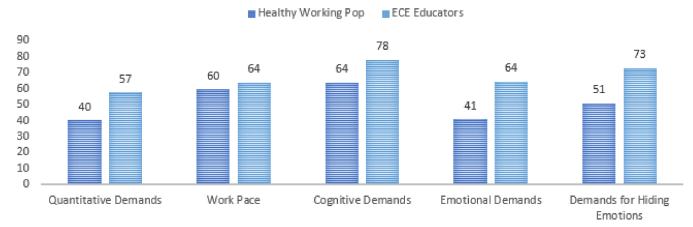


Figure 9: ECE educator five major job demands

Note: 0 indicates that respondents never/hardly ever experience these demands and 100 indicates that they always experience them.

Comparing Service Types

In most instances, the extent of the five major job demands reported by respondents did not vary significantly between service types. Respondents working in community based education and care services, however, reported notably lower levels of quantitative demands when compared with the other service types.

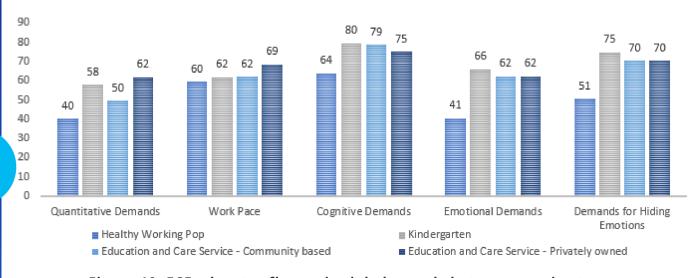


Figure 10: ECE educator five major job demands between service types



Comparing Employment Experience

No discernible differences were noticeable between reported job demands when comparing employment experience.

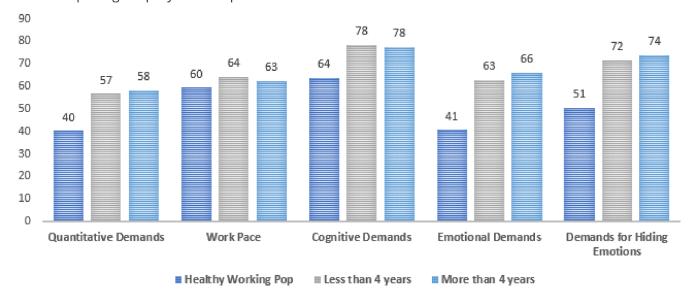


Figure 11: ECE educator five major job demands between employment experience

Note: 0 indicates that respondents never/hardly ever experience these demands and 100 indicates that they always experience them.

Comparing Regulatory Environments

Respondents working in services with better than minimum adult: child ratios reported experiencing lower levels of all job demands compared with those working in services at minimum ratio.

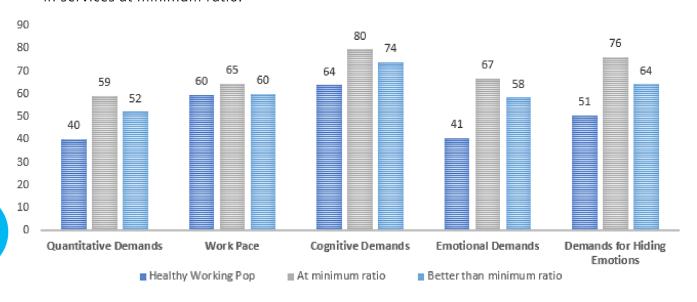


Figure 12: ECE educator five major job demands between regulatory environments



ECE Educator Work Environments: Job Resources

Job resources are the aspects of ECE educator work that enables them to achieve work goals, and stimulate personal growth, learning and development. Workplace resources are the physical and social resources available in the workplace setting. They may include strong work relationships, clear trust between colleagues and management, among many other factors. In this section we report on the following job resources: quality of leadership, social support from colleagues, social community at work, trust and justice.

Table 2: Survey measures of ECE educator's job resources

Quality of Leadership assesses the next higher managers' leadership in different contexts and domains.

Social Support from Colleagues assesses ECE educators' impressions of the possibility to obtain support from colleagues if one should 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 the employees can trust the 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 the 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.

In 2021, respondents reported that they experienced most of the job resources to some extent. On average, they reported that they 'often' felt a strong sense of community at work and that they experienced a good degree of trust regarding management and also mutual trust between employees. However, social support from colleagues appeared to be quite limited, with most reporting 'sometimes' having such support available (Figure 13).



Compared to the healthy working population, the respondents experienced similar levels of job resources.

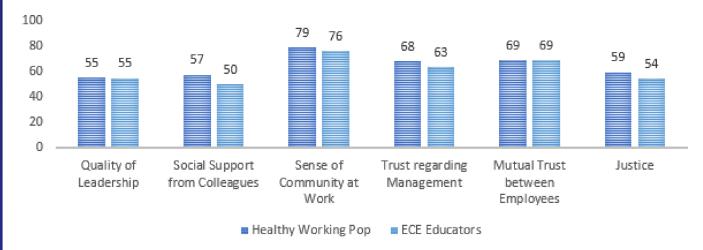


Figure 13: ECE educator job resources

Note: 0 indicates that the respondents never/hardly ever experience these resources and 100 indicates that they always experience them.

Comparing Service Types

When comparing ECE educator job resources between service types, a few discrepancies are evident. Respondents working at privately owned education and care services reported the lowest levels of all resources when compared to the other service types, with the largest discrepancy regarding the quality of leadership. Conversely, those working at community based education and care services reported the highest levels of job resources, including when compared with the healthy population, except regarding the extent of social support from colleagues.

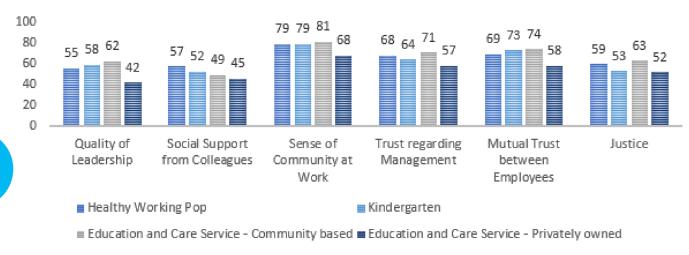


Figure 14: ECE educator job resources between service types



Comparing Employment Experience

When comparing the respondents based on their employment experience, there were a few differences, with those having worked for 4 or more years as an ECE educator reporting higher levels of quality of leadership, social support from colleagues, sense of community at work, and mutual trust between employees compared to those that had worked fewer than 4 years.

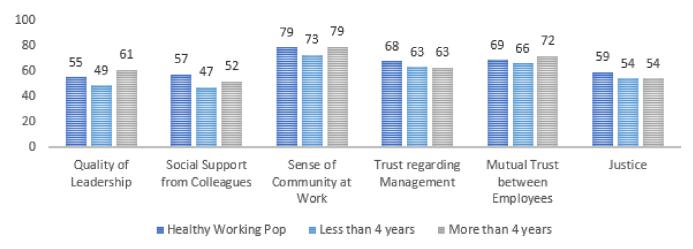


Figure 15: ECE educator five major job resources between employment experience

Note: 0 indicates that the respondents never/hardly ever experience these demands and 100 indicates that they always experience them.

Comparing Regulatory Environments

Only 2 notable differences of reported ECE educator job resources were evident when comparing between those working in services at minimum adult: child ratio compared with those working in services better than minimum ratio; trust regarding management, and justice were higher for those working in services better than minimum ratio.

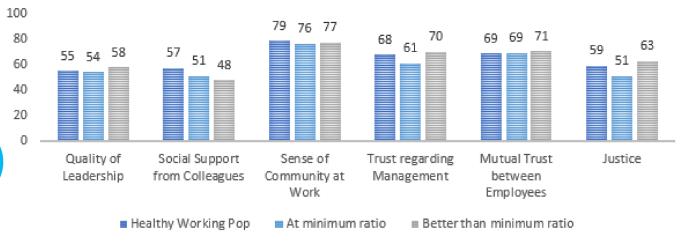


Figure 16: ECE educator job resources between regulatory environments



Sources of Support

As shown in Figure 17, the majority of respondents (65%) reported friends and family outside of the workplace were their main source of support. This includes family members, partners, and friend outside the workplace. The second highest source of support (55%) was from professional relationships, including those with colleagues within their own workplace, and colleagues outside their workplace. Friendships in the workplace, such as with colleagues and managers, were a source of support for 27% of the respondents. The lowest reported sources of support for the respondents were from medical professionals (medical practitioners, psychologist/counsellor), and external organisations (Ministry of Education, professional association/union) with 13% and 12% respectively. Fortunately, no respondents indicated they had no sources of support (typically a subset of individuals in a working population indicates that they have no sources of support).

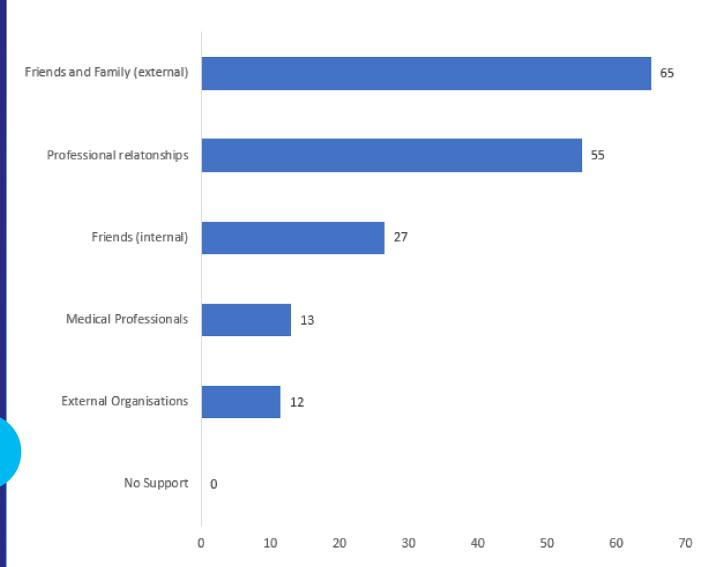


Figure 17: Respondent sources of support (%)



3. ECE Educator Health and Wellbeing

In this section, we report on ECE educator health and wellbeing during 2021. We begin by considering key measures of ECE educator experiences of work before analysing the main health and wellbeing outcomes included in the survey.

Experiences of Work

ECE experiences of their work indicate how they feel about their working conditions and how their work impacts on their lives outside of work. In this section we report on two key measures of early childhood educators' work experience: job satisfaction and work-family conflict. The respondents reported considerably higher levels of work-family conflict when compared with the healthy working population, however the difference between job satisfaction was minimal.

Table 3: Survey measures of experiences of work

Job satisfaction assesses the degree of pleasure or positive emotions that ECE educators experience as a result of their work

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

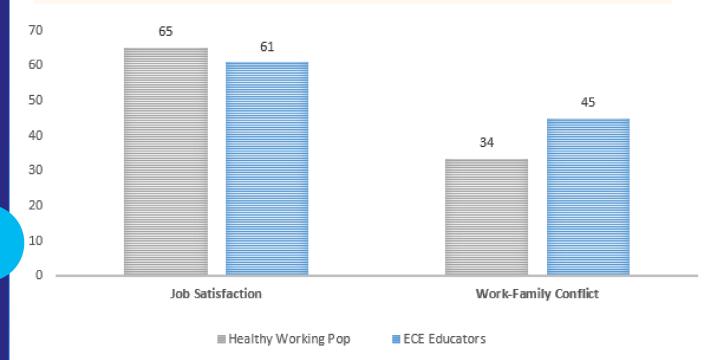


Figure 18: Respondent experiences of work



Comparing Service Types

Respondents working in privately owned education and care services reported significantly lower levels of job satisfaction when compared with the other service types, and they reported the highest level of work-family conflict (though not significantly different when compared with respondents working in kindergarten).

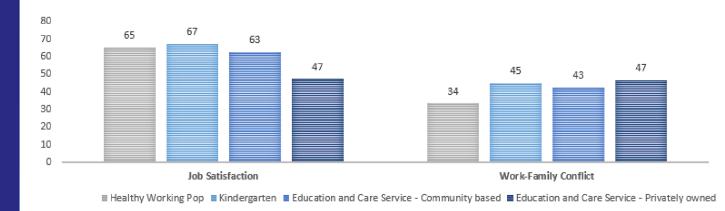


Figure 19: Respondent experiences of work between service type

Note: 0 indicates that respondents never/hardly ever experience these conditions and 100 indicates that they always experience them.

Comparing Employment Experience

No discernible difference is shown between the reported levels of job satisfaction or work-family conflict when comparing respondent employment experience.

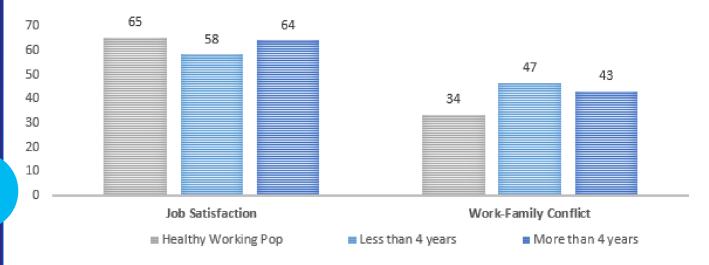


Figure 20: Respondent experiences of work between employment experience



Comparing Regulatory Environments

No discernible difference is shown between the reported levels of job satisfaction comparing ECE educator regulatory environments, however respondents working in services with better than adult: child minimum ratio reported significantly lower levels of work-family conflict when compared with those working in services at minimum ratio.

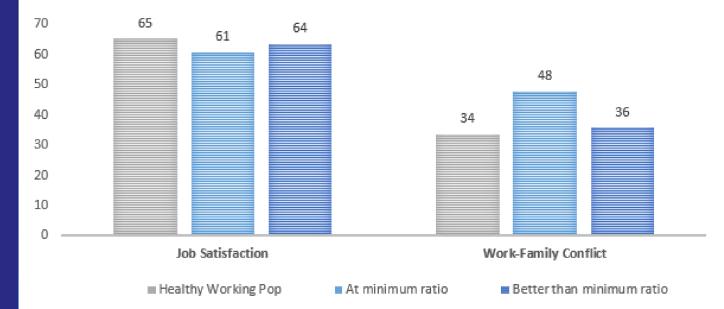


Figure 21: Respondent experiences of work between regulatory environments



ECE Educator Health and Wellbeing: Key Outcomes

ECE educator experiences at work elicit cognitive and emotional processes that lead to mental and physical health outcomes. This section of the report summarises ECE educator experiences of four major health and wellbeing outcomes: self-rated health, burnout, sleeping troubles and stress.

Table 4: Survey measures of health and wellbeing

Self-rated health is a rating of the overall general health experienced by an employee.

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

Sleeping troubles deal with sleep length, determined by e.g. sleeping in, waking up, interruptions and of quality of sleep.

Stress is defined as a reaction of the individual, a combination of tension and unwillingness. As elevated stress levels over a longer period are detrimental to health, it is necessary to determine long-term, or chronic stress.

In 2021, the respondents rated their overall state of health as approximately 59 out of 100. On this scale, 100 is the best possible state of health and 0 the worst. On average, the respondents reported that they experienced sleeping troubles, stress and burnout 'some of the time'.

Compared to the healthy working population, the respondents reported similar levels of general health, yet significantly higher levels of burnout, stress, and sleeping troubles.

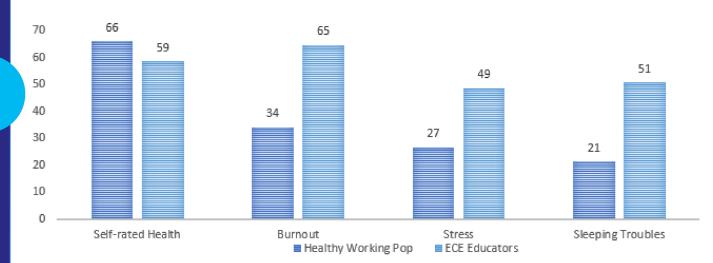


Figure 22: Respondent health and wellbeing key outcomes



Comparing Service Types

The respondents working in privately owned education and care services reported the lowest levels of self-rated health, and highest levels of burnout and stress. It was those working in kindergarten, however, that reported the highest levels of sleeping troubles.

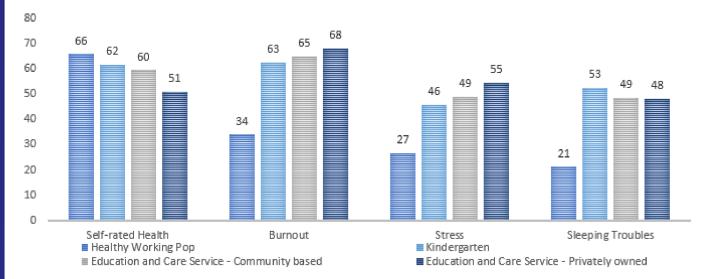


Figure 23: Respondent health and wellbeing outcomes between service type

Note: 0 indicates that the respondents never/hardly ever experience these conditions and 100 indicates that they always experience them.

Comparing Employment Experience

Respondents who had fewer than 4 years of experience in their current employment agreement reported lower levels of self-rated health when compared with those that have worked for more than 4 years. The more experienced respondents, however, reported considerably higher sleeping troubles than the less experienced respondents.

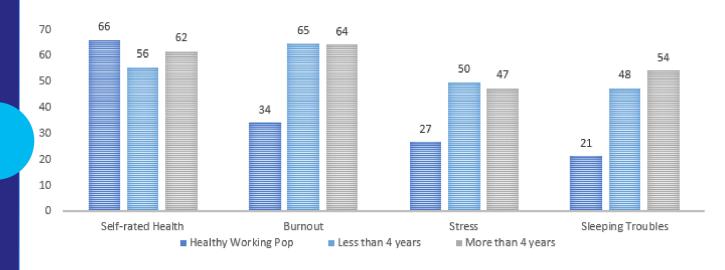


Figure 24: Respondent health and wellbeing outcomes between employment experience



Comparing Regulatory Environments

The respondents working in services better than minimum adult: child ratio reported significantly higher levels of self-rated health, lower levels of burnout, and lower levels of sleeping problems when compared to those working in services at minimum ratio.

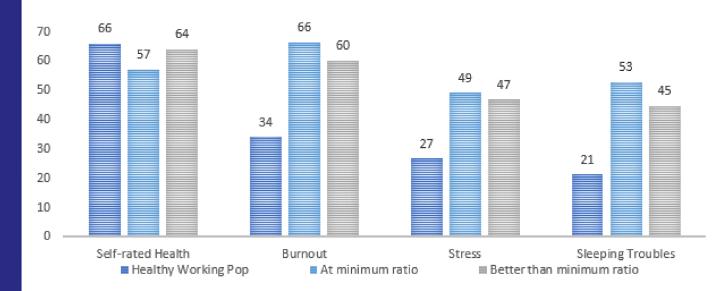


Figure 25: Respondent health and wellbeing outcomes between regulatory environments



ECE Educator Health and Wellbeing: Sources of Stress

In terms of the sources of stress, excessive demands, such as sheer quantity of work and lack of time to focus on teaching and learning, were reported as the biggest stressors for the respondents (76%). Illbeing, such as mental health issues of staff was the second leading source of stress reported at 59%, closely followed by support deficits (e.g., lack of specialist support for dealing with children, inability to get relievers, staff absences) at 58% and child and whānau/parent related issues, such as behavioural and learning needs issues, were reported as sources of stress by 56% of respondents.

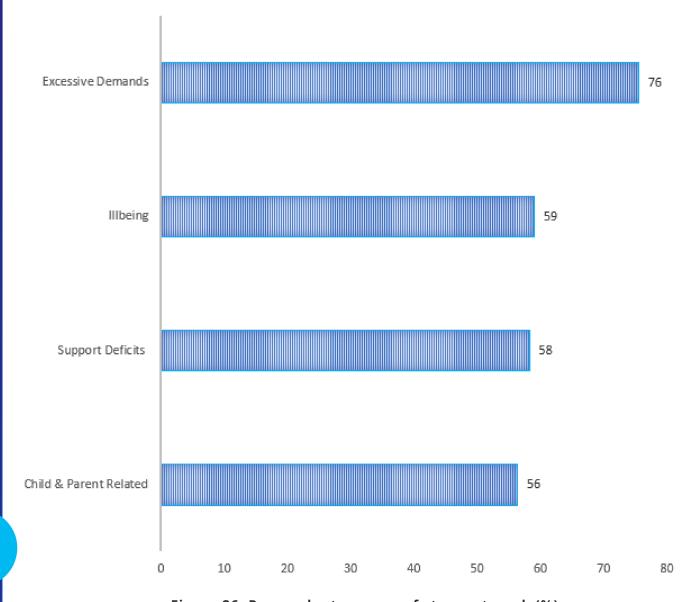


Figure 26: Respondent sources of stress at work (%)



4. Offensive Behaviours against ECE Educators

Recent studies indicate that disruptive and extreme behaviour from primary aged students is a growing cause for concern for teachers in New Zealand (Wylie and Macdonald, 2019). Wylie & MacDonald (2019) found that primary school teachers' reports of disruptive student behaviour and of feeling unsafe in English-medium primary schools had increased noticeably in recent years. Data on ECE educators regarding this, however, is lacking. In this section, we focus on a sample of early ECE educator experiences of offensive behaviours in ECE services. We report on experiences of four offensive behaviours during the last 12 months: threats of violence, physical violence, bullying and cyber-bullying.

Table 5: Survey measures of offensive behaviours

Threats of violence is the exposure to a threat of violence in the workplace.

Physical violence is the exposure to physical violence in the workplace.

Bullying is the repeated exposure to unpleasant or degrading treatment in the workplace, and the person finds it difficult to defend themselves against it.

Cyber bullying is the repeated exposure to unpleasant or degrading treatment via the internet, such as through social media platforms, in which the person finds it difficult to defend themselves against.

Overall, 30% of the respondents reported experiencing bullying during the last 12 months, and 25% reported experiencing actual physical violence.

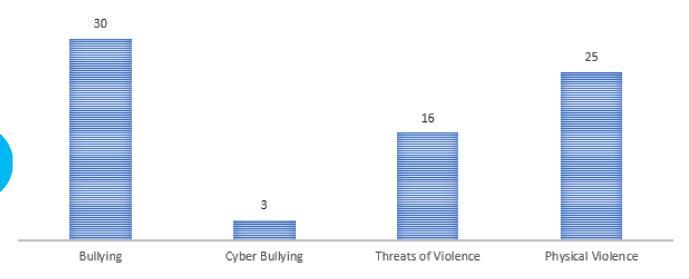


Figure 27: Respondents reported offensive behaviours (%)



Comparing Service Types

Respondents working in privately owned education and care services reported substantially higher levels of bullying, cyber bullying, and physical violence, when compared with the other service types. However, such respondents reported lower levels of experiencing threats of violence.

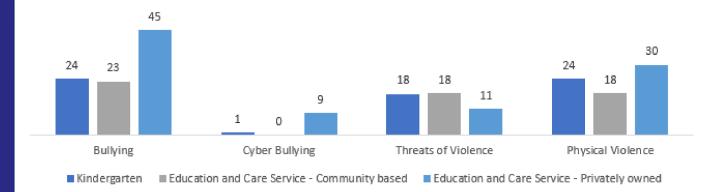


Figure 28: Respondent reported offensive behaviours between service type (%)

Comparing Employment Experience

As shown in the Figure 29, the proportion of respondents experiencing offensive behaviours is more prevalent in all forms for those being part of their agreement for less than 4 years when compared with those being part of their current agreement for 4 or more years. Bullying was the most common offensive behaviour experienced (25-34%), and cyber bullying being the rarest (2-4%).

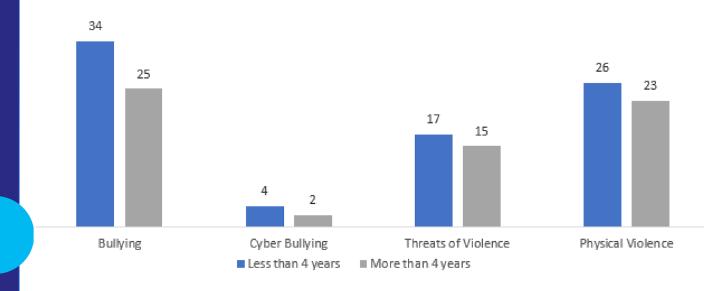


Figure 29: Respondent reported offensive behaviours between employment experience (%)



Comparing Regulatory Environments

Besides the prevalence of cyber bullying, all forms of offensive behaviour were more likely to be experienced by those working in centres at minimum adult: child ratio compared with those working in centres with better than minimum ratio. Notably, the likelihood of experiencing physical violence was more than double in centres at minimum ratio for respondents (Figure 30).

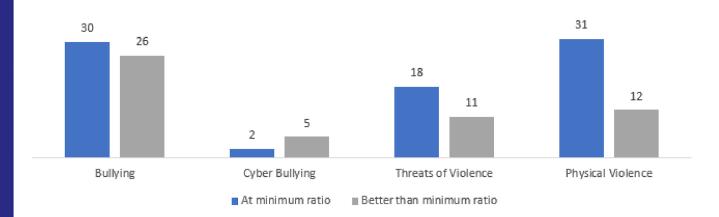


Figure 30: Respondent reported offensive behaviours between regulatory environments (%)

Offensive Behaviour Perpetrators

The following section breaks down the percentage of survey respondents that experienced offensive behaviour based on the perpetrator of the behaviour. We note only 2% of ECE educator respondents reported cyber bullying, all from parents/carers. As such, this has not been further explored.

Bullying

Of the survey respondents, 15% indicated they had experienced bullying from colleagues, followed by 5% reporting the bullying came from parents, and 1% from tamariki/children.



Figure 31: Perpetrators of bullying (%)



Threats of Violence

Of the survey respondents, 14% indicated they had experienced threats of violence from Tamariki/children, followed by 5% reporting the threats came from parents, and 1% from colleagues.

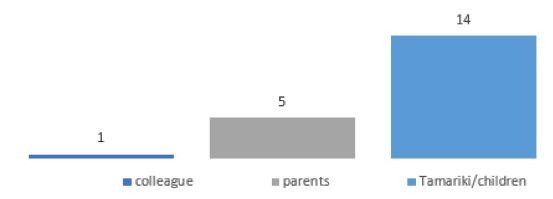


Figure 32: Perpetrators of threats of violence (%)

Physical Violence

Of the respondents, 25% reported experiencing physical violence from Tamariki/children, with 2% reporting the physical violence came from parents.

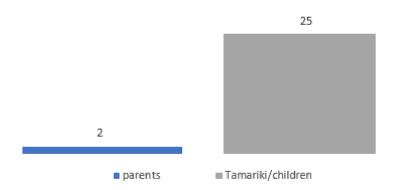


Figure 33: Perpetrators of physical violence (%)



5. Summary

Work demands and resources need to be in balance for good psychological health at work. High job demands and low job resources may cause job strain and eventually result in burnout (Bakker and Demerouti, 2007). However, high job resources buffer job demands, reducing their negative impact on individuals.

NZ ECE Educator Respondents

The respondents reported experiencing substantially higher levels of all major demands when compared with the general population except work pace. Compared to the healthy working population, the respondents reported similar levels of general health, yet significantly higher levels of burnout, stress, and sleeping troubles. Further, they reported high musculoskeletal issues, with the majority reporting lower back and shoulder issues during the last 12 months. The 2022 and 2023 surveys will enable us to consider whether these scores remain consistent over time and the impact that the COVID-19 pandemic may have had on the results.

The high levels of offensive behaviours against respondents are a serious cause for concern. The high proportion of respondents experiencing offensive behaviours underscores that this is an issue in need of urgent policy attention. The consequences of offensive behaviours in ECE workplaces are likely to become costly for employers, through time lost to ill health, Health, Safety, Security, and Environment claims against employers' responsibility for not providing a safe working environment, and reduced functioning while at work because of the high levels of offensive behaviour in the workplace. These issues could be systematically addressed through a comprehensive investigation that examines:

- differences in the occupational risk of the different types of ECE educators, to identify
 - who is most at risk;
 - why, and what can be done to protect them; and governance structures, information
 - o flow between adults; and
 - external influences on centre functioning.

Service Type

The respondents working at privately owned education and care services reported the lowest levels of all resources when compared to the other service types, with the largest discrepancy regarding the quality of leadership. These respondents also reported the highest level of work-family conflict, the lowest levels of self-rated health, and highest levels of burnout and stress.



Conversely, those working at community-based education and care services reported the highest levels of job resources, including when compared with the healthy population, except regarding the extent of social support from colleagues. It was the respondents working in kindergarten, however, that reported the highest levels of sleeping troubles. Finally, private sector respondents reported substantially higher levels of bullying, cyber bullying, and physical violence, when compared with the other service types. However, such respondents reported lower levels of experiencing threats of violence. These findings suggest when compared with the other ECE service types, the privately owned education and care services are performing poorly on a multitude of metrics. As such, further scrutiny by those managing these services is strongly needed.

Employment Experience

Respondents that have worked for 4 or more years as an ECE educator reported higher levels of quality of leadership, social support from colleagues, sense of community at work, and mutual trust between employees compared to the respondents that had worked fewer than 4 years. Respondents who had fewer than 4 years of experience in their current employment agreement reported lower levels of self-rated health when compared with those that had worked for more than 4 years. The more experienced respondents, however, reported considerably higher sleeping troubles than the less experienced respondents. Finally, the proportion of respondents experiencing offensive behaviours is more prevalent in all forms for those being part of their agreement for less than 4 years when compared with those being part of their current agreement for 4 or more years. Considering the difficulties service managers are having with filling staff vacancies, it is important to foster a welcoming workplace environment in particular for these new employees.

Regulatory Environment

The respondents working in services with a better than minimum adult: child ratio reported experiencing lower levels of all job demands compared with those working in services at minimum ratio. They reported significantly lower levels of work-family conflict, burnout, and sleeping problems and higher levels of self-rated health, trust regarding management, and justice when compared with though working in services at minimum ratio. Besides the prevalence of cyber bullying, all forms of offensive behaviour were more likely to be experienced by those working in centres at minimum ratio compared with those working in centres at better than minimum ratio.



Notably, the likelihood of experiencing physical violence was more than double in centres at minimum ratio for respondents. The significant differences in metrics and outcomes for respondents working in services with a better than minimum ratio suggests the current set of regulations are not adequate to meet ECE educators' needs, and may be placing them at additional psychosocial and physical risk. More indepth research is required regarding the impact external regulatory factors have on psychosocial and physical risks to ECE educators. If these survey findings are consistently reflective of the general ECE educator population, immediate substantial and thorough review of external regulatory factors is necessary to ensure they are conducive to both ECE educator and child wellbeing outcomes.



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7. Appendix

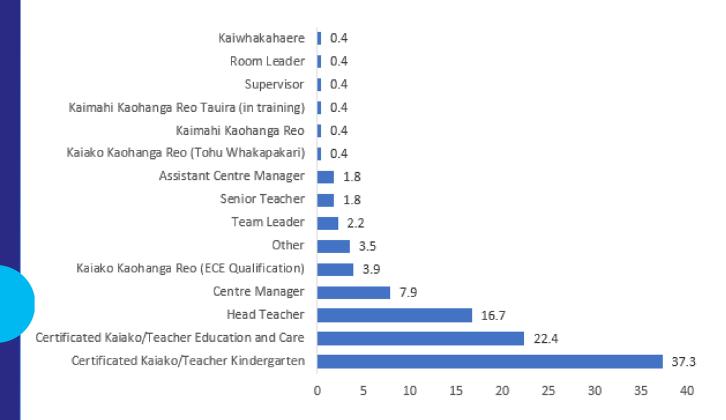
Survey Participants

In 2021, 228 New Zealand ECE educators completed the survey (27 being partial completions). The number of respondents is lower than what we would typically expect, likely due to the substantial challenges and disruptions caused by the COVID-19 pandemic.

We stress that, although these data may reflect the current situation and trends among ECE educators, there is no guarantee this sample represents the broader ECE educator population. These data, however, highlight areas of interest that warrant further exploration and research. A greater proportion of the population would be needed to be surveyed to ensure the findings are representative.

Role

Of the 228 participants that completed the survey 85 (37.3%) were Certificated Kaiako/Teachers in Kindergarten, 51 (22.4%) Certificated Kaiako/Teachers in Education and Care, 38 (16.7%) Head Teachers and 18 (7.9%) were Centre Managers.

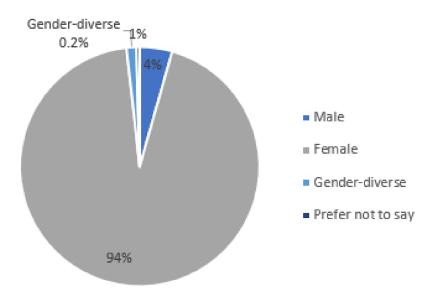


Appendix Figure 1: Sample distribution by role (%)



Gender

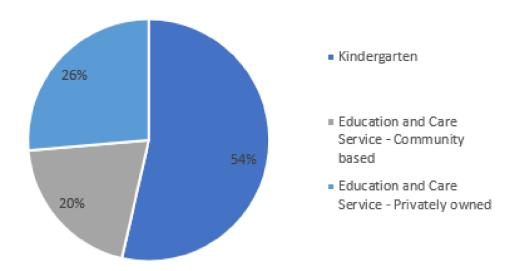
The gender breakdown for the sample was 214 (94%) female, 10 (4.4%) male, 3 (1.3%) gender-diverse and 1 participant (0.2%) preferred not to say.



Appendix Figure 2: Sample distribution by gender (%)

Service Type

Of the participating ECE educators, 120 worked in Kindergarten (54%), 45 (20%) worked in Community based Education and Care Services and 59 (26%) worked in privately owned Education and Care Services.

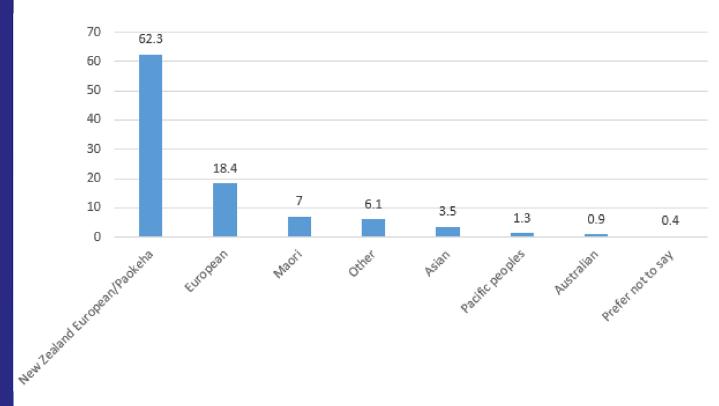


Appendix Figure 3: Sample distribution by service type (%)



Respondent Ethnicity

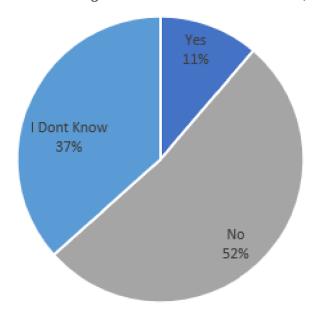
The majority of respondents have New Zealand European/Paokeha ethnicity (62.3%).



Appendix Figure 4: Respondent Ethnicity (%)

Annual Top-Up for Isolated Services

Only a small proportion of respondents indicated their service received an annual top-up for being an isolated service (11%). Over a third, however, indicated they did not know whether such funding was received at their service (37%).

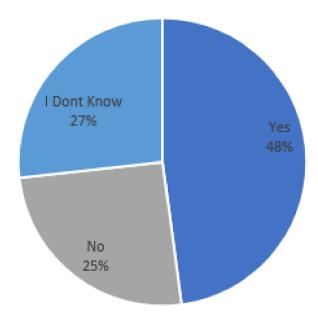


Appendix Figure 5: Services that received an Annual Top-Up for being isolated (%)



Pay Parity Funding

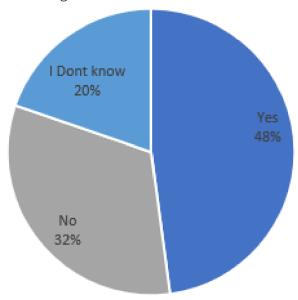
Almost half (48%) of respondents indicated their service plans to opt for the new Pay Party funding to support higher teacher salaries from January 2022.



Appendix Figure 6: Services intending to opt for Pay Parity funding (%)

Targeted Funding for Disadvantage

Almost half (48%) of the respondents indicated their service qualified for Targeted Funding for Disadvantage.



Appendix Figure 7: Services that qualify for Targeted Funding for Disadvantage (%)



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.

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 ECE demographic items.
- 2. Personal demographic and historical information.
- 3. Early childhood educators' quality of life, psychosocial coping, and other metrics were investigated by employing the following measures:
 - a.The Assessment of Quality of Life 8D (AQoL-8D; Richardson, et al., 2009; Richardson, lezzi & Maxwell, 2014).
 - b.The Copenhagen Psychosocial Questionnaire-II (COPSOQ-III; Pejtersen, et al., 2010).
 - c.The Alcohol Use Disorders Identification Test (AUDIT: Babour et al., 2001), developed for the World Health Organisation.
 - d. Passion (Trepanier, Fernet, Austin, Forest & Vallerand, 2014; Vallerand, 2015).
 - e.The Positive and Negative Affect Scale (PANAS: Watson, Clark, and Tellegen, 1988).
 - f. Basic Psychological Needs at Work Scale (BPNWS: Deci & Ryan, 2004; Van den Broeck, Ferris, Chang, & Rosen, 2016).
 - g.'Life Events'.
 - h. 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 early childhood educators themselves.

Our survey instrument relies heavily on the Copenhagen Psychosocial Questionnaire (COPSOQ-III). 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-III 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, such as gender, 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 early childhood educators 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 survey sample size.