Differences and Similarities between Leaders and Non-Leaders on Psychological Distress, Wellbeing and Challenges at Work

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Abstract

In this paper, we examined differences and similarities in wellbeing outcomes (flourishing and satisfaction with life), psychological distress, work and non-work challenges, and perceptions of organisational support and climate between groups of senior leaders, team leaders, and team members across New Zealand (N = 4,215). Results indicated that non-leaders (team members) reported greater non-work life challenges, lower flourishing and satisfaction with life, greater psychological distress, and less favourable perceptions of their organisational support and climate compared to team leaders and senior leaders. Team leaders and senior leaders reported more work-related challenges (work demands and poor peer support) and lower satisfaction with their work life balance. Mediation analysis found that work factors significantly mediated the relationship between leadership status (leader versus non leader) and psychological distress, flourishing and life satisfaction. Findings support the necessity for targeted interventions for different groups within organisational hierarchies. Further, they emphasise the need for proactive and multi-level approaches to building workplace wellbeing to foster wellbeing in all employees regardless of their leadership status. We make recommendations for consulting psychologists to achieve these goals and build psychologically healthy and thriving workplaces.

Keywords: psychological distress; leadership; organisational wellbeing; flourishing; life satisfaction

What's it mean?

Building on previous research, leaders in our study reported higher wellbeing and lower psychological distress and reported different challenges at home and at work compared to non-leaders. To improve wellbeing, consulting psychologists should scope an organisation's needs to determine strengths and challenges at each leadership level; there is no one-size-fits-all solution. However, based on our mediation models, autonomy, work demands and peer support may be useful first avenues to explore.

Differences and Similarities between Leaders and Non-Leaders on Psychological Distress, Wellbeing and Challenges at Work

More psychological research is needed to understand how to effectively enhance wellbeing for individuals at work. Early research indicates that there is no one-size-fits-all approach to building workplace wellbeing and diverse interventions are needed for diverse populations (Bennett et al., 2017) – however the different wellbeing needs of leaders compared with non-leaders in the workplace has not been extensively examined. Literature concerning wellbeing and mental health at work has traditionally been focused on the behaviours, attitudes, and outcomes of employees (e.g. Nielsen et al., 2017). While a few studies have considered interactions between leaders and employees and how these predict employee wellbeing and mental health (e.g. Li et al., 2016), there has been little effort to date to understand how leaders fare in the workplace as individuals (Barling & Cloutier, 2017). The extant literature is summarised below and the dearth of research in this field has prompted the present study. In it, we analyse data from over 4,000 participants representing the three distinct groups of senior leaders, team leaders, and team members across New Zealand. We specifically analysed the relationships between leadership status and key wellbeing and organisational outcomes including psychological distress, flourishing, satisfaction with life, work and non-work challenges, and perceptions of organisational climate. Based on these findings, we suggest recommendations for organisations to effectively build wellbeing through targeted interventions that consider placement on the organisation's hierarchy.

The reason for such limited research in the field of leader wellbeing is likely due to the fact that employees generally outnumber leaders in most organisations, making their wellbeing a more impactful area of focus. Furthermore, employee wellbeing is often viewed as the *outcome* of leader behaviour (e.g. Inceoglu et al., 2018), while leader wellbeing itself is left unexamined. Barling and Cloutier (2017) suggested additional theories in their paper, the most likely of which, they averred, is that leaders are generally perceived as mentally stronger and possessed of higher wellbeing – and therefore not worthy of dedicated investigation - than their subordinates. This biased perception is proposed to be held by researchers too, in addition to other motivations putting employee wellbeing at the forefront of research

agendas, resulting in a paucity of studies in this area. While research in the field is limited, there are pockets of studies that propose certain patterns and relationships between leadership status on the one hand and mental health, stress and wellbeing on the other hand. Of the existing literature, according to Li and colleagues (Li et al., 2018), there are two contrasting views on how individuals cope while fulfilling leadership roles. The studies reported below do not constitute an exhaustive literature review and represent only a selection of the published research. For a more complete review, read Barling and Cloutier (2017).

One view proposes that leadership can be detrimental to mental health and wellbeing due to greater work demands, change and uncertainty, and energy and effort needed to meet organisational goals. Indeed, some existing research supports this view, for instance, job demands mediated the relationship between leadership status and low wellbeing in one study (Li et al., 2018). Supporting this result, “C-Suite members” (e.g. Chief Executive Officers) reported poorer wellbeing compared to their employees in the wake of the COVID-19 pandemic in one sample, likely due to the additional difficulties of managing a business while working from home in lockdowns (Oracle, 2020). In addition, qualitative research based on interviews with CEOs of large companies found several key themes relating to the job demands of being a senior leader (Bunea, 2020). The leaders interviewed reported that their job was all-consuming, meaning that they struggled to detach themselves from their work and felt a risk of losing themselves in the job. They also reported high stress and mental health risk, citing external demands as a key stressor (e.g. stakeholder demands, focus on delivery of results, and the pressure of public opinion). Lastly, leaders reported demands on themselves as leaders as a strain on their wellbeing (e.g. feeling compelled to inspire and empower and not feeling able to show weakness as a leader). Other individual studies have also showed that business owners and managers are more likely to drink higher quantities of alcohol (Frone, 2006) and experience lower social support at work compared to non-managers (Tetrick et al., 2000). In summary, these disparate studies suggest that leaders are exposed to a unique set of challenges that contribute to poor mental health and wellbeing. However, as noted by Li and colleagues

(2018), there has been little broad-based empirical scrutiny or replication of the findings reported in these single studies. As such, sound conclusions cannot be drawn.

The second dominant view in the literature is that leadership is beneficial to people's wellbeing because of the job control and autonomy over work that it provides (Li et al., 2018). Supporting this view, in a cohort study examining Swedish government databases containing data on CEO status and healthcare engagement, CEOs were found to report better mental health compared to the general population (Keloharju et al., 2020). Other studies have found that leaders report lower anxiety and greater wellbeing (hedonic, eudemonic, and physiological) compared to workers who are non-leaders (Li et al., 2018; Sherman et al., 2012). In their research, Sherman and colleagues (2012) further found an inverse relationship between stress and seniority, such that more senior leaders manifested lower levels of the stress hormone cortisol compared to more junior leaders, and junior leaders manifested lower levels of cortisol than non-leaders. Critically, sense of control over one's job mediated this inverse relationship between stress and seniority, suggesting that autonomy over work is a key contributing factor to the wellbeing of leaders.

'Conservation of Resources' (COR) theory is a key model when investigating work-stress related research. Within the basic principles of COR theory it is postulated that those who are already lacking in resources, such as employees with less control at work, are more exposed to experience loss spirals as they have fewer resources to recover from the adverse consequences of resource shortages (e.g. finances or time; Hobfoll, 1998; Hobfoll 2002; Hobfoll, 2011; Hobfoll et al., 2018). The theory also posits that people experience stress when the resources they value are lost, threatened, or there is a mismatch between resource investment/gain (e.g. working long hours for poor monetary return). As stress and maladaptive wellbeing show a positive correlation (Cooper, 2013; Kirk & Brown, 2003), this would imply that those with supposedly higher resources and power, such as leaders, should experience higher wellbeing when dealing with challenges than non-leaders. Moreover, assuming leaders have greater resources at work and are more capable in gaining resources, they are also protected against future resource loss, improving wellbeing outcomes over time. However, this does not explain the conflicting

emerging research aforementioned (Li et al, 2018) and further research is still needed to test the theory in an applied leadership context. Reflecting this complexity regarding leaders' wellbeing, COR theory can also explain how resource investment may have adverse consequences. As noted by Bunea's (2020) research, leadership at work can be all-consuming meaning that leaders may underinvest in other domains of life from which to generate resources from (e.g. social/family support, hobbies and interests). From this perspective, leaders who are highly involved at work may lack resources in other areas of life, leading to poor wellbeing outcomes and consequent loss spirals. These poor wellbeing outcomes may be particularly pronounced if their resource investment at work is not returned with equivalent resource gain or reward (see Effort Reward Imbalance model: Siegrist, 1994; Siegrist & Li, 2016).

When discussing investment at work, work demands are a key component that play a role in determining employee wellbeing (Hausser et al., 2010). The Job-Demand-Control-Support (JDCS) model suggests that, when employees have insufficient job autonomy and skill discretion (breadth of skills to draw on), psychological demands at work (e.g. workload) lead to greater psychological strain and illness (Karasek & Theorell, 1990). In other words, high job control can buffer against the adverse impact of high work demands. Social support is also noted in this model as another protective factor against the detrimental effect of work demands (Johnson & Hall, 1988). Karasek and Theorell (1990) in the JDCS model also suggest that increasing levels of optimism and self-efficiency promote healthy stress management (Ozdemir & Kerse, 2020; Thompson & Gomez, 2014). As noted already, leaders may experience greater autonomy/job control (Sherman et al., 2020) but lower social support at work (Tetrick et al., 2000), all of which contribute to their experience of job demands, and resultant wellbeing, in the workplace. The mediating role of job control has been validated empirically in a leadership context wherein job control mediated the relationship between leadership status and wellbeing (Li et al., 2018). While there is supporting evidence for the beneficial aspects of leadership for wellbeing, through job control, as posed by Li and colleagues (2018), "This perspective, however, has yet to be fully articulated or comprehensively tested" (p. 2). If we can clarify the relationship between leaders or non-leaders and

wellbeing, particularly relating to job control (autonomy) and work demands, within the modern workplace, targeted support can be given to aid all employees.

It is possible, of course, that both views on leadership wellbeing are true. Both dynamics may co-occur and can function in complementary fashion. As suggested by Li et al.'s (2018) dual pathway model of leader wellbeing, and reflecting the Job Demand-Control Support model, job demands can hold a negative correlation with wellbeing while job control holds a positive correlation with wellbeing. In other words, greater job control is also associated with higher wellbeing. Different aspects of the leadership role (job demands and job control) may have countervailing effects on wellbeing. Supporting this dual pathway model, a recent study found that job control mediated the effects of workload demands on leader's job satisfaction (Teo et al., 2020). The model demonstrated that greater workload demands were associated with greater job control, which was, in turn, associated with higher job satisfaction for senior managers employed in the Australian public sector. These results indicate that the job of being a leader is multidimensional and may involve contradictory influences on wellbeing. Instead, researchers should take a multi-faceted lens to leader's wellbeing, acknowledging that leaders may need targeted support to allow them to thrive.

The two continua model for mental illness and mental health by Westerhof and Keyes (2010) is a widely used conceptualisation of psychological health, positing that mental health and mental illness are related but distinct dimensions. The positive mental health dimension of this model encompasses subjective wellbeing as it is often discussed today, whereas the mental illness dimension is concerned with the presence or absence of psychopathological symptoms (i.e. those associated with anxiety and depression). Under the key tenets of this model, whether someone is experiencing any mental illness does not determine the extent to which they are experiencing positive or negative mental health (termed "flourishing" or "languishing" by the authors). Our measurement approach in this paper adheres to Westerhof and Keyes's (2010) approach and seeks to measure both positive mental health (operationalised in our study through use of the Flourishing Scale and Satisfaction with Life Scale) alongside symptoms of mental illness (measured in our study through the Kessler Psychological Distress scale).

Currently, the ways in which wellbeing is measured and reported amongst the literature is not always clear (Linton et al., 2016). Linton and colleague's report examined 99 measures of wellbeing that have been used over time, for example, and highlighted the importance of clarity when it comes to what measures are used when conducting wellbeing research. Responding to these concerns, Disbato and colleagues (2021) recently proposed a hierarchical framework of wellbeing: outlining three key lenses through which wellbeing is conceptualised: Subjective Wellbeing; Psychological Wellbeing; and Social wellbeing. In line with these recommendations, and for the purpose of this report, we measured wellbeing in this study by assessing participants' self-reported satisfaction with life and levels of flourishing. More on these measures and how they fit within the wellbeing framework is outlined below. We also measured psychological distress as a key measure of mental ill health.

The Satisfaction with Life scale (Diener et al., 1985) is a widely implemented measurement of wellbeing and has been used across a vast range of psychological research whether it be social, clinical or organisational psychology (Joshani, 2013; Bloore et al., 2020). Used to identify global cognitive judgements of one's life satisfaction, it is important to note that it is not a measure of positive or negative affect (see Watson, Clark & Tellegen, 1988) but — based on the hierarchical framework presented by Disbato, Goodman and Kashdan (2021) — falls under the category of a self 'appraisal' of a person's own subjective wellbeing (for more information see Disbato et al. 2021). Secondly, the Flourishing Scale (Diener et al., 2010) was initially designed to complement other measures of subjective wellbeing (e.g. Satisfaction with Life Scale) by capturing aspects of eudaimonic wellbeing alongside hedonic wellbeing (Hone et al., 2014). According to Disbato et al's (2021) framework, the Flourishing Scale measures across various aspects of subjective, psychological and social wellbeing through items including social relationships, competence, engagement, meaning and purpose, optimism and self-esteem. We include both satisfaction with life and flourishing as our two key wellbeing outcomes to capture broad conceptualisations of wellbeing through use of two widely used, reliable, and validated measures. We also assess psychological distress using the Kessler10 (Kessler et al., 2003) as a widely used measure of mental ill health (validated with New Zealand samples: Oakley Browne et al., 2010). Within the field of

organisational psychology, psychological distress is often measured as an outcome (Hilton & Whiteford, 2010; Gregoire & Lachance 2015). Therefore, in order to draw meaningful comparisons with other research, and better understand wellbeing outcomes, this paper explores the effects of being a leader (senior leader or team leader) or non-leader (team member) on levels of flourishing, satisfaction with life and psychological distress (as well as key factors that may explain these outcomes e.g. work demands and autonomy).

To summarise, there is limited research devoted to the comprehensive exploration of leaders' wellbeing, mental health, and challenges experienced at work and outside of work. By contrast, much of the attention of organisational psychology research has been devoted to measuring and improving the wellbeing of employees in non-leadership roles. However, as the conflicting research outlined above (e.g. Barling & Cloutier, 2017) suggests, leaders are likely to experience unique aspects of their job that are both beneficial and detrimental to their wellbeing. While the available evidence suggests that leadership leads to greater overall wellbeing and lower stress (Keloharju et al., 2020; Li et al., 2018; Sherman et al., 2012), it appears that leaders face different challenges at work, on average, compared to non-leaders. Studies suggest they are more susceptible to workload demands, for example, while also benefitting from greater autonomy (Li et al., 2018; Teo et al., 2020). In line with the Job-Demand-Control-Support model and Conservation of Resources theory, job control may be one useful resource that protects the wellbeing of leaders in the face of heightened work demands (Hobfoll et al., 2018; Karasek & Theorell, 1990). As such, research should be devoted to replicating and further examining the unique work challenge and wellbeing profile of leaders in comparison with non-leaders. In doing so, a new wave of research can be devoted to the testing of interventions to improve wellbeing outcomes for both sets of individuals. Therefore, the aim of the present study is to investigate leadership status and how it is related to a range of outcomes (satisfaction with life, flourishing and psychological distress) and work and non-work factors. Based on the aforementioned research, we make three predictions outlined below. We also conduct additional exploratory analyses in this paper based on available data, testing between-group differences among leadership groups on intention to leave their job, satisfaction with work life balance,

non-work challenges, various work challenges, health behaviours, and perceptions of organisation support and organisation climate.

Hypothesis 1: Leaders (team leaders and senior leaders) will report higher self-reported wellbeing (flourishing and satisfaction with life) and lower self-reported psychological distress compared to non-leaders (team members) (direct effect).

Hypothesis 2: Leaders (team leaders and senior leaders) will report greater self-reported workload demands compared to non-leaders (team members) which will be associated, in turn, with lower self-reported wellbeing and higher psychological distress (indirect effect).

Hypothesis 3: Leaders (team leaders and senior leaders) will report greater self-reported autonomy at work compared to non-leaders (team members) which will be associated, in turn, with higher self-reported wellbeing and lower psychological distress (indirect effect).

Method

Participants

This report is based on analyses from a large sample of 4215 employees drawn from fourteen diverse New Zealand organisations (spanning the healthcare, public service, non-profit, insurance, financial services sectors, among others), with self-report data collected between 2017 and 2020. Participants were invited to voluntarily participate in an online survey by Umbrella Wellbeing Ltd at the request of their employer to gather information about the wellbeing of individuals in their organisation. The analyses presented in this paper are conducted using a de-identified dataset and cannot be used to identify any individual or organisation who participated in the survey in adherence with the principles of the New Zealand Privacy Act (2020). Participation in the survey was voluntary and participants were free to decline participation. Informed consent, including information on why the information was being collected and what it was going to be used for, was granted by all participants prior to beginning the survey. Most participants in the sample were women (60.6%, $n = 2555$) and about one third were men (38.7%, $n = 1632$). Fewer than 1% of our sample identified as gender diverse (0.7%, $n = 28$). For more

demographic information (gender, age, and time worked for organisation), and how these differ by leadership group, refer to Table 1.

Participants self-identified as team members (i.e. non-leaders, 73.6%, $n = 3104$), team leaders (i.e. leading a group of team members, 13.5%, $n = 567$) or senior leaders (i.e. leading other leaders and/or contributing to the strategic direction of the organisation (including executive leaders), 12.9%, $n = 544$). For exploratory analyses reported below, these three groups were analysed separately in order to explore differences within leaders (team leader vs. senior leader) as well as between leaders (senior and team) and non-leaders (team members). For the mediation analysis which related to the three hypotheses, team leaders and senior leaders were combined into one ‘leader’ group to create a binary categorical measure (leader vs. non-leader), to match the analytic methods of prior research (e.g. Li et al., 2018), however mediating differences between both types of leaders are also discussed.

Measures and procedure

We included established measures (Kessler10, Flourishing Scale, Satisfaction with Life Scale), adapted measures (non-work life challenges, work challenges), and new measures (intention to leave job, satisfaction with work-life balance, health behaviours, organisation support and climate) in our study. More information on each of these measures is outlined below. Where we have used adapted or new measures, we developed or adapted these to capture data that was most relevant to organisations we surveyed, for which there were no appropriate established measures available. We acknowledge the limitations of this approach in the discussion section.

Psychological distress. We used the Kessler10 (K10: Kessler et al., 2003, $\alpha = .91$) to measure distress. The K10 is a widely-used, well-validated measure of non-specific psychological distress symptoms, with established reliability ($\alpha > .88$: Easton et al., 2017; Fassaert et al., 2009) and construct validity for use in the general population (Kessler et al., 2002; Kessler et al., 2003), including use in Australia (Furukawa et al., 2003) and New Zealand (Oakley Browne et al., 2010). This 10-item questionnaire was designed as a global measure of psychological distress based on questions about

anxiety (e.g. “During the past 30 days, about how often did you feel nervous?”) and depressive symptoms (e.g. “During the past 30 days, about how often did you feel hopeless?”) that a person has experienced in the most recent four-week period. Participant responses to each item were rated from zero (*none of the time*) to four (*all of the time*) and were summed to produce a single composite score. A higher score on the K10 indicates greater psychological distress.

Flourishing. We used the Flourishing Scale (Diener et al., 2010; $\alpha = .90$) made up of eight items. Psychometric properties of this Flourishing Scale have been evaluated and determined suitable as a brief self-report of overall psychological wellbeing, with high internal reliability according to the original authors of the scale (Diener et al., 2010: $\alpha < .87$). These psychometric properties have also been confirmed with in a New Zealand context, finding strong internal reliability, convergent and discriminant validity and external validity for use with an adult population (Hone et al., 2014). Items were rated on a 7-point Likert scale (ranging from *strongly disagree* to *strongly agree*) resulting in final scores ranging between 8 to 56 (the scoring approach was matched to previous research: Hone et al., 2014). Example items include: “I lead a purposeful and meaningful life”; “I am optimistic about my future”; “My social relationships are supportive and rewarding”; and “I am engaged and interested in my daily activities”.

Satisfaction with life. We used the Satisfaction with Life Scale (SWLS: Diener et al., 1985; $\alpha = .90$) consisting of five items. Items were rated on a 7-point Likert scale (ranging from *strongly disagree* to *strongly agree*), resulting in final scores ranging between 5 to 35. This scoring approach was matched to previous research (Pavot & Diener, 2008). Previous research has shown the SLWS to be a sound measure of life satisfaction, displaying good internal and test-retest reliability ($\alpha < .79$) and has been used with a wide range of populations and age groups to assess subjective life satisfaction (Pavot & Diener, 2009). Example items include: “The conditions of my life are excellent”; “If I could live my life over, I would change almost nothing”; and “I am satisfied with my life”.

Intention to leave job. Participants completed a single item asking how likely they were to leave their job in the next six months. Responses ranged through from 1 (*not at all*) to 10 (*almost certain*).

Satisfaction with work-life balance. We used a single item: “Overall, how satisfied are you with the balance between your work and other aspects of your life such as time with your family or leisure?” People rated their agreement on a 10-point scale from 1 (*very dissatisfied*) to 10 (*very satisfied*).

Non-work life challenges. This measure consisted of 12 items ($\alpha = .76$) including “Money/financial difficulties” and “Relationship stresses e.g. marriage or relationship conflict” and was adapted from a measure described by Cleland et al (2016) which was used successfully to test relationships between life challenges, health and wellbeing in an general population adult sample. Challenges were rated on a 5-point Likert scale for how stressful each challenge had been in the four weeks prior to taking the assessment (1= *not stressful* to 5= *very stressful*).

Work challenges. Items used to measure work challenges were adapted from the United Kingdom Health and Safety Executive Management Standards tool (Kerr et al., 2009) which has shown sound psychometric properties and internal reliability of sub-scales (Cronbach alpha ranging between .78 and .88; Edwards et al., 2008). Responses were made on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) and reverse-coded where required. Eight overarching work challenge sub-scales were created using 20 items ($\alpha = .78$): Autonomy (three items e.g. “I have choice in deciding how I do my work”, $\alpha = .70$); Bullying (one item: “I am subject to personal harassment in the form of unkind words or behaviour”); Role clarity (one item: “I am clear what my duties and responsibilities are”); Staff consultation over change (one item: “Staff are always consulted about change at work”); Work demands (three items e.g. “I have to work very intensively to meet deadlines”, $\alpha = .72$); Peer support (three items e.g. “I get the help and support I need from colleagues”, $\alpha = .75$); Strong relationships (four items e.g. “My team mates get on well together”, $\alpha = .85$); and Manager support (four items e.g. “My line manager encourages me at work”, $\alpha = .87$). Work challenges were analysed at the sub-scale level by averaging across individual items.

Health behaviours. Participants were asked to self-report how often they engaged in the following health behaviours: moving about regularly during the workday, engaging in moderate exercise, eating regular nutritious meals and snacks, limiting caffeine consumption, limiting alcohol consumption,

getting enough good quality sleep, maintaining a healthy weight, and getting enough leisure/relaxation time. Each of these eight items was measured on a 3-point Likert scale: 1 (“*Not at all, need to do much better*”), 2 (“*Sometimes but room for improvement*”), and 3 (“*Doing this pretty well most of the time*”). Overall internal reliability was acceptable ($\alpha = .63$).

Organisation support and climate. To measure organisational support for wellbeing and resilience, participants rated the extent to which their employer supported their wellbeing on six items ($\alpha = .89$): supporting a healthy work/life balance, having a sense of community, having a positive outlook, encouraged to lead healthy lifestyle, having a shared vision, and psychological wellbeing of staff being a priority. Ratings were made on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Further, participants were asked to rate their organisational climate on six items (e.g. “There are good opportunities for development in this organisation” and “I am committed to this organisation”) using a 5-point Likert scale ranging from 1 ‘*strongly disagree*’ to 5 ‘*strongly agree*’ ($\alpha = .87$).

Results

Descriptive Statistics

We computed Pearson’s bivariate correlations between leadership status (1 = team member, 2 = team leader, 3 = senior leader) and all other key variables (see Table 2). These analyses found significant weak positive correlations between leadership status and flourishing, life satisfaction, and organisational climate, suggesting that leaders reported higher levels of wellbeing at the individual and organisation level compared to non-leaders. We also found significant weak negative associations between leadership status and psychological distress, satisfaction with work-life balance, and non-work challenges, suggesting that leaders report lower distress and fewer non-work challenges. Leaders also report lower satisfaction with their work-life balance. All descriptive statistics including sample sizes, means, and standard deviations for each leadership group on each variable can be found in the supplemental material. Across all descriptive findings, we find that leaders evidence a somewhat mixed picture of favourable and unfavourable wellbeing outcomes, albeit mostly favourable (see analyses below).

Between-Group Differences

To explore the differences among the three groups in our sample, we examined responses from senior leaders, team leaders, and team members on each of the key variables in the study, as outlined below. To test the differences among the three groups on these variables, we used non-parametric independent-samples Kruskal-Wallis tests because our data did not meet the assumption for homogeneity of variance needed for parametric Analysis of Variance (ANOVA) tests (Levene's test $p < .001$). For each statistically significant between-group difference we then conducted post-hoc pairwise comparisons using Bonferroni correction for multiple tests and calculated effect sizes (Cohen's d_s : ranging between small-moderate, 0.1 – 0.4). The results of these post-hoc comparisons can be found in Table 3.

Flourishing and Satisfaction with Life. We found statistically significant differences in wellbeing among the different groups for (in order of effect size): satisfaction with life ($\chi^2(2) = 54.58, p < .001, \varepsilon^2 = .013$), flourishing ($\chi^2(2) = 47.41, p < .001, \varepsilon^2 = .011$). For both measures of wellbeing, pairwise comparisons showed that team members reported significantly *lower* flourishing and life satisfaction compared to both team leaders and senior leaders. Team leaders and senior leaders did not differ significantly on either wellbeing measure.

Psychological distress. We found a statistically significant difference in psychological distress among the different groups, $\chi^2(2) = 70.66, p < .001, \varepsilon^2 = .017$. Pairwise comparisons using Bonferroni correction found that team members reported significantly higher psychological distress compared to both team leaders and senior leaders. Team leaders reported significantly higher psychological distress compared to senior leaders.

Intention to leave job. We found no statistically significant differences among these groups on their intention to leave their job: $\chi^2(2) = 2.53, p = .282, \varepsilon^2 = .001$.

Satisfaction with work-life balance. We found a significant between-group effect of leadership status on satisfaction with work life balance: $\chi^2(2) = 14.35, p < .001, \varepsilon^2 = .003$. Post-hoc tests found that team members reported being significantly more satisfied with their work life balance compared to senior

leaders, but not team leaders. Team leaders and senior leaders did not significantly differ on their satisfaction with work-life balance.

Non-work life challenges. We tested the differences among senior leaders, team leaders and team members on common non-work life challenges and found a statistically significant difference among the different groups for overall non-work challenges: $\chi^2(2) = 25.29, p < .001, \varepsilon^2 = .006$. Senior leaders reported significantly lower difficulty with non-work challenges compared to team members, but no other significant between-group differences were found. The findings for individual challenges were, in order of effect size: money/financial difficulties ($\chi^2(2) = 80.37, p < .001, \varepsilon^2 = .019$), difficulties with children/parenthood ($\chi^2(2) = 30.92, p < .001, \varepsilon^2 = .007$), being a victim of crime ($\chi^2(2) = 29.17, p < .001, \varepsilon^2 = .007$), starting a new job ($\chi^2(2) = 23.62, p < .001, \varepsilon^2 = .006$), moving into a new house ($\chi^2(2) = 20.67, p < .001, \varepsilon^2 = .005$), significant ill health ($\chi^2(2) = 20.94, p < .001, \varepsilon^2 = .005$), bereavement ($\chi^2(2) = 14.33, p = .001, \varepsilon^2 = .003$), commuting ($\chi^2(2) = 8.33, p = .016, \varepsilon^2 = .002$), caregiving responsibilities ($\chi^2(2) = 8.54, p = .014, \varepsilon^2 = .002$), family problems ($\chi^2(2) = 6.09, p = .048, \varepsilon^2 = .001$), relationship problems ($\chi^2(2) = 2.03, p = .363, \varepsilon^2 = .000$), and redundancy/unemployment ($\chi^2(2) = .82, p = .663, \varepsilon^2 = .000$).

For the significant non-work life challenges, we conducted post-hoc pairwise comparisons. Team members reported greater difficulty than both their team and senior leaders when it came to money/financial difficulties, being a victim of crime, starting a new job, moving to a new house, and ill health. Team members reported more challenge from bereavement and commuting than senior leaders, but not team leaders. Conversely, when it came to children/parenthood and caregiving, team leaders reported significantly higher challenge compared to their team members. Senior leaders also reported significantly higher challenge from children/parenthood compared to team members. There were no significant differences in non-work challenges between team leaders and senior leaders, except for family problems, from which team leaders reported greater difficulty.

Work challenges. No statistically significant difference were found among groups for overall work challenges: $\chi^2(2) = 3.90, p = .143, \varepsilon^2 = .001$. The findings for individual work challenges were, in order of effect size: high work demands ($\chi^2(2) = 163.90, p < .001, \varepsilon^2 = .039$), lack of autonomy ($\chi^2(2) =$

31.80, $p < .001$, $\varepsilon^2 = .008$), poor peer support ($\chi^2(2) = 12.56$, $p = .002$, $\varepsilon^2 = .003$), consultation about change ($\chi^2(2) = 7.15$, $p = .028$, $\varepsilon^2 = .002$), weak relationships ($\chi^2(2) = 6.90$, $p = .032$, $\varepsilon^2 = .002$), role clarity ($\chi^2(2) = 4.66$, $p = .097$, $\varepsilon^2 = .001$), poor manager support ($\chi^2(2) = 3.30$, $p = .192$, $\varepsilon^2 = .001$), and bullying ($\chi^2(2) = 2.08$, $p = .354$, $\varepsilon^2 = .000$).

Post comparison tests on those work challenges that showed significant between-group differences demonstrated that work demands were significantly higher for senior leaders compared to team leaders and team members. Team leaders also reported higher work demands than their team members. Both types of leaders also reported significantly lower peer support compared to team members. Team members, however, reported lower staff consultation about change compared to senior leaders but not team leaders. And, both team members *and* team leaders reported lower autonomy compared to senior leaders. No other significant post-hoc differences were found.

Health behaviours. There was no significant between-group effect on overall healthy habit uptake ($\chi^2(2) = 2.20$, $p = .334$, $\varepsilon^2 = .001$), getting enough quality sleep ($\chi^2(2) = 4.09$, $p = .130$, $\varepsilon^2 = .001$), engagement in moderate exercise ($\chi^2(2) = 4.51$, $p = .105$, $\varepsilon^2 = .001$), maintaining a healthy weight ($\chi^2(2) = 2.56$, $p = .278$, $\varepsilon^2 = .001$), getting enough relaxation/leisure time ($\chi^2(2) = 3.74$, $p = .154$, $\varepsilon^2 = .001$), or limiting caffeine consumption ($\chi^2(2) = .91$, $p = .636$, $\varepsilon^2 = .000$). However, we found a statistically significant difference in uptake of health behaviours among the different groups for (in order of effect size): limiting alcohol consumption ($\chi^2(2) = 35.83$, $p < .001$, $\varepsilon^2 = .009$), moving about regularly during the work day ($\chi^2(2) = 25.64$, $p < .001$, $\varepsilon^2 = .006$), and eating regular nutritious meals and snacks ($\chi^2(2) = 7.52$, $p = .023$, $\varepsilon^2 = .002$).

For each of these significant between-group effects, we conducted post-hoc pairwise comparisons. Team members were significantly better than both types of leaders at limiting their alcohol consumption. Senior leaders and team leaders did not differ from one another. Senior leaders, however, reported greater regular movement during the workday compared to both team members and team leaders, who did not differ significantly from each other. No significant post-hoc differences were found for nutritious eating.

Organisation support. No between-group difference was found for overall organisational support for resilience and wellbeing ($\chi^2(2) = .87, p = .648, \varepsilon^2 = .000$), for support for healthy lifestyle ($\chi^2(2) = 2.85, p = .241, \varepsilon^2 = .001$), encouragement of work-life balance ($\chi^2(2) = .10, p = .949, \varepsilon^2 = .000$), sense of community ($\chi^2(2) = 4.38, p = .112, \varepsilon^2 = .001$), shared vision ($\chi^2(2) = 2.77, p = .250, \varepsilon^2 = .001$), or having a positive outlook ($\chi^2(2) = .01, p = .995, \varepsilon^2 = .000$). However, we found a statistically significant difference among the different groups for perceptions of psychological wellbeing of staff being prioritised ($\chi^2(2) = 7.22, p = .027, \varepsilon^2 = .002$). According to post-hoc comparisons, senior leaders reported significantly *higher* ratings of prioritisation compared to team members. Team leaders did not significantly differ in their perceptions compared to either team members or senior leaders.

Organisation climate. We found a statistically significant difference in organisational climate between the different groups for (in order of effect size): commitment to the organisation ($\chi^2(2) = 41.40, p < .001, \varepsilon^2 = .010$), opportunities for development ($\chi^2(2) = 20.99, p < .001, \varepsilon^2 = .005$), overall organisational climate (averaged across all items) ($\chi^2(2) = 15.33, p < .001, \varepsilon^2 = .004$), and recognition and reward ($\chi^2(2) = 7.12, p = .028, \varepsilon^2 = .002$). No statistically significant difference between the groups was found for pride in belonging to the organisation ($\chi^2(2) = 2.34, p = .311, \varepsilon^2 = .001$), regular leadership communication ($\chi^2(2) = 4.34, p = .114, \varepsilon^2 = .001$), or supportive leadership ($\chi^2(2) = 2.18, p = .336, \varepsilon^2 = .001$).

Based on post-hoc comparisons for the significant between-group effects, senior leaders reported a stronger overall organisational climate compared to team members but not compared to team leaders. In addition, both types of leaders reported significantly higher commitment to their organisation and opportunities for development compared to their team members. When it came to recognition and reward, senior leaders reported higher ratings compared to both team leaders and team members who did not differ from each other.

Leadership Differences in Challenge Profiles

As an exploratory test, we regressed psychological distress onto each of the 20 work and non-work challenges examined in the survey (12 non-work life challenges and eight work challenges) using a

multiple regression model for each of the groups separately (team member, team leader, and senior leader; see Table 4 for full reporting). We chose a conservative threshold to determine cases of multicollinearity (VIF greater than 4; O'Brien, 2007). Variance Inflation Factors were low across these tests (ranging between 1.14 and 2.43), meaning that multicollinearity was not an identified problem.

For team members, all challenges accounted for a combined 39% of the variance associated with their psychological distress, the large majority of which (34%) was accounted by non-work life challenges alone ($F(20, 3039) = 97.50, p < .001, R^2 = .39$). The strongest predictors of psychological distress for team members, while holding all other challenges constant, were (in order of largest effect): serious ill health ($\beta = .22, p < .001$), money/financial difficulties ($\beta = .19, p < .001$), and family problems ($\beta = .18, p < .001$).

For team leaders, all challenges accounted for a combined 38% of the variance associated with their psychological distress, the majority of which (30%) was accounted by non-work life challenges alone ($F(20, 543) = 16.80, p < .001, R^2 = .38$). The strongest predictors of psychological distress for team leaders while holding all other challenges constant were (in order of largest effect): relationship problems e.g. marriage conflict ($\beta = .25, p < .001$), serious ill health ($\beta = .22, p < .001$), and work demands ($\beta = .15, p < .001$).

For senior leaders, all challenges accounted for a combined 49% of the variance associated with their psychological distress, a majority of which (38%) accounted for non-work life challenges alone ($F(20, 522) = 25.2, p < .001, R^2 = .49$). The strongest predictors of psychological distress for senior leaders, while holding all other challenges constant, were (in order of largest effect): serious ill health ($\beta = .28, p < .001$), work demands ($\beta = .20, p < .001$), and lack of role clarity ($\beta = .17, p < .001$).

Mediation Models

To test our three hypotheses, we examined the relationships between leadership status and the outcome variables of psychological distress, flourishing, and satisfaction with life. As hypothesised, we included work demands and autonomy as mediating variables. Further, as exploratory analyses, we included the variables of peer support and staff consultation about change in this mediation model as they

were identified as important work challenges in between-group analyses reported above. For the main mediation analyses reported below we combined senior leaders and team leaders into one group to create a binary leadership status variable (non-leader = 0, leader = 1) to simplify the analyses and also to match the analytic method of previous research by Li et al. (2018) that we seek to replicate and expand upon. As an exploratory analysis, and to ensure no important group differences were suppressed by combining both types of leaders together, we also examined the mediating effect of the same work challenges on wellbeing outcomes when contrasting team leaders and senior leaders. Across all analyses we tested whether the specific work challenges that leaders report more (or less of) would significantly mediate the relationship between leadership status and psychological distress, flourishing and satisfaction with life. Mediation models were run from the jamovi Advanced Mediation Models module based on the lavaan package for R (Gallucci, 2020; Rosseel, 2019). All estimates of the indirect effects were bootstrapped and we report the 95% confidence interval in all cases (see Table 5).

The total effect between leadership status (leader vs. non-leader) and psychological distress was significant and, as indicated by indirect effects in Table 5, this association was significantly mediated by work demands, autonomy and peer support. These findings support all three of our hypotheses and suggest that each of these work factors at least partly explain the relationship between leadership and psychological distress. . In other words, leaders (as opposed to team members) reported lower psychological distress, and these three mediators helped explain how these leaders avoided this distress. Leadership manifested statistically negative indirect association with psychological distress, mediated via its positive association with job autonomy As hypothesised, leadership also showed a positive indirect association with psychological distress, mediated via its positive association with work demands (which is, in turn, positively associated with psychological distress). Leadership also manifested a positive indirect association with psychological distress, mediated via its negative association with peer support (which is, in turn, negatively associated with psychological distress). These results suggest that leaders experience an upward influence of distress due to work demands and poor peer support at the same time that autonomy exerts a downward influence on distress. The direct effect remained significant after

accounting for these mediators, indicating that work factors only partially mediated the association between leadership level and psychological distress. Figure 1 outlines the effect sizes of the pathways between each of these variables.

For flourishing and satisfaction with life, the total effect between leadership level (leader vs. non-leader) and both outcome variables was significant and, as indicated by indirect effects in Table 5, autonomy and peer support significantly mediated this association. Contrary to our hypothesis, work demands did not significantly mediate the association between leadership and flourishing and satisfaction with life. This pattern of results indicates that both autonomy and peer support at least partly explain the relationship between leadership and wellbeing outcomes. According to these models, leadership has a positive indirect association with both flourishing and life satisfaction, mediated via its positive association with autonomy. We also found that leadership exhibited a negative indirect association with flourishing and life satisfaction, mediated via its negative association with peer support. These results suggest that leaders experience an upward influence of flourishing and life satisfaction due to job autonomy at the same time that poor peer support exerts a downward influence. The direct effect remained significant after accounting for these mediators in both models, indicating that work factors only partially mediated the association between leadership and flourishing and life satisfaction. Figure 2 and Figure 3 outline the effect sizes of the pathways between each of these variables.

As a secondary analysis and to examine whether significant differences exist, we also tested the contrast between team leaders and senior leaders as the independent variable using the same mediation models. As expected, given that there were no significant between-group differences on flourishing or satisfaction with life between team leaders and senior leaders, neither the total effect ($\beta = .04, p = .082, 95\% \text{ CI } [-1.528, .092]$) nor the direct effect ($\beta = .03, p = .075, 95\% \text{ CI } [-1.262, .084]$) of leader type on flourishing were significant while accounting for mediators. We also found no significant total or direct effect of leader type on satisfaction with life (Total effect: $\beta = .04, p = .073, 95\% \text{ CI } [-1.362, .061]$; Direct effect: $\beta = .03, p = .096, 95\% \text{ CI } [-1.045, .143]$) while accounting for mediators. For psychological distress, both the total effect ($\beta = .04, p = .035, 95\% \text{ CI } [.065, 1.751]$) and direct effect ($\beta = .05, p = .010,$

95% CI [.240, 1.692]) were significant, indicating partial mediation. Autonomy ($\beta = .006$, $p = .025$, 95% CI [.025, .246]) and work demands ($\beta = -.010$, $p = .001$, 95% CI [-.347, -.093]) significantly mediated the association between leader type and psychological distress. As would be expected based on between-group differences already reported, senior leaders appear to experience greater psychological distress through higher work demands and lower distress through greater job autonomy compared to team leaders who experience the opposite effects.

Discussion

In this paper, we examined data from over 4000 New Zealand team members, team leaders, and senior leaders and examined how the groups differed or were similar on flourishing, satisfaction with life, psychological distress, work and non-work challenges, and organisational measures. First, supporting previous research (e.g. Li et al., 2018) and our hypothesis, self-reported wellbeing (flourishing and life satisfaction) was higher among staff who were more senior in their organisation. In addition, and as hypothesised, senior leaders and team leaders reported significantly lower psychological distress compared to their team members. These findings indicate that, consistent with Westerhof and Keyes's (2010) model, leaders report more favourable outcomes on both dimensions of psychological health - higher mental health and lower mental illness. While these differences are significant and marked, they may also be confounded by other variables such as age, income, and other important demographic covariates. Nevertheless, they reflect an opportunity to proactively support younger employees and their mental health and wellbeing.

In line with previous studies, theories (e.g. JDCA model) and our hypotheses, leaders (compared to non-leaders) reported greater work demands which, in turn, contributed to greater psychological distress. While this mediating effect was not found for flourishing or satisfaction with life (contrary to hypothesis), job autonomy significantly mediated the relationship between leadership and all outcome variables. In addition, poor peer support experienced by leaders led to adverse wellbeing outcomes (higher psychological distress and lower flourishing and life satisfaction) in our mediation models. As such, poor peer support represents one pathway through which leaders experience diminished wellbeing,

whereas job autonomy appears to improve wellbeing for leaders. In line with previous research, job autonomy and peer support may be particularly important elements to proactively cultivate when it comes to navigating those work demands experienced more commonly by leaders.

Despite these work-related findings, across our data, non-work life challenges were more strongly associated with psychological distress than work-related challenges for all groups. Serious ill health was one of the strongest predictors of psychological distress for all participants, regardless of their leadership status. For team leaders specifically, relationship problems (e.g. marriage conflict) was one of strongest predictors of psychological distress and, for team members, financial difficulties and family problems were the second and third strongest predictors. Financial difficulties were also significantly higher for team members compared to both types of leaders in our sample. It is likely that this result is due to differences in pay where team members usually earn less than their more senior colleagues, resulting in greater financial difficulties (and, possibly, greater effort reward imbalance: Siegrist, 1994). These findings are consistent with a robust literature (e.g. Netemeyer et al., 2018) finding that financial security is an important contributor to psychological wellbeing, suggesting that regular and fair pay reviews should be considered as one tool in organisations' wellbeing toolkit (alongside behavioural interventions such as financial planning sessions).

However, for work-related challenges, leaders appeared to suffer more than non-leaders (team members) in our sample. While team members reported significantly lower work-related autonomy and change consultation compared to senior leaders, both types of leaders reported higher work demands (Bunea, 2020; Li et al., 2018) and lower peer support (Tetrick et al., 2000) compared to team members. Further, work demands was one of the top three strongest predictors of psychological distress for both team leaders and senior leaders, while controlling for all other challenges, indicating that this is no small issue. Unsurprisingly, based on these findings and in line with previous research (Bunea, 2020), satisfaction with work-life balance was also significantly lower for senior leaders compared to team members. When it came to explaining the variance in people's psychological distress, work-related factors accounted for 8-11% of this variance for leaders, but only 5% of the variance for non-leaders

(team members). As noted already, several of these factors also significantly mediated the relationship between leadership status and psychological distress, flourishing and life satisfaction. The wellbeing of leaders, therefore, appear to be more strongly influenced by work factors compared to non-leaders. This discrepancy represents an opportunity for organisations to prioritise the psychological wellbeing of their leaders with a targeted focus on improved working conditions.

Team members reported higher levels of psychological distress than their leaders, however their distress profiles appear to be more impacted by non-work challenges. These findings give additional insight into the inverse relationship between stress and leadership reported by Sherman and colleagues (2012). While non-work challenges are usually outside of the direct control of organisations, psychological distress is still brought by employees to work and undoubtedly influences the way they work, their productivity, and their interactions with other team members.

Increasing resilience to life's challenges at the individual level is one method for reducing psychological distress, and maintaining wellbeing for all employees (Shatté et al., 2017). However, it should also be accompanied by organisational and team-level changes to support greater systemic support for the wellbeing of everyone. In our data, senior leaders were significantly more likely to report that psychological wellbeing was prioritised in their workplace compared to team leaders and members. There is evidently a gap between perceptions held by senior leadership about wellbeing at work, and the reality experienced by more junior staff. In line with this difference, team members reported significantly lower rates of commitment to their organisation, fewer opportunities for development, and lower recognition and reward compared to their leaders. The climate of an organisation, and the extent to which it actively supports and promotes the wellbeing of its employees, can predict and possibly protect against psychological distress at work (e.g. Dollard & Bakker, 2010). Our findings in this paper suggest that team members are not experiencing the same benefits of their organisational climate as their leaders.

These findings further emphasise the necessity for organisations to understand their workers through extensive data gathering, rather than relying solely on anecdotal data or personal experience when it comes to wellbeing strategies. The findings reported in this paper serve to remind all readers that

not all employees experience the same set of challenges or support, even when they come from the same organisation. Tailored support is necessary and changes should be made at all levels of the organisation. Importantly, leaders should not be forgotten in organisational wellbeing strategies. While their psychological distress is reportedly lower, they also struggle significantly with work demands, poor peer support and work-life balance (as well as limiting their alcohol intake (Frone, 2006), and difficulties with children/parenthood). For senior leaders, role clarity was also one of the strongest predictors of psychological distress, indicating that they may struggle with knowing their unique place in the organisation. Strategies to improve these circumstances may include intentional job crafting allowing leaders to better delegate, share responsibilities, and draw clear boundaries so that their work-life balance is protected. In addition, care should be taken to cultivate and strengthen peer-to-peer networks of leaders so that they are better able to share work load and navigate work challenges through the support received from workplace relationships.

Implications for Consulting Psychologists

Our findings assert the need for consulting psychologists to adequately scope the needs of organisations to determine strengths and challenges at each level of leadership: non-leaders, team leaders, senior leaders and executives. A collaborative approach, working with all employees, is central to this scoping process. As part of this, our findings imply that leaders' perceptions of the organisation may not always match the experience of non-leaders (e.g. regarding organisation climate), meaning that collaboration should occur at all levels of the organisation to determine the key areas for intervention. The stressors facing each of these groups will be nuanced, as highlighted by the data presented here. Leaders reported lower satisfaction with their work life balance and higher work demands, for example. This suggests that, when addressing high work demands among leaders, consultants should understand the implicit and explicit norms within the workplace surrounding workload, particularly for leaders. Does the organisation promote work-life balance on paper, for example, but fail to monitor hours worked? In addressing any discrepancies, or establishing norms, organisations are investing in a leader-led approach

to wellbeing wherein leaders actively role model healthy behaviours and work-life balance, which have flow-on effects for the health of their employees (e.g. Dietz et al., 2019).

Encouraging the use of peer support networks for leaders will also be important for consulting psychologists to explore in the organisations they work with. Given that poor peer support was a mechanism through which leaders experienced greater psychological distress and poorer wellbeing in our sample, our findings imply that this should be one area that consultants proactively check in on. Suggestions for building peer support include investing in internal activities to build psychological safety among leadership teams – enabling leaders to lean on their colleagues, and feeling safe to do so. Networking opportunities should also be recommended as professional development opportunities, knowing that people are better able to lead, and make strategic decisions, when they have wide networks made up of strong bonds.

Finally, when it comes to non-leaders, our findings were clear that they generally experience poorer mental health and wellbeing outcomes compared to leaders, and that autonomy is a key mechanism that at least partly explains these outcomes. While other interventions should also be considered in the non-work and work domains (and these should be tailored to the unique needs of the organisation), our findings suggest that particular effort could be taken to assess and respond to job autonomy for those who are more junior in the organisation. Ways of improving autonomy involve understanding the nature of the jobs being performed by employees and where choice and control, however small, can be incorporated. Key to this is consulting with those employees who report low autonomy and giving them a voice to share strategies that would work for them. In what is a thread of commonality across all of these implications, we reiterate here that there is no one-size-fits-all to employee wellbeing, leaders or not. While our paper presents trends among a large dataset, these should be treated as a starting point for consulting psychologists in their work and should always be verified by data from each organisation worked with through a collaborative approach.

Strengths and Limitations

We must note that our data are concurrent in nature, therefore, they cannot be used to make temporal or causal assertions. We do not presume, for example, that being a senior leader makes one more satisfied with life, or the inverse, i.e. that being more satisfied with one's life makes one more prone to promotion. Selection biases are possibly a factor in the recruitment and appointment of leaders (e.g. those with high wellbeing may be more likely to be promoted to a senior leadership position). Future research should seek to replicate and examine the directionality of these associations and models using longitudinal data, rather than relying upon cross-sectional data (Jose, 2013). Future longitudinal studies should be based on three-wave data sets in order to achieve a more sensitive analysis of mediated relationships (Jose, 2016).

It must also be noted that our data was collected using a commercial wellbeing assessment tool, not built-for-purpose as an academic research tool. While reliable and validated measures were used (e.g. Flourishing Scale, Kessler10, Satisfaction with Life Scale), other measures (e.g. health behaviours) were designed in response to customer needs. Due to this, we acknowledge the limitations of certain measures having not been rigorously psychometrically tested (Cronbach's alphas, however, were acceptable). Further, because comprehensive demographic data were not always required for customer organisations from whom this data was collected for, this paper may be lacking potentially informative control variables (e.g. ethnicity, income, and education). Future research should extend and explore the possible effect that these controls may have on patterns reported here, as well as seek to develop high-quality indices to measure those domains that we used single items to capture.

Regardless of the limitations aforementioned, the sample size was large and all data were collected by a third-party agency (Umbrella Wellbeing Ltd) with strict data privacy procedures communicated clearly to participants. As a result, we expect that participants trusted the data collection process more than may be expected when surveys are administered internally within an organisation. This trust is evidenced by the average 70% response rate received from each of the organisations we surveyed, which allowed us to collect a reasonable cross-section of New Zealand employees in our sample, including a reasonable sample of senior leaders and team leaders. However, it needs noting that our

sample of team leaders and senior leaders was similar in size, suggesting that one group may have been over- or under-represented (given that team leaders usually outnumber senior leaders in an organisation). Because participants self-identified their leadership status, it is possible that some leaders misidentified their status. Conversely, in many of the smaller organisations we surveyed, there may be no clear distinction between team leaders and senior leaders, leading these participants to self-identify as senior leaders. It is also likely that senior leaders may be more invested in the purpose of a wellbeing survey, leading to greater participation rates than team leaders. We also combined executive leaders with senior leaders in this study, given a small sample size of executives ($n=42$). Future research should aim to replicate these findings with a sample that is verified to represent the proportion of team and senior leaders in the organisations being surveyed.

On this point, we were not able to establish any systematic differences between those that responded to the survey and those that did not, because we were not able to capture demographic information on those that did not respond. However, participant demographic groupings were presented to each organisation that completed the survey, and no obvious gaps (e.g. fewer men responding to the survey compared to organisation gender break-downs) were reported during this process. Our sample did include a greater number of women compared to men, which may represent a trend in survey research wherein women appear more likely to participate (Smith, 2008). Future research should ensure that any systematic differences between respondents and non-respondents are minimised where possible and controlled for while conducting analyses.

Our paper is also strengthened by the comprehensive data we collected i.e. capturing data not only on flourishing, life satisfaction and psychological distress, but also on the challenges and protective factors that are thought to contribute to these outcomes. These measures allow us to make recommendations on the tailored actions that should be taken to support the wellbeing of leaders and team members across Aotearoa New Zealand and, arguably, other similar countries. Further, they allowed us to replicate previous research findings with a large sample. Future research should consider replicating these findings in other contexts, as well as testing interventions to improve work demands, autonomy and peer

support for affected leaders and non-leaders, and exploring their longitudinal impact on wellbeing outcomes over time.

Conclusions

People in leadership positions at work (team leaders and senior leaders) report higher flourishing and life satisfaction and lower psychological distress compared to their team members, a pattern that appears to be influenced by numerous differences between the experiences of leaders and non-leaders in the workplace. While leaders report higher work demands and lower peer support than their team members, they also report higher job autonomy, consistent with previous research and in line with theoretical propositions (e.g. Job Demand Control Support model: Karasek & Theorell, 1990; Li et al., 2018; Teo et al., 2020; Tetrick et al., 2000). Each of these workplace factors explain, at least partly, the relationship between leadership status and outcomes (flourishing, life satisfaction and psychological distress) according to mediation models. Non-leaders (team members), in contrast, were more likely to report experiencing a range of non-work challenges (e.g. financial difficulties) and to perceive a less supportive organisational climate. These findings highlight the importance of targeted support for both leaders and non-leaders in the workplace. They further support the argument that there is no one-size-fits-all wellbeing solution for all employees of an organisation. For true improvements in people's wellbeing at work and, therefore, improvements in their performance, businesses should always consider the individual, their needs, and the myriad factors that influence their mental health and wellbeing both at home and at work.

Table 1. Descriptive statistics for age and time spent working for organisation

	Overall		Team members		Team leaders		Senior leaders	
	n	%	n	%	n	%	n	%
Gender								
Female	2555	60.6	1927	62.1	329	58.0	299	55.0
Male	1632	38.7	1154	37.2	234	41.3	244	44.8
Gender diverse	28	.7	23	.7	4	.7	1	.2
Age								
<30 years	772	18.6	757	24.4	49	8.6	25	4.6
30-39 years	1179	28.4	945	30.4	144	25.4	90	16.5
40-49 years	1054	25.4	645	20.8	190	33.5	219	40.3
50-59 years	846	20.4	533	17.2	152	26.8	161	29.6
>60 years	305	7.3	224	7.2	32	5.6	49	9.0
Time at organisation								
<1 year	828	19.6	689	22.2	60	10.6	79	14.5
1-3 years	1067	25.3	848	27.3	99	17.5	120	22.1
3-5 years	708	16.8	506	16.3	112	19.8	90	16.5
5-10 years	795	18.9	525	16.9	138	24.3	132	24.3
10-15 years	457	10.8	306	9.9	84	14.8	67	12.3
>15 years	360	8.5	230	7.4	74	13.0	56	10.3

Table 2.*Pearson's correlation matrix between leadership status and key variables*

	1	2	3	4	5	6	7	8	9	10	11
1. Leadership status	1	-	-	-	-	-	-	-	-	-	-
2. Life satisfaction	.12***	1	-	-	-	-	-	-	-	-	-
3. Flourishing	.11***	.76***	1	-	-	-	-	-	-	-	-
4. Psychological distress	-.12***	-.55***	-.53***	1	-	-	-	-	-	-	-
5. Intention to leave	.01 ^{ns}	-.20***	-.19***	.25***	1	-	-	-	-	-	-
6. Satisfaction with work-life balance	-.06***	.37***	.35***	-.40***	-.28***	1	-	-	-	-	-
7. Non-work challenges	-.08***	-.33***	-.29***	.49***	.13***	-.32***	1	-	-	-	-
8. Work challenges	.02 ^{ns}	-.33***	-.36***	.35***	.41***	-.45***	.24***	1	-	-	-
9. Health behaviours	.02 ^{ns}	.33***	.34***	-.40***	-.13***	.36***	-.31***	-.25***	1	-	-
10. Organisational support	.02 ^{ns}	.31***	.35***	-.28***	-.38***	.41***	-.18***	-.66***	.21***	1	-
11. Organisational climate	.06***	.30***	.34***	-.26***	-.46***	.37***	-.17***	-.65***	.16***	.78***	1

Note. ^{ns} $p > .05$; * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Table 3.*Post-hoc pairwise comparisons using Bonferroni correction for multiple tests*

	Team members – Senior leaders		Team members – Team leaders		Team leaders – Senior leaders	
	<i>t</i>	<i>Cohen's d_s</i>	<i>t</i>	<i>Cohen's d_s</i>	<i>t</i>	<i>Cohen's d_s</i>
Flourishing	351.08***	.30	210.75***	.19	140.33 ^{ns}	.13
Satisfaction with life	378.15***	.31	223.02***	.20	155.13 ^{ns}	.13
Psychological distress	-440.10***	.33	-236.76***	.21	-203.34*	.14
Satisfaction with work-life balance	-200.14***	.17	-97.17 ^{ns}	.08	-102.97 ^{ns}	.09
Non-work challenges	-275.53***	.23	-106.41 ^{ns}	.11	-169.12 ^{ns}	.13
Money	-426.47***	.35	-299.97***	.25	-126.50 ^{ns}	.11
Children	225.06***	.17	189.62***	.14	35.44 ^{ns}	.03
Victim of crime	-172.03***	.22	-92.35*	.15	-79.69 ^{ns}	.10
New job	-203.89***	.21	-125.07*	.12	-78.82 ^{ns}	.09
Moving to a new house	-178.30***	.21	-101.91*	.10	-76.39 ^{ns}	.12
Ill health	-190.23***	.16	-142.17**	.14	-48.07 ^{ns}	.02
Bereavement	-160.41***	.20	-57.71 ^{ns}	.08	-102.71 ^{ns}	.14
Commuting	-149.74*	.15	-30.39 ^{ns}	.02	-119.35 ^{ns}	.13
Family problems	-74.81 ^{ns}	.07	96.14 ^{ns}	.09	-170.95*	.15
Caregiving	75.74 ^{ns}	.07	126.51*	.08	-50.77 ^{ns}	.01
Work challenges	-	-	-	-	-	-
Work demands	648.87***	.54	395.40***	.33	253.47***	.23
Lack of autonomy	-306.65***	.26	-116.83 ^{ns}	.13	-189.82*	.15
Poor peer support	140.14*	.12	156.52*	.12	-16.38 ^{ns}	.00
Lack of staff consultation	-142.52*	.12	9.67 ^{ns}	.00	-152.19 ^{ns}	.12
Weak relationships	121.44 ^{ns}	.07	98.90 ^{ns}	.07	22.54 ^{ns}	.00
Health behaviours	-	-	-	-	-	-
Limiting alcohol consumption	-254.18***	.23	-128.55*	.10	-125.64 ^{ns}	.13
Moving about regularly during work day	250.55***	.24	89.29 ^{ns}	.10	161.25*	.15

Eating regular nutritious meals	118.96 ^{ns}	.11	86.24 ^{ns}	.08	32.72 ^{ns}	.03
Organisational support	-	-	-	-	-	-
Psychological wellbeing prioritised	143.02*	.12	-5.40 ^{ns}	.01	148.42 ^{ns}	.13
Organisational climate	206.32***	.16	105.44 ^{ns}	.10	100.88 ^{ns}	.07
Opportunities for development	206.34***	.18	164.60**	.15	41.75 ^{ns}	.03
Recognition and reward	132.64*	.11	-36.66 ^{ns}	.04	169.30*	.16
Commitment to organisation	282.72***	.23	230.08***	.21	52.64 ^{ns}	.02

Note. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$

Table 4.

Standardised coefficients (β) for predictors of psychological distress for team members, team leaders, and senior leaders

	Team members		Team leaders		Senior leaders	
Model 1 (non-work challenges):	-	-	-	-	-	-
Money	.21***	.19***	.15***	.13**	.17***	.13***
Family	.20***	.18***	.15**	.13**	.16***	.15**
Children	-.07***	-.06***	-.06 ^{ns}	-.05 ^{ns}	.01 ^{ns}	.02 ^{ns}
Caregiving	.02 ^{ns}	.00 ^{ns}	.03 ^{ns}	.01 ^{ns}	.04 ^{ns}	.02 ^{ns}
Relationships	.16***	.15***	.26***	.25***	.18***	.14***
Commuting	.10***	.08***	.04 ^{ns}	-.00 ^{ns}	.07 ^{ns}	.01 ^{ns}
Redundancy	.01 ^{ns}	-.02 ^{ns}	.04 ^{ns}	.00 ^{ns}	.06 ^{ns}	.01 ^{ns}
Moving to a new house	-.03 ^{ns}	-.01 ^{ns}	.03 ^{ns}	.06 ^{ns}	-.06 ^{ns}	-.05 ^{ns}
New job	.13***	.11***	.08*	.01 ^{ns}	.07 ^{ns}	.07 ^{ns}
Ill health	.22***	.22***	.22***	.22***	.30***	.28***
Bereavement	.03 ^{ns}	.03 ^{ns}	.03 ^{ns}	.03 ^{ns}	.07 ^{ns}	.08*
Victim of crime	-.09***	-.08***	-.18***	-.14***	-.10*	-.07 ^{ns}
Model 2 (work challenges):	-	-	-	-	-	-
Poor manager support	-	-.02 ^{ns}	-	.06 ^{ns}	-	-.01 ^{ns}
Weak relationships	-	.04 ^{ns}	-	.01 ^{ns}	-	.04 ^{ns}
Poor peer support	-	.05*	-	.02 ^{ns}	-	.05 ^{ns}
Work demands	-	.06***	-	.15***	-	.20***
Lack of staff consultation	-	.02 ^{ns}	-	-.03 ^{ns}	-	.01 ^{ns}
Lack of role clarity	-	.11***	-	.11**	-	.17***
Bullying	-	.05**	-	.09*	-	.07 ^{ns}
Lack of autonomy	-	.07***	-	.05 ^{ns}	-	.02 ^{ns}
R^2	.34***	.39***	.30***	.38***	.38***	.49***

Note. R^2 significance levels indicating p -value for F change

* $p < .05$. ** $p < .01$. *** $p < .001$

Table 5.

Indirect, direct, and total effects of leadership (leader vs. non-leader) on psychological distress and flourishing

Dependent variable	Total effect B (β)	95% bias- corrected bootstrap CI	Direct effect B (β)	95% bias- corrected bootstrap CI	Mediating variable	Indirect effect B (β)	95% bias- corrected bootstrap CI
Psychological distress	-1.93*** (-.12)	(-2.423, -1.440)	-2.28*** (-.14)	(-2.755, -1.865)	Work demands	.42*** (.03)	(.301, .544)
					Autonomy	-.20*** (-.01)	(-.290, -.128)
					Peer support	.14** (.01)	(.058, .234)
					Staff consultation	-.01 (-.00)	(-.049, .001)
Flourishing	1.71*** (.11)	(1.237, 2.183)	1.83*** (.12)	(1.411, 2.236)	Work demands	.03 (.00)	(-.072, .131)
					Autonomy	.10*** (.01)	(.051, .161)
					Peer support	-.26*** (-.02)	(-.441, -.120)
					Staff consultation	.02 (.00)	(-.004, .059)
Satisfaction with life	1.57*** (.11)	(1.151, 1.981)	1.59*** (.12)	(1.259, 1.928)	Work demands	-.02 (-.00)	(-.113, .051)
					Autonomy	.13*** (.01)	(.078, .200)
					Peer support	-.16*** (-.01)	(-.262, -.064)
					Staff consultation	.03 (.00)	(-.004, .076)

Note. Leader=1, Non-leader=0, CI = confidence interval, B = unstandardised regression coefficient, β = standardized regression coefficient

* $p < .05$. ** $p < .01$. *** $p < .001$

Figure 1.

Standardised coefficients (β) for multiple mediation pathways between leadership psychological distress

Note. c = Total effect, c' = Direct effect. Leadership (0=non-leader, 1=leader).

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Figure 2.

Standardised coefficients (β) for multiple mediation pathways between leadership and flourishing

Note. c = Total effect, c' = Direct effect. Leadership (0=non-leader, 1=leader).

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Figure 3.

Standardised coefficients (β) for multiple mediation pathways between leadership and satisfaction with life

Note. c = Total effect, c' = Direct effect. Leadership (0=non-leader, 1=leader).

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

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