

# Job Demands and Resources Predict Flourishing and Turnover Intentions Among Aotearoa New Zealand Employees during the Covid-19 Pandemic

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## Abstract

The Job Demands-Resources (JD-R) model suggests that job resources can buffer the detrimental effects of job demands. This remains untested in New Zealand within the context of the Covid-19 pandemic leaving researchers to question the importance of resources and whether the pandemic's impact means that job demands are not as easily buffered. In this study, we test a moderated mediation model with job demands predicting turnover intentions, flourishing as a mediator and job resources buffering. Using data collected across eight New Zealand organisations in 2021 (N=934), the current study supports the necessity for organisations to take stock of the risk factors associated with job-related demands, and work to provide employees with necessary psychosocial job resources to buffer their effect on flourishing and turnover.

**Keywords:** Covid-19, job demands, job resources, flourishing, turnover intentions, workplace wellbeing.

## Introduction

Since the Covid-19 pandemic began in 2020, workplace wellbeing has become an important focus for organisations globally (Wallace, 2022). Malinen et al (2020) stated that “while the long-term impacts of the Covid-19 pandemic are yet to be realised, there is no doubt that the wellbeing of many are and will be affected” (p. 17). Indeed, New Zealand evidence suggests wellbeing has suffered, including rising job burnout (Haar, 2021). These risks include, but are not limited to, social isolation, cognitive drain from work-home interference while working from home, greater work demands, and exposure to physical health threats (Wang et al., 2020; Green et al., 2020). Organisations have similarly faced challenges to quickly adopt work-from-home systems, manage employees in distributed teams, and build community and culture in a remote working model (Vyas & Nantapong, 2021; Green et al., 2020). An alternative view highlights the silver lining of the pandemic with some employees reporting greater flexibility and autonomy and associated productivity (George et al., 2022).

With countries, states, and districts moving away from Covid-19 mandates in 2022, researchers have investigated what a return to the workplace will look like post-pandemic, prompting conversations about those resources that should be available to employees to ease the transition (Appel-Meulenbroek et al., 2022). Walker (2020) stated “Aotearoa New Zealand is in a relatively

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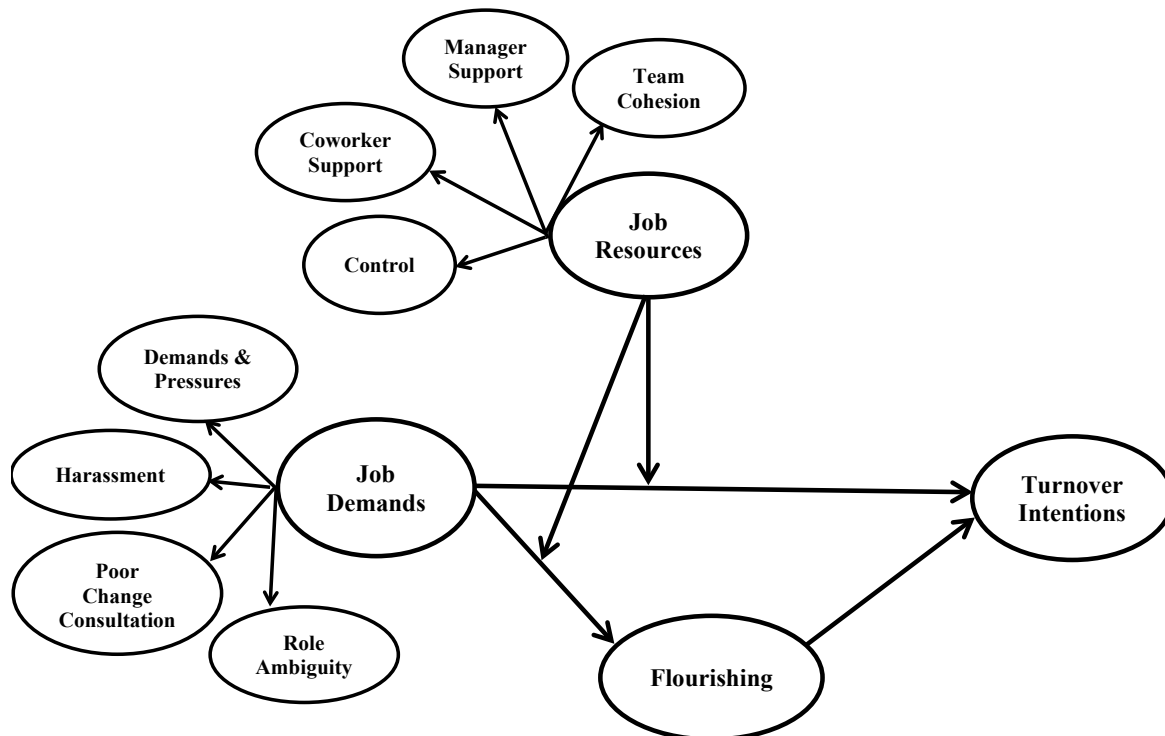
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unique position. It is part of a small group of countries and jurisdictions that have pursued a public health goal of elimination, rather than the mitigation or suppression of the disease” (p. 2). Further, the ongoing impact of the pandemic is yet to be realised and is likely to continue to negatively impact the psychological health of many, meaning that organisations must continue to actively identify and mitigate distress in the workplace (Gavin et al., 2020). Indeed, the first half of 2022 has brought new upheavals in the form of “the Great Resignation” with reports suggesting that close to 40 per cent of New Zealanders are searching for alternative employment (Bell, 2022). In a tight labour market, organisations are increasingly concerned with the attraction and retention of staff, making understanding turnover, and associated healthy workplaces important (Rangachari & Woods, 2020).

This study seeks to understand the demands placed on workers in a Covid climate, and the way this shapes employee wellbeing and turnover intentions. We draw on the Job Demands and Resources (JD-R) Model (Demerouti et al., 2001; Bakker & Demerouti, 2007) to explore how job demands (e.g., workload, poor consultation) and job resources (e.g., job control, social support) differentially predict wellbeing, specifically flourishing (e.g., Janse van Rensburg et al., 2018) and a key workforce outcome of turnover intentions. We include flourishing as a mediator and, following the JD-R model and building on the limited New Zealand evidence (e.g., Haar et al., 2019), we also explore job resources buffering job demands. This provides new insights into workplace challenges facing employees in a Covid world. Our study model is shown in Figure 1.

Figure 1. Study Model



## Turnover Intentions

## Turnover Intentions

Covid-19 has caused upheaval in labour markets globally, leading to falls in job opportunities in some sectors and sharp opportunity increases in others (Costa Dias et al., 2020). Current trends suggest ongoing volatility in the labour market, and that recovery of labour demand to pre-pandemic levels will not occur quickly (International Labour Organization, 2022). In New Zealand, the labour market is tight, and there are growing difficulties for employers in finding skilled and unskilled workers (Ministry of Business Innovation and Employment, 2022). Turnover intentions refer to employee thoughts about leaving their job and organisation (Haar et al., 2012) and managing turnover is important because there are a number of costs associated with it (Hinkin & Tracey, 2000), including employee departure (e.g., severance pay), recruitment costs for the replacement (e.g., agency fees), then selection costs and hiring costs (e.g., orientation, on-the-job training), not to mention lost productivity costs (e.g., peer disruption). Fundamentally, understanding turnover within the Covid-19 pandemic is vital for firms to alleviate the pressures around staff leaving.

## Flourishing

Our model also includes flourishing, which is a broad conceptualisation of wellbeing, described as functioning effectively and feeling good (Hone et al., 2015). There are numerous ways of conceptualising wellbeing (Linton et al., 2016), with the World Health Organization (2005) defining health in their Constitution as “a state of complete physical, mental and social well-being” (p. 1). Created from the study of positive psychology, the study of flourishing involves a ‘flip’ from the traditional study of ‘negative’ risk factors towards a focus on more positive ‘strengths’ approach (Levin, 2020). It is important to emphasise that flourishing is a multi-faceted concept and that the non-existence of physical or mental health issues on its own does not equate to flourishing. Under the key tenets of their flourishing model, Westerhof and Keyes (2010) note that whether someone is experiencing any mental illness does not determine the extent to which they are experiencing positive or negative mental health, termed *flourishing* if positive and *languishing* if negative. We follow their approach and measure positive mental health operationalised through how employees feel they are performing in key areas such as relationships, competence, optimism, self-esteem, and purpose (Diener et al., 2010).

## Job Demands-Resources Model

The JD-R Model (Bakker & Demerouti, 2007; Demerouti et al., 2001) provides a framework for understanding employee wellbeing and work behaviours through interactions between two occupational characteristics termed job demands and job resources. Researchers argue that no matter the type of work undertaken, there is always a certain balance/imbalance between these two characteristics which contribute to employee wellbeing and associated organisational outcomes. The JD-R model defines demands as aspects of the job (e.g., heavy workloads or role ambiguity) that, through requiring sustained effort, impose physiological or psychological costs on the employee. Job resources reflect positive workplace factors, and these might include autonomy or support (Haar et al., 2019). Research suggests that, if job demands are not buffered by appropriate job resources, the employee will experience constant overtaxing, potentially leading to negative

occupational outcomes like stress (Bakker & Demerouti, 2007) and higher turnover intentions (Rajendran et al., 2020). The JD-R model also acknowledges that stressful job demands can be mitigated through increasing job resources. For example, having greater work autonomy and control over one's work can enable employees to buffer the detrimental issues around workload. Thus, employees with high job resources achieve superior outcomes compared to employees with high job demands but low job resources (Haar et al., 2019). We detail each characteristic next.

## Job Demands

The Covid-19 pandemic forced governments to implement large scale interventions, such as lockdowns, mask wearing, and limitations on social gatherings, to flatten the pandemic curve and protect overtaxed healthcare systems. These life-altering measures had a resounding impact on the way workplaces operate. For example, due to Covid-19, workers faced unique job demands, including higher workloads leading to reduced wellbeing (Falco et al., 2021). For employees across a wide range of sectors, reviews suggest that working conditions pose greater demands now than prior to the pandemic (Wong & O'Connor, 2021). Workload issues might also relate to new ways of working, including hybrid work and associated technology challenges (Green et al., 2020). Here, we focus on four psychosocial sources: work demands and pressures, harassment, poor change consultation, and role ambiguity. It is important to consider these factors considering the added demands of the Covid-19 pandemic.

*1. Work demands and pressures* recognise that during the Covid-19 pandemic, many employees reported an increase in workloads and pressures (Wong & O'Connor, 2021). Research suggests that, due to the pandemic, this form of job demand has increased, with issues around greater workload, technology-stressors, poor working-from-home arrangements, and greater tensions and stress (Gilleen et al., 2021; Meyer et al., 2021).

*2. Workplace bullying/harassment* is an established problem in New Zealand, with research suggesting that almost one in five employees experience bullying (O'Driscoll et al., 2011). Importantly, that research showed bullying was detrimental to wellbeing and work outcomes. During Covid-19, studies were reporting a significant increase in workplace bullying/harassment (Iida et al., 2021), making it a pertinent factor to explore. Indeed, we include workplace bullying because it is associated with a variety of negative personal wellbeing and organisational outcomes (Neto et al., 2017).

*3. Poor change consultation.* Yue (2021) noted that change has been a critical aspect of organisations responses to Covid-19, and thus captures a critical element of job demands. Organisations need to be cognizant of the impact of change on their employees, and how to navigate detrimental effects by communicating clearly and consulting employees about change that will affect them. Research suggests that, during times of organisational change, individuals can experience job uncertainty and feelings of loss of control over their circumstances, and that these negative impacts are worsened when communication around the change is poor (Bordia et al., 2011).

4. *Role ambiguity* refers to when a job role is poorly defined, which is characterised by uncertainty regarding the requirements of one's role and function within the organisation (Karkkola et al., 2019). Role ambiguity influences employee wellbeing through the creation of work conflict (Karkkola et al., 2019) and encourages turnover intentions (Bakar et al., 2021).

We follow standard approaches to job demands and group all four dimensions together as job demands (e.g., Bakker et al., 2007; Bakker & Demerouti, 2007). Combined, we expect job demands will be positively related to turnover intentions as employees react to the detrimental effects of job demands and seek to leave their job (see Bakker et al., 2003; Bon & Shire, 2017). Further, such individuals are expected to be detrimentally affected in their personal wellbeing via reduced flourishing. Many studies capturing aspects of flourishing have shown job demands are detrimental (e.g., Balducci et al., 2011; Fernet et al., 2013). We posit the following:

*Hypothesis 1: Job demands will be a) positively related to turnover intentions and b) negatively related to flourishing.*

Flourishing is an “aspirational framework for thinking about human development and obligations” (Kleinig & Evans, 2013, p. 339) and, as such, acts as a useful guide for organisational policy in relation to workplace wellbeing. Research has demonstrated that levels of flourishing predict important organisational outcomes, such as job performance and reduced intention to leave (Redelinguys et al., 2019). In New Zealand, research prior to the pandemic categorised one in four New Zealanders as flourishing, and that this state was associated with other desirable factors, including physical health, work-life balance, and job satisfaction (Hone et al., 2015). Research suggests that Covid-19-related factors have impacted flourishing detrimentally, including pandemic fears (Sürücü et al., 2021). Interestingly, other research suggests that the Covid-19 pandemic may have prompted positive development of flourishing, such as positively impacting on environmental mastery, personal growth, and social growth/activism (Graham & Eloff, 2022). Findings like this suggest that people may be finding ways to adapt and flourish despite their new circumstances (Paz et al., 2022).

Overall, we also explore whether flourishing will shape turnover intentions, given evidence pre-Covid-19. For example, Janse van Rensburg et al (2017) demonstrated that flourishing was negatively related to turnover intention. Coetzee and Oosthuizen (2017) found flourishing mediated the effects of bullying (one of our job demand factors) on turnover intentions, and we expect similar mediation effects from flourishing here on job demands on turnover intentions. In this regard, employees with high flourishing – even in the context of job demands – may be better able to fight off any intention to leave their job. Consequently, we include flourishing because it not only captures a key wellbeing dimension but also consider its role in employee turnover. Researchers have found that flourishing is negatively related to turnover intention (Rothmann & Redelinguys, 2020; Coetzee & Oosthuizen, 2017) and we test this here in our New Zealand Covid-19 context. We suggest higher flourishing (e.g., greater competence, optimism, and purpose etc.) will enable employees to get more out of their work, making them more desirable and, thus, make them less likely to leave. We suggest highly flourishing employees will be less likely to intend to leave their job (turnover intentions) because they are especially enjoying their work. We posit the following:

*Hypothesis 2: Flourishing will be negatively related to turnover intentions.*

*Hypothesis 3: Flourishing will mediate the influence of job demands on turnover intentions.*

## **Job Resources**

It is important to note that not all changes brought on by the pandemic have resulted in negative outcomes. While several novel job demands have been introduced throughout the Covid-19 pandemic, research has identified a variety of job resources that may help to buffer these in line with the JD-R model (Bakker & Demerouti, 2007; Demerouti et al., 2001; Haar et al., 2019). In the JD-R model, job resources refer to aspects of the job (physical, psychological, social, or organisational) that do one or more of the following: (1) functions in a way that aids work-goal achievement, (2) reduces job demands and associated costs (both physiological and psychological); (3) stimulates personal growth, learning and development (Bakker & Demerouti, 2007; Demerouti et al., 2001). We examine four job resources in this study: manager support, co-worker support, job control, and team cohesion.

*1. Manager support.* Support from supervisors is associated with improved organisational and personal wellbeing outcomes, including health (Payne et al., 2018). Managerial support commonly utilises employee perceptions of their manager as valuing and caring for their wellbeing and this is negatively related to turnover intentions (Eisenberger et al., 2002). Research suggests that, under pressure from the Covid-19 pandemic, the role of managers is instrumental in aiding employee wellbeing (Mihalache & Mihalache, 2022).

*2. Co-worker support.* Social support at work can be extended beyond supervisor/manager, and we focus on the co-worker. During Covid-19, social support from co-workers had been important in protecting the wellbeing of employees (Meyer et al., 2021). Other benefits of social support from co-workers during Covid-19 included reduced levels of fear around Covid-19 (Fronda & Labrague, 2022).

*3. Job control* refers to the “ability to use discretion over how someone does their job” (Haar & Spell, 2009, p. 1831), which leads to a feeling of control over the work being done. This job resource was especially useful during Covid-19, with changes to working-from-home, meaning job control positively shaped wellbeing (Becker et al., 2022). While linked to turnover intentions pre-Covid-19 (e.g., Haar & Spell, 2009), job control during the pandemic is linked positively to job satisfaction (Chan et al., 2021).

*4. Team cohesion* refers to the complex interrelated adaptive cognitions, shared behaviours, and attitudes that contribute positively to a team’s performance, such as strong norms around communication and high levels of trust (Delice et al., 2019). During Covid-19, teams may have experienced shifts in their team cohesion that were detrimental due to increased ambiguity (Wildman et al., 2021) or isolation through physical separation. However, teams may have also become more cohesive as employees turn to their team members to provide support and stability during times of uncertainty. Spell et al. (2011) suggests that teams can be especially useful in challenging times, and this applies well to our Covid-19 setting. Further, New Zealand research

has shown that team cohesion is positively associated with job satisfaction and negatively related to turnover intentions, supporting its inclusion in this study (Brougham & Haar, 2019).

Comparable to our approach towards job demands, we, again, group all four dimensions together as a global job resources construct (e.g., Bakker et al., 2007; Bakker & Demerouti, 2007). Studies show that the availability of job resources, such as support from colleagues and supervisors, autonomy, and job control, improve important organisational outcomes (e.g., Othman et al., 2021), including turnover intentions (Bakker et al., 2003; Scanlan & Still, 2019) and wellbeing (Agarwal et al., 2020; Xanthopoulou et al., 2012). Thus, job resources also link well with our outcomes. We posit the following:

*Hypothesis 4: Job resources will be a) negatively related to turnover intentions, and b) positively related to flourishing.*

## **Buffering Effects of Job Resources**

Beyond the direct effects of job resources, they also can function to reduce job demands and associated costs (Bakker & Demerouti, 2007; Demerouti et al., 2001), and thus act as a ‘buffer’ to the detrimental effects of job demands, especially when job demands are strong (Bakker et al., 2005; Bakker et al., 2007). For example, research conducted during the Covid-19 pandemic suggests that social support can help to buffer the detrimental effects of low individual resilience on mental health (Li et al., 2021). Interestingly, research suggests that this buffering effect may be most beneficial when both job demands and resources are strong (Bakker et al., 2010; Haar et al., 2019). In effect, when job demands are strong and workers face additional pressures (e.g., increased work demands, bullying), the ability to draw on stronger resources (e.g., a cohesive team, supportive manager, or having strong job autonomy) can provide the needed resources which, then, enables employees to retain their flourishing levels and be less inclined to considering quitting their job. Theoretically, under the JD-R model, it is expected that job resources will buffer job demands (see Haar et al., 2019) and moderate the effect of job demands on turnover intentions and flourishing. Haar et al. (2019) argue “that the interaction between demands and resources has a critical role” (p. 266), whereby those with extra resources can better manage their demands, and thus are expected to report superior flourishing and lower turnover intentions. In effect, job resources provide additional benefits beyond direct effects, being able to buffer job demands and their detrimental effects. Under the JD-R theory, high levels of job resources can be particularly beneficial, especially regarding countering the effects of strong job demands.

Finally, we follow contemporary practice (e.g., Ghafoor & Haar, 2020) and combine the mediation and moderation analysis and test a moderated mediation model. Ultimately, this allows us to explore the indirect effect of job demands on turnover intentions, including flourishing as a mediator, across levels of our moderator job resources. Given empirical evidence showing the benefits of job resources as moderating the effects of job demands (e.g., Haar et al., 2019), we suggest the indirect effect of job demands will be lower as job resources increase. In effect, job resources are expected to operate as a boundary condition, changing the indirect effect of job demands on turnover when different levels of job resources are considered. We posit the following:

*Hypothesis 5: Job resources will interact with job demands towards a) turnover intentions and b) flourishing, buffering detrimental effects.*

*Hypothesis 6: The indirect relationship of job demands on turnover intentions, through flourishing, will be moderated by job resources. Such that the indirect effect of job demands becomes less detrimental as job resources strengthens (moderated mediation).*

## Method

### *Participants and Sample*

Data was collected as part of the Umbrella Wellbeing Ltd. workplace wellbeing assessment, which targets different sized New Zealand organisations across varied industries and roles. From a total of eight organisations, data was received from 943 respondents in 2021. We focus on 2021 because this is the height of New Zealand working through the Covid-19 pandemic. These eight organisations produced a range of respondents from small (n=22) to large (n=493). Participation in the survey is voluntary and all data was anonymised prior to data analysis.

Overall, our sample showed respondents were more likely to be female (62.5 per cent), followed by males (36.8 per cent) and gender diverse (0.7 per cent). Respondents represented a wide age range: under 20 years (0.6 per cent), 20-29 years (17.8 per cent), 30-39 years (31.7 per cent), 40-49 years (24.0 per cent), 50-59 years (19.6 per cent), 60-64 years (4.1 per cent), and 65 years plus (2.3 per cent). By ethnicity, the majority were New Zealand Europeans (64.2 per cent), followed by Māori (11.9 per cent) and Māori/New Zealand European (9.0 per cent). The rest were across a range of other minorities (e.g., Asia, Pacifica, etc.).

### *Measures*

In places we use single-item measures because this aligns with arguments around respondent fatigue (e.g., Gao et al., 2021), and reflects a common practice used within meta-analytic studies (Wanous et al., 1997).

**Job demands** were measured using four measures from Cousins et al. (2004), coded 1= strongly disagree, 5= strongly agree. The measures were: (1) *work pressures*, 3-items, sample “I have to work very intensively to meet deadlines” ( $\alpha = .75$ ), *unclear roles*, single-item, “I am not clear what my duties and responsibilities are”, *lack of consultation*, single-item, “Staff are never consulted about change at work”, and *workplace harassment*, single-item, “I am subject to personal harassment in the form of unkind words or behaviour”. Again, we conducted a higher-order Confirmatory Factor Analysis to test the four dimensions loading on a single factor.

This model was also good fit to the data:  $\chi^2(df) = 67.9(11)$ , Comparative Fit Index (CFI) = .94, root-mean-square error of approximation (RMSEA) = .07, and standardised root mean residual (SRMR) = .05. We compared this with a single measure (all items loading on a single factor) and this was a significantly ( $p < .001$ ) poorer fit to the data:  $\Delta\chi^2(\Delta df) = 106.5(0)$ , CFI = .84, RMSEA = .13, and SRMR = .08.



**Job resources** were measured using four measures from within the literature, coded 1= strongly disagree, 5= strongly agree. Three measures from Cousins et al. (2004): (1) *control*, 3-items, sample “I have choice in deciding how I do my work” ( $\alpha = .79$ ), *support – managerial*, 3-items, sample “I can rely on my line manager to help me out with a work problem” ( $\alpha = .85$ ), *support – co-worker*, 2-items, sample “I get help and support I need from colleagues” ( $\alpha = .76$ ). Finally, we included a team factor based on Campion et al. (1993) and Spell et al. (2011), which we called *team cohesion*, 3-items, with sample items being “There are high levels of trust in my team” and “Generally, there is good communication between team members” ( $\alpha = .88$ ). Given our focus on global job resources, we conducted a CFA as a higher-order construct with the four dimensions loading on a single factor. This model was a good fit to the data:  $\chi^2(df) = 136.3(43)$ , CFI=.98, RMSEA=.05, and SRMR=.05. We compared this with a single measure (all items loading on a single factor) and this was a significantly ( $p < .001$ ) poorer fit to the data:  $\Delta\chi^2(\Delta df) = 1563.7(1)$ , CFI=.66, RMSEA=.20, and SRMR=.12.

**Flourishing** was measured using six items from Diener et al. (2010), coded 1= strongly disagree, 7= strongly agree. Sample items included “I lead a purposeful and meaningful life”, “I am engaged and interested in my daily activities”, and “I am optimistic about my future” and this scale has been confirmed in New Zealand (Hone et al., 2014). Given the newness of the measure, a CFA (principal components, direct oblimin) was conducted, with the six items loading onto a single factor, with factor loadings all above 0.7 (.705-.826), with an eigenvalues greater than one (3.580), accounting for sizeable amounts of the variance (60.0%), with good reliability ( $\alpha = .86$ ).

**Turnover intentions** were measured with a single-item “How likely is it that you will leave your job in the next 6 months?”, with a 10-point scale (1=not at all, 10=almost certainly). The turnover literature often uses a single-item measure (e.g., Haar, 2004).

**Control Variables.** We controlled for two factors that have been found to influence turnover. Given there is meta-analysis supporting employee tenure benefiting work outcomes (Ng & Feldman, 2010), including turnover (Griffeth et al., 2000), we controlled for Tenure (in bands, 0=less than 12 months, 1=1-3 years, 2=3-5 years, 3=5-10 years, 4=10-15 years, 5=more than 15 years). Next, we controlled for Contracts ending to capture respondents who might be coming to the end of a current work contract because external factors can play a key role (Tepper, 2000). We asked, “Are you likely to leave because your contract is ending?” and this was coded 1=yes, 0=no. Finally, given our focus on eight organisations, we conducted ANOVA on the dependent variable (turnover intentions) to explore potential differences across the eight participating organisations. This showed that organisations 8 and 5 were significantly higher:  $F(7, 935) = 5.231$ ,  $p < .001$ , and so we controlled for organisation using dummy variables for both organisations.

### *Measurement Models*

All study measures were confirmed using CFA with AMOS (version 28) with the following goodness-of-fit indices: (1) CFI  $\geq .95$ , (2) RMSEA  $\leq .08$ , and (3) SRMR  $\leq .10$ .

Overall, the hypothesised measurement model was an excellent fit for the data:  $\chi^2(df)=795.9(248)$ , CFI=.94, RMSEA=.05, and SRMR=.06. Two alternative CFA models were tested, and all models were significantly a poorer fit (all  $p < .001$ ) to the data (Hair et al., 2010). These models were (1) a model with job demands and job resources were not measured by higher-order constructs:  $\Delta\chi^2(\Delta df)=1955.0(1)$ , CFI=.73, RMSEA=.10, and SRMR=.09, and (2) a model whereby flourishing and turnover were combined:  $\Delta\chi^2(\Delta df)=203.0(2)$ , CFI=.92, RMSEA=.06, and SRMR=.08.

### Analysis

Hypotheses 1-6 were tested in SPSS (version 28) using the PROCESS 4.0 macro, with control variables included in all models. Analysis included bootstrapping (5,000 times) and provided confidence intervals. Model 8 was used to test for moderation and moderated mediation effects. We also used model 4 to determine mediation effects, including the direct and indirect effects of job demands when flourishing is included in the model. The inclusion of indirect effects provides a useful confirmation of mediation effects, with bootstrapping providing additional confidence in mediation effects (Hayes, 2009). The PROCESS macro also calculates the index of moderated mediation (Hayes, 2015), which is a parameter assessing whether the indirect effect of job demands on turnover intentions through flourishing significantly vary by job resources. PROCESS provides additional details on the indirect effects at -2SD, Mean, and +2SD of the moderator (here job resources). The interaction analysis had the independent variable and moderator mean centred.

## Results

Descriptive statistics for the study variables are shown in Table 1.

**Table 1. Correlations and Descriptive Statistics of Study Variables**

Variables	M	SD	1	2	3	4	5	6
1. Job Tenure†	2.08	1.64	--					
2. Contract Ending	.036	.187	-.06	--				
3. Job Demands	2.28	.63	.09**	-.01	--			
4. Job Resources	3.97	.59	-.01	-.05	-.60**	--		
5. Flourishing	5.58	.81	.06	.02	-.21**	.33**	--	
6. Turnover Intentions	3.14	2.64	-.02	.13**	.44**	-.42**	-.20**	--

N=943. \* $p < .05$ , \*\* $p < .01$ . †=job tenure in bands, see measures section for specifics

Table 1 shows that all key study measures are significantly correlated in the expected direction (all  $p < .001$ ).

**Table 2. Direct, Mediation, Moderation, and Moderated Mediation Results**

Variables	Flourishing		
	$\beta$ (SE)	Confidence Intervals	p-value
<i>Controls:</i>			
Tenure	.03(.02)	LL= -.00, UL= .06	p= .0653
Contracts Ending	-.04(.14)	LL= -.32, UL= .23	p= .7591
Organisation #5	.56(.14)	LL= .30, UL= .83	p< .0001
Organisation #8	.11(.10)	LL= -.09, UL= .31	p= .2898
<i>Direct Effect:</i>			
Job Demands	-.30(.04)	LL= -.39, UL= -.22	p< .0001
<i>Moderator:</i>			
Job Resources	.49(.05)	LL= .39, UL= .60	p< .0001
<i>2-Way Interaction:</i>			
Job Demands x Job Resources	-.18(.06)	LL= -.29, UL= -.07	p= .0013
Total R <sup>2</sup>	.14 (F=22.2010, p< .0001)		
Variables	Turnover		
	$\beta$ (SE)	Confidence Intervals	p-value
<i>Controls:</i>			
Tenure	-.05(.05)	LL= -.14, UL= .04	p= .2451
Contracts Ending	1.81(.42)	LL= .98, UL= 2.64	p< .0001
Organisation #5	-.37(.41)	LL= -1.17, UL= .44	p= .3733
Organisation #8	.24(.30)	LL= -.35, UL= .84	p= .4260
<i>Direct Effect:</i>			
Job Demands	1.83(.13)	LL= 1.58, UL= 2.08	p< .0001
<i>Mediator:</i>			
Flourishing	-.24(.10)	LL= -.43, UL= -.04	p= .0165
<i>Direct Effect (with mediator):</i>			
Job Demands	1.19(.15)	LL= .90, UL= 1.49	p< .0001
<i>Moderator:</i>			
Job Resources	-.90(.17)	LL= -1.23, UL= -.57	p< .0001
<i>2-Way Interaction:</i>			
Job Demands x Job Resources	-.42(.17)	LL= -.75, UL= -.09	p= .0124
Index of Moderated Mediation	.04(.02)	LL= .00, UL= .10	p= .0466
Total R <sup>2</sup>	.26 (F=40.7910, p< .0001)		

Table 2 shows that flourishing is significantly negatively related to turnover intentions supporting Hypothesis 1. Further, job demands are significantly positively related to turnover intentions and negatively related to flourishing, supporting Hypothesis 2a and 2b. The addition of flourishing in the model predicting turnover intentions showing evidence of partial mediation supporting Hypothesis 3. Importantly, the indirect effect of job demands on turnover intentions remain significant [.11(.04), LL= .04, UL= .20,  $p = .0028$ ] providing support for partial mediation effects only. This is also referred to as joint significance (Hayes, 2009). Job resources are significantly positively related to flourishing and negatively related to turnover intentions, supporting Hypothesis 4a and 4b. Further, job resources interact significantly with job demands towards flourishing and turnover intentions, supporting Hypothesis 5a and 5b. Finally, the index of moderated mediation is supported, supporting Hypothesis 6. We graph the significant interactions to aid our interpretation.

**Figure 2. Interaction Effect of Job Resources on Job Demands towards Flourishing**

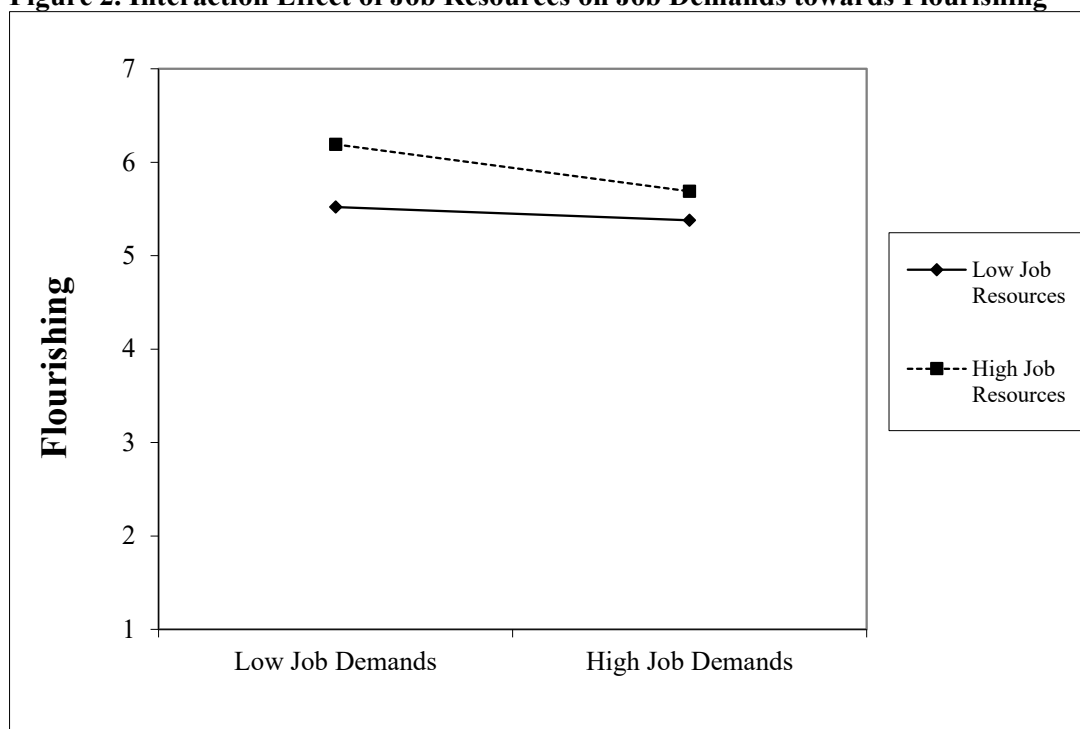


Figure 3. Interaction Effect of Job Resources on Job Demands towards Turnover Intentions

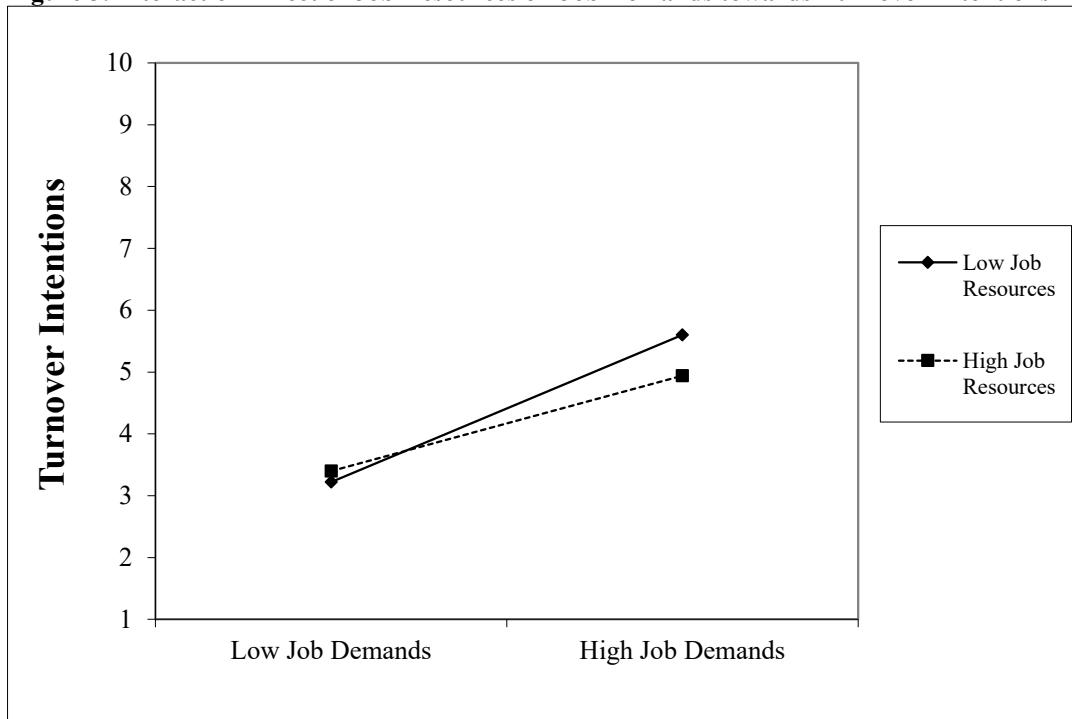


Figure 4. Indirect Effect of Job Demands on Turnover Intentions Through Flourishing Conditional on Job Resources

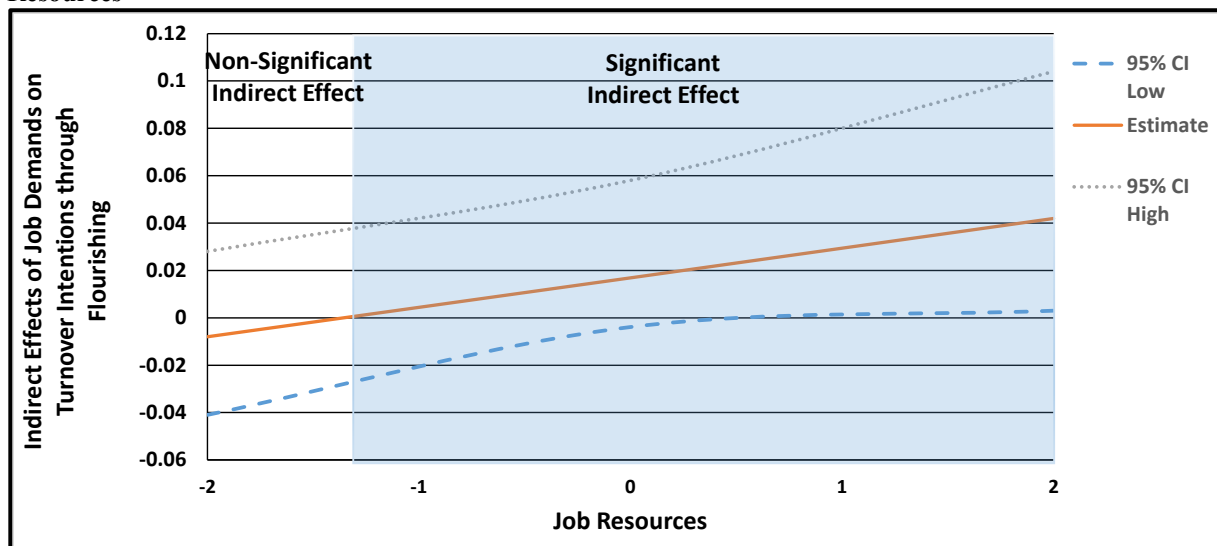


Figure 2 shows that, at low levels of job demands, the highest levels of flourishing occur in employees with high job resources. When compared to employees with high job demands, these effects are largely maintained. Employees with low job resources and high work demands report similarly low levels of flourishing as employees with low job resources and low job demands. Those with high job resources do report lower flourishing when comparing low job demands with high job demands, but this is still significantly higher than those employees with low job resources

and high job demands. Thus, job resources buffer the detrimental effects of job demands, supporting our hypothesis.

Figure 3 shows that, at low levels of job demands, turnover intentions are similar for employees with low or high job resources. At high job demands, however, all employees in this category report significantly higher turnover intentions, with employees with low job resources reporting higher turnover compared to employees with high job resources. Thus, job resources buffer the detrimental effects of job demands on turnover intentions, supporting our hypothesis.

Finally, Figure 4 shows significant moderated mediation effects. We illustrate these effects following Wayne et al. (2017), whereby we probe the conditional indirect effects, which is a standard common approach (e.g., Ghafoor & Haar, 2020; Haar et al., 2021). We examined the magnitude and significance of the indirect effects at three-levels of the moderator (job resources): -2SD, Mean, and +2SD (95 per cent confidence intervals). At -2SD, the indirect effect of job demands on turnover intentions vis-à-vis flourishing is non-significant ( $\beta = -.01(.02)$ ,  $p = .3096$  [LLCI =  $-.04$ ; ULCI =  $.03$ ]), and similarly so at the Mean ( $\beta = .02(.02)$ ,  $p = .1529$  [LLCI =  $-.00$ ; ULCI =  $.06$ ]). However, at +2SD the indirect effect of job demands is significant ( $\beta = .04(.02)$ ,  $p = .0491$  [LLCI =  $.00$ ; ULCI =  $.10$ ]). This shows that, as the level of job resources increases, the indirect effect of job demands on turnover intentions, through flourishing, increases not decreases as hypothesised. The indirect effect only becomes significant at -1.3SD of job resources.

From the control variables, only organisation five is significantly related to flourishing ( $\beta = .56(.14)$ ,  $p < .0001$  [LLCI =  $.30$ ; ULCI =  $.83$ ]) and towards turnover intentions, only contract ending is significant ( $\beta = 1.81(.42)$ ,  $p < .0001$  [LLCI =  $.98$ ; ULCI =  $2.64$ ]). Overall, the flourishing model is significant ( $F = 22.2010$ ,  $p < .0001$ ) and accounts for a modest amount of variance (14 per cent), while the turnover intentions model is significant ( $F = 40.7910$ ,  $p < .0001$ ) and accounts for a larger amount of variance (26 per cent).

## Discussion

The Covid-19 pandemic created upheavals for workplaces globally, bringing about an increase in job demands for many (Wang et al., 2020). Given the tight labour market in New Zealand (Ministry of Business Innovation and Employment, 2022), it is important for employers to understand the critical role that demands, resources, and wellbeing, play on employee retention. The present study utilised the JD-R model of stress (Bakker & Demerouti, 2007; Demerouti et al., 2001) as its framework to examine the extent to which workplaces provide poor working conditions (i.e., high job demands) and conversely, provide sufficient resources to aid employees in managing these work challenges. We included the role of employee flourishing as a mediator because the literature has acknowledged wellbeing impacts from Covid-19 (e.g., Graham & Eloff, 2022; Paz et al., 2022; Sürücü et al., 2021). Overall, consistent with the JD-R model, and aligning with the literature (e.g., Bakker et al., 2003; Balducci et al., 2011; Bon & Shire, 2017; Fernet et al., 2013), we found that job demands appear detrimental for flourishing and turnover intentions.

Beyond the established direct effects, we, importantly, tested and found support for job resources moderating the detrimental relationship with job demands. In our study, resources buffered job

demands which provides an important contribution to the literature (Bakker et al., 2005; Bakker et al., 2007). While Haar et al. (2019) found this in multiple samples, including New Zealand employees, these samples were all surveyed pre-Covid-19. Thus, we find that, in the Covid-19 context, job resources appear to be especially beneficial and helpful in negating the damage done by job demands. This is both theoretically and practically important because it elucidates one way for organisations to maximise employee flourishing and retention: by providing more resources. For example, organisations might offer manager training to better support employees and offer greater job autonomy and control to their teams. Further, providing team building resources to encourage team cohesion and co-worker support would also be beneficial.

In examining the interaction effect towards flourishing, we find that participants with low job demands, and high job resources, report the highest flourishing, which aligns with the JD-R model. While flourishing levels are lower at high job demands, flourishing is still significantly higher among those with high job resources, also aligning with the JD-R model (Haar et al., 2019). However, towards turnover intentions, at low levels of job demands there is no difference in turnover intentions across low or high job resources. Again, at high job demands, we find that turnover intentions are also high, but is significantly less so for those with high job resources. These findings align with previous research suggesting that the buffering effects of job resources are especially significant when job demands are high (Bakker et al., 2010).

However, while the two-way interactions supported the valuable role of job resources in combination with job demands, the evidence was opposite in our moderated mediation. This showed that, when job resources were stronger, the indirect effect of job demands on turnover intentions through flourishing also became stronger. Moderated mediation models are important to test because they can produce incredibly complex and alternative effects (e.g., Ghafoor & Haar, 2020). The findings here suggest that, in this specific combination, job resources may not be as beneficial as the JD-R theory suggests (Bakker et al., 2010). We find that when flourishing is considered towards turnover intentions, job resources – while directly negatively related – act as a mechanism that makes job demands more influential as the levels of job resources increases. This is contrary to JD-R theory and opposite to other empirical studies (e.g., Haar et al., 2019). A reason for this might be the inclusion of flourishing as a mediator, which is negatively related to turnover intentions. Ultimately, job resources act as a boundary condition and creates an indirect effect from job demands that is opposite the theory and the two-way moderating effects found towards both flourishing and turnover intentions. It might be that, when the beneficial effect of flourishing is also included in the model, the potential for job resources to buffer job demands changes, creating an opposite effect than typically found. We encourage further exploration of such models using the JD-R approach.

### *Implications and Recommendations for Practice*

As workplaces continue to navigate employee wellbeing and retention challenges from the Covid-19 pandemic, and employees face novel and compounding job demands, employers must know how to mitigate the negative effects of these on employees. The findings of the current research support the necessity for organisations to take stock of the risk factors associated with job-related demands and work to provide employees with adequate job resources to, not only directly improve wellbeing and retention, but to also buffer job demands. For organisations to achieve these goals,

and build psychologically healthy and thriving workplaces, we recommend that psychosocial risks (e.g., work demands, poor change consultation, role ambiguity, and harassment) are proactively identified at the organisational- and team-level, perhaps following standards set by the ISO 45003:21 global standard for psychosocial safety in the workplace (International Organization for Standardization, 2021).

The ISO 45003:21 provides standardised guidance for organisations to manage psychosocial risks and promote wellbeing at work. The standard details practical actions that organisations can take with regards to identifying and assessing job demands and job resources in the workplace, including consultation with employees through surveys, interviews or group discussions and analysing work tasks and schedules (among other recommendations). Once risks are identified, the standard provides a process for assessing these risks, including providing information about the potential harm, prioritising hazards based on level of risk, and providing information on opportunities for improvement. Further, the standard also notes the importance of establishing, providing, and maintaining resources for the management of psychosocial risks (including job demands) in the workplace, suggesting that organisations consider all types of support specific to its operation, including human, financial, and technological.

Following proactive identification, steps must be taken to maximise job resources, and minimise job demands that contribute to poor wellbeing and high turnover; thereby creating thriving employees, organisations, and communities. Given that Covid-19 has created many workplace changes, enabling employee control can be especially beneficial, with Bilotta et al. (2021) encouraging the reduction in employee monitoring in favour of increasing autonomy while working from home. Indeed, Blumenfeld et al. (2020) have noted that employee surveillance increased during the Covid-19 pandemic, but potentially has privacy concerns around employees conducting work in their private space.

### *Limitations*

Limitations include the use of cross-sectional data meaning that causal relationships cannot be inferred. The use of mediation in studies with cross-sectional data is less ideal although was beyond the scope of the data collection method. Such approaches are typical when it is not possible to get respondents to repeat parts of a survey later in time. Future research might want to capture flourishing and turnover intention data using time-lagged data (see Podsakoff et al., 2003) to strengthen the mediation tests in our model. Further, the data examined in the current study was collected as part of a wider wellbeing assessment tool designed for use in a commercial context, which necessitated truncated versions of some variable measures. While measures for job demands and job resources used the United Kingdom Health and Safety Executive Management Standards tool (Cousins et al., 2004), there are only selected items for some factors (e.g., harassment). While it would have been ideal to include the full scales for every variable, a trade-off was made between the comprehensiveness of the scales used, and brevity of the overall wellbeing assessment.

Third, data is collected through organisations approaching the research company in the interest of assessing the wellbeing of their people. Thus, participants are somewhat self-selecting, and caution must be taken when generalising the results to the wider New Zealand (organisational) population. Finally, we acknowledge that, in 2021, New Zealand experienced a Covid-19 (Delta variant)



outbreak, which may have impacted respondents and responses to the study. However, such is the nature of research in a global pandemic. Future research would benefit from replicating these findings through utilising longitudinal data collection methods to add confidence to the directionality of relationships, including using expanded measures. However, we suggest the data is sufficient for testing the model we proposed and the large sample size (n=943), different sized firms, and wide representation across gender, age, and ethnicity, makes the sample broadly representative of many New Zealand workplaces.

## Conclusion

There is a degree of uncertainty as to what the “new normal” of work will look like in New Zealand and globally. As businesses and borders have re-opened and the after-effects of the pandemic continue to disrupt, our study finds that the provision of job resources (e.g., control, support etc.) appears key to enabling the New Zealand workforce to manage their wellbeing and reduce turnover intentions during a pandemic. Our findings provided strong support for the JD-R model, confirming the detrimental effects of job demands on turnover intentions and flourishing, and both the direct and buffering effects of job resources in these relationships. The current research confirmed that it is of continuing importance to ensure that employees are provided with the job resources necessary to buffer job-related demands and sets out several practical actions that leaders and organisations may take in pursuit of this goal.

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