

# Enhancing Workplace Mental Health During and Post-Covid-19

Final report

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# **Executive Summary**

COVID-19 has changed the way we work. While Australia in general, and Western Australia (WA) in particular, has managed the effects of the pandemic well, COVID-19 continues to impact workers in this state. More Australians are working from home, with 41 per cent of workers working from home at least once a week in February 2021. Further snap lockdowns in 2021 have shown that the effects of the pandemic are far from over.

This research has provided valuable insights into factors that promote the positive mental health and well-being of employees working remotely or flexibly in the post-COVID-19 environment. A strength of the study is the two-phased approach, combining quantitative and qualitative data. The quantitative findings suggest that a positive psychosocial safety climate (PSC), trust and social support are associated with less stress, good mental health and well-being, and satisfaction with life, job, and career. Similarly, the qualitative findings indicate that a positive PSC is influenced by leadership, support, communication, and trust throughout the pandemic to support well-being with remote working. The high-level organisational and managerial factors that promote good mental health and well-being, impact across the work system at all levels to support employees. This study also found that the capabilities with technology and tasks, a relational management style and support by the organisation, line-manger and team, and personal circumstances all contribute to positive mental health outcomes.

Finally, this report concludes with general recommendations to improve the experience of remote working and for supporting mental health and well-being directly from the data. These have been grouped broadly to reflect aspects of the work system (individuals, team, managers, organisation, task, and technology).

#### **RECOMMENDATIONS**

- 1. At an individual level, employees may consider working on a daily structured schedule and routine that enables them to be productive. Building in time to disconnect from work, and to exercise. We also promote employees to connect with co-workers for social support.
- 2. At a team level, work teams could consider what would work best for their team, such as scheduling regular catchups and check-ins, being inclusive through peer support.
- Managers with supervision responsibilities may want to avoid micro-managing their staff and be
  more supportive. Providing clear communication and setting realistic objectives based on
  individual employee personal circumstances to demonstrate genuine support.
- 4. At an organisational level, the leadership team could build culture of trust and preparedness to flexible working conditions. Organisations should lead policy changes to accommodate positive mental well-being by creating a safe environment and career support.

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### 1.0 Introduction

# 1.1 Background

COVID-19 has changed the way we work. While Australia in general, and Western Australia (WA) in particular, has managed the effects of the pandemic well, COVID-19 continues to impact workers in this state. Knowledge workers have experienced more working from home. For some organisations, there was enforced working-from-home from March to May 2020. Further snap lockdowns in 2021 have shown that the effects of the pandemic are not over. Lockdowns aside, more Australians are working from home, with 41 per cent of workers working from home at least once a week in February 2021 (ABS, 2021), this figure being roughly double that for a year earlier. Issues surrounding working from home are therefore increasingly important for knowledge workers in WA. The current research explored workplace mental health and well-being in the state during the COVID-19 restrictions. This includes factors impacting employees' well-being, whether positively or negatively, at a number of levels: organisational, line management and individual (while also recognising the impact of the wider regulatory, social and economic climate). It also examined issues which can arise from remote work (working from home or a location other than the employer's primary place of business), notably isolation, workload, work-life balance, work-family conflict, and technology-related issues.

This study is significant in three main ways. Firstly, there is a likelihood of future lockdowns. Secondly, more employees are working from home for at least part of the week, even when not required by COVID-19-related restrictions. Many employees want to continue working remotely, and a number of organisations are moving towards extending their flexible working arrangements beyond the pandemic (Colley & Williamson 2020; ACTU 2021). Thirdly, there is a mental health epidemic currently occurring in Australia (Carter & Stanford 2021) affecting many workers. Poor mental health outcomes can be a consequence of exposure to psychosocial hazards – work-related factors (e.g. workload, lack of supervisory support) which can affect workers' psychological well-being. These affect knowledge workers working remotely in specific ways.

This report comprises findings from two sequential research phases. Firstly, two quantitative surveys of 719 Australian workers are presented. This phase of the research aimed to identify factors that promote the positive mental health and well-being of employees. Secondly, a qualitative study involving interviews with 39 workers and managers who had experienced work during the various periods of COVID-19 lockdowns is described. This qualitative phase of the research allowed the researchers to delve deeper into the relevant issues, by getting remote workers and managers to explain their own experiences, in their own words. By combining these two aspects of the research we were able to build a fuller picture of the effect of COVID-19 on workplace mental health. A timeline of significant COVID-19 events in relation to this project is illustrated in Figure 1.

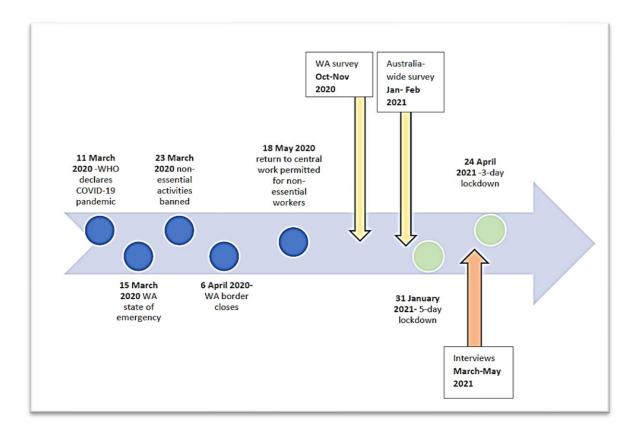


Figure 1 Timeline of significant COVID-19 events and this project

As the literature scan reported below illustrates, factors that influence positive well-being and mental health amongst flexible and remote workers act across the breadth of the work system, including organisational, line-manager and employee level factors. The project objectives for this study reflects this work systems view:

- 1. To identify organisational-level factors that promote the positive mental health and well-being of employees working remotely or flexibly in the post-COVID-19 restrictions period.
- 2. To identify line-manager and individual-level factors that enhance the positive mental health and well-being of employees working remotely or flexibly in the post-COVID-19 restrictions period.
- 3. To explore effective organisational, line-manager and employee strategies for promoting effective remote working in the post-COVID-19 restrictions period.
- 4. To develop best practice guidelines for organisations and employees for the management of psychosocial risk factors and the promotion of positive mental health and well-being in the post-COVID-19 period and beyond.

The present report addresses research objectives 1-3 (a further report will address objective 4).

This report is arranged as shown in Figure 2. The next section summarises the current literature on remote working and its impact on mental health and well-being for people in the work system. The methods and findings of the quantitative, online surveys are then presented in section 2.0. Attention is then turned towards the qualitative part of the research in section 3.0, where the method and findings of the interviews with managers and employees are explained. The report concludes with a discussion (section 4.0) of the

findings and the implications for organisations, line-managers, and employees in promoting mental health and well-being in remote working arrangements.

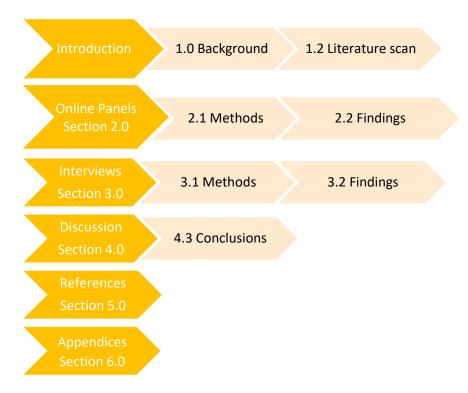


Figure 2 Report structure

#### 1.2 Literature scan

The latest Australian and European data on working from home during the pandemic supports what previous academic research on remote working arrangements has told us: this mode of working exposes workers to a range of psychosocial risk factors that can impact mental health and well-being. This section will scan this literature in order to frame the results from the present study.

An Australian Council of Trade Unions (ACTU) survey of 10,000 employees who worked from home conducted in 2020 (ACTU, 2021) found that "almost half (49%) of workers in our survey had experienced some form of mental health issue. These can include debilitating issues like stress, anxiety, depression, or self-harm" (ACTU, 2021, p12). More women than men experienced mental health issues. This takes place against the backdrop of an existing crisis of mental health in Australian society as one in five Australians experience an active mental health condition at any one time (Carter & Stanford, 2021). Some research has attributed 15 percent of employees' mental health issues to the workplace while one study put the figure as high as 45 percent (Carter & Stanford 2021). It is worth acknowledging that mental health issues are complex, causes can be multifaceted, and more research needs to be done to understand the workplace factors that can contribute to both positive and negative mental health outcomes. Nonetheless, work-related factors, often referred to as psychosocial risks, such as low levels of employee control at work, a lack of worker voice, and excessive job demands, can lead to mental distress (Carter & Stanford 2021).

Remote work has the potential to increase work-to-home conflict (that is, work impinging on home life) and home-to-work conflict (the reverse phenomenon) conflict (Delanoeije et al., 2019). One study found that

employees working from home made more work to home transitions on the days they were working from home, thus reducing work-to-home conflict, but then made more home to work transitions after hours. Overall, however, the total effect of a day working from home on work-to-home conflict was negative (Delanoeije et al., 2019). Another study found that work-family conflict was higher when employees were made to work remotely, rather than doing so voluntarily (Kaduk et al., 2019).

The findings from recent studies are mixed with respect to work-life balance. An October 2020 survey of approximately 6000 Australian Public Service (APS) employees, including almost 1400 managers, who worked from home during the pandemic was reported as "overwhelmingly positive" for both employees and managers. Many employees saved commute time and could spend more time with families (Colley &Williamson, 2020). Similarly, a survey of 5748 European knowledge workers who worked from home from March to May 2020, found that the experience was advantageous to work-life balance (Ipsen et al., 2021). Other studies (see for example, Bjärntoft et al., 2020) have found negative association between remote work and work-life balance. In-line with this, some 48 per cent cited "problems achieving a healthy separation between work and home life" in the ACTU (2021, p13) report.

Working from home can pose risks to well-being, including eroding the restorative nature of the home environment, increasing social isolation, or blurring the boundaries between home and work (Johnson et al., 2020). The more porous boundary between work and home can impact remote workers. Data from UK workers (before the pandemic) suggests that 44 percent of remote workers "kept worrying about job problems after work", compared to 36 percent of "conventionally sited workers" (Felsead & Hensenke, 2017, p207).

Recent Australian research into the working from home experience during the pandemic has elicited workload – a psychosocial risk factor – as an issue. This includes both working longer hours, and work intensification during work hours. In the APS survey, 30 percent of respondents were working longer hours (Colley & Williamson, 2020). A survey of 1500 remote NSW workers reported an average of an extra 13 minutes a day spent working (NSW Innovation and Productivity Council, 2020). In an Australia-wide study, 40 percent of workers reported working longer hours, including some working very long hours, with one in three working up to or past 9pm. An increased workload affected 32 percent of workers surveyed (ACTU 2021). As Kaduk et al. note (2019, p425-6), "long work hours are associated with worse WFC, burnout, stress and psychological distress."

Scholars have suggested that remote workers work harder as an exchange for their increased job flexibility (Palumbo, 2020; Felsead & Hensenke, 2017; Kelliher & Anderson, 2010). A study by Bloom and colleagues (2015) reported findings to support this assertion. Workers at a travel agency who worked from home, compared to those who worked from the office over a one-year time period, found that remote workers worked more minutes each shift, and made more calls per minute (Bloom et al., 2015), suggesting work intensification. Remote work can also cause stress. A Swedish quantitative study of 372 academics found that "frequent telework was associated with increased stress among academics that had the opportunity to telework" (Heiden et al., 2020, p719). Another study found that "involuntary variable schedules are

associated with significantly higher turnover intentions, burnout, stress, and psychological distress compared to employees working stable schedules" (Kaduk et al., 2019, p425).

Working from home is heavily reliant on technology. This raises the issue of "technostress", that is, "mental stress from technology" (Weil & Rosen, 1997, cited in Atanasoff & Venable, 2017, p327). Factors such as constant connectivity, technology overload, and difficulty understanding or using technology can create technostress, while training and technical support can inhibit it. Technostress is linked to poor self-rated health (Atanasoff & Venable, 2017).

The literature also finds that the experience of working from home can vary according to demographic factors. Gender, for example, is highly significant here, as shown in a survey of 2722 Australian workers during a lockdown in May 2020. Working mothers, the survey found, spent more time on unpaid labour and caring for children before the pandemic, and this also increased by a slightly larger amount in absolute terms during the COVID-19 lockdown than for working fathers (Craig and Churchill, 2021). A survey of around 90,000 European Union (EU) workers working remotely during the pandemic last year found that "women struggle with work-life balance more than men, particularly if they have young children" (Eurofound, 2020a, p22). The literature regarding the effects of gender on remote work before the pandemic was variable, with some authors (e.g. Ross et al., 2017) emphasising the benefits to women with care responsibilities with respect to work-life balance, but others (Kaduk et al., 2019; Higgins et al., 2014) finding that remote work brought about more work-family conflict for women. Here it is worth delving deeper to distinguish between women with children (and the age of children) and those without dependents, and also investigating psychosocial factors such as workload. It may not be the location the work is conducted from that is the issue, so much as too high a workload. Scholars have also applied a gender lens to the phenomenon of mass working from home in Australia during the pandemic, referring to "requisitioning the home" to draw attention to the accommodation made by workers in allowing work to be transferred to the home, as well as the unpaid labour (mainly carried out by women) undertaken in the home (Jenkins & Smith, 2021). More research is needed on experience of workers by demographic background, including age, disability, ethnicity, sexuality, and by employment contract. While the current study did not include casual workers, the ACTU's research found that mental health was worse for casual workers working from home (ACTU, 2021).

Many Australian employees want to keep working from home for part of the week (Colley & Williamson, 2020), as do a number of organisations, making a focus on managing risks for remote workers of utmost importance. The psychosocial risks to mental health noted above – workload, work-family conflict, blurring, stress isolation, technostress – while being related to the world of work more broadly, are distinct issues stemming from remote work. Each of these psychosocial risks impact on well-being and mental health. While mental health has not historically received the same level of attention and regulation as physical health in the occupational health and safety field, this appears to be changing with a majority of Australian State and Territory Ministers responsible for Work Health and Safety (WHS) agreeing on 21 May "to amend the model WHS Regulations to deal with psychological injury" (Meeting of Work Health and Safety Ministers, 2021).

Organisations, line managers and individuals can all play a role in striving to make remote work psychologically safe. A New Zealand study of 804 remote workers across 28 organisations (Bentley at al., 2016) found that perceived support from direct supervisors, co-workers and organisations was positively related to to job satisfaction and negatively related to psychological strain. Organisational support also reduced social isolation (Bentley at al., 2016).

Trust in senior management and direct supervisors is crucial for remote work to function (Lee, 2021). Many managers became more open to remote work during the pandemic (Colley & Williamson, 2020). Previously, academics have cited a reluctance of Australian public service managers to allow employees to work from home, despite the existence of flexible work polices (Williamson et al. 2018). Rather than micromanaging, management needs to trust that remote workers will get the job done, without the physical presence of managers (Colley & Williamson, 2020).

A further factor promoting well-being which cuts across both line management and senior leadership lines is workload (Kaduk et al., 2019). Senior management can assist in building a positive psychosocial safety climate (PSC) for remote workers by setting realistic expectations regarding output, which line managers can then oversee at the operational level. Support from line managers is also important here. This includes maintaining a balance between respecting flexible workers' autonomy, and staying in contact with them (Johnson et al., 2020), noting that preferences vary from worker to worker. Managers "checking in" with their employees in various ways, has been a feature of work during the pandemic. This includes an element of pastoral care, while noting potential privacy issues involved. Social support from colleagues can help reduce the isolation which can be involved in working from home (Johnson et al. 2020). This can include informal catch-ups, zoom drinks, quiz nights, buddying, or employees simply ensuring they keep in touch with close colleagues.

At an individual level, personal circumstances and resources mediate the effects of remote working. Individual preferences also matter. Remote workers navigate the boundary between work and home differently, with respect to time, space (e.g. working from a separate room of the house or working from the lounge room) and objects (such as personal phone versus work laptop) (Reissner et al., 2021). Clear boundary planning – that is, planning for appropriate boundaries between work and home – is a factor which spans different organisational levels. At the whole-of-organisation and line-manager levels, leaders need to build a culture whereby employers are not "always on", expected response times for communications are reasonable (Johnson et al., 2020), and employees are encouraged to have adequate breaks.

Some people prefer not to work from home. In a quantitative study of 931 Italian employees working from home in March 2020, Bolisani et al. (2020) found a polarisation of answers into two extremes: those in favour and those against working from home. Working from home is not always a positive, they argued, instead it depends on the specific personal conditions. These individual differences need to be accommodated, and employees should have the right to choose *not* to work from home, if that is their preference (Pennington & Stanford, 2020).

The remote working literature in business-as-usual contexts and in circumstances of disruption (e.g. Donnelly & Proctor-Thomson, 2015; Green et al., 2017), and the emerging research conducted during the pandemic, point to a number or issues which can arise from remote work including isolation, increased workload, and technology-related issues. We know that for some people, work-life balance can be improved, for others, remote working can be detrimental to juggling the responsibilities of home and work. These issues can combine in complex ways, for example, employees may report enjoying working from home and having better work-life balance, while also having an increased workload. Challenges such as work intensification and work-load balance are not all unique to remote work, but the ways that they play out can differ from the office environment. For example, tasks may take longer because of inadequate equipment at home (Colley & Williamson, 2020). The experience of working from home can vary according to demographic, and individual factors, so care must be taken to avoid a "one-size fits all" approach.

The implications of the COVID-19 pandemic and the resultant restrictions are likely to continue into the future. This general environment of disruption and uncertainty presents additional challenges to mental health and well-being, such as employment uncertainty and concerns about health and safety. Moreover, many organisations, as well as individuals, would like to continue working remotely. This occurs at a time of mental health epidemic in Australia, and a move towards greater regulation of psychosocial risk. The current context, therefore, demands that serious attention be paid to these issues, with mental health and well-being at the forefront of our thinking about work.

## 2.0 Online panels

#### 2.1 Method

#### 2.1.1 Sampling and data collection procedures

The quantitative part of the project was approved by the Human Research Ethics Committee at Edith Cowan University<sup>1</sup>. This part consists of two key stages demonstrated in Figure 3.

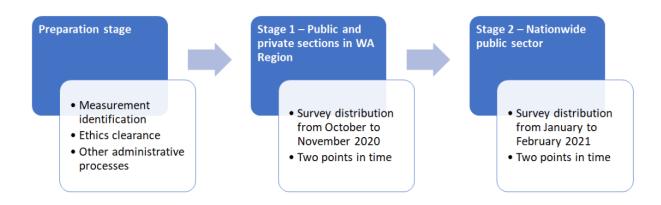


Figure 3 Design of quantitative data collection

In Stage 1, through the administration of a market research company, Cint (www.cint.com), an online survey was distributed on two occasions to employees in WA during October and November 2020. In October 2020, 1,011 respondents aged from 21-70 years and who worked as full- or part-time employees completed the first wave of the survey. In this survey, responses were collected on demographic backgrounds and perceptions of organisational work conditions (e.g. psychosocial safety climate, i-deals HR practices, social support, family-supportive supervisor behaviours and technostress – these are explained in section 2.1.2). Four weeks later in November 2020, the pool of 1,011 respondents were reinvited to share their experiences concerning work-family conflicts, quantitative, emotional and mental home demands, and work-life balance during the pandemic. Data was also collected on the degrees of mental health and well-being outcomes in the second survey. The final sample of Western Australian respondents that took part in both waves of the surveys consisted of 319 respondents.

In Stage 2, the research findings were validated following the same procedure in Stage 1. Accordingly, the same survey was distributed throughout Australian public sector organisations through the administration of the company Qualtrics in January 2021. A pool of 4,000 potential participants agreed to open the survey and the first wave resulted in a sample of 1,335 complete responses. These participants were then invited to answer the second survey four weeks later. The final sample was 400 Australian public sector employees who participated in both surveys.

<sup>&</sup>lt;sup>1</sup>Approval Number: 2020-01891-BENTLEY

In this project, existing validated measures were adopted from the academic literature to capture the perceptions and experiences of employees in Australia who were or were not working from home during the pandemic. The sample items of the validated scales used in this project are described in detail in Appendix 1. The findings of the surveys are presented as descriptive statistics and statistical pair correlations between employee working from home experiences of mental health and well-being and organisational work conditions. Additionally, linear regression was used to predict the impacts of individual and organisational factors on the mental health and well-being outcomes. The demographics of people in WA who participated in the survey are described in 2.1.2 and those in the Australia-wide survey in section 2.1.3, before the factors that were investigated are explained in 2.1.4.

#### 2.1.2 Western Australian respondents

Of the 319 respondents in the WA region, 76.2% worked in private sector organisations, 15.4% in state and local governments, 3.6% in non-profit organisations and 4.8 % from other organisational types.

61.7 % of the WA respondents were under 40 years old and 32.9% above 40 years old and women comprised 62% of the sample and men 38%. As shown in Table 2, women comprise a significantly higher proportion of the sample across employment arrangements, industry sectors, and managerial positions.

Table 1 Employment arrangements, industry sectors, and managerial positions as percentage of total WA respondents by gender

	Female (%)	Male (%)
Employment type		
Full-time and on-going contract	29.47	25.71
Full-time contract	10.34	6.9
Part-time contract	20.38	5.02
Fixed-term contract	1.88	0.30
Industry		
Manufacturing	7.84	5.02
Service	32.92	24.14
Other	21.32	8.76
Managerial level		
Non-supervisory	34.48	15.05
First-line supervisor	10.97	6.9
Line manager	5.02	5.64
Middle manager	5.64	4.08
Senior manager	3.45	5.96
Chief executive	2.51	0.30

Overall, more than half (61%) of respondents (n=194; 110 females and 84 males) reported working from home to some extent (Figure 4). Of those not working from home (n= 125), 30% (n=37) were men and 70% (n=88) women. The number of respondents working from home during the last six months with respect to industry is shown in Figure 4 and by sector in Figure 5.

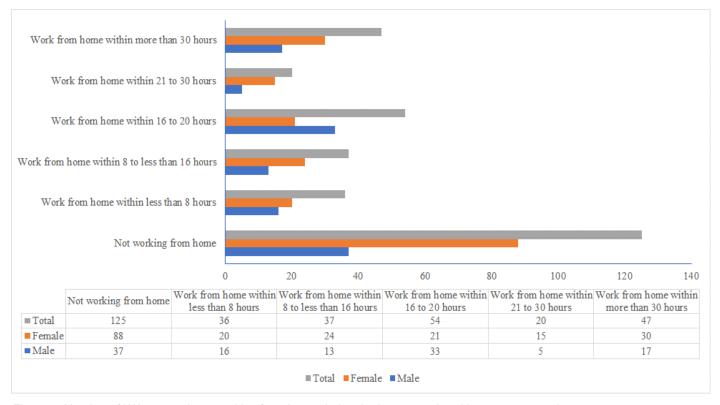


Figure 4 Number of WA respondents working from home during the last 6 months with respect to gender

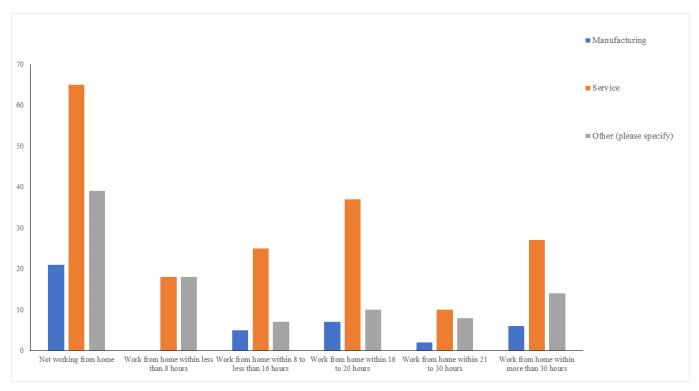


Figure 5 The number of WA respondents working from home during the last 6 months with respect to industry

158 respondents reported working from home at least 8 hours per week and of those 117 (74 %) worked in service industries (Figure 5). Approximately half (49 %) of them were non-supervisory employees and senior managers (Figure 7). The sample consisted of only nine chief executive officers (Table 2) with just three of them working from home more than eight hours per week (Figure 7).

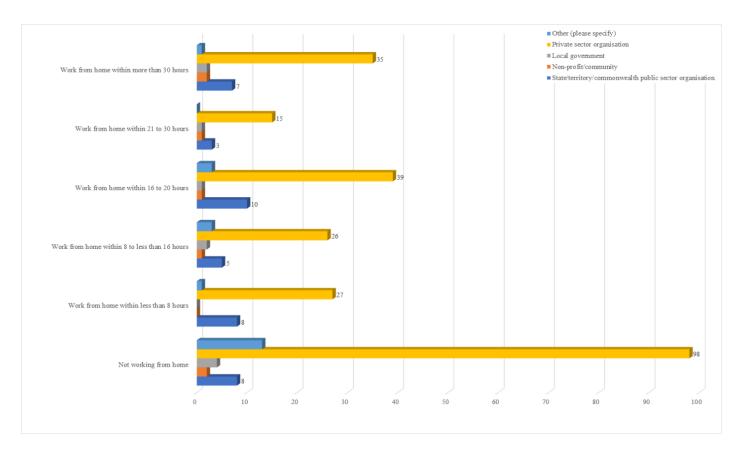


Figure 6 The number of WA respondents working from home during the last 6 months with respect to sector

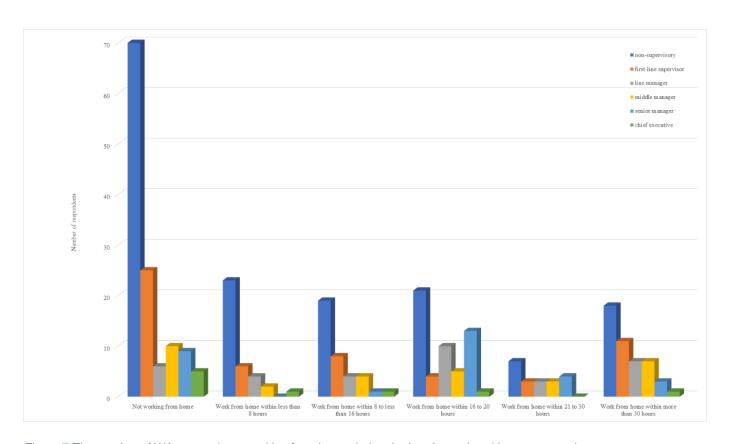


Figure 7 The number of WA respondents working from home during the last 6 months with respect to role

#### 2.1.3 Australia-wide respondents

There were 400 respondents in the nationwide public sector sample. This comprised 28% from New South Wales (n=112), 26.8% from Victoria (n=107), 18.3% from Queensland (n=73), 10% from Western Australia (n=40) and 17% from South Australia, Tasmania, and Australian Capital Territory combined (n=68).

51% of respondents were less than 40 years old and 49 % older than 40 years. Women made up almost three quarters of the sample (74 %) and men slightly more than one quarter (26 %). Reflecting the WA sample, Table 3 shows that women in the Australia-wide sample are represented at a significantly higher proportion than men across employment arrangements, industry sectors, and managerial positions.

Table 2 Australia-wide sample characteristics

	Female (%)	Male (%)	Other (%)	Do not want to answer (%)
Employment type				
Full-time and on-going contract	34.5	20.5	0.25	0.25
Full-time contract	19.5	2.25	-	0.25
Part-time contract	18.75	2.25	-	-
Fixed-term contract	1	0.5	-	-
Industry				
Manufacturing	1.5	1.25	0	0
Service	46	15.5	0.25	0.25
Other	26.25	8.75	0	0.25
Managerial level				
Non-supervisory	42.25	11.75	0	0.5
First-line supervisor	9.25	5.5	0.25	0
Line manager	7.25	2	0	0
Middle manager	12	4.75	0	0
Senior manager	3	1.5	0	0

In similar proportions to WA respondents, 62% (n=248) of the public sector respondents reported working from home in the last six months. Of these, 88 % (n=219) reported working eight or more hours per week at home (Figure 8). The next figures illustrate the number of respondents reporting working from home during the last six months with respect to gender (Figure 8), sector (Figure 9), and managerial level (Figure 10).

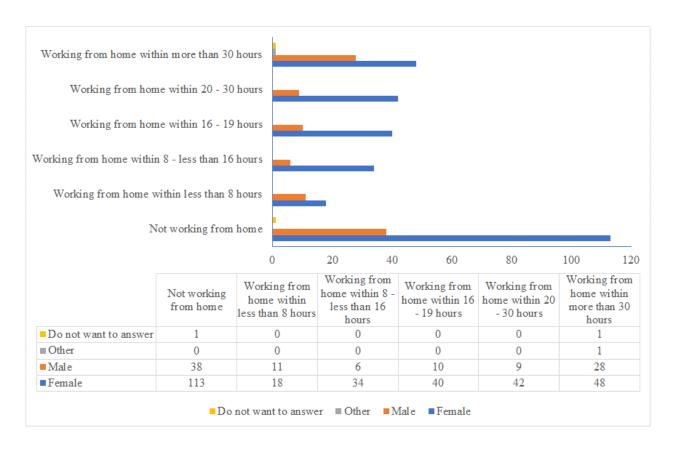


Figure 8 Number of Australia-wide respondents working from home during the last 6 months with respect to gender

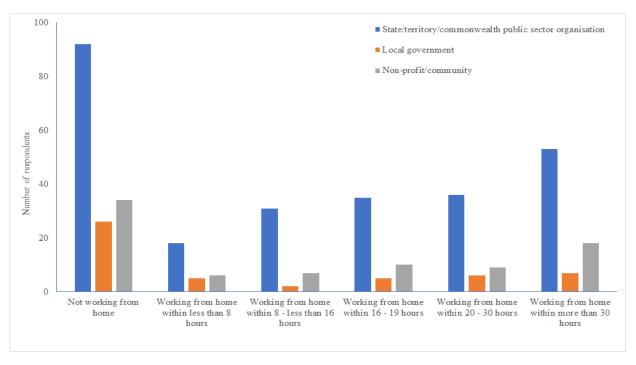


Figure 9 Number of Australia-wide respondents working from home during the last 6 months with respect to sector

173 respondents working in the state/territory/commonwealth public sector organisations reported working from home at least eight hours per week (Figure 9). Almost half (48%) of those working from home eighthours or more per week were non-supervisory employees, middle and senior managers (Figure 10). The sample included 60 first-line supervisors and 37 line managers though very few of them (n=15) worked from home for more than eight hours per week (Figure 10).

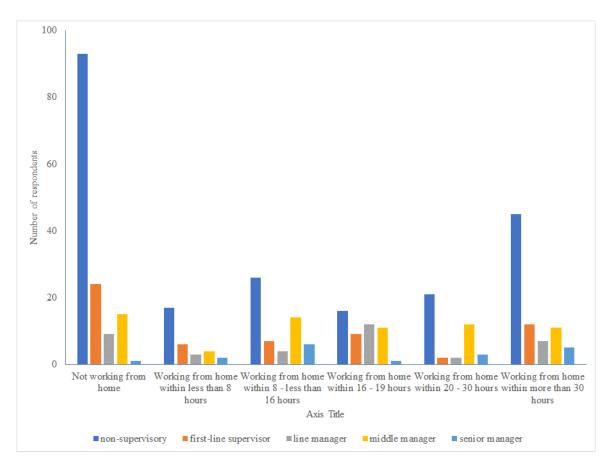


Figure 10 Number of Australia-wide respondents working from home during the last 6 months with respect to role

The factors that were investigated are described in the next section, 2.1.4.

#### 2.1.4 Organisational, mental health and well-being factors investigated

Many factors have been found to influence employees' mental health and well-being in the literature. This project focuses on key factors that increase the positive mental health and well-being of employees and work conditions that decrease the positive experience of employees during and after the pandemic. Organisational factors in this part of the study included organisational climate, human resource practices, social support, supervisor support, trust in supervisor and technostress. These factors are explained in the sections below.

#### Psychosocial safety climate

Psychosocial safety climate (PSC) consists of "policies, practices, and procedures for worker psychological health and safety" (Dollard & Bakker, 2010, p. 580). PSC is comprised of four dimensions: (1) senior management support and commitment, (2) organisational priority, (3) organisational communication and (4) organisational participation and involvement (Dollard et al., 2017). These dimensions are defined in Table 1.

Table 3 Psychosocial safety climate dimensions

Psychosocial safety climate dimension	Definition
Senior management support and commitment	The protection of psychological health and safety, including decisive and quick actions to address and correct issues that affect the psychological health and safety of employees.
Organisational priority	How organisations prioritise and protect the psychological health and safety of employees in developing and implementing policies, procedures, practices and work design.
Organisational communication	The actions taken by the senior management to gain a common awareness of psychological health and safety issues throughout the organisation.
Organisational participation and involvement	The involvement of diverse organisational stakeholders, including employees, unions, and health and safety representatives in stress prevention.

Empirical evidence shows that PSC provides benefits to individuals by reducing the adverse effects of high job demands on burnout, emotional exhaustion, and psychological stress (Dollard et al., 2017). The measurement of PSC developed by Hall et al. (2010) was used to examine the PSC perceptions of respondents regarding their organisations.

#### i-deals HR practices

i-deals HR practices refer to the flexible, voluntary, and personalised agreement and negotiation between employees and the organisation concerning benefits to both parties (Rousseau et al., 2006). Organisations that adopt i-deals HR practices are likely to attract, retain and motivate employees to perform effectively (Hornung et al., 2008; 2010). Employees who are recipients of i-deals HR practices are likely to have high commitment, work engagement and creativity in performing their work as they have a diversity of tasks and responsibilities within a flexible schedule, location and financial incentives (Hornung et al., 2008; 2010). The adoption of i-deals HR practices could be critical for organisations in supporting employees working from home. In this project, the measurement of i-deals HR practices developed by Rosen et al. (2013) was used to examine the perceptions of the adoption of i-deals HR practices in WA organisations.

#### Social support

Social support refers to the perceptions of an employee towards the socio-emotional integration and trust among colleagues and supervisors, and how much help and assistance they receive from co-workers and supervisors (Karasek & Theorell, 1990; O'Driscoll, 2000). Social support is a relevant, accessible, and available resource to strategise stress management and energise employees' work engagement because of strong support and identification with the groups/ organisations (Giorgi, 2010). Social support plays a key role in reducing the negative impact of role stressors on work-family conflict and job satisfaction (Carlson & Perrewe, 1999). This concept is most relevant to the circumstance of the pandemic as employees could experience challenges and difficulties in dealing with changing work conditions.

#### Family-supportive supervisor

In addition to supportive management policies and practices, the role of supervisors is seen to be directly affecting employees' workload and work-related stressors (Hammer et al., 2009). Supervisors also have a significant influence on the quality of workplace interactions, the well-being, and the work-life balance of employees (Braun & Peus, 2018; Inceoglu et al., 2018). During the pandemic period, we argue that the role

of supervisors in managing work design to support employees' work and family balance is highly essential (Wang et al., 2021). Previous research has shown that supervisors can give advice, guidance and resources to reduce stress and negative emotional experiences among remote workers (Bentley et al., 2016). In line with the model of a supportive supervisor concerning employees' work-life perspective, respondents were asked to rate how supportive their direct supervisors were to them managing their work and non-work activities.

#### Affective trust in supervisor

Recent reports have indicated adverse impacts of a lack of trust between supervisors and employees on the performance and well-being of employees during the pandemic (Hickok, 2021; Parker et al., 2020). In this project, the perceptions of respondents towards the emotional bonds they have with their supervisors were examined (Dirks & Ferrin, 2002).

#### **Technostress**

Technology plays a critical role in the context of working remotely during the pandemic (Collins, 2021; Weil, 2020). Specifically, employees are required to be familiar with using different types of information and communication technology (ICT) to facilitate their work and communicate with other people. Tarafdar et al., (2007) argues that employees who experience technostress are likely to feel dissatisfaction, sleepiness, worry, and perform less productively. This may be stressful for some employees. In this project, 'technostress' was defined as:

a problem of adaptation that an individual experiences when he or she is unable to cope with, or get used to, ICTs. (Tarafdar et al., 2007, p. 304).

The findings from the quantitative surveys are detailed in the next section.

# 2.2 Key quantitative findings

# 2.2.1 Correlations between organisational factors and outcomes of mental health and wellbeing: WA findings

#### Psychosocial safety climate (PSC)

As expected in line with the literature, PSC was found to have significantly positive associations with the following organisational factors: i-deals HR practices (b = 0.51, p < 0.001), social support (b = 0.63, p < 0.001), family-supportive supervisor behaviours (b = 0.71, p < 0.001) and affective trust in supervisor (b = 0.43, p < 0.001). A negative association was also found between PSC and technostress (b = -0.13, p < 0.001), indicating that an increase in PSC results in a decrease in technostress. These positive associations indicate that an increase in PSC is positively related to an increase in associated positive organisational factors while leading to a reduction in work-related stress.

Interestingly, PSC was found to have negative influences on work-family issues. Specifically, an increase in PSC could result in a decrease in work interferences with family regarding time-based work interference

with family (b = -0.11, p < 0.05) and strain-based work interference with family (b = -0.18, p < 0.01). In addition to positive effects of PSC on work-family domains, we found that an enhancement in PSC is likely to result in a reduction in quantitative home demands (b = -0.12, p < 0.05) and emotional home demands (b = -0.13, p < 0.05). Overall, PSC was found to increase the experience of work-life balance (b = 0.35, p < 0.001). These findings provide significant support for empirical evidence of the spill-over influences of PSC on the family domain.

Regarding the mental health and well-being outcomes, PSC was found to minimise the mental health problems as follow: reduced perceived stress (b = -0.28, p < 0.001), decreased mental health issues (b = -0.23, p < 0.001), lessened burnout (b = -0.30, p < 0.001) and diminished sleeping troubles (b = -0.25, p < 0.001). Strongly positive influences of PSC was found on: World Health Organisation-Five Well-Being Index (WHO-5) (b = 0.30, p < 0.001), job satisfaction (b = 0.40, p < 0.001), life satisfaction (b = 0.33, p < 0.001) and career satisfaction (b = 0.43, p < 0.001). Overall, the associations of PSC with other factors are illustrated in Figure 11.

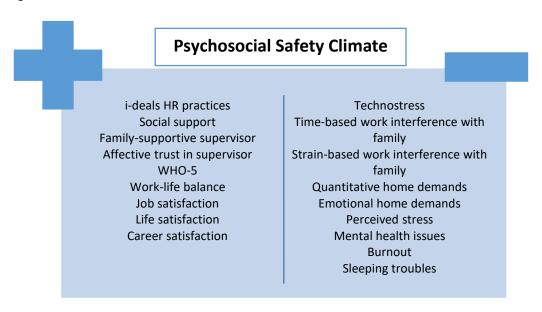


Figure 11 The associations of PSC with other factors (left-hand side of figure shows positive associations and the right-hand side negative associations)

#### I-deals HR practices

Supporting the evidence-based literature, the study found the adoption of i-deals HR practices could produce positive outcomes through increases in social support (b = 0.44, p < 0.001); family-supportive supervisor behaviours (b = 0.65, p < 0.001); and affective trust in supervisor (b = 0.42, p < 0.001). These findings indicate that an increase in i-deals HR practices could result in an increase in social support, family-supportive supervisor behaviours and affective trust in supervisor respectively. By contrast, a decrease in I-deals HR practices could lead to a reduction in these factors.

For mental health and well-being outcomes, negative influences of i-deals HR practices were found on: work-life balance (b = 0.18, p < 0.01); WHO-5 (b = 0.17, p < 0.01); job satisfaction (b = 0.30, p < 0.001); life satisfaction (b = 0.30, p < 0.001) and career satisfaction (b = 0.36, p < 0.001). These results indicate that when organisations increase the adoption of i-deals HR practices, employees may perceive higher levels of work-life balance and well-being. Respondents are more likely to be satisfied with their jobs, life and career

when there are beneficial i-deals HR practices. The factors associated positively with i-deals HR practices are shown in Figure 12.

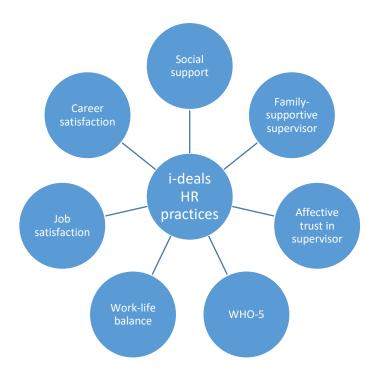


Figure 12 The factors positively associated with i-deals HR practices

#### Social support

The existing literature posits that social support as an organisational resource provides benefits to employees such as increasing job performance (Golden & Gajendran, 2019) and reducing work-family conflict (Selvarajan et al., 2016). The survey results found that employees receiving social support are likely to experience less technostress and work-family conflicts. Specifically, an increase in social support could result in a reduction in technostress (b = -0.28, p < 0.001); time-based work interference with family (b = -0.17, p < 0.01); time-based family interference with work (b = -0.17, p < 0.01); strain-based work interference with family (b = -0.17, p < 0.01) and strain-based family interference with work (b = -0.17, p < 0.01). It was also found that employees having social support are likely to have a work-life balance (b = 0.33, p < 0.001) while experiencing low levels of stress (b = -0.26, p < 0.001), mental health problems (b = -0.32, p < 0.001), burnout (b = -0.19, p < 0.01) and sleeping troubles (b = -0.29, p < 0.001). In line with the evidence-based research, respondents who reported high social support were likely to have higher WHO-5 (b = 0.27, p < 0.001), job satisfaction (b = 0.34, p < 0.001), life and career satisfaction (b = 0.24 and 0.33, respectively, p < 0.001). Overall, the associations of social support with other factors are illustrated in Figure 13.

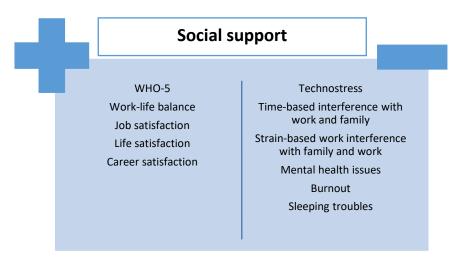


Figure 13 The associations of social support with other factors (left-hand side of figure shows positive associations and the right-hand side negative associations)

#### Family-supportive supervisor

The supportive supervisor is perceived as one of the critical organisational resources reducing work-family conflicts and enhancing the positive experience of work (Brady, 2021; Hammer et al., 2009). Specifically, family-supportive supervisor behaviours have been found to provide benefits to employees concerning work-family and health outcomes (Crain & Stevens, 2018). In this project, supporting evidence for the benefits of the exhibition of family-supportive supervisor behaviours was found. Employees who received family-supportive supervisors from their supervisors were likely to report a higher level of affective trust in their supervisors (b = 0.57, p < 0.001) while having a lower degree of strain-based work interference with family (b = -0.12, p < 0.05) and a high work-life balance (b = 0.40, p < 0.001). Also, the recipients of family-supportive supervisor behaviours were likely to experience a reduction in stress (b = -0.21, p < 0.001), mental health problems (b = -0.17, p < 0.01), burnout (b = -0.24, p < 0.001) and sleeping troubles (b = -0.23, p < 0.001). Overall, the findings show that supervisors who exhibit family-supportive behaviours could stimulate positive employee outcomes, including: WHO-5 (b = 0.27, p < 0.001), job satisfaction (b = 0.39, p < 0.001), life satisfaction (b = 0.32, p < 0.001) and career satisfaction (b = 0.35, p < 0.001). Figure 14 models the associations of family-supportive supervisor behaviours with other factors.

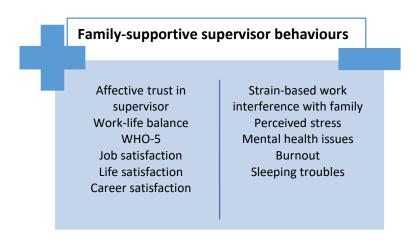


Figure 14 Associations of family-supportive supervisor behaviours with other factors (left-hand side of figure shows positive associations and the right-hand side negative associations)

#### Affective trust in supervisor

A large body of research has found significant evidence that trusting supervisors is fundamental for positive work outcomes (e.g. Colquitt et al., 2007; 2015). The survey results of this study found that 'trust in supervisor' had negative associations with mental health problems and positive well-being outcomes. Specifically, an increase in trust in supervisor could result in a decrease in the following: perceived stress (b = -0.21, p < 0.001), mental health (b = -0.23, p < 0.001), burnout (b = -0.19, p < 0.01) and sleeping troubles (b = -0.22, p < 0.001). Without trust in their supervisors, employees reported low levels of work-life balance (b = 0.38, p < 0.001), WHO-5 (b = 0.34, p < 0.001), job satisfaction (b = 0.41, p < 0.001), life satisfaction (b = 0.32, p < 0.001) and career satisfaction (b = 0.38, p < 0.001). Figure 15 visualises the associations between affective trust in supervisor and other factors.

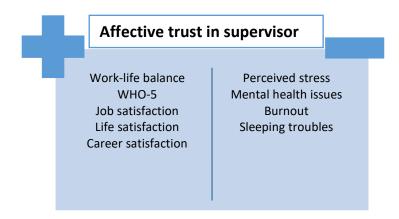


Figure 15 Associations between affective trust in supervisor and other factors (left-hand side of figure shows positive associations and the right-hand side negative associations)

#### **Technostress**

Technostress resulting from the use of new ICTs may impair the mental health and well-being of employees and spill over its adverse impacts on the family domain (Ayyagari et al., 2011; Chen & Karahanna, 2018). Adverse influences of technostress were found on several work and well-being outcomes (Table 4) along with a positive association of technostress to mental health and well-being problems (Figure 16).

Table 4 Influence of technostress on well-being and mental health outcomes

Work-related outcomes	b-value	p-value	Mental health and well-being outcomes	b-value	p- value
Work-life balance	-0.24	< 0.001	Perceived stress	0.28	< 0.001
WHO-5	-0.26	< 0.001	Mental health	0.49	< 0.001
Life satisfaction	-0.12	< 0.05	Burnout	0.27	< 0.001
Career satisfaction	-0.17	< 0.01	Sleeping troubles	0.36	< 0.001
			Sleepiness	0.35	< 0.001

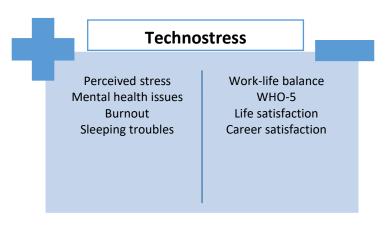


Figure 16 Association of technostress on outcomes (left-hand side of figure shows positive associations and the right-hand side negative associations)

#### 2.2.2 Comparing WA and Australia-wide public sector findings

#### Psychosocial safety climate

Similar to the findings for the WA region, the project found that PSC had significantly positive associations with: i-deals HR practices (b = 0.49, p < 0.001), social support (b = 0.50, p < 0.001), family-supportive supervisor behaviours (b = 0.65, p < 0.001) and affective trust in supervisor (b = 0.51, p < 0.001). A negative association between PSC and technostress (b = -0.18, p < 0.001) was found. The findings for the WA region were also validated when PSC was negatively associated with time-based work interference with family (b = -0.28, p < 0.001) and strain-based work interference with family (b = -0.30, p < 0.001). Contradictory to the findings for the WA region, there was not significant relationships between PSC and work-family domains. However, there was support that an increase in PSC results in higher work-life balance (b = 0.43, p < 0.001).

Regarding the mental health and well-being outcomes, support was found for positive impacts of PSC on WHO-5 (b = 0.41, p < 0.001), job satisfaction (b = 0.47, p < 0.001), life satisfaction (b = 0.33, p < 0.001) and career satisfaction (b = 0.32, p < 0.001). An increase in PSC was found to reduce perceived stress (b = -0.27, p < 0.001), mental health issues (b = -0.19, p < 0.001), burnout (b = -0.26, p < 0.001), sleeping troubles (b = -0.12, p < 0.05) and sleepiness (b = -0.12, p < 0.05). Overall, the associations of PSC with other factors are listed in Table 5.

#### i-deals HR practice

Consistent with the findings for WA region, the adoption of i-deals HR practices could produce positive outcomes through the increases in: social support (b = 0.26, p < 0.001), family-supportive supervisor behaviours (b = 0.59, p < 0.001) and affective trust in supervisor (b = 0.43, p < 0.001). Mental health and well-being outcomes showed positive influences of i-deals HR practices on work-life balance (b = 0.20, p < 0.001); WHO-5 (b = 0.17, p < 0.001); job satisfaction (b = 0.25, p < 0.001); life satisfaction (b = 0.19, p < 0.001) and career satisfaction (b = 0.18, p < 0.001). These are the same factors as shown in Figure 12.

Table 5 Associations of PSC with other factors in WA and Australia-wide

	Positive ass	sociation	Negative association		
	WA region	Australia-wide	WA region	Australia- wide	
Psychosocial safety climate	<ul> <li>i-deals HR</li> <li>Social supp</li> <li>Family-supposupervisor</li> <li>Affective true</li> <li>WHO-5</li> <li>Work-life based</li> <li>Job satisface</li> <li>Life satisface</li> <li>Career satisface</li> </ul>	oort portive  ust in supervisor  alance ction ction	<ul> <li>Technostress</li> <li>Time-based we interference with the strain passed we interference with the strain passed with the strain p</li></ul>	th family vork th family ss ssues	

#### Social support

Supporting the findings for the WA region, the sample of nationwide public sector respondents showed similar results. These indicate that an increase in social support could result in a reduction in technostress (b = -0.26, p < 0.001); time-based work interference with family (b = -0.24, p < 0.001); time-based family interference with work (b = -0.19, p < 0.001); strain-based work interference with family (b = -0.20, p < 0.001) and strain-based family interference with work (b = -0.15, p < 0.01). Social support for employees was found to improve the likelihood of work-life balance (b = 0.33, p < 0.001), high WHO-5 (b = 0.30, p < 0.001), job satisfaction (b = 0.38, p < 0.001), life and career satisfaction (b = 0.28 and 0.33, respectively, p < 0.001). Social support was also found to reduce stress (b = -0.20, p < 0.001), mental health problems (b = -0.24, p < 0.001), burnout (b = -0.17, p < 0.001) and sleeping troubles (b = -0.20, p < 0.001). Overall, there was no difference found between employee experiences in WA and across Australia.

#### Family-supportive supervisor

In line with the WA region findings, a strong association was found between family-supportive supervisor behaviours and affective trust in their supervisors (b = 0.72, p < 0.001). Employees who received support from supervisor were likely to experience a low degree of technostress (b = -0.17, p < 0.01), time-based work interference with family (b = -0.26, p < 0.001) and strain-based work interference with family (b = -0.19, p < 0.001). Also, family-supportive supervisor behaviours were likely to increase employees' work-life balance (b = 0.35, p < 0.001). An increase in family-supportive supervisor behaviours was found to result in a reduction in stress (b = -0.171, p < 0.001), burnout (b = -0.13, p < 0.001) and sleeping troubles (b = -0.23, p < 0.001). Consistent with the results for the WA region, it was found that the exhibition of family-supportive supervisor behaviours could foster positive employee outcomes, including WHO-5 (b = 0.31, p < 0.001); job satisfaction (b = 0.34, p < 0.001); life satisfaction (b = 0.28, p < 0.001) and career satisfaction (b = 0.27, p < 0.001). Table 6 summarises the associations of family-supportive supervisor behaviours between the two samples.

	Positive ass	sociation	Negative association		
	WA region Australia-wide		WA region Australia-wide		
Family- supportive supervisor	<ul> <li>Affective true</li> <li>WHO-5</li> <li>Work-life batisface</li> <li>Life satisface</li> <li>Career satisface</li> </ul>	ction ction	<ul> <li>Strain-based work interference with family</li> <li>Perceived stress</li> <li>Mental health issues</li> <li>Burnout</li> <li>Sleeping troubles</li> </ul>		
				<ul> <li>Technostress</li> <li>Time-based work interference with family</li> </ul>	

#### Affective trust in supervisor

Supporting the findings for the WA region, there was evidence for significant associations of affective trust in supervisor with mental health well-being outcomes. Specifically, an increase in trust in supervisor could result in a decrease in the following: perceived stress (b = -0.14, p < 0.01), mental health problems (b = -0.11, p < 0.05), burnout (b = -0.11, p < 0.01) and sleeping troubles (b = -0.23, p < 0.001). A lack of trust in their supervisors resulted in low levels of: work-life balance (b = 0.25, p < 0.001), WHO-5 (b = 0.21, p < 0.001), job satisfaction (b = 0.37, p < 0.001), life satisfaction (b = 0.28, p < 0.001) and career satisfaction (b = 0.27, p < 0.001). In addition to similar findings for the WA region, affective trust in supervisor was negatively associated with time-based work interference with family (b = -0.11, p < 0.05) and strain-based work interference with family (b = -0.11, p < 0.05). The results are summarised in Table 7.

Table 7 Associations of affective trust in supervisor and factors investigated in WA and Australia-wide

	Positive as:	sociation	Negative association		
	WA region	Australia-wide	WA region	Australia-wide	
Affective trust in	<ul> <li>WHO-5</li> <li>Work-life batisfaction</li> <li>Life satisfaction</li> <li>Career satisfaction</li> </ul>	ction ction	<ul><li>Perceived stre</li><li>Mental health i</li><li>Burnout</li><li>Sleeping troub</li></ul>	issues	
supervisor				<ul> <li>Time-based         work         interference         with family</li> <li>Strain-based         work         interference         with family</li> </ul>	

#### **Technostress**

In the nationwide sample of public sector workers, there was significant evidence that technostress increases strain between the work and home domains. This included time-based work interference with family (b = 0.57, p < 0.001); time-based family interference with work (b = 0.44, p < 0.001); strain-based work interference with family (b = 0.39, p < 0.001) and strain-based family interference with work (b = 0.32, p < 0.001). Similar to the WA region, respondents in the Australian public sector reported negative associations of technostress with work-life balance (b = -0.37, p < 0.001), WHO-5 (b = -0.29, p < 0.001), job

satisfaction (b = -0.15, p < 0.01), life satisfaction (b = -0.19, p < 0.001) and career satisfaction (b = -0.13, p < 0.01). Consistent with the findings for the WA region, positive relationships of technostress with perceived stress (b = 0.38, p < 0.001), mental health issues (b = 0.43, p < 0.001), burnout (b = 0.27, p < 0.001), sleeping troubles (b = 0.33, p < 0.001), sleepiness (b = 0.37, p < 0.001). The associations of technostress with other factors are summarised in Table 8.

Table 8 Associations of technostress and factors investigated in WA and Australia-wide

	Positive a	association	Negative a	ssociation
	WA region	Australia-wide	WA region	Australia-wide
	<ul><li>Perceived s</li><li>Mental hea</li><li>Burnout</li><li>Sleeping tree</li></ul>	lth issues	<ul><li>WHO-5</li><li>Work-life bal</li><li>Job satisfact</li><li>Life satisfact</li><li>Career satisf</li></ul>	ion ion
Technostress		<ul> <li>Time-based work interference with family</li> <li>Time-based family interference with work</li> <li>Strain-based work interference with family</li> <li>Strain-based work interference with family</li> <li>Strain-based family interference with work</li> <li>Sleepiness</li> </ul>		

#### 2.2.3 Predictions for mental health and well-being: WA region findings

In this section, linear regression was used to predict the impacts of individual and organisational factors on the mental health and well-being outcomes. Demographic variables such as age, gender, education background, sector or tenure were found to have no impact on the mental health and well-being outcomes. The following results show how organisational factors impact perceived stress, mental health problems, burnout, sleeping troubles, WHO-5 and satisfaction with job, life and career.

#### Perceived stress

Perceived stress was found to be more strongly influenced by technostress (B = 0.24, p < 0.001) than PSC (B = -0.19, p < 0.05). Other organisational factors were not found to have significant impacts on perceived stress (Table 9).

Table 9 Linear regression for perceived stress, significant variables in bold

	Unstandardize	ed Coefficients	Standardized Coefficients			Collinearity S	Statistics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	2.233	.327		6.829	.000		
Psychosocial safety climate	189	.075	200	-2.541	.012	.443	2.259
I-deals HR practices	.066	.084	.058	.784	.433	.499	2.003
Social support	050	.058	066	872	.384	.484	2.068
Family- supportive supervisor behaviours	.004	.058	.006	.070	.945	.323	3.098
Affective trust in supervisor	060	.041	095	-1.456	.147	.648	1.544
Technostress	.239	.068	.207	3.528	.000	.796	1.256

a. Dependent Variable: Perceived stress.

#### Mental health problems

Mental health problems were more strongly affected by technostress (B = 0.52, p < 0.001) than social support (B = -0.14, p < 0.05) and affective trust in supervisor (B = -0.09, p < 0.05). Other organisational factors were not found to have significant impacts on mental health problems (Table 10).

Table 10 Linear regression for mental health problems, significant variables in bold

			Standardized				
	Unstandardize	d Coefficients	Coefficients			Collinearity	Statistics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	1.943	.335		5.806	.000		
Psychosocial	116	.076	109	-1.528	.127	.443	2.259
safety climate							
I-deals HR	.130	.086	.102	1.517	.130	.499	2.003
practices							
Social support	143	.059	165	-2.422	.016	.484	2.068
Family-supportive supervisor behaviours	.040	.060	.056	.672	.502	.323	3.098
Affective trust in	091	.042	127	-2.151	.032	.648	1.544
supervisor							
Technostress	.521	.069	.400	7.531	.000	.796	1.256

a. Dependent Variable: Mental health problems

#### **Burnout**

PSC and technostress had similar degrees of influences on burnout (B = -0.31, B = 0.32 respectively, p < 0.001) in the linear regression results (Table 11). Other organisational factors were not found to have significant impacts on burnout.

Table 11 Linear regression for burnout, significant variables in bold

		ndardized ficients	Standardized Coefficients			Collinearity	Statistics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	2.941	.380		7.742	.000		
PSC	307	.087	278	-3.546	.000	.443	2.259
I-deals HR practices	.083	.097	.062	.847	.398	.499	2.003
Social support	.101	.067	.113	1.515	.131	.484	2.068
Family-supportive supervisor behaviours	073	.068	099	-1.081	.280	.323	3.098
Affective trust in supervisor	040	.048	054	839	.402	.648	1.544
Technostress	.316	.079	.235	4.020	.000	.796	1.256

a. Dependent Variable: Burnout

#### Sleeping troubles

Only technostress was found to have had an impact on sleeping troubles (Table 12).

Table 12 Linear regression for sleeping troubles, significant variables in bold

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	2.669	.370		7.220	.000		
PSC	116	.084	106	-1.379	.169	.443	2.259
I-deals HR practices	.163	.095	.124	1.715	.087	.499	2.003
Social support	093	.065	105	-1.433	.153	.484	2.068
Family-supportive supervisor behaviours	076	.066	104	-1.156	.249	.323	3.098
Affective trust in supervisor	055	.047	075	-1.192	.234	.648	1.544
Technostress	.364	.076	.272	4.767	.000	.796	1.256

a. Dependent Variable: Sleeping troubles

#### WHO-5

The results suggest that technostress (B = -0.28, p < 0.001) had the strongest impact on WHO-5, followed by PSC (B = 0.18, p < 0.05). Affective trust in supervisor had the weakest impact on WHO-5 (B = 0.16, p < 0.001) while other organisational factors were not found to have significant impacts on sleeping troubles (Table 13).

Table 13 Linear regression for WHO-5, significant variables in bold

	Unstandardized Coefficients		Standardized Coefficients			Collinearity	Statistics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	2.114	.351		6.019	.000		_
PSC	.179	.080	.172	2.242	.026	.443	2.259
I-deals HR practices	.068	.090	.054	.752	.452	.499	2.003
Social support	006	.062	007	096	.924	.484	2.068

Family-supportive supervisor behaviours	028	.062	040	440	.660	.323	3.098
Affective trust in supervisor	.162	.044	.233	3.670	.000	.648	1.544
Technostress	281	.073	222	-3.868	.000	.796	1.256

a. Dependent Variable: WHO-5

#### Job satisfaction

PSC (B = 0.20, p < 0.01) had the strongest impact on job satisfaction, followed by affective trust in supervisor (B = 0.16, p < 0.001). Other organisational factors were not found to have significant impacts on sleeping troubles (Table 14).

Table 14 Linear regression for job satisfaction, significant variables in bold

Unstandardized Coefficients			Standardized Coefficients			Collinearity	Statistics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	1.513	.299		5.066	.000		
PSC	.195	.068	.214	2.868	.004	.443	2.259
I-deals HR	.036	.077	.033	.464	.643	.499	2.003
practices							
Social support	.036	.053	.049	.682	.495	.484	2.068
Family- supportive supervisor behaviours	.028	.053	.046	.523	.601	.323	3.098
Affective trust in supervisor	.155	.038	.254	4.126	.000	.648	1.544
Technostress	.008	.062	.007	.129	.898	.796	1.256

a. Dependent Variable: Job satisfaction

#### Life satisfaction

I-deals HR practices were found to have the strongest impact on life satisfaction (B = 0.19, p < 0.05), followed by PSC (B = 0.18, p < 0.05). Affective trust in supervisor and technostress had similar influences on life satisfaction

(B = 0.10, p < 0.01) and B = -0.13, p < 0.05 respectively). Other organisational factors were not found to have significant impacts on life satisfaction, shown in Table 15.

Table 15 Linear regression for life satisfaction, significant variables in bold

	Unstandardized Coefficients		Standardized Coefficients			Collinearity	Statistics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	2.070	.308		6.711	.000		_
PSC	.178	.070	.196	2.529	.012	.443	2.259
I-deals HR practices	.189	.079	.175	2.394	.017	.499	2.003
Social support	060	.054	082	-1.102	.271	.484	2.068
Family-supportive supervisor behaviours	.010	.055	.016	.176	.860	.323	3.098
Affective trust in supervisor	.103	.039	.171	2.666	.008	.648	1.544
Technostress	134	.064	122	-2.108	.036	.796	1.256

a. Dependent Variable: Life satisfaction

#### Career satisfaction

Both PSC and i-deals HR practices were found to have the strongest impact on career satisfaction (B = 0.45, p < 0.001). Technostress had a slightly higher impact (B = -0.29, p < 0.01) than affective trust in supervisor (B = 0.21, p < 0.001) on career satisfaction. Other organisational factors were not found to have significant impacts on career satisfaction (Table 16).

Table 16 Linear regression for career satisfaction, significant variables in **bold** 

		ndardized efficients	Standardized Coefficients			Collinearity	Statistics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	2.260	.462		4.894	.000		
PSC	.452	.105	.312	4.295	.000	.443	2.259
I-deals HR practices	.447	.119	.258	3.768	.000	.499	2.003
Social support	030	.081	025	365	.716	.484	2.068
Family-supportive supervisor behaviours	154	.082	159	-1.872	.062	.323	3.098
Affective trust in supervisor	.205	.058	.212	3.524	.000	.648	1.544
Technostress	294	.096	167	-3.078	.002	.796	1.256

a. Dependent Variable: Career satisfaction

#### Summary: WA

Figure 17 is a graphical representation of the predictors of mental health and well-being outcomes for the WA respondents. The solid lines predict a positive association from the variable to the corresponding outcome, i.e. the variable is predicted to increase that outcome. The negative associations, indicated by the broken lines, predict that the variable decreases that outcome. For example in Figure 17, PSC is predicted to increase job, life and career satisfaction and the WHO-5 well-being score (solid line) and decrease (broken line) sleeping troubles, perceived stress and burnout. Whereas technostress is predicted to increase sleeping troubles, perceived stress, burnout and mental health problems (solid line) and decrease well-being and satisfaction (broken line).

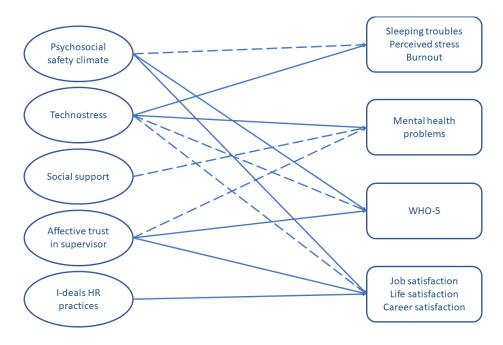


Figure 17 Predictors of mental health and well-being outcomes for WA respondents

----- indicates negative associations

indicates positive associations

# 2.2.4 Comparing WA and Australia-wide public sector predictions for mental health and well-being

Similar to the findings from the WA region sample, the significant effect of technostress (B = 0.44, p < 0.001) was higher than that of PSC (B = -0.25, p < 0.001) on perceived stress. Other organisational factors were not found to have significant impacts on perceived stress, as shown in Table 17.

Table 17 Linear regression for perceived stress, significant variables in bold

<del>-</del> -	nstandardized Coefficients	d Standardiz Coefficier			Collinearit	y Statistic	S
Model B	Std. Erro	r Beta	t	Sig.	Tolerance	VIF	
(Constant)	1.035	.320		3.240	.001		
PSC	246	.064	244	-3.845	.000	.515	1.943
I-deals HR practices	.095	.074	.076	1.285	.200	.586	1.705
Social support	018	.051	020	352	.725	.630	1.587
Family-supportive supervisor behaviours	.007	.053	.011	.141	.888	.318	3.147
Affective trust in supervisor	001	.042	001	012	.990	.459	2.180
Technostress	.445	.067	.322	6.630	.000	.874	1.144

a. Dependent Variable: Perceived stress.

#### Mental health problems

Consistent with the findings for the WA region, mental health problems were strongly affected by technostress (B = 0.49, p < 0.001), greater than either PSC (B = -0.22, p < 0.001) and social support (B = -0.13, p < 0.05) (Table 18)

Table 18 Linear regression for mental health problems, significant variables in **bold** 

6 1.705	.586	.198	1.284	0.76	.072	.095	I-deals HR practices
บ 1./บอ	.586	.198	1.284	0.76	.072	.095	I-deals HR practices
5 1.943	.515	.000	-3.581	217	.062	223	PSC
		.000	4.041		.311	1.257	(Constant)
- 1	Tolerance	Sig.	t	Beta	Coefficients  B Std. Error		Model
earity Statistic	Collinearity			d Coefficients	Unstandardized Coefficients		
				Standardize d	Unstandardized		

a. Dependent Variable: Mental health problems

#### **Burnout**

The findings showed that both PSC and technostress had similar degrees of influences on burnout (B = 0.34, and B=-0.33, p < 0.001). These findings are consistent with the results from the WA analysis. Other organisational factors were not found to have significant impacts on burnout (Table 19).

Table 19 Linear regression for burnout, significant variables in **bold** 

		dardized ficients	Standardized Coefficients			Collinearity	Statistics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	2.786	.378		7.364	.000		
PSC	337	.076	292	-4.450	.000	.515	1.943
I-deals HR practices	.123	.088	.086	1.398	.163	.586	1.705
Social support	025	.061	025	419	.676	.630	1.587
Family-supportive supervisor behaviours	.047	.063	.063	.757	.449	.318	3.147
Affective trust in supervisor	.000	.050	.000	003	.997	.459	2.180
Technostress	.331	.079	.210	4.166	.000	.874	1.144

a. Dependent Variable: Burnout

#### Sleeping troubles

The results showed that technostress had the strongest impact on sleeping troubles (B = 0.39, p < 0.001) followed by PSC (B = -0.16, p < 0.05). Other organisational factors were not found to have significant impacts on sleeping troubles, as indicated in Table 20.

Table 20 Linear regression for sleeping troubles, significant variables in **bold** 

		Unstandardized Coefficients		Standardized Coefficients			Collinearity	Statistics
M	odel	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	2.376	.352		6.753	.000		
	PSC	156	.070	142	-2.219	.027	.515	1.943
	I-deals HR practices	.165	.093	.123	1.710	.085	.586	1.705
	Social support	032	.056	033	563	.574	.630	1.587
	Family-supportive supervisor behaviours	048	.058	067	824	.410	.318	3.147
	Affective trust in supervisor	083	.047	120	-1.772	.077	.459	2.180
	Technostress	.387	.074	.258	5.238	.000	.874	1.144

a. Dependent Variable: Sleeping troubles

#### WHO-5

In reverse order to the results found in the WA region, the Australia-wide public sector respondents indicated that PSC had the strongest impact on WHO-5 (B = 0.31, p < 0.001), followed by technostress (B = -0.27, p < 0.001). As shown in Table 21, other organisational factors were not found to have significant impacts on general well-being.

Table 21 Linear regression for WHO-5, significant variables in bold

	Coefficients		Standardized Coefficients			Collinearit	y Statistics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	2.271	.299		7.599	.000		
PSC	.313	.060	.323	5.232	.000	.515	1.943
I-deals HR practices	018	.069	015	262	.793	.586	1.705
Social support	.066	.048	.078	1.389	.166	.630	1.587
Family-supportive supervisor behaviours	.061	.049	.097	1.238	.216	.318	3.147
Affective trust in supervisor	051	.040	085	-1.296	.196	.459	2.180
Technostress273 063		207	-4.353	.000	.874	1.144	

a. Dependent Variable: WHO-5

#### Job satisfaction

In agreement with the WA sample, PSC was found to have the strongest impact on job satisfaction (B = 0.35, p < 0.001). In the Australia-wide sample this was followed by social support (B = 0.13, p < 0.01) and affective trust in supervisor (B = 0.11, p < 0.01) whereas the WA respondents indicated affective trust in supervisor was the only additional impact on job satisfaction. Other organisational factors were not found to have significant impacts on sleeping troubles (Table 22).

Table 22 Linear regression for job satisfaction, significant variables in **bold** 

	Unstandardized Coefficients		Standardized Coefficients			Collinearity	Statistics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	1.477	.291		5.076	.000		
PSC	.349	.058	.362	5.996	.000	.515	1.943
I-deals HR practices	.043	.068	.036	.635	.526	.586	1.705
Social support	.128	.047	.150	2.744	.006	.630	1.587
Family-supportive supervisor behaviours	081	.048	130	-1.692	.091	.318	3.147
Affective trust in supervisor	.110	.039	.181	2.837	.005	.459	2.180
Technostress	064	.061	049	-1.052	.293	.874	1.144

a. Dependent Variable: Job satisfaction

## Life satisfaction

PSC (B = 0.17, p < 0.001) and technostress (B = -0.14, p < 0.05) had similar influences on life satisfaction according to nationwide public sector respondents. This contrasts with the WA respondents who indicated i-deal HR practices had greater impact. Other organisational factors were not found to have significant impacts on sleeping troubles, as indicated in Table 23.

Table 23 Linear regression for life satisfaction, significant variables in bold

	Unstan	dardized	Standardized			Colline	arity
	Coeff	icients	Coefficients			Statis	tics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	2.232	.291		7.668	.000		
PSC	.174	.058	.194	2.984	.003	.515	1.943
I-deals HR practices	.044	.068	.040	.657	.512	.586	1.705
Social support	.080	.047	.101	1.714	.087	.630	1.587
Family-supportive supervisor	011	.048	019	229	.819	.318	3.147
behaviours							
Affective trust in supervisor	.062	.039	.111	1.612	.108	.459	2.180
Technostress	143	.061	116	-2.335	.020	.874	1.144

a. Dependent Variable: Life satisfaction

#### Career satisfaction

As in the WA sample, PSC (B = 0.25, p < 0.01) was found to have the strongest impact on career satisfaction. However, in the Australia-wide sample social support also had an impact (B = 0.23, p < 0.01) whereas for the WA respondents i-deals HR practices impacted career satisfaction. Similar to the WA findings, technostress had a slightly higher impact than that of affective trust in supervisor on career satisfaction. Other organisational factors were not found to have significant impacts on career satisfaction (Table 24).

Table 24 Linear regression for career satisfaction, significant variables in bold

	Unstandardized Coefficients		Standardized Coefficients			Collinearity	Statistics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	2.602	.451		5.769	.000		
PSC	.248	.090	.179	2.750	.006	.515	1.943
I-deals HR practices	.052	.105	.030	.496	.620	.586	1.705
Social support	.234	.072	.190	3.234	.001	.630	1.587
Family-supportive supervisor behaviours	027	.075	030	357	.721	.318	3.147
Affective trust in supervisor	.072	.060	.083	1.208	.228	.459	2.180
Technostress	092	.095	049	973	.331	.874	1.144

a. Dependent Variable: Career satisfaction

# Summary: Australia-wide

To summarise, Figure 18 illustrates the factors that predict mental health and well-being outcomes in the sample of Australian public sector employees. The results are similar to the WA sample in Figure 17.

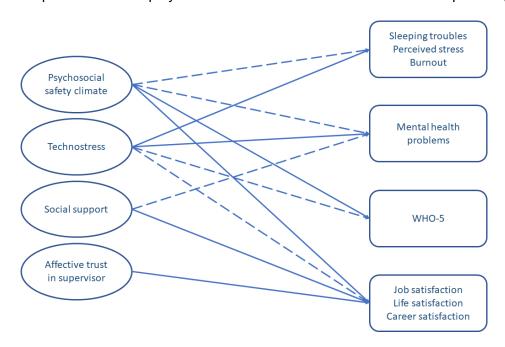


Figure 18 Predictors of mental health and well-being outcomes for Australia-wide respondents
------ indicates negative associations
indicates positive associations

# 2.2.5 Summary of quantitative findings

The two-phased quantitative survey in this project surveyed working Australians on their perceptions of organisational work conditions, their experiences of home and work demands and mental health and wellbeing during the COVID-19 pandemic. Overall, 52 % of the respondents were working from home at least 8 hours per week during the pandemic. Through both WA and Australian respondents, consistent evidence was found for the positive influences of PSC and affective trust in supervisors on well-being and employee satisfaction with job, life and career. The prevalence of PSC was also negatively associated with sleeping troubles, perceived stress and burnout (Figures 17 and 18). On the other hand, the findings provide empirical evidence for the harmful effects of technostress on employees' mental health and well-being. Support from co-workers had a positive impact on mental health problems. Despite the consistently significant evidence, there are some differences in the perceptions of WA and Australian employees. For instance, the findings showed that PSC positively impacted mental health problems in the overall public sector. This relationship was not evident in the sample of WA respondents. We found that i-deals HR practices were positively related to WA employees' satisfaction with the job, life and career, but not in the sample of Australian public sector respondents. The findings highlight the importance of organisational and managerial factors in promoting mental health and well-being of workers.

While the quantitative survey data is useful in determining connections between factors it is limited in understanding why these factors are important and how they are experienced. The qualitative phase of this research aimed to delve deeper into the experiences of employees and managers who worked remotely during the pandemic. This is described now in section 3.0.

# 3.0 Interviews with managers and employees

# 3.1 Method

Data for this report came from 39 semi-structured interviews conducted between March and May 2021. Of the participants, 24 were employees (indicated as E1, E2, etc.), and 15 were managers (indicated as M1, M2, etc.). Participants of the study were a mix of private and public sector workers of diverse demographic background, working in WA organisations. All participants had experience working remotely as a result of the COVID-19 pandemic and its associated lockdowns and restrictions.

While we did not collect detailed demographic information from participants, or information from which they could be identified for ethical reasons, more than three quarters of the sample were women (n=30) and less than one quarter men (n=9) and included individuals from across the age spectrum.

Participants were recruited by reaching out to key members of the research team's extended professional networks via an invitation email. This invitation email included information about the study and a request to provide a list of potential participants within their own network who were eligible, and potentially interested in participating in the study. The researchers then contacted potential participants individually via email, with information about the study, as well as information regarding their privacy and confidentiality, along with the consent form. Interviews were subsequently scheduled according to the researcher's and the participant's availability. Participants were given the opportunity to ask any questions they had, or to withdraw at any stage. This process was approved by and overseen by Edith Cowan University's Ethics Committee. Signed consent forms were received from participants before they were interviewed.

Semi-structured interviews were conducted via the Microsoft Teams on-line platform, or via Zoom where the participant did not have access to Teams. Interviews typically lasted between 30-60 minutes. The interviews explored flexible workers' and managers' thoughts about flexible and remote working arrangements in their organisation, diversity and flexible working, links between risks, hazards and safety and flexible working, engaging with work health and safety processes while undertaking flexible working, and key facilitators and barriers that can affect successful and safe flexible and remote working arrangements. The full interview schedule is provided in Appendix 2 with example questions presented below:

- What are the main changes in how you go about your work routine before COVID-19 and now?
- How would you assess your work/life balance transitioning to COVID-19 restrictions?
- When you work from home, what do you miss most about going to work?
- What does good mental health mean to you in relation to your work?

Interviews were recorded and transcribed in full with participants de-identified. The data analysis approach followed a qualitative thematic content analysis process. An initial framework was created according to themes identified from the literature and through an initial review of the content of transcripts by the research team who had conducted the interviews. Broadly speaking, this framework comprised of

outcomes of remote work (largely in relation to mental health and well-being factors), job demands, and resources associated with remote work, and perceptions around improvements to the remote work experience. This framework was transferred to qualitative data analysis software (NVivo) as a starting point to help organise the interview data into themes. As each transcript was read, verbatim sections were allocated to themes – a process referred to as 'coding'. As this coding continued the framework was added to and adjusted to best reflect the ideas emerging from the participants. Alongside the coding, the researcher made memos of developing themes, relationships and ideas sparked from the transcripts. Finally, the resultant themes were refined, combined, and modelled to elucidate the main findings of the interviews. These findings are present in the next section.

# 3.2 Key qualitative findings

Participants provided insight into how workplace mental health is understood by employees and managers. The 25 most frequent words used by the interviewees in response to the question: "What does good mental health mean to you in relation to your work?" are shown in the word cloud in Figure 19. Interviewees emphasised people, feelings and support for good mental health in the working environment.



Figure 19 Word cloud of participants perception of 'good mental health at work'

This conceptualisation of good mental health highlights the holistic approach required for the support of mental health and well-being, particularly in a time of disruption and uncertainty. The broad nature of mental health and well-being is exemplified in the themes that emerged from the interviews related to flexible work and the COVID-19 pandemic. The key themes are inter-related across the work system: at an individual level (e.g., personal circumstances, work-family conflict); at a task level (e.g., workload, performance); at a team level (e.g., social isolation from colleagues, support) and at an organisational level (e.g., trust, leadership).

The presentation of themes in this section is organised into the three phases of the COVID-19 disruption: pre-lockdown, during lockdown and post-lockdown. These are shown in the next model (Figure 20), along with the key themes for each phase and how they are associated with each other (shown by the connecting lines). The themes and their inter-relationships highlight elements that contribute to positive or negative outcomes for well-being and mental health. These include factors of flexible or remote working arrangements during the pandemic that were perceived by participants as being beneficial or detrimental to well-being and performance. The experiences of outcomes depend to a large extent on how well the management of each stage was perceived and experienced by the employees and managers.

#### 3.2.1 Pre-lockdown

Preparation, technical capabilities, and experience in remote working at the organisational and individual levels impacted the experiences of employees and management as the transition to remote working began as the pandemic developed. This included change in ways of working, technical capabilities, and abilities in the use of technological tools. These elements are discussed in the next paragraphs with exemplar quotes from interviewees and additional quotes that are included in Table 25.

Without good preparation some people experienced difficulties in changing the way that work was done. This included uncertainty about how the work would be done, what technology was needed and how this would be provided, and what support would be necessary.

That first period was incredibly chaotic...Management wasn't sure exactly what resources or tools staff would need to do their jobs, and staff also didn't know what tools they would need to do their jobs.

This experience of disarray contrasted the experiences of those practiced in working flexibly who were able to transition to remote working with much greater ease,

We were quite fortunate...In the office we operate an agile environment, so you don't have desks that you are sat at. It's clean desk policy. Nothing is left out. You have a laptop. You have a plastic box and you sit where you want. So, to go to home working, everyone already had VPNs set up. We just literally picked up our laptop and box and went home. It was seamless, and it worked very, very well.

The technical capabilities of the organisation influenced the extent to which the transition to remote work was smooth. The ability to remotely connect through established VPNs was a facilitator, as was mobile devices such as laptops as opposed to desktop computers. Organisations with collaborative software systems (e.g., Teams, Zoom) previously installed or in use were also advantaged when the pandemic started,

COVID was not something that any of us was prepared for. But the fact that we had the technology in place and the policy in place, it did make that transition when we had to go into lockdown a lot smoother than I know all of our other public-sector colleagues in other agencies found.

M12

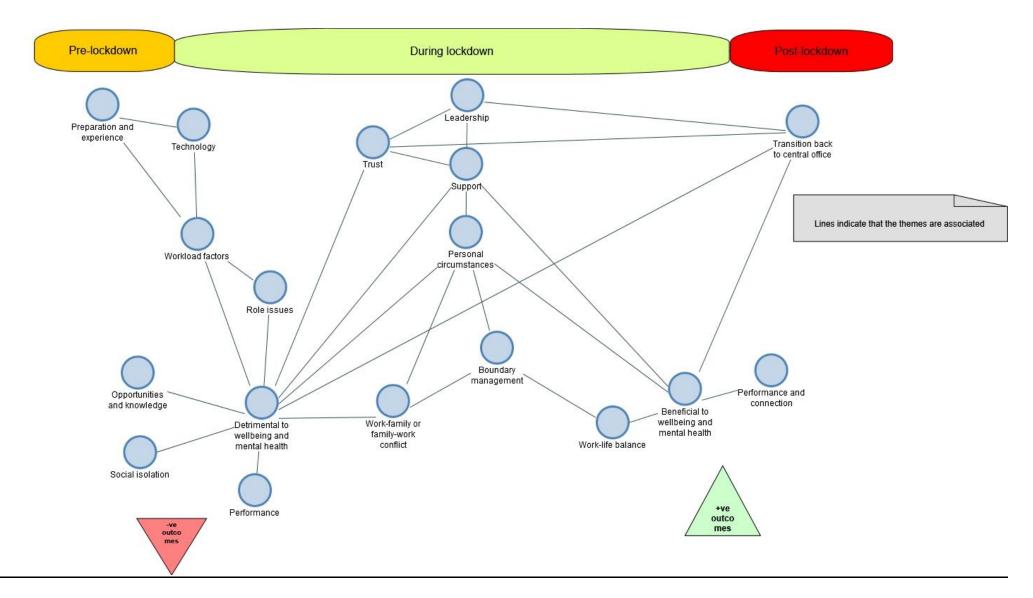


Figure 20 Key themes extracted from the interview data and their relationship to each other

The degree of training, abilities, and familiarity of team members in the use of technological tools that enabled remote working also influenced the experiences of moving to remote working, as the contrasting quotes below suggest,

Because we were moving towards Office 365 a few months before the COVID 19 lockdown it was quite timely, and I actually was working on the transition to that. So, I was very familiar with the system and everything, so I did not find that challenging at all.

At the time of going into COVID lockdown we were using Skype. And we were in the infancy of Teams.

Everyone had Teams, but we weren't really using it. We very quickly shifted to Teams, but all of the office infrastructure was set up for Skype, not Teams, which gave some real challenges.

E11

Previous experience in working remotely impacted positively on the forced transition due to COVID-19. This included having established organizational policies and procedures and less formal 'rules' and expectations set-out by managers and teams,

I would say 90% already worked from home. So it was quite seamless in a way, because we already had the facilities, we already had flexible work rules, where we send our tasks to our manager each morning to say what we're going to do.

M14

However, those who had no previous experience of remote working found the transition more difficult. This increased workload while systems were established, as well as creating more stress and worry for team members,

We worked from home for one or two months. During that time, because we never done working from home, I was a little bit worried.

Table 25 Participant quotes illustrating experiences during the transition to remote working

Theme	Verbatim quote example
Preparation	I think at the start of the COVID-19, for us as an organisation, because it was so unclear as to how we were going to operate from our homes, it needed technology to come in really quickly, needed our people to be focused and to continue to deliver; that there was a sense, initially, as to what are we going to get our people to do?' M8
Technical capabilities	I know technology is a huge thing for lots of different organisations, and many, that was the litmus test for whether they were - so if you look across WA state public sector, even now, some of them don't have the technology - they didn't have the technology for a COVID shutdown in order for people to be able to work from home. M2
	We had to get a remote RDA access to work from home, so whilst the ATO was dwindling that out, there was a lot of problems, slowness, log-in issues, access issues. E9
Training and abilities	I did a crash course on Zoom, Googled everything, asked around how, what do we do? Just kind of self-thoughts on a situation. Then I had to teach all the facilitators or most of them how to use this new platform because many of them just like myself had not been exposed to it. M7
Previous experience	Having a flexible work arrangement in place has probably assisted in that because [I was] used to working at home, whereas not having had that in place would've been quite challenging. So, I've had 12 months to sort of adapt to that. E17
	When they [another organisation] first went into lockdown, and they were like, "We don't work from home – I don't even have a laptop!"I was like, "Oh, I'm working from home, it's fine." I had everything I needed, whereas those guys had no idea what to do, and it was so much more of a challenge. Whereas because we have already had so many systems in place, it was just so much easier. M14

# 3.2.2 During lockdown

During lockdown, the flexible working experiences of participants were shaped predominantly by the overlapping themes shown in Table 26. These are described in more detail in the narrative that follows with verbatim guotes used to exemplify the themes.

Table 26 Themes during lockdown

Theme	Description
Leadership	Perceptions of organisational leadership during COVID and remote working
Support	Perceptions of support received or given or support lacking while remote working during COVID
Personal circumstances	Perceptions of flexible work based on personal circumstances
Workload factors	Workload factors related to COVID and flexible/remote work
Technology	Perceptions of technology in flexible/remote working and COVID
Trust	Perceptions of trust related to flexible/remote working

# Leadership

Organisational leadership was important to participants throughout the stages of the pandemic, the change to flexible working and the return to 'business as usual'. Positive experiences of leadership were expressed as perceptions of strength and certainty; providing reassurance to staff and a sense of organisational pride as exemplified by the next quotes,

In my team and from the senior CEO I thought the leadership was very good. From my personal perspective I felt it was strong, it was clear, it was directional, there was no iffy and butty, what are we doing. It was like yep this is what we do.

E15

I saw really strong leadership in terms of "Okay, this is what's happening, this is the action that we're going to take". But there was also a lot of consideration about how it would impact people on a personal level and taking into consideration people's mental health and well-being. So, the response was very decisive, but also extremely considered.

Perceptions of poor leadership were expressed with disappointment from employees as a 'lost opportunity' for leaders to support their people, show clear direction, consistency, and action,

So, there was clearly no plan, and again, my problem is it's one thing not to have a plan in March 2020 – no one had a plan in March 2020..the messaging at the time was like "We're all in this together. Let's be agile," But in February 2021, that's not acceptable...you need to have protocols in place.

I keep talking about it as a Jenga tower... they need to put people in place to sustain what was going on here, everything else was shaking.

The perceived quality of communication played a role in how interviewees felt about their organisation and its leadership. For example, relational communication from a senior leader was well received,

But communication throughout that was very strong, to the point where we were having – we're an organisation in Australia of about 5000 people. And we were having a weekly briefing from the managing director. He would come online and he would literally brief everybody in – I think he did about three sessions a time.

I feel like they communicate really well, so there's always a message from the senior manager going, "this is what's happening. Do your best. Come in and collect" – there was a lot of instruction and support available from the senior manager.

M14

Whereas there was dissatisfaction with impersonal, directional, or unclear electronic messages,

You know we were getting one and a half thousand-character SMSs that went on for pages. Do this, don't do that. But there was no personal touch.

We would get these emails from the [senior leader] which were frankly disheartening... it was completely opaque.

In addition, leadership was associated with perceptions of organisational support and support from wider social circles which is discussed next.

# Support

The key factors of support identified were line managers, co-workers and the support of the team. Interestingly, family and friends also provided support for employees and managers working remotely. These factors in support are illustrated in Figure 21 below and described further in the next section.

Organisational support tended to be perceived positively when the support was relational, emphasising

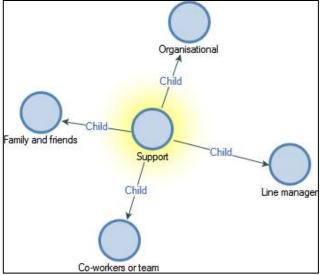


Figure 21 Factors in the theme of support

personal support and acknowledgement of the challenging circumstances. When personal support was perceived to be of low quality, this was experienced negatively by participants as the next quote suggests,

No one ever reached out to say, "Hey, how are you going? Is this working for you?". All that HR ever did was send forms that we had to sign to make sure that we were health and safety conscious, and we had a fire extinguisher. There was no personal touch at all.

Allowing flexibility in work targets was also seen as good organisational support to acknowledge the impact of the more general pandemic situation but also personal circumstances,

Flexibility from management has just been amazing. Absolutely, truly amazing, which has helped the well-being, which has helped individuals, which has helped change the mindset.

In contrast, dissatisfaction was expressed when the organisation failed to take into account the circumstances resulting from the pandemic, provided resources without feelings of genuine support, or did not provide support that aligned with the wider public health messaging,

They were doing meetings, like information sessions. We were offered access to the EAP, but that was only more to do with the restructure. It was such a weird time to do a restructure when people were already feeling vulnerable, and then they pushed ahead with this thing, hence why I left.

E18

It was really frustrating because to me it made sense that I be able to work from home the whole time because the message that the government was sending everyone was to do that. Yet, at a corporate level in my workplace, the message was that we should keep coming to work.

Many creative examples of organisational support for mental health during remote working were retold by participants, including 'Mindful Mondays', 'Coffee Roulette', 'Boombox Fridays', 'Friday Quarantinis' and curated online libraries of resources. In addition, some managers reported receiving training and of resources.

Line manager support was generally reported as excellent by employees, as shown in the quotes in Table x, even when this did not reflect their perceptions of overall organisational support. From a manager's perspective, the need to provide support particularly for mental health was well understood, while at the same time there were indications that this increased their workload with possible negative outcomes for their own well-being. Examples of this is shown in Figure 22.



Figure 22 Quotes from managers supporting remote workers

Co-worker and/and team support were valued highly by participants and the effort put into providing additional, particularly social support, was appreciated. When this support was not present or had subsided it was missed, even for short periods of lockdown,

We didn't have meetings and things like that, so I did find it - but I guess it was only a week. But even in that week, it just felt more isolating.

Additionally, there were examples of support provided by *friends and family* which contributed positively to the abilities of people to cope with the change in circumstances. Table 27 provides additional quotes to highlight the importance of multiple levels of support to employees.

Table 27 Exemplar quotes related to support

Support factor	Example quotes
Organisational	We did some mental health training as managers that my manager had organised because she could see that it was – there were a few staff where it would benefit that their managers had a bit more understanding and tools at hand. M5
	We built a working-from-home platform of information to support individuals and line managers with just some tools and some thinking around how to support people working from home, and also some supports around helping manage stress and resilience and fatigue and all those mental-health issues, recognizing that that was a significant thing for people. So giving people the tools that they need. M12
	But the good thing I want to mention is that we did have that pressure taken off because we had from above and government that work as best you can but you will get paid that time for this week regardless.  M5
	The organisation's been very positive, very supportive and we've been having what's called pulse surveys, which checks in on our mental well-being and how we're coping and gives us, the staff, the opportunity to offer feedback to the department on how they can support mental well-being. E17
Line manager	I feel like she is just so supportive and so good. I think that was extremely helpful, but I also feel like that's the way she is. I don't think it's an organisation thing, it's more like that I'm very lucky to have her as a supervisor. E8
	In terms of more direct support from my director and manager, great. If we needed time off, if we needed help with anything, always open at any time; if we had to email them or even just call them directly or have a meeting. They took all barriers down. E1
Co-workers / team	There were other people in the team that made an effort to create dedicated time during the week where we could catch up for coffee breaks, set aside half an hour on a Thursday just to see how everyone was going and chat about everything and anything. E1
	We could send messages, we could Teams call whenever we wanted, but at least we knew at that time of day that was, "Okay, where are we at", or, "What's happening", or, "How are you going", or, "How did you sleep last night". We were very much in touch with how everybody else was, which I thought was great. E6
	There was probably a lot more of the connecting, like regular meetings every morning post COVID just to check in and make sure everyone was surviving out in their makeshift offices, so I think that was really – it was an advantage for us that people had the time to give to each other.
	After a period, the business decided that we would drop off those daily meetings, or each team decided individually. I don't actually think that was probably the right move, having looked back. I think keeping that connection going is actually really important, and whether that's an eat lunch together and go on Zoom and have a chat. M10
Family and friends	Maybe in the second days of the lockdown, and then actually my husband is very helping try to make me calm and then everything is fine. E3
	When the lockdown happened, my coach, the owner of the gym, was very good at loaning out all of her equipment, she made up bundles for everyone. We went and picked them up in the carpark, all staggered pickups. So I was able to set up a home gym in the shed. E18

#### Personal circumstances

Differences in individuals' specific situations were consistently perceived by participants to be an important mediator to the way in which flexible working during COVID-19 was experienced.

I just get a feel that there definitely isn't the right environment in some cases...Is it just that they don't have the right technology, they don't have the right internet service? Is it a safety aspect? Is it just a mental health aspect? Is it a physical aspect? Is it the ergonomics? I think if you have one of those, it can potentially play off on your mental health or something else.

M10

Personal circumstances included the make-up and social environment of the household (see also work-family conflict and family-work conflict). People living with extended family or in a flatting situation may not feel comfortable or it may not be appropriate or conducive to remote working. Related to this, the availability of a suitable physical working space was also a factor, with people who did not have a dedicated workspace forced to adapt or rearrange their living spaces (see also Work family conflict). Working in children's' bedrooms or in the kitchen was common. This was contrasted with those with plenty of room to work separately from other household activities. Additionally, personality and personal preferences played a role. Those who were more introverted preferred the working arrangements compared with those who preferred the company of others. Stage of life also plays a role in this, with younger people tending to want more social interaction. Considering the needs of people with disabilities to be able to work flexible and accounting for the range of diversity was perceived to be a vital part of success for all people. Examples included those with hearing disabilities which were managed better in a home environment with less extraneous noise and use of ICT and those that managed better in the work with additional support for their well-being. Quotes illustrating these points are included in Table 28.

# Workload factors

During the pandemic and in the move to flexible, remote working there were several impacts on workload which can be divided into overlapping sub-themes. Table 29 shows these with an example from the interviews. Initially, there was a general report of increased work hours associated with the extra efforts required to transition and also support people. As the situation settled, work hours continued to be extended. This was often attributed to work replacing travel time. Moreover, there were reports of extended days due to managing home and family responsibilities, working more flexible hours and the tendency to overwork. There were some reports of increased difficulty with tasks when working remotely, particularly associated with collaboration and incidental interactions that makes work flow easier. The nature of usual work tasks and if the role was either connected to the pandemic response or directly affected by it determined if tasks were perceived to have changed or the load increased. Some participants reported an increase in work tasks while others reported a decrease. For some this decrease was significant, resulting in underload stress, feelings of job insecurity and in some cases job loss.

Personal circumstance	Example quotes
Household make-up	A lot of our students also, because of their family situations, didn't feel comfortable discussing certain ideas in their home. They felt either embarrassed or it might bring them into conflict with family members. E7
	One of the team members, in her household she has three different generations, so she's got her parents, or in-laws, or whatever, and her and her husband and her kids, as well, and I think her husband had contracted the virus. M1
Physical working space	I was in my son's bedroom because, literally, that was the only place that we had, in the house, that I could use and be private. E5
	So yeah, I've got this corner. It's in the back corner of the house. It's away from everybody. But we're empty nesters now and we have a four-bedroom house with a study. So there's plenty of space to work. E4
Personality	Really good for me, and I think it comes, probably, down to personality types. I'm
	an introvert, and I quite liked having some quiet to be able to really focus and get some writing done and some things done. E12
	I know there's some guys who volunteer – they've chosen not to come in. They haven't been into to the office for a year. Whereas myself, I'm in at least three days a week. But then I'm a social animal. E4
	Again, it is a very personal journey. Some people love being in the office and have to be in the office. Sometimes it can be like an age thing as well. I found those people in their twenties and low thirties want that more frequent contact. E22
Disability	We had a third of the 15 grads that identified on disability pathway. So given that they had just been inducted, just started work, there were a couple of them where I had to try and make arrangements for them to be in the office, because the danger factor and the duty of care for them to be working from home was too great, from a health and well-being perspective. M2
	I didn't realise how much my introverted nature actually impacted my health and well-being at work. I am also hard of hearing. I am deaf, and without my hearing aids I can't hear anything. When Covid happened, two things happened for me. One was communication happened on my time, on my schedule. The second thing that happened was I could hear everything, and I could participate in conversations.  M15

Managers generally reported an increase in work tasks due to providing increased support, work and social, to their distributed teams (Figure 22). This was also reflected in perceptions of an increase in work intensity. This was attributed to the crisis situation, involving the provision of additional support to team members and working from home without the usual people interaction that provide breaks (see also boundary management). In addition, the use of technology for communication seemed to create a new work intensity. The impact of technology in flexible working is discussed more in the next section.

Sub-theme of workload	Description	Example quotes
factors Changes in working hours	Reports of increased work hours,	I actually think I was working more hours, initially, because you're trying to do everything and be everything. M1
	extended days, flexible hours	Look, if it means you've got to do your seven and a half hours over 13 hours because now you've got children at home and you need to break up those hours over the day, whatever works for you works for you. E10
		The days you work at home you can run the risk of overworking, working really long hours, because you think, I've just saved an hour on the commute, it's 7 o'clock I'll just go and start working straight away, if you don't build other things into your life. M11
Task difficulty	Perceptions that the working arrangements or	Because you're on your own you can't ask someone else a question if you're stuck. We had a different way of seeking support, which then took a little bit longer. E5
	COVID made tasks more difficult, more complex or less efficient or effective	Talking about work and comparing as opposed to typing, typing out the situation, lengthy but still could potentially come out in a different result sometimes as well. E9
		And it was that lean-over and go, "what do you think?" And we – just bouncing off. So, what you miss is the ability to bounce off of somebody when you're not in the office; bounce ideas, that sort of thing. E11
		Not being able to get hold of colleagues, things taking three times as long as they should, I would find that stressful. M11
Work tasks	Perceptions of change in work tasks or amount or work	There were moments where my training officer would maybe say "oh this is so much harder and I have to do this on top of what I was doing before and difficult, it's more work". M7
		It probably dropped about probably two hours of my work and was left feeling a little bit probably unhappy because I'd sort of gone from doing quite a bit of work to almost feeling a bit relegated in terms of my workload. E17
Work intensity	Perceptions that work became more intense	So, when we first went into lockdown it was super busy. At the beginning it was 10 hour days and then sleeping with my work phone next to me just in case. E1
		I think the first day of lockdown I had six and a half hours of Teams meetings, and that was full on, and I was absolutely exhausted that night. M11
		It was unrelenting but maybe it's because of the work that we do in the area that I work, but there were just imperatives that we couldn't, in terms of timeframe, we had to deliver really quickly, so everybody was hands on board everybody. M8
		You can imagine, you dedicate a lot of time and energy into supporting staff through that incredibly difficult time. M15

# Technology

There were issues noted with the variety in internet infrastructure quality and the limitation of home data plans. This resulted in some cases in policy updates to financially support flexible working or individuals taking on this cost. Interestingly, technology was seen as an essential and welcome facilitator of flexible work and one which has ensured the continuity of operations. The technology, once implemented generally functioned well in terms of operation and functionality and was not seen as a stressor in these terms, provided people have the technical equipment, skills and support required (see preparation). However,

reports of increased fatigue were a common stressor. Associated with work intensity factors in Table 29 the use of technology to communicate also contributed to stress for some participants. The limitations of virtual connection were recognised and a balance of in-person interactions preferred (see also social isolation). This was particularly prominent in training, teaching and developmental environments where the in-person interactions were missed, and the perception was that the quality of the education was compromised. Quotes of workers experiences related to technology are included in Table 30.

Table 30 Quotes showing the impact of technology on remote workers

Theme	Verbatim quote example
Infrastructure	We used to joke about connectivity. Like the guy that I report to, he used to sometimes stand around the swimming pool with his face held the right way for the connection to the phone to work sort of thing. M2  We were using a lot of that technology but consequently the bandwidth at home, that really suffered, and with the kids wanting to also use the same bandwidth that was a bit of a challenge initially. M8
Costs	We haven't got a policy of paying for people's home internet plans and things — so for those who didn't have either NBN, or a decent speed, it was a bit of an issue. And I think a couple have just upgraded or done something, and we've said you can claim it on tax and whatever else. Because it was decided that that wouldn't be something that we would necessarily pay for, as an institution. M3
Flexible work facilitator	Technology has really helped. If we weren't able to run Japanese classes online, we wouldn't have those teachers today. They'd be gone. M13  And thank heavens for social media. Thank heavens for MS Teams and these others, because they could link in. M6
Stress and Fatigue	So that's where I found the technology, it fatigued me, and by the end of the day I was completely braindead. I thought just sitting there looking at a screen, I didn't realise it'd have that sort of impact, but it did. M11  Just getting burned out by looking at a screen about the ways that staff might feel the need to over gesticulate or overcommunicate with their voice in order to try to convey meaning that is being lost through the webcam. And all of that stresses you out and burns you out. E7
Limitations of virtual connections	I really think this period we've gone through has shown a number of things, and one of them is that doing things online requires — it's not just something that you pick up in a sort of amateurish way and you're "Okay, I'll just fiddle a bit with my computer and then I do — everything's online and it's great and you go." I think it's really a skill set that you need to acquire and that requires training and we none of us had that. I certainly didn't. E25 We had new people starting, so trying to get a new person equipped with their new laptop and trying to help a new person settle in is really challenging when - you're not face to face so you can't develop that relationship, and also, showing people things is just so much easier if somebody's sitting next to you, or if you can just bounce ideas off each other. M1
Physical working environment	When I work from home, I work on a laptop, which is what I'm using right now, so I've only got a very small screen. Versus when I'm in the office, I've got two screens, plus I've got the laptop that I'm looking at as well so that means that I can actually see a bit more. I think it's a bit more relaxed versus trying to squint and look and see what I'm doing. E6 Through the COVID and working from home more that I actually put more effort into my home office space, making it unique for me, a nice little safe place for me to work from. E10 Between the first lockdown and this one, now I have an additional screen at home. So, it was actually more comfortable to work from home than the previous time. E8 I definitely wasn't offered any screens, and I wasn't offered a port to be able to plug the multiple screens into so that I could run them. I had to purchase an HDMI cable myself and all that sort of stuff. E18 That was all very streamed to make sure every person that will intentionally or going to be working at home has the appropriate [equipment]. 'This is what you need at home. We need photos of your working environment at home. Do we need any ergonomic checks and stuff like that and how that's going to be affected. Where are the exits?' E9

Using technology to work flexibly also requires a *workstation and working environment* beyond the computer and this was a challenge for some interviewees (see also personal circumstances). The lack of the peripheral equipment (e.g. multiple monitors, adjustable chairs, cameras) that they had in the usual office environment was perceived as a negative and may impact on the health and safety of employees. There were multiple reports of individuals making effort, including spending money, to improve their home physical working environment (Table 30). In addition, preparation for flexible working had an impact on health and safety with several participants noting that there were already procedures in place for checking that the home working environment was appropriate,

#### Trust

The theme of trust emerged from the interviews as related to leadership, support and ultimately to outcomes of well-being and performance (Figure 20). Employees and managers felt that appropriate levels of support and trust were complementary to meet objectives and if there was an imbalance then performance and/or satisfaction was affected. This is illustrated in the quotes in Figure 23.

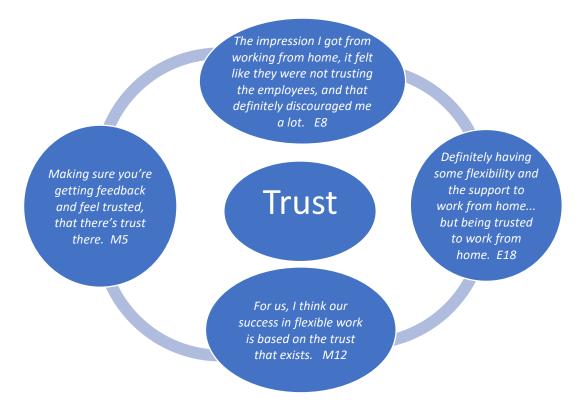


Figure 23 Quotes highlighting the importance of trust in flexible working well-being

# 3.2.3 Negative outcomes

Where preparation, leadership, support, personal circumstances, and trust were unfavourable they contributed to detrimental well-being and mental health while working flexibly during the lock down. In addition, the negative outcomes such as stress, fatigue and less physical exercise were reported consequences of negative workload factors (discussed above), roles issues primarily job insecurity, social isolation and perceived loss of opportunities to gain knowledge and reduction in performance. These interrelated themes are illustrated and exemplified in Figure 24 and explained more in the sections below before work-family and family-work conflict is discussed.

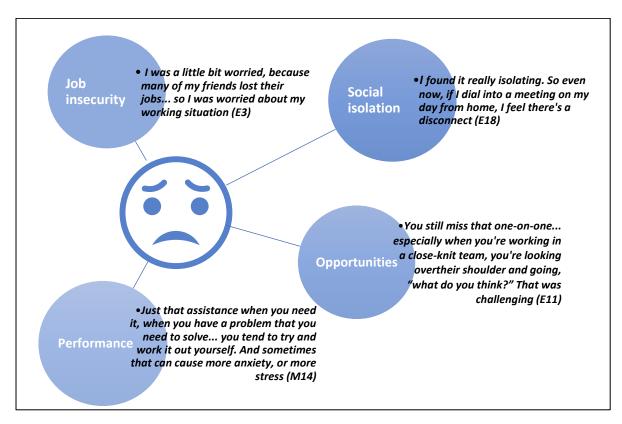


Figure 24 Themes of negative outcomes

#### Role issues

The predominant job role issue that contributed to stress was the threat of job insecurity, brought on by the COVID-19 situation. This manifested for employees as worry that the impact of the pandemic would result in job loss, which was the reality for some employees,

Was probably just the stress about job loss, as well, which I think a lot of people did worry about at the time...it did actually result in me losing my job. E21

For managers, there was worry associated with potential business failure and the impact on their employees.

I suppose we were worried in a way about the business, and - I was worried about the business, and because of that, people's jobs.

M13

In the teaching and learning environment, there were accounts of frustration and discontent where the nature of the role had fundamentally changed with the move to an online environment. This was in part due to what was perceived as incompatible demands (role conflict) and partly as a resultant lack of role clarity, as indicated in the next quotes,

I get the feeling that for a lot of people what the lockdown revealed is that we all know that our bosses don't just want us to get good results, they also want to see in the act of getting those results that we are committed and that we take our jobs really seriously.

There was no clear guidance as to "Okay, what does it mean to go online? Does it mean I just take what I have and deliver it on Zoom? Or Teams? Or does it mean I rethink it in order for it to be effective as a learning experience online? Because they're not the same thing.

## Social isolation

Acknowledgment of the risks associated with social isolation when working remotely were common amongst the participants and these are shown in the verbatim quotes in Table 31. This included loneliness and a sense of losing collegial connection and support. Generally, the negative impacts of social isolation were not experienced in the short term but were more pronounced and recognised as the period of isolation was extended. The negative potential impacts of social isolation on mental well-being were identified early in the change to flexible working arrangements. This was demonstrated in the efforts to maintain contact with teams, as discussed in the theme of support. Moreover, social isolation was linked to an extension of working hours and days and less breaks without the natural interruptions and punctuations typically seen in a central workplace environment,

When you're at home, because you're isolated, you're by yourself, you think, "I've got lots to do" – and you do have a lot to do – I don't think we give ourselves those breaks.

E6

I found though was that I was working longer days. Because I was starting earlier. And then because there was no one to actually talk to, you'd just be working.

The isolation of flexible working was also associated with a strong sense of a loss of opportunities and knowledge and a potential risk to performance, expanded in the following section.

# Loss of opportunities, knowledge and performance

Not being in the same physical location as your co-workers and managers eliminates the opportunity for spontaneous interactions. Such interactions may relate to the social interactions discussed above but the participants also identified the importance of these opportunities to be more aware of the context of their work and extend their knowledge. Related to perceptions of trust (discussed previously), being physically distributed decreased the opportunities to be 'seen' by managers, resulting in feelings of stress by some interviewees (Table 31).

Interviewees also noted the lack of opportunity for exercise to support physical well-being when working remotely. At home they noted the proximity of the kitchen and the bathroom, comparing it to the larger distances to walk in an office environment. Also, the incidental exercise associated with commuting and going out for coffee or lunch when working centrally was lacking when working flexibly,

I think I probably got a bit more incidental exercise actually when I have to work in the office because I might walk to the train station or ride my bike or go for a run or something before I start work in the city.

Moreover, there were concerns that less in-person interactions would mean that it was harder to identify those in the workplace who require more support to manage their mental well-being, as described in the next quote.

There's a lot of people in the workspace who already have mental health issues and they might be hidden and not exposed in the workplace. Or some people like going to work as it gives them an opportunity to get away from what they're dealing with at home. So how does a workspace support somebody like that if you're not aware that that's going on?

E15

Social isolation and the resultant restricted incidental interactions can impact on perceptions of work performance. Beyond the loss of social interaction, social isolation was reported as affecting the organisational and team engagement. This manifested in a feeling of disconnect and difficulties with developing a sense of team as explained in the quotes in Table 31. An increase in task difficulty (Table 29) was noted along with impediments to collaboration and communication.

Table 31 Exemplar quotes for the themes of social isolation and loss of opportunities

Theme	Verbatim quote example
Social isolation	I'm not the sort of person that's constantly craving company of people. But that being said, after a month or two months into it, you do miss that day-to-day interactions with people. E1
	I think if I'd been stuck in lockdown permanently, no option to go to the office for more than a couple of weeks, I would have found it very hard. E4
	You heard a lot of people talk about how great it was too – you don't have to get dressed or you can just wear your pyjamas at work and that kind of thing. But I feel a lot of that was pretty tongue in cheek and just trying to look on the bright side for what was for the most part just a very stressful experience. E7
	We had to make a conscious effort to have that human connection, still, because you can just get stuck at home, sitting in front of your computer, answering emails, and doing work, and it comes to the end of the day and you realise, "I haven't actually spoken to anybody." Particularly for people who are at home by themselves and don't have a family, or other people, around them. I think that was a big thing, for us, initially just making sure that human contact was maintained.
Loss of opportunities, knowledge and performance	I guess the biggest thing that I noticed at that time was the one-on-one contact that you have with your colleagues. Or just being in that space where you hear something that a colleague is talking about, and you think "Oh actually, I can provide you with some further information about that. Or that relates to something that I'm doing". So it's those things that you miss. E19
	I think you do miss out on a bit of learning just that learning that you get through osmosis when you might be sitting near a group of people and you don't have to join in to their conversation but you can hear what they're working on and any issues that come up and you kind of absorb those things, definitely miss out on that.
	People feel this anxiety of maybe, am I still liked or am I still valued or that kind of thing? I feel that was definitely something that people were trying to improvise as well. E7
Sense of team	People have come back and said, yeah, they felt really quite isolated, and it really affected our team morale and our staff engagement with the business There just wasn't a sense of that team-ness, or – We felt like we were quite disjointed. M10
	So the difficulty that you have, or that we have, is that if you've got teams where there's an arrangement that people work 50 per cent from home, 50 per cent from the office, it's the availability for supervision and development and really making people feel part of a team. M2
Collaboration and communication	As soon as we could, one colleague and I started going back to the office on a Monday and a Wednesday and a Friday. Purely to make that collaboration easier and get work completed. E4
	Whereas when you're in a [Teams] meeting, you're probably less likely to speak up, because you can't talk over someone else that's talking, or something like that. There's definitely collaboration, but it's limited. M14

In addition to the themes presented in Figure 24, work-family conflict and/ or family-work conflict was a dominant issue reported by the participants.

# Work-family or family-work conflict

Conflicts between the responsibilities of work and family were a key negative effect of working from home during COVID-19 lockdowns. This conflict contributes to negative mental health and well-being outcomes, with reports of stress and relationship breakdowns. Many examples given by the interviewees include stress associated with simultaneously dealing with children and work,

I had the whole family home and for some reason I was working on the kitchen and they thought it was really important that they needed to sit around there as well. It was like, could you all just go away for a while. E15 My son was interrupting everyone, everyone was playing with him, we're not really doing much work but then we get stressed because we have to do the work. M7

The impact of loss of normal routine, sharing workspaces and work schedules with family also created fatigue with extended work hours to compensate for time spent caring for children,

I don't think it would have been sustainable long term... we'd take turns with the kids and that would involve ducking in and out sometimes to just check the emails or if we had a meeting that we couldn't miss... Then at night we'd put the kids to bed and we'd do the remaining couple of hours...Just not doing one solid set of hours per day, it was pretty much often broken up...and then I'd have to switch off for a long time and then switch back on again, and then being tired in the morning.

The conflict of family and work also impacted on the ease of performing work tasks such as finding a quiet or private space,

Whenever my husband's answering the telephone, I had to go to other room, and then I had to talk to my client in a different room. And the opposite. Like whenever I'm talking to someone, my husband had to move somewhere.

Additionally, there were links between an organisation's preparedness and capabilities for remote working and work and personal life conflicts as some participants reported using personal resources to do their jobs,

There were often instances where I would just have to email someone my mobile number and ask them to call me directly. Or just finding ways to ensure that your job got done but using resources that normally you wouldn't feel that you want to utilise or draw on because they're related to your personal life.

Whether the conflict associated with living and working at home resulted in negative outcomes seem to be mediated by personal circumstances and how well people were able to manage the boundaries between work and home (Figure 25). Important factors in boundary management identified by participants include personal circumstances and trying to separate work and home both in a physical and cognitive way.

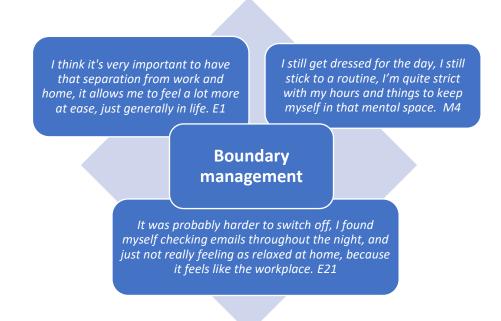


Figure 25 Participant quotes related to boundary management

Successful boundary management can result in positive outcomes of well-being through a better work lifebalance that can be aided by flexible working. The perceptions of flexible working that emerged from the interviews as positively supporting mental health and well-being are discussed next.

# 3.2.4 Positive outcomes

When leadership, support, and personal circumstances were favourable, many workers enjoyed the flexibility that remote working offered. The section of Figure 20 reproduced in Figure 26 shows the relationship of boundary management and work life balance to benefits of well-being and mental health.

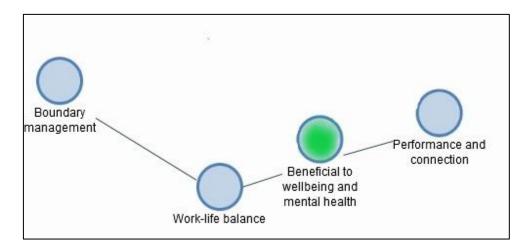


Figure 26 Relationship of the themes of boundary management and work-life balance to benefits to well-being and mental health

#### Work and life balance

Participants perceived their work-life balance was improved when working remotely primarily because of less travel time required and the time flexibility it gave them. This offered more time for family, household tasks, exercise and hobbies and increased autonomy of schedules. Verbatim quotes illustrating these benefits are included in Table 32. Benefits to mental health and well-being were reflected from the improvement in work-life balance particularly less stress and fatigue.

## Performance and connection benefits

Flexible working was perceived to improve performance and connection (contributing to positive well-being and mental health (Figure 26). Performance was primarily enhanced by time to focus with less distractions and interruptions. Other efficiencies of time were noted particularly associated with the increase use of video calls to connect to meetings as described below,

It's sometimes easy actually – it's sometimes easier to just click a button and see a face instantly if they pick up, rather than actually walk around, check are they available, walk back. It's actually a time saver. I feel like I'm definitely more productive in the sense that there's more time available

E16

The flexible working forced by the COVID-19 situation has forced development and innovation in ways of working, improving performance in some respects, according to participants,

If I had to go, tick, COVID, the good thing is that it's actually opened up the eyes of some people who said things can't be done a particular way.

M2

COVID has forced everyone to question what they do and if what they're doing is the right way or if there's a better way, more efficient way. Also, learnt and picked up quite a few new skills on the way, like being a remote worker.

Table 32 Benefits of remote working

Theme	Verbatim quote example
More time with family	I'm really, really glad I had that opportunity to work from home. I got to take my son to school in the mornings which – I've been a working mum all his life, I walked the dog, we had lovely chats. There were lots of benefits to it for me. E5
More time for household activities	Being able to keep up with the washing and dishes, and all of that sort of stuff, because you are naturally here so you can do all those things. While it doesn't impinge on my working hours, it was just easier. I could take a ten-minute break and go and do the lunch dishes. M15
More time for exercise and hobbies	I did quite enjoy it because I've got a nearly two-hour commute to get to and from my workplace. So I can get up a little bit later, still go for a walk and go for a bit of a longer walk, still start about 9 o'clock, do a bit of gardening and then still go - either go for a walk of an eveningdefinitely found there's a lot more time to take up certain hobbies, bit of reading and a lot less stress. E17  Work-life balance also allows me to pursue sport that I wouldn't ordinarily be able to pursue, by not working on a Wednesday I can go and play a team sport and be part of a local community that I wouldn't normally be able to get to do, because in the evenings I'd be too tired. M11
Increased autonomy of scheduling	What helps with that is flexibility: so, for me, I start early, I finish early, I work longer hours some days, shorter hours other days, so I can do school pick-ups and that kind of thing. Being able to be flexible and work some of those life priorities in around paid employment is really important and helps a lot. E12

Somewhat counter-intuitively, many participants felt that their connection with co-workers and team was enhanced during the pandemic. This was partly due to the increased communication and support employees felt they received and partly due to the lessening of perceived formal barriers, allowing people to feel like they had got to know their colleagues better. The following quotes exemplify this,

Last year went quite well with connecting with my colleagues because there was less barriers of suits and the professional façade, so I was able to get to know people in their home environment with some of the blokes that would otherwise keep a pretty stern face, in their hoodies at home with a dog on their lap. E14

The other added thing is because all of us were working from home, I think the fact that you are in your home environment and probably more yourself you can see what's behind you. And so we often used to also take the camera and the phone or the iPad and show people around the house: 'Here's my vege patch that I'm growing.' And so we actually got to know people better. Because of the use of technology, we were able to connect at a much deeper level, I thought.

M8

Overall, participants reported positive and negative outcomes of flexible working during the pandemic. Following the easing of COVID-19 restrictions, organisations took varied approaches to transitioning back to central workplaces. The different approaches were experienced differently by interviewees and this is discussed in the next section.

## 3.2.5 Post-lockdown

Feelings of satisfaction or dissatisfaction with the transition back to central office largely depended on the way this was managed, communicated, and implemented, and the remote working experience of the individual. Many participants reported positively about returning to their 'normal' environment as described below,

But returning to [office] I realised that I felt a lot less stressed and just lots of small things. I was sleeping better. I felt more relaxed when I would come home from work because I guess you get that relief of actually coming home from work. I did notice on returning clearly there had been a bigger impact working from home or working in lockdown than I was aware of at the time.

When we first came back in the office, it was like you hadn't seen good friends for a really long time, everybody just wouldn't stop talking. I think, the very first day we all came back into the office, I don't think anyone, actually, got any work done because everybody was talking about whatever they've been watching on Netflix, what they've been cooking, and all these other things.

M1

Conversely, some organisations experienced difficulty getting people to return to the office and recognised that they may have managed the transition better with clearer communication. There were concerns that the benefits gained from working from home would not be carried by policies into the future. Dissatisfaction and loss of engagement was expressed when the communication was perceived as inadequate and there were blanket instructions that did not account for individual circumstances or that good performance while working from home was not recognised. When there was a decision to request a return to central offices with the requirement to wear a mask, this was considered unfavourably by the participants. Examples of these perceptions are shown in Table 33.

Theme	Verbatim quote example
Problems with transition communication	People would not come back into the office. We were given the go ahead by the government, it was all good, we could come back into the office, and the numbers were just teeny. We had like 10, 15% on the uptake on that, and it was just terriblewe didn't make it mandatory. We made it discretionary, and I think that was the biggest mistake We should have given people time to transition back in, so you can get your head around getting your kids back to day care, or school, or whatever the case may be, and then doing a hard-line, "You actually need to come back at least three or four days a week, and have one or two days at home." M10
	No, as soon as the restrictions are lifted, everyone was back into the workplace, everyone's back to work, no more working from home, when I think that could have decreased morale. E6
	I think they put a percentage quota on the time that you could spend away from the office, and I think it might have been something like 30 per cent. That did surprise me because I thought that given how well things worked during the pandemic, that they would have continued to provide people with full flexibility. So I'm not sure what the reasoning was behind that, nothing was ever said about why it would be a quota. E19
	I think that I found that the department didn't really have [clear policies], as soon as the phases started to move up, it was interpreted that we must be in the office at work. I found that really hard to adjust to that implies we haven't been at work this whole time. I am like, we have been at work, just in our homes, so I felt really untrusted. M15
	In terms of transitioning back to post-Covid worldI had to really work on my own mindset to actually maintain positivitybecause I just felt really negative towards the way that the organisation handled that phase. M15
Concerns benefits would not be continued	I can't see why businesses or enterprises would insist on a full-time back in the office scenario. That wouldn't make sense to me. E16
Mask use	I think the second week when we were encouraged to come back, asked to come back to the office and we were asked to have a face mask the whole day, that was a little bit challenging. E8
	We were sent home from the office again for that lockdown, and then the following week from that, we could go back into the office, but had to wear a mask in the office, which was a bizarre setup in itself. E10

Experiences of the first lockdown, including the way organisations and individuals had managed and adapted during this period influenced the perceptions of the subsequent lockdowns. This is illustrated in Table 34 with positive and less positive quotes,

Positive perceptions of return to lockdown	Negative perceptions of return to lockdown
So absolutely, experience through the last 12 months has helped everyone at the organisational level. There's definitely better processes and things in place now to assist, and I think at an individual level people are a little bit more mentally prepared, and they've experienced it; so it's like 'oh I know what that's like'. The five days was nothing, really, compared to the three months beforehand. E12	People's feelings were not at all, "Oh, look we've done this before, and it will be easier the second time around." My feeling and most of my colleagues feeling was we know how hard it was last time and so I'm not looking forward to another semester of this if this is what we have to do. E7
It was old hats. No surprise. No turbulence. It was just a matter of picking up that hat and putting it on, because we had worn it before. E16	My problem with the way in which our managershave dealt with the whole thing is that there literally was not much more knowhow in February 2021 than there was in March 2020. And that's not acceptable. They should have had some systems in place to help us do things. E25

On the whole, the ability to work sometimes remotely and sometimes at a shared location (a hybrid model) was most favored by participants. The option to work flexibly was favoured and the positive changes in this area as a consequence of COVID-19 were recognised,

We're set up to be able to work from home pretty instantly, if we need to. Some of the other teams, whose role is to actually be on the ground for responding to emergencies, they are also now better equipped to be able to respond, and they're training up their staff - and a broader pool of staff - to be able to assist with those sorts of things. So absolutely, experience through the last 12 months has helped everyone at the organisational level. There's definitely better processes and things in place now to assist, and I think at an individual level people are a little bit more mentally prepared, and they've experienced it; so it's like 'oh I know what that's like'. E12

After COVID there was a realisation that "Oh, we can do this. People are still productive. We're not losing clients. We're not losing money. People are still doing their work" and yeah, employees have flexibility and actually they're happier.

# 3.2.6 General recommendations

Ideas to improve the experience of remote working and for supporting mental health and well-being were extracted directly from the interview data. These have been grouped broadly to reflect aspects of the work system (individuals, team, managers, organisation, task and technology) in Table 35 below.

Table 35 General recommendations from participants to support remote working and mental health

Remote working in general Supporting mental health and well-be				
Individuals	Structure days, routine	Be able to disconnect from work Exercise Seek support / talk Mindfulness / gratitude Connect with co-workers		
Teams	Consider what will work best for team Communication Catch ups Schedule some in-person time Test	Inclusivity, connection Peer support		
Managers	Avoid micro-management Support Set objectives Consider personal circumstances Clear communication	Genuine interest in individuals Support Training in recognising and supporting Consider personal circumstances Clear communication		
Organisation	Show leadership Build culture of trust Be prepared for disruption /plans, policies including transitions Provide flexibility Support/train managers to effectively lead virtual teams Consider the business case /metrics Guidelines for remote working best practice	Offer flexibility Support / coach / mentors Positive industrial relations / good working conditions Mental wellness initiatives / peer support program Monitor mental well-being at work Career support Create safe environment		
Tasks	Consider suitability for remote working			
Technology	Improved digitisation Training Optimal workstations	Online /digital resources		

# 4.0 Discussion

On March 11, 2021 the WHO declared the COVID-19 a global pandemic and subsequently restrictions were placed on the work and lives of Australians. Organisations and employees were forced to rapidly change the way that they worked and lived, often moving to a remote or flexible working arrangement. These changes introduced new demands for the mental health and well-being of individuals and organisations and coupled with environment of uncertainty created many challenges. Alongside the challenges, there has been significant individual and collective benefits and learnings about remote working and well-being. This project draws on two sets of data (sections 2.0 and 3.0) to identify factors across the work system which impact on the mental health and well-being of employees and managers when working remotely or flexibly. Additionally, the data collected helps to explore effective organisational, manager and employee strategies for promoting effective remote working and 'good' mental health in the current post-COVID-19 context. The key overlapping findings are shown in Table 36.

Table 36 Implications for mental health and well-being across the work system and factors that promote effective remote working

Level		Implications		Promoting effectiveness
		Challenges	Benefits	
	Society	<ul><li>COVID-19 global situation</li><li>Technology infrastructure</li></ul>		<ul><li>Leadership</li><li>Robust National</li><li>Broadband Network</li></ul>
	Organisations	<ul><li>Change</li><li>Uncertainty</li></ul>	Continuity of operations	<ul><li>Positive psychosocial safety climate</li><li>Preparation</li><li>Leadership</li><li>Trust</li></ul>
	Management	<ul> <li>Workload especially related to supporting staff</li> </ul>	<ul> <li>Realisation of opportunities for flexible working</li> </ul>	<ul><li>Leadership</li><li>Trust</li></ul>
<b>9</b>	Teams	<ul><li>Social isolation</li><li>Opportunities and knowledge</li></ul>	<ul> <li>Increased social connection/und erstanding of co-workers</li> <li>Realisation of benefits for flexible working</li> </ul>	<ul> <li>Clear communication</li> <li>Social support</li> <li>Relational management style</li> <li>Trust</li> </ul>
<b>†</b>   <b>†</b>	Individuals	<ul> <li>Extended workdays</li> <li>Work and home conflict</li> <li>Social isolation</li> <li>Job insecurity</li> <li>Transitions of working arrangements</li> </ul>	<ul><li>Continued employment</li><li>Flexibility</li><li>Work life balance</li></ul>	<ul> <li>Account for personal circumstances</li> <li>Clear communication</li> <li>Boundary management</li> <li>Support</li> </ul>
	Tasks	<ul> <li>Workload especially in initial stages of pandemic</li> <li>Performance and coordination frustration</li> </ul>		<ul><li>Preparation</li><li>Technical capabilities</li></ul>
Ţ	Technology	<ul> <li>Infrastructure and hardware capabilities</li> <li>Over-use</li> <li>Skills with software, tools</li> </ul>	<ul><li>Connection</li><li>Support</li></ul>	<ul> <li>Preparation</li> <li>Provision of robust, useable systems</li> <li>Training</li> <li>Boundary management</li> </ul>

The challenges and benefits of remote working on mental health and well-being are discussed further in the next section 4.1 and while attention is turned to actions that can promote effective remote working for all levels of organisations in section 4.2.

# 4.1 Implications of remote working on mental health and well-being

Implications of remote working to mental health and well-being can be summarised as a balance between the potential negatives of social isolation, work family conflict, technology, transitions to 'normal' working arrangements and the potential benefits of flexibility and connection (Figure 27).

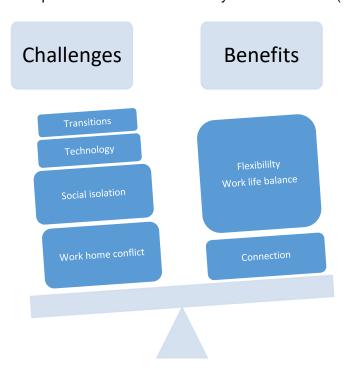


Figure 27 Balancing positive and negative implications of remote working

The challenges are discussed in the next sections 4.1.1 to 4.1.4 and the benefits in sections 4.1.5 and 4.1.6.

#### 4.1.1 Social isolation

Reports of social isolation with remote working was a common finding among the interview participants, with most interviewees expressing that the company of their co-workers was what they missed the most.

This is in line with the scholarly literature on remote working that identifies social isolation as a key psychosocial risk factor (e.g., Bentley et al., 2016). Feelings of social isolation have found to have a detrimental effect on mental health, and potentially impacting stress, mental health and sleep (Johnson et al., 2020). This was also reflected by the participants particularly with the monotony of remote working, especially during the pandemic when other social interactions were also limited.

The quantitative findings of this study show that social support decreases mental health problems, but this does not differentiate between in-person and virtual social support. Responses from the interviewees indicate that feelings of social isolation are not just about talking to co-workers, which can be done virtually, but extend to in-person interactions such as having lunch or coffee with friends from the office. Incidental

social interactions are missed when working remotely as virtual connections are more likely to be scheduled.

Loss of spontaneous human connection was also considered a negative to well-being through loss of opportunities to ask for or offer help. The literature raises similar concerns regarding knowledge sharing, working relationships and social support (Chadee et al., 2021; Malik et al., 2020; Gascoigne, 2020).

These challenges of being physically isolated can lead to a range of negative emotions including feelings of alienation, loneliness, worry and exclusion (Contreras et al., 2020; Diab-Bahman & Al-Enzi, 2020; Rysavy & Michalak, 2020; Waizenegger et al., 2020; Wang et al., 2021).

#### 4.1.2 Work-home conflict

Conflicts between work and home or vice versa was strongly expressed by the interview participants as being an implication of remote working. This was generally as a consequence of personal circumstances and difficulties with defining the boundaries between work and home. During COVID-19 lockdowns when childcare facilities and schools were also closed, there were role conflicts for those with children. Caring for and schooling children while working at home required a juggle of time and space. For some this included 'taking shifts' with their partners leading to extended workdays and fatigue.

Technology that enables remote working can also contribute to work intensification as the boundary between home and work is blurred. This can raise expectations of constant reachability, availability and instant responses, which may create interruptions to home life (Gascoigne, 2020; Molino et al., 2020; Waizenegger et al., 2020). Lack of a physical workspace was also an issue with reports of 'taking over children's bedrooms' or working at the kitchen bench alongside children doing schoolwork. The conflict for work and home physical spaces changes the work environment and can impact on well-being due to non-optimal space and equipment to do tasks (Beck & Hensher, 2020; Bolisani et al., 2020; Ipsen et al., 2021; Koss, 2020. Additionally, the general context of the pandemic heightens concerns for personal and family well-being, leading in some circumstances to negative emotional responses including anxiety (Malik et al., 2020). This blurred boundary between home and work is reported in the literature to exacerbate life-to-work conflicts and perceived fatigue for employees working remotely (Ipsen et al., 2021; Palumbo, 2020). The loss of a sense of control when trying to work at home amid distractions from the home environment can be emotionally demanding, leading to fatigue and a range of negative emotions (Jarosz, 2021; Waizenegger et al., 2020; Wang et al., 2021).

## 4.1.3 Technology

Technology is the enabling factor in remote working, without the use of ICT remote working is not practical. However, using technologies can be stressful for some employees and associated with dissatisfaction, sleepiness and worry, Tarafdar et al., (2007). The quantitative surveys in this project defined 'techno-stress' as difficulties with coping with or getting used to ICT. The findings predict that experiencing techno-stress is related to increases in stress, sleeping troubles, burnout, mental health problems, and decreases in well-being and satisfaction with job, career and life. However, the interviewees in the qualitative findings were generally positive about using ICT particularly in the way it allowed them to connect with their co-workers

and teams. Related to how well-prepared organisations were for remote working, some employees expressed difficulties in the early stages of lockdown with learning to use unfamiliar tools. At a societal level, there were reports of problems with infrastructure connectivity and the cost of this to individuals. This was moderated by the support of the organisation.

Bolisani et al., (2020) and Molino et al., (2020) assert that technology-related stress is exacerbated through information overload, constant connectivity and the use of multiple electronic communication systems. This is supported by participants in this study reporting fatigue when using online meeting platforms for extended periods of time.

# 4.1.4 Transition management

The quantitative findings correlated satisfaction with social support and trust in supervisor which aligns with the qualitative findings of lack of satisfaction when participants did not feel supported during the transition to 'normal' working arrangements.

Disappointment was expressed if there was a blanket directive to return to work particularly when masks were required to be worn, where personal circumstances were not considered or when there was not a gradual transition. Similar findings have been seen in research examining a return to 'business as usual' following other disruptions such as earthquakes (Donnelly & Proctor-Thompson, 2014; Green et al., 2017) where employees felt disgruntled when forced to return to a central location when they were able to work productively and happily from home. Recognising the value of, and preparing for, remote working in times with and without disruption is important for transitioning smoothly from one working arrangement to another. The need for this has been demonstrated in subsequent lockdowns and is likely to be repeated in the future. Moreover, with the value from multiple perspectives of remote and flexible working being demonstrated, not harnessing the benefits is likely to result in employee dissatisfaction.

The beneficial implications of remote working on mental health and well-being include connection and work life balance improvements through flexibility, these are explained in the next sections.

#### 4.1.5 Connection

Perhaps counter-intuitively, participants in the interviews reported increased connection as a positive implication of remote working. This may be due to the 'levelling' nature of virtual communications and particularly videoconferencing that provided a window into people's home lives. Renjen (2020) suggests that video instead of emails and other forms of communication is better to connect emotionally with teams and this may be one reason for the increased feeling of connection. Many organisations introduced innovative virtual social events to engage people and reduce social isolation, this seems to have had a positive impact on connection for many people, including across the organisation. These types of interactions are suggested in the literature as important for keeping employees connected and feeling supported by providing ways for people to ask questions and offer check-ins for both work and broader well-being conversations (Koss, 2020; Davim & Dempster 2020). Generally, the organisations in this study seem to have done this well, contributing to the positive feelings of connection when remote working. Moreover, the quantitative findings predict that social support improves the outcomes of mental health

problems and satisfaction and it may be that the increased communication and sense of social support felt during the pandemic also increased feelings of connection.

# 4.1.6 Flexibility and work life balance

Johnson et al. (2020) suggest that remote or flexible working is an arrangement which can be used to improve employee mental health through increased autonomy and flexibility. This is a key, positive outcome of the qualitative findings of this study, whereby less commuting and more time at home and in local communities provided employees flexibility to integrate life activities into the daily schedule.

However, increased the autonomy and flexibility of remote can also result in intensification of work, as was reported in the early stages of the pandemic and experienced when juggling work and childcare responsibilities. Eurofound (2020a) terms this the "autonomy paradox" of remote work and can result in remote workers putting in greater work effort as an exchange for their increased job flexibility. This may have negative implications for mental health and well-being.

Drawing on the findings of this study, there are several factors that organisations, teams and individuals can develop and enhance so the outcomes of remote working and mental health are positive.

# 4.2 Promoting effective remote working and positive mental health

The quantitative findings suggest that a positive PSC, trust and social support are associated with less stress, good mental health and well-being, and satisfaction with life, job and career (Figures 17 and 18). Similarly, the qualitative findings that reflect a positive PSC, for example, leadership, support, communication, and trust were important throughout the pandemic to support well-being with remote working. Preparation, capabilities with technology and tasks, a relational management style and support by the organisation, line-manger and team, and personal circumstances all contribute to positive outcomes. The high-level organisational and managerial factors that promote good mental health and well-being, impact across the work system at all levels to support employees. This is depicted in Figure 28, where the outer layers of the concentric rings encircle employees at the centre. Considering the multiple, interacting layers of the work system will most likely result in effective remote working and positive well-being. The factors are discussed further is sections 4.2.1 to 4.2.5.

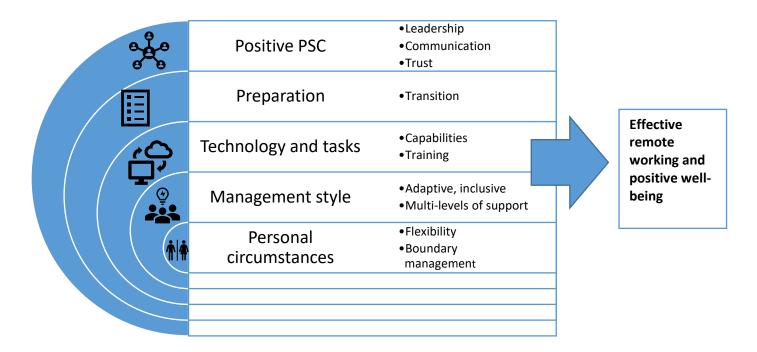


Figure 28 Multi-level factors needed to promote effective remote working and positive mental health

## 4.2.1 Psychosocial Safety Climate

PSC is a form of organisational support where the well-being of workers is prioritised within an organisation. Organisations with high levels of PSC, as measured empirically in this research, support their employees from the top, and this support is communicated effectively. In addition, staff within such organisations are involved in psychological safety. In business-as-usual times, leadership along with a supportive culture has been found to be crucial for enabling positive outcomes in distributed workers (Nielsen et al., 2019). In the context of the uncertainty that COVID-19 presented the findings of this research highlighted the importance of leadership and clear communication.

In times of crisis when people are feeling a wide range of negative emotions such as anxiety and fear, communication from leaders is more important than ever. Frenkel et al. (2021) suggest that providing information is critical for building coping resources. Relevant and clear instructions for action is needed. Leadership is required to educate and regularly update their teams using valid knowledge.

When leaders are good 'crisis communicator' it helps people make sense of everything (Mendy et al., 2020). Linking trust to communication Malik et al. (2020) and Mendy et al. (2020) emphasis the critical role of leaders in building trust through transparent communication which reduces the chance of misunderstanding or misinformation. This helps employees cope with sudden changes to their work arrangements. Davim and Dempster (2020) suggest timely and transparent communication is achieved through the provision of consistent, factual and need-to-know information. The approach to communication should be empathetic (D'Auria & De Smet, 2020) and leaders need to ensure that each audience's concerns, questions, and interests are addressed in their frequent communications. This was evidenced by the interviewees who were reassured and impressed that senior leaders fronted video-presentations and hosted Q & As. This is aligned with the two-way communication advice of Malik et al., (2020) who suggest platforms to gather employee feedback and concerns. Supporting a participatory approach, Lee (2021) suggests this more open communication, is critical in enhancing high psychological safety, which is important for well-being. Inter-related to leadership and communication, trust is an important aspect of a positive organisational culture that supports well-being (Koss, 2020; Mendy et al., 2020; Renjen, 2020; Somborn, 2020).

# 4.2.2 Preparation and transition

The findings of the qualitative part of this research demonstrated the importance of organisational preparedness in facilitating a smooth transition to flexible working arrangements (section 3.2.1). Employees with experience in flexible working moved easily to remote work with no adverse impacts on their well-being.

This was evidenced further when transitions in subsequent lockdowns were experienced with less upheaval. In an environment characterised by uncertainty, clarity in procedures and policies can help lessen the stress of change as well as supporting business continuity. The rapid transition to remote work for entire workforces highlighted the need for flexible working organisational policies and practices to be robust to support both performance and well-being outcomes. Wang et al. (2021) suggest this encompasses consideration of how flexible work roles are designed, and Gascoigne (2020) proposes that this design process should consider organisational needs as well as the needs of remote and on-site employees. Moreover, mandatory remote working due to COVID-19 restrictions poses risks of added stressors such as cuts to remuneration, leave entitlements and additional personal costs such as internet and electricity (Green et al., 2020). Organisational policies which provide clarity and certainty around these issues are likely to support employees.

Preparing for a transition back to centralised offices is important to support mental health and well-being. Mirroring other research in disruption dissatisfaction was experienced by employees when the transition was not well thought out or communicated (Green et al., 2017). As the course of the COVID-19 pandemic

continues, frequent transitions to remote working and back to office may be necessary if restrictions have to be reapplied or workers have to self-isolate in response to the threat of virus infection (Green et al., 2020). The World Health Organization (2020) recognises that a return to the usual way of working may be stressful for some people where there are threats to mental and physical health and the transition needs to be carefully managed. Stress or anxiety about COVID-19 can also be exacerbated by difficulties which a return to the workplace presents to managing home and family responsibilities if, for example, schools and childcare facilities are closed. The well-being implications of returning to a workplace need to be considered for staff, plans communicated effectively, and support provided. Depending on the circumstances of the disruption, the organisation, and the individuals, this may need to be done in a gradual way (Green et al, 2017). Transitioning from remote work to BAU is an important phase for framing flexible work in the future. The forced remote working experiences provide an opportunity for organisations to evaluate, design and formalise sustainable flexible arrangements which contribute to organisational development and impact positively on well-being and engagement of employees (Donnelly & Proctor-Thomson, 2015; Green et al., 2017).

# 4.2.3 Technology

The extent of technology capabilities is also an important part of preparation. Organisations and employees that had both the technological capabilities through the provision of remote access and suitable hardware and software and the skills to use them were able to move to remote working at the onset of the pandemic more easily. This was less stressful for employees than those not prepared or capable.

Minimising technological stress is important for overall mental health and well-being as the quantitative findings of this study found that techno-stress is strongly associated with more stress, more mental health problems, less well-being and less satisfaction (Figure 17). Thus, taking action to provide technology that is suitable and useable for the work that needs to be done and ensuring that employees have the training in the skills required to use the technology will have a positive impact on mental health and well-being. Moreover, it is vital that systems and processes are coordinated so that information overload and application multitasking is minimised to support well-being (Molino et al., 2020).

#### 4.2.4 Management style and support

The findings of this study echo the extant literature (e.g. Bentley et al., 2016) in emphasising the importance of multi-level support to promote well-being at work. This has been especially true during COVID-19 where additional support has been required and the quantitative findings showing that social support is associated with less mental health problems and more satisfaction (Figure 18). The interviewees conceptualised good mental health in the workplace as centring around people, feelings and support (Figure 19) and the qualitative findings model (Figure 20) shows that support is associated with well-being and mental health outcomes. Moreover, this model shows that support, trust, and leadership are connected, and the survey results found that 'trust in supervisor' lessened mental health problems and improved well-being outcomes (Figure 15). Rysavy and Michalak (2020) stress that line and senior managers trusting remote employees is particularly important if the working arrangement is to succeed.

Similarly, McKay (2020) argues that the benefits of flexible working can only be leveraged through trust-based management styles and behaviours.

Lawton-Misra and Pretorius (2021) stress that in a crisis each person experiences events differently and so a one-size-fits-all response cannot be applied – this requires an inclusive and adaptive approach to leadership. In the same vein, Ipsen et al., (2021) argue that managers should support remote workers by focussing primarily on employees' basic needs, for example, working conditions and belongingness. In addition, in times of uncertainty and disruption leadership needs to be particularly versatile (Kaiser, 2020; Lawton-Misra & Pretorius, 2021) with adjustments as needed to meet the needs of employees and to face the changing challenges. This agility of management also requires learning, supporting, and adapting to the new ways of working that remote working presents (Kirchner et al., 2021). Role modelling of behaviours consistent with messaging is also important to build trust and instil confidence in employees (Vogus et al., 2021). Other scholars have suggested that leaders can be positive role models by not only being empathetic but also by being receptive to empathy from others and being mindful of their own well-being and mental health (Allas & Schaninger, 2020); D'Auria & De Smet, 2020; Davim & Dempster, 2020). Overall, it is likely that an inclusive and adaptive management approach requires a balance between a relation-oriented leadership behaviour and task-oriented leadership behaviour (Bartsch et al. (2020) to best support remote workers. Finally, inclusive leaders try to understand the varied impacts on different groups and provide appropriate support while ensuring certain employees are not disadvantaged (McKay, 2020). This partially encompasses the theme that emerged in this study - personal circumstances- which is discussed next.

#### 4.2.5 Personal circumstances

Considering personal circumstances is an important aspect of promoting effective flexible working and supporting mental health. As discussed in 4.1.6, most remote workers rate highly the flexibility they are afforded by working away from the central office. This allows them to balance their work and life responsibilities. Indeed, the findings of the surveys show that employee well-being and satisfaction is enhanced by supervisors who exhibit family-supportive behaviours (Figure 14). However, remote working is not experienced favourably by all employees. Conflicts between work and home were commonly reported (see 3.2.3) and technology issues vary between employees' location and situations (3.2.2).

Being aware of personal circumstances is vital to be able to support the well-being of employees. This was particularly apparent in the transition to central offices after a lockdown (see 4.1.1), when some participants felt dissatisfied and stressed by a 'one-rule-for all' approach. Positive support may include adaption of work demands and locations, more flexibility of hours or resources for social support. Additionally, personal circumstances have implications for the ability of employees to manage the boundaries between work and home. This may be due to personality, work, or family situations. Clear boundary planning, and training for this, can reduce the risk of negative mental health impacts from remote work (Johnson et al. 2020). However, achieving a work-life balance is still seen as a goal and challenge according to a recent EU report (Eurofound, 2020b). Regulatory action has been proposed in the EU for 'the right to disconnect' as a tool

to curb self-imposed work intensity, project-based work, performance-based pay and constant availability (Eurofound, 2020b).

# 4.3 Conclusions

This research has provided valuable insight into factors that promote the positive mental health and well-being of employees working remotely or flexibly in the post-COVID-19 environment. A strength of the study is the two-phased approach, combining quantitative and qualitative data. The information gained from the surveys highlighted the importance of organisational and managerial factors in positively influencing mental health and well-being and decreasing the impacts of technostress. Exploring the experiences of employees and managers in the interviews highlighted the benefits of preparation for remote working, multiple levels of support and considering personal circumstances. The findings of this research, supported by the international literature, demonstrate that flexible and remote working presents opportunities alongside challenges which must be understood and managed. The COVID-19 pandemic has highlighted that work can be done successfully with flexible and remote arrangements. The learnings from this research exploring the experiences of workers and managers can enable organisations and individuals to retain these arrangements while supporting mental health and well-being in the workplace.

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# 6.0 Appendices

## 6.1 Appendix 1: survey measurements

Measurements and sample items in the survey part of the project are described below.

Measurements		Sample items
Organisational work conditions	Psychosocial safety climate Source: Hall et al. (2010) 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'	<ul> <li>Psychological well-being of staff is a priority for this organisation.</li> <li>Senior management clearly considers the psychological health of employees to be of great importance.</li> <li>My contributions to resolving occupational health and safety concerns in the organisation are listened to.</li> <li>Participation and consultation in psychological health and safety occurs with employees, unions and health and safety representatives in my workplace.</li> </ul>
	I-deals HR practices Source: Rosen et al. (2013) 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'	<ul> <li>Following my initial appointment, my supervisor assigned me to a desirable position that makes use of my unique abilities.</li> <li>My supervisor considers my personal needs when making my work schedule.</li> <li>Because of my particular circumstances, my supervisor allows me to do work from somewhere other than the main office.</li> <li>My supervisor has ensured that my compensation arrangement (e.g., hourly vs. salaried) meets my individual needs.</li> <li>There is a calm and pleasant atmosphere from others when I work.</li> <li>We get on well with each other when I work.</li> <li>My co-workers support me while I am working.</li> <li>The others understand if I have a bad day while I am working.</li> </ul>
	Social support Source: Karasek (1979) 7-point Likert scale ranging from 'strongly disagree' to 'strongly agree'	
	Family-supportive supervisor behaviours Source: Hammer et al. (2009) 7-point Likert scale ranging from 'strongly disagree' to 'strongly agree'	<ul> <li>My supervisor and I have talked effectively to solve conflicts between work and nonwork issues.</li> <li>I have depended on my supervisor to help me with scheduling conflicts if I need it.</li> <li>My supervisor has demonstrated how a person can jointly be successful on and off the job</li> <li>My supervisor has thought about how the work in my department can be organised to jointly benefit employees and the organisation.</li> </ul>
	Affective trust in supervisor Source: McAllister (1995) 7-point Likert scale anchored with 'strongly disagree' and 'strongly agree'	<ul> <li>I have a sharing relationship with my direct supervisor. We can both freely share our ideas, feelings, and hopes.</li> <li>I can talk freely to my supervisor about difficulties I am having while I am working and know that (s)he will want to listen.</li> </ul>

Measurements		Sample items
	<b>Technostress</b> Source: Tarafdar et al.	<ul> <li>We would both feel a sense of loss if one of us was transferred and we could no longer work together.</li> <li>If I shared my problems with my supervisor, I know (s)he would respond constructively and caringly.</li> <li>I have a higher workload because of increased ICT complexity.</li> </ul>
	(2007) 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'	<ul> <li>I spend a lot of time everyday reading an overwhelming amount of e-mail messages.</li> <li>I feel my personal life has been invaded by the use of new ICTs.</li> <li>I do not know enough about new ICTs to handle my job satisfactorily.</li> </ul>
		- The time I have spent with my family has
	Work-family conflicts Source: Carlson et al. (2000) 7-point Likert scale ranging from 'strongly disagree' to 'strongly agree'	often caused me not to spend time in work activities that could be helpful to my career.  - I have missed work activities due to the amount of time I have spent on family responsibilities.  - When I have completed my work, I have bee often too frazzled to participate in family activities/ responsibilities.  - I have been often so emotionally drained when I have completed my work that it has prevented me from contributing to my family.
	Mental home demands Source: Peeters et al. (2005) 5-point Likert scale anchored with 'never' and 'always'	<ul> <li>Do you find that you have to plan and organise a lot of things in relation to your home life?</li> <li>Do you have to remember a lot of things with regard to your home life?</li> <li>Do you have to do many things simultaneously at home?</li> <li>Do you have to coordinate everything</li> </ul>
Experiences with	Quantitative home	carefully at home?
work and home domains	demands Source: Peeters et al. (2005) 5-point Likert scale anchored with 'never' and 'always'	<ul> <li>Do you find that you are busy at home?</li> <li>Do you have to do many things in a hurry when you are at home?</li> <li>Do you have to carry out a lot of tasks at home [household/caring tasks]?</li> </ul>
	Emotional home demands Source: Peeters et al. (2005) 5-point Likert scale anchored with 'never' and 'always'	<ul> <li>How often do emotional issues arise at home?</li> <li>How often does your housework confront you with things that touch you personally?</li> <li>How often do you get frustrated about things concerning your home-life?</li> </ul>
	Work-life balance Source: Brough et al. (2014) 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'	<ul> <li>I currently have a good balance between the time I spend at work and the time I have available for non-work activities.</li> <li>I do not have any difficulty balancing my work and non-work activities.</li> <li>I feel that the balance between my work demands and non-work activities is currently about right.</li> </ul>

Measurements		Sample items
		- Overall, I believe that my work and non-work
		life are balanced.
Mental health and well-being outcomes	Perceived stress Source: Cohen et al. (1983) 5-point Likert scale ranging from 'never' to 'very often'	<ul> <li>How often have you felt that you were unable to control the important things in your life?</li> <li>How often have you felt unconfident about your ability to handle your personal problems?</li> <li>How often have you felt that things were not going your way?</li> <li>How often have you felt difficulties were piling up so high that you could not overcome them?</li> </ul>
	Mental health Source: Mewton et al. (2016) 5-point Likert scale anchored with 'none of the time' and 'all of the time'	During the past 30 days, how often did you feel - How often did you feel nervous? - How often did you feel hopeless? - How often did you feel restless or fidgety? - How often did you feel so depressed that nothing could cheer you up?
	Burnout Source: COPSOQ III 5-point Linkert scale ranging from 'not at all' to 'all of the time'	During the last 30 days, - How often have you felt worn out? - How often have you been physically exhausted? - How often have you been emotionally exhausted? - How often have you felt tired?
	Sleeping troubles Source: COPSOQ III 5-point Linkert scale ranging from 'not at all' to 'all of the time'	During the last 30 days, - How often have you slept badly and restlessly? - How often have you found it hard to go to sleep? - How often have you woken up too early and not been able to get back to sleep?
	Sleepiness Source: Johns (1992) 5-point Likert scale anchored with 'would never doze' and 'very high chance of dozing'	How likely are you to doze off or fall asleep in the following situations, in contrast to feeling just tired? - Sitting and reading Watching TV As a passenger in a car for an hour without a break Lying down to rest in the afternoon when circumstances permit.
	WHO-5 Well-being Source: The World Health Organisation - Five Well-being Index (WHO-5) 6-point Likert scale ranging from 'at no time' to 'all of the time'	Over the last four weeks,  - I have felt cheerful and in good spirits.  - I have felt calm and relaxed.  - I have felt active and vigorous.  - I have waken up feeling fresh and rested.  - My daily life has been filled with things that interest me.
	Job satisfaction Source: Brayfield and Rothe (1951) 5-point Likert scale anchored with 'strongly disagree' and 'strongly agree'	<ul> <li>Most days I am enthusiastic about my work.</li> <li>I feel fairly satisfied with my present job.</li> <li>I find real enjoyment in my work.</li> <li>Each day seems to finish so quickly.</li> <li>I find my job very pleasant</li> </ul>
	Life satisfaction	<ul><li>In most ways my life is close to ideal.</li><li>The conditions of my life are excellent.</li></ul>

Measurements		Sample items
	Source: Diener et al. (1985) 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'	<ul> <li>I am satisfied with my life.</li> <li>So far, I have gotten the important things I want in life.</li> <li>If I could live my life over, I would change almost nothing.</li> </ul>
	Career satisfaction Source: Greenhaus et al. (1990) 7-point Likert scale anchored with 'strongly disagree' and 'strongly agree'	I am satisfied with the progress I have made towards meeting my overall career goals     I am satisfied with the progress I have made towards meeting my goals for income     I am satisfied with the progress I have made towards meeting my goals for advancement

### 6.2 Appendix 2: interview schedule

#### What individual and organisation initiatives are effective in the maintenance of mental health?

- 1. Can you briefly tell me about your typical working day before the COVID-19 restrictions first came into play?
- 2. Can you briefly tell me about your typical working day during the first period of lockdown last year?
- 3. Has anything changed about your typical workday during the latest COVID lockdown compared with the first lockdown?
  - a. Prompts for the above 3 questions:
    - i. Work experiences
    - ii. The work itself/tasks
    - iii. Well-being
    - iv. Performance
    - v. Work team relationships,
    - vi. line manager work relationship and related well-being and performance,
    - vii. relationship with your supervisor/line-manager
- 4. What are the main changes in how you go about your work routine before COVID-19 and now (probe to compare tasks and responsibilities before and during)
  - a. Specifically, what role does technology play in terms of your day-to-day work experience? (probe for technostress)
- 5. Now please tell us more about your experience adapting to how work is done now (during COVID-19 restrictions).
- 6. How would you assess the supervisory support you are receiving during COVID-19 restrictions?
- 7. How would you assess your work/life balance transitioning to COVID-19 working situation and during COVID-19 restrictions? (probe for boundary management, spill over of work-life in terms of hours and how manageable this is (trade-offs e.g. travel time))
- 8. How has your job changed as a result of COVID-19?
  - Have you taken additional tasks and responsibilities as a result of the workplace changes due to COVID-19 restrictions? (probe into types of task/responsibilities and how they correspond to job requirements)
- 9. When you work from home, what do you miss most about going to work?
- 10. Describe organisation and supervisor's consideration/recognition in the last few months (tapping into the ethics of care), is there additional care, has the line managers has relational approach?
- 11. Have you perceived/experienced relationship leadership approach during the remote work period?
- 12. How has working from home impacted on your experiences of collaboration/teamwork?
- 13. What does good mental health mean to you in relation to your work?