# The mental health, wellbeing and work impacts of COVID-19 on first responders and frontline workers in Australia.

*Summary of findings*

*June 2021*


CHARLES STURT UNIVERSITY
WORKFORCE WELLNESS
RESEARCH UNIT

Charles Sturt University

# Acknowledgements

Charles Sturt University acknowledges the traditional owners of the lands where CSU students and staff reside. In particular, CSU acknowledges the Wiradjuri, Ngunawal, Gundungarra and Biripai peoples of Australia, who are the traditional custodians of the land where the University's campuses are located.

This research was funded from a Charles Sturt University (CSU) grant program to support communities during COVID-19 through socially relevant research.

We sincerely thank the Police Federation of Australia, the Australasian College of Paramedicine, NSW Ambulance, the Public Service Association (Community Services) of NSW, and Community Nurses of Western NSW, who assisted in the design, distribution and interpretation of this research.

We especially wish to thank the 1542 respondents from first responder services across Australia, who, when most of the Australian population was locked down at home, continued to serve our community by going onto the frontline to provide vital and essential services during COVID-19. This research would have been impossible without you, and is intended to honour and support your admirable public service in the future.

The data within this report draws on the unique perspectives of the frontline workers who have shared them. All quoted data is unaltered to accurately reflect participant opinions. The data from each state and territory, and each service has been amalgamated to protect the confidentiality of all respondents. Specific, focussed reports have been provided to each of our partner organisations in this report.



**Preferred citation.**

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Charles Sturt University

*'Yindyamarra Winhanganha' – The wisdom of respectfully knowing how to live well in a world worth living in*

## Key findings

COVID-19 has resulted in work expansion and increased complexity and intensity of work leading to significant **negative mental health impacts** on first responders.

The proportion of respondents with severe **depression and anxiety:**

- ◊ Was 10 and 4 times higher (respectively) than the general population rate
- ◊ Significantly higher than that found in hospital workers during COVID-19.

The level of **workplace burnout** of our respondents was very high with:

- ◊ Over half showing high levels of emotional exhaustion (burnout)
- ◊ Significantly higher levels of burnout than in similar occupations pre-COVID-19, and higher than hospital workers during COVID-19
- ◊ 40% of respondents considering quitting their current job.

They **major statistical associations** with poor mental health were:

- ◊ Increased workload (30% higher than considered fair and reasonable)
- ◊ The rapidly changing work environment
- ◊ Insufficient practical support and operational guidance
- ◊ Lack of management connection with the 'coal-face'
- ◊ Ambiguous, conflicting and redundant communication.

When respondents were asked to offer **key messages to their leaders,** the most frequent themes that emerged were:

- ◊ Manage and maintain a reasonable workload for frontline workers
- ◊ Clearly communicate operational directives
- ◊ Connect, listen and respond to workers' 'on-the-ground' reality
- ◊ Provide practical support including the deployment of necessary equipment and personnel.

**The most effective mental health interventions are practical and preventative**. Providing additional workplace mental health wellbeing programs and support is helpful. However, the data suggests the most effective workforce wellbeing strategy is to prevent the major sources of psychological distress (listed above). Leaders of organisations should address these areas as a priority.



## Contents



Charles Sturt University

# Executive summary


*Workload was 30% higher than what staff considered fair and reasonable.*
*Burnout was 2-4 times higher than occupational norms.*

*COVID-19 has led to an expansion of work and work that is more complex, more intense and more demanding*

## Background

This study of 1,542 respondents investigated the impact of COVID-19 on police and paramedics from across Australia. It also surveyed child protection workers and health workers from one state of Australia. The online survey investigated issues such as levels of stress, depression, anxiety and workplace burnout. It also researched potential contributors to workplace wellbeing during COVID-19, examining issues such as family circumstances, workplace consultation and communication and support offered by peers, workmates, family and friends.

COVID-19 was associated with significantly increased stress, workload and family demands of the vast majority of respondents.



## Mental health impacts

COVID-19 resulted in significant additional stress and workload for the respondents. The sample showed alarming levels of depression, anxiety and burnout. Depression and anxiety were many times higher than the expected population rate. The rate of severe depression in the respondents was almost twice that reported in overseas public service workers during COVID-19.

## Burnout

The level of burnout of this sample was an area of extreme concern. It was much worse than hospital staff during COVID-19 and of similar occupational groups pre-COVID-19.

## Sources of stress

Participants identified several sources of stress, including the overarching risks associated with frontline work such as fear of infection and the risk of spreading the virus to family or colleagues. These concerns were exacerbated by a lack of access to personal protective equipment (PPE). Workers experienced the rapid environmental and organisational change as major stressors, combined with a lack of access to their traditional stress management and coping mechanisms such as social activities, exercise and other forms of stress reduction.

## Workload

COVID-19 has led to an expansion of work and work that is more complex, more intense and more demanding for frontline workers. The data revealed the already high workloads increased further as a result of the pandemic. Qualitative responses highlighted that increased workload resulted from the need for greater hygiene precautions, the use of PPE, additional duties, increased work surrounding online meetings, managing staff absences/redeployment as well as managing the heightened needs of the community and service recipients. Rapid changes to regulatory frameworks, procedures and protocols also demanded extra focus and concentration.

## Workplace engagement

Frontline workers usually have a strong connection with the value of their work and are generally highly engaged. However, the survey respondents reported high levels of work disengagement during the pandemic and much higher levels of intention to quit than normal. Organisational citizenship (their desire to go above and beyond the call of duty) was also negatively impacted due to dissatisfaction with organisational communication, overall workload and burnout.

*Covid-19 had a massive impact on mental health of frontline staff. Anxiety and depression and burnout was many times higher than population norms.*

## Communication and support

On average, respondents were dissatisfied with consultation, support and communication from executive management. The insights from COVID-19 in this respect present an opportunity for organisations to reconsider and enhance their communication strategies to better support their staff to provide essential public services.

Clear communication and organisational leadership were identified as major factors that could reduce stress and increase participants' sense of security. Many participants identified that being valued and having their difficult work recognised helped to reduce feelings of stress or burnout.

*"I've had a deterioration of my mental health due to the combined physical, emotional and financial stress that has been indirectly related to covid."*



## General conclusions

Despite relatively low COVID-19 related infection and mortality rates in Australia, the personal and professional impacts on frontline workers were significant. COVID-19 resulted in significant additional stress and workload for the vast majority of the respondents. The sample showed very high levels of depression, anxiety and burnout. All of the scores on these standardised measures were many times higher than the expected population rate.

On an organisational level, staff perceived a lack of listening, consultation and trust from their management/leadership team. Additionally, staff indicated that the communication from the top was interpreted differently across levels of management. Therefore, for the communication to be effective, it needs to be succinct, accurate, authentic and have one source of truth. For example, a central e-resource system offering a one-stop-point of reference may be helpful instead of continual, repeated and sometimes contradictory emails.

Workers also reported a lack of trust and listening from their senior management, and important communication was often duplicated, creating unnecessary confusion and complexity.

# Recommendations summary

## Recommendations summary


*"Zero recognition of the additional workload related to COVID-19 … Forgetting to let the troops know they are actually doing a good job."*

*"Listen to the actual frontline … doing the hard yards day in day out and then act on those things accordingly. No good sitting in an ivory tower making decisions that affect the actual workers."*



**Recommendation 1**

Services should ensure they deploy additional and redeploy existing personnel and resources to meet increased operational demands due to COVID-19.

**Recommendation 2**

Organisations must develop a communication strategy and plan that can be activated in times of crisis/pandemics/major service disruptions.

**Recommendation 3**

Senior executives should demonstrate their awareness, understanding and connection to the experience and 'on-the-ground' realities of frontline services. They should meet staff at places of work (virtually or in person), acknowledging and thanking them for their efforts and consulting on how things can be improved.

**Recommendation 4**

Revise policies and procedures taking into account events of crisis, such as pandemics, by clarifying leave, sick leave, work-from home policies, as well as determining the conditions relating to workplace settings. Training needs to occur with line managers to ensure equal and fair application of support.

**Recommendation 5**

Frontline staff should be provided with appropriate personal protective equipement (PPE), PPE training and support for tasks that are outside the normal scope of practice.

**Recommendation 6**

A range of mental health support services and links must be provided to staff. These should be available within and outside the organisation.

**Recommendation 7**

Recognise that work has social components that are essential for workplace wellbeing and to support individual resilience.

**Recommendation 8**

Avoid cutting wages or delaying pay increases for frontline staff when they are working harder than ever in uncertain times and for the public good. Indeed, conversely leaders should consider ways to tangibly recognise the increased workload and stress of frontline workers during COVID-19.

## Implications for leadership in a crisis

The key advice staff offered to leadership was to:

- **Listen**, connect and acknowledge the reality of the frontline staff
- **Consult** and discuss emerging work issues
- **Take action** as needed **providing support** and **deploying resources** to areas of need, and supporting those in place
- **Communicate** clearly and unambiguously actions taken and changes to procedures
- **Trust** the integrity, resourcefulness and professionalism of staff.



## Conclusion

COVID-19 offers valuable insights into the actions leaders can take to support frontline staff and first responders. Leaders need to address a range of factors that may affect the **mental health** of the workforce during the pandemic.

### Manage workloads

The extra demands on an already stretched workforce necessitate **rapid deployment or redeployment of resources** to cope with additional workload and respond to the needs of frontline workers. Failure to do this has a negative impact on stress, mental health, burnout, and intention to quit.

### Consultation and communication

In times of crises, workers look to their leaders and leaders look to their people (Roberts, 2020). A reciprocal process of listening and responding to the immediate and emerging needs of the workforce is critical. This includes clear direction and updates on operational and procedural matters. In addition, staff want to engage directly with their managers and leaders, and see them connect directly with frontline staff.

The lessons from COVID-19 also provide valuable insights into the key characteristics of effective leadership and agile organisations at all times. These are presented in the following pages of this report.

# Context

## Background

In March 2020 the World Health Organization declared COVID-19 to be a global pandemic. In Australia, this resulted in State and Federal governments closing national and state borders to restrict citizens' movement, instigating quarantine procedures for any travellers and implementing social distancing protocols to reduce potential spread. By 21 March all non-essential and education services were directed to shut down. For frontline public sector workers such as police, paramedics, nurses and health and welfare professionals, these strategies had a significant impact on their workplace wellbeing as they were required to enforce rapidly changing regulations and continue interacting with the public despite concerns regarding their own personal safety and risk of infection. These changes had significant impact on the complexity and intensity of their daily work processes.

*While many Australian businesses and public services 'locked down', frontline workers continued to provide essential services in the midst of the risk and uncertainty of a rapidly unfolding pandemic.*

*This research investigates the experience of these frontline staff.*

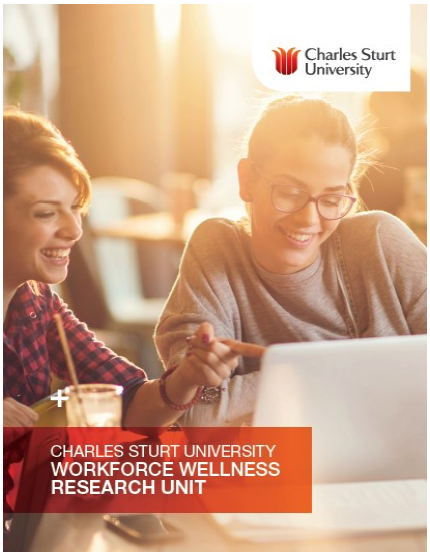


## The Workforce Wellness Research Unit

The Charles Sturt University Workforce Wellness Research Unit provides a holistic and comprehensive approach to workplace wellbeing that is underpinned by an understanding that workplace wellbeing is influenced by individual factors such as resilience, experience, individual health, skills and capacities; by work task or job-based factors such as the ethical dilemmas associated with decision making or providing care; by organisational factors such as workplace culture, resources, technology, training and support; and by environmental factors including cultural, historical, political, social background and regulatory frameworks.

The team recognises that these factors are integrated into broader systemic factors such as the interaction of organisational and work factors within the social 'system' or environment. Systemic factors may include interactions within and between elements such as education, health, welfare and justice systems and the need to operate within legislative and regulatory frameworks. Also recognised is that workplace wellbeing also incorporates emotional health, cultural safety and a sense of achievement or satisfaction in the morality or ethics and justice of the job along with the more recognised physical, social and mental wellbeing.

The team draws upon a broad range of expertise and capacity to distil the relevant lessons from contemporary workplace practice and policy and apply it to unique occupational contexts.




*The CSU Workforce Wellbeing Research Unit is a multidisciplinary team including psychology, HR, industrial relations, communications, legal and data science to provide a comprehensive, holistic approach to workplace wellness research.*

# What we did

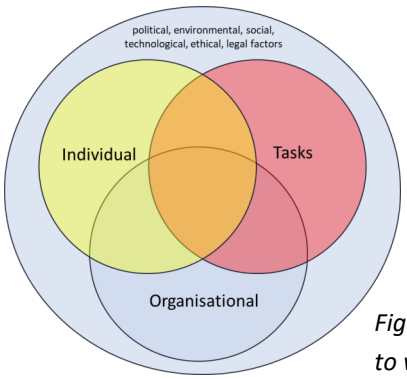



*Figure 1. Holistic approach to workplace wellbeing*

## Consultation and design

An online cross-sectional survey was used, implemented through the Qualtrics platform. The survey questionnaire was co-designed based on extensive consultations with organisational partners. This approach resulted in the creation of a focussed and customised questionnaire. The nomenclature in the questionnaire was tailored to different organisational cohorts surveyed. The survey also included standardised and international benchmarked measures including: the Generalised Anxiety Disorder (GAD-7), Patient Health Questionnaire (PHQ-9), the Maslach Burnout Inventory (MBI), and Employee Engagement.

*The survey was administered to:*

- *Police*
- *Paramedics*
- *Child protection workers*
- *Community nurses.*

*The survey used internationally benchmarked and validated measures of depression, anxiety, and workplace burnout.*

## Process and method

A link to an online survey was sent to a variety of frontline agencies across Australia. This included police, ambulance, child protection and community health services. The survey measured COVID-19 related demands and stress, depression, anxiety, workplace burnout, and workplace engagement. In addition, demographic and work role data was collected. Finally, the survey specifically investigated the sources of stress and support coming from the workplace, family and colleagues. The survey quantitative data was entered and analysed using SPSS 27. This document reports basic data trends. More sophisticated data analysis will be published in the peer-reviewed scientific literature.

*In addition, in consultation with industry partners a number of questions focussing on work experiences during COVID-19 were included in the survey.*

The qualitative responses to the survey were analysed using NVivo 12 (QSR International). The coding was undertaken by a team of four researchers, with all researchers reviewing the questionnaire responses to identify emerging themes. A coding frame was developed through an interactive and iterative process among the researchers and this was subsequently used to analyse, interpret and code the data. Allowing for peer review and reflection, the results were discussed within the qualitative research team and then organised and edited. The qualitative findings were also compared and triangulated against the relevant quantitative results with the broader research team. The preliminary findings were presented to key stakeholders representing each of the organisations participating in the broader survey, and their feedback integrated into the final report.

# Findings
# Workload and impacts

## Overall impact

The survey respondents indicated COVID-19 had a major impact on their life with an average score of 5.8 out of a maximum score of 7.

*"It is constant, always in the back of my mind, and at the peak of risk it was overbearing."*


*Figure 2. Impact of COVID-19*



## Areas most impacted

Survey respondents identified how the COVID-19 situation impacted them. Less than 10% of the sample reported COVID-19 had no impact. The major areas of impact were on work and family life.

*"The frontline workload has more than doubled in the last 4 months. Being short staffed and under resourced is an ongoing issue that is exacerbated in the current situation."*
*[Social worker]*

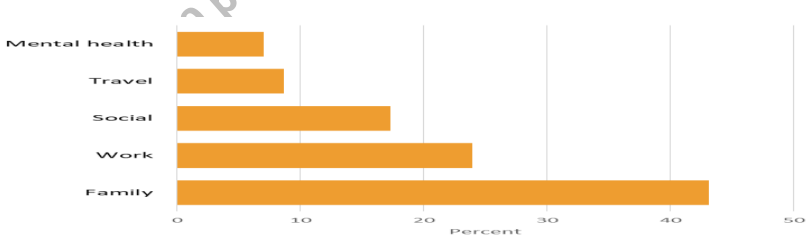



*Figure 3. Areas most impacted by COVID-19*

## Workload

Figure 4 reveals that even before COVID-19, frontline workers were carrying a workload 22% above what they considered fair and reasonable. With the emergence of COVID-19, this increased to 26.5% above what was considered fair.

*"There is an awful lot of increased expectation being loaded onto frontline staff with no reduction in service expectation."*
*[Paramedic]*

*"We were understaffed prior to the pandemic and this has worsened as our workload increases."*
*[Health worker]*

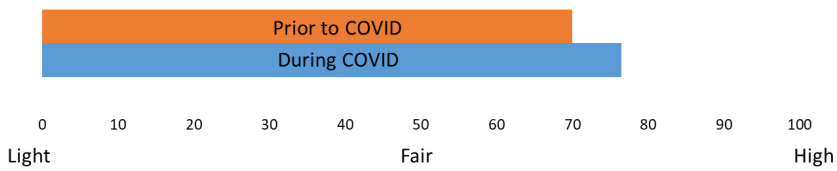



*Figure 4. Average rating of workload pre and post- COVID-19*

# Findings
# Stress and PPE

## COVID-19 related stress

The nature of this impact resulted in significant additional stress for the vast majority of the survey respondents (Figure 5). The average impact was 5.1 out of a possible 7.

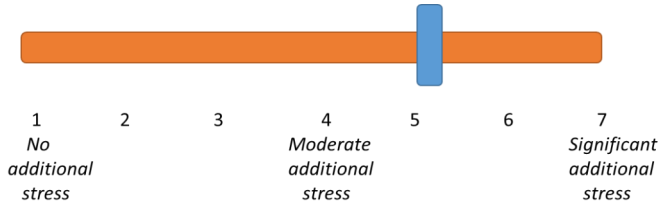



*Figure 5. Level of stress*

*"This pandemic has made our work lives a lot more stressful. Every person we deal with may have the disease, unfortunately we have to treat all people like that and that has taken a toll on us all."*



## PPE anxiety and satisfaction

Respondents were generally not overly anxious or concerned with their level of Personal Protective Equipment (Figure 6) and were generally satisfied with the standard and adequacy of the PPE provided (Figure 7).

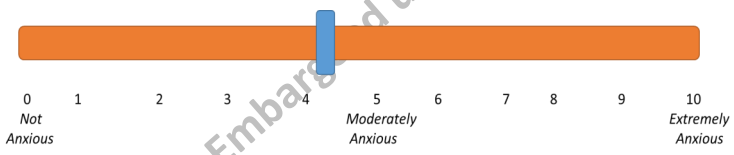



*Figure 6. Anxiety about PPE*

*"Increased stress related to exposure of the disease. Evolving policies that are changing daily and hard to keep up with. Zero support or time given by management to support or facilitate these changes. Differing practices in place at each local hospital."*

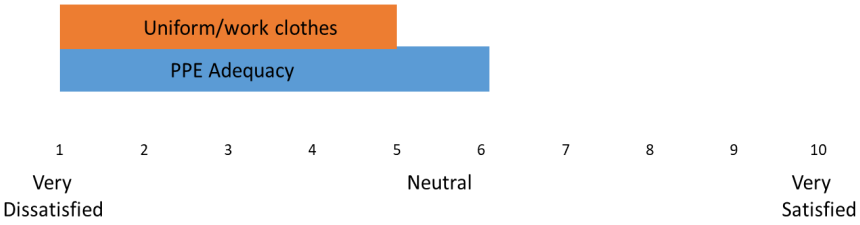



*Figure 7. PPE Satisfaction*

*"Fear of bringing infections home. My wife is a cancer survivor and has a compromised immune system. I have a disabled daughter who lives in Sydney. She normally travels to the ACT to visit regularly but is unable to do so at the moment due to the heightened risk on the bus."*

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# Findings
# Qualitative analysis

## Overall identification of stress factors

Participants were asked to describe the nature and causes of the extra stress that they were experiencing due to the COVID-19 pandemic. The word cloud (opposite) is based on participant responses to this single question. Overall the strongest theme that emerges is 'work', although 'home' and 'family' also loom large. The emphasis on work is also strengthened with similar key words such as workload and working. Stress, PPE and risk also feature prominently, while within the scope of home we also see children, partner, friends and community.

*"It was stressful understanding and adapting to the quick changes to our protocols. Having to withhold treatment to a lot of patients resulted in poorer outcomes. I personally witnessed patients pass away as we were forced to withhold treatment."*

*[Paramedic]*




*"Feeling overwhelmed with increased tasks at work. Minimal training or education or support from manager regarding extra tasks and workload."*
*[Health worker]*

*"There is an awful lot of increased expectation being loaded onto frontline staff with no reduction in service expectation. Just keeping up with covid related emails from our employer is almost impossible and absolutely impractical."*

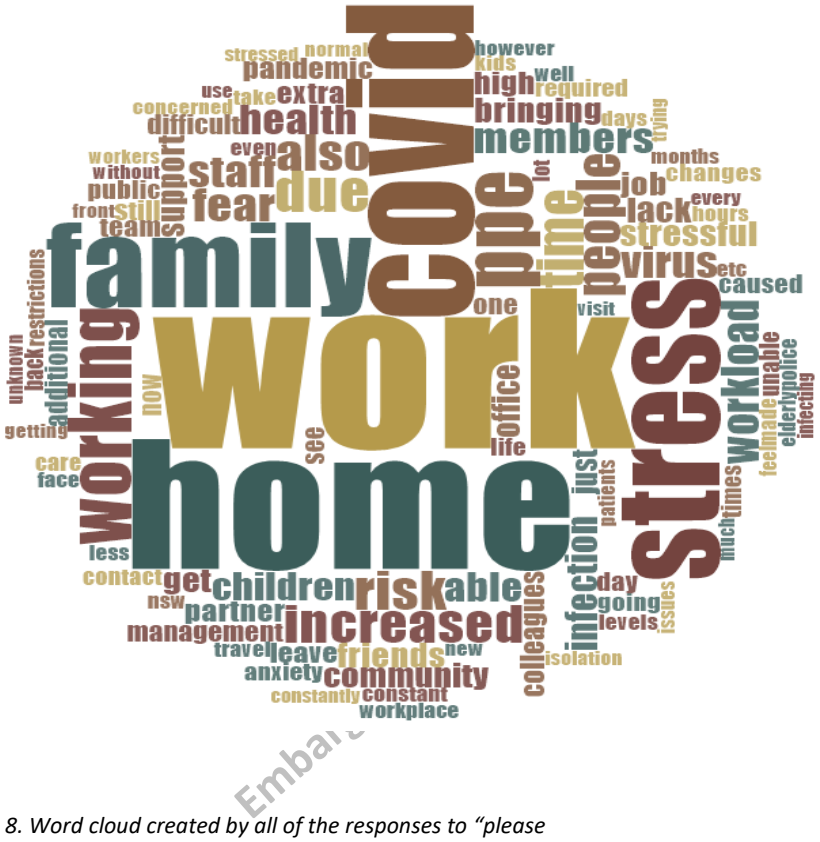


*Figure 8. Word cloud created by all of the responses to "please describe the nature and causes of this stress in your own words"*

*"No recognition for the increased danger to ourselves, families, friends and colleagues.*
*[Social Worker]*

*"Just expected to continue as nothing has changed with no support either financially or psychologically"*
*[Paramedic]*

*"Increased operational workload relating to COVID-19 ... with changing priorities, changing processes and a sense that management are uncertain as to how best to respond ..."*
*[Police officer]*

## Thematic analysis of qualitative responses

In understanding how COVID-19 has impacted the wellbeing of employees, it is important to understand how each of the four factors that contribute to workplace wellbeing have been impacted by the pandemic. In exploring the qualitative responses to the survey, the team explored how participants perceived the impact of COVID-19 on the broader environment, on their own capacity to cope or individual resilience, on the nature of their work, including the complexity and intensity of workloads and work processes, and on organisational structures and culture, including leadership, communication and support systems. While each of the cohorts that participated in the survey experienced these factors differently, there were a number of features that were consistent across them.

# Findings
# Qualitative analysis

*"Having to constantly adapt to constantly changing COVID work practices and different (hospitals) all having different working guidelines. Dishonest public/patients not being upfront and honest when asked COVID screening questions."*
*[Paramedic]*

*" Had to take on responsibilities for which we were given no lawful authority to deal with … yet was escorting buses between airport and hotels. We were advised if someone got off the bus to have a 'persuasive conversation' with the person as we had no official powers. We knew that if a passenger got off, police were going to be blamed although we had no authority or power to deal with the situation.*
*[Police]*

*"Communicating and acknowledging the increased stresses on staff and increased workload is only beneficial if backed up by associated changes or adjustments in the workplace to accommodate the increased demands on frontline staff."*

## 1. The challenge of working in a rapidly changing environment

All of the participants identified that there was significant upheaval and change in the broader environment or context of their workplaces and roles. Respondents identified that they had experienced new and changing priorities surrounding the use of:

- Infection control protocols
- PPE and
- hand sanitiser.

For those in the police services and in family welfare support roles, this required steep learning curves, and the quick assimilation and operationalisation of new knowledge. Among paramedics and community health workers, while principles of infection control and sanitary conditions underpin their foundational training, the extra layers of precaution impacted on the levels of care and support that they could provide to their clients and the community. All participants identified that new policies and procedures surrounding:

- social distancing
- health security

impacted on their capacity to do their work efficiently, effectively and to the best of their ability.

All participants also identified that they experienced instability in their environment due to rapidly changing law, regulations and policies relating to:

- curfews, enforced isolation of suburbs/buildings
- lockdowns, fines, anti-social behaviour
- hotel quarantine, border controls
- public safety standards.

These created significant extra stressful challenges in dealing with clients and members of the community. Many of the participants noted that as frontline workers they were highly visible within the community during shutdowns and as a result, they were frequently a target for public anger and frustration, creating increased levels of stress and anxiety.

## 2. Challenges to individual resilience

Participants across all of the cohorts identified a range of factors that undermined their capacity to cope with sudden changes, unstable environments and the increasing complexity and intensity of work. While a high proportion of participants expressed a fear of catching COVID-19 themselves, for many participants their greatest source of stress was their fear of, not only catching, but more importantly spreading COVID-19 to:

- family, especially with pre-existing health, ageing or disability issues
- community
- co-workers.

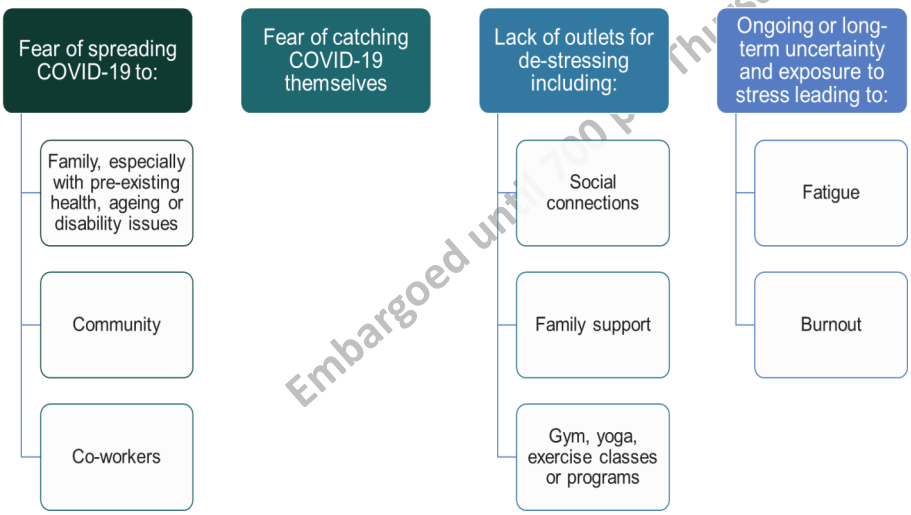


*Figure 9. Challenges to individual resilience*



As frontline workers who were required to be out in the community, many experienced anxiety about being a source of contagion and about the lack of awareness and compliance among others (both amongst colleagues and the community more generally). Given this anxiety, many participants felt unable to safely connect with others, including family and social networks. They identified that their personal ability to destress was limited by the lack of outlets for destressing including:

- Social connections
- Family support
- Gym, yoga, exercise classes or programs.

In combination with the lack of outlets for destressing, participants identified that the ongoing nature of the crisis and the long-term uncertainty and continuing exposure to stress had led to significantly higher levels of fatigue and burnout than normal.

*"The changes to social and work practices has forced dramatic changes to coping mechanisms."*

*"Not being able to de-stress by catching up with friends/ family in a social setting without fear of infection, either them infecting me (and the subsequent impacts on my job), or me infecting them (and potentially killing them)."*
*[Paramedic]*

*"Feeling isolated from family and friends, no affection, not being able to socialise or share activities, and not being able to attend a gym for regular exercise and having access to exercise equipment. It has impacted my physical fitness and sense of wellbeing. I have not slept so well."*

*[Social worker]*

## 3. Changes to the nature of frontline work

Participants noted that the nature of their frontline work had changed significantly as a result of COVID-19, both in complexity and intensity. That is, they experienced the addition of extra roles and responsibilities: in many cases they experienced increased task load due to sudden changes in staffing and rostering patterns, while they also experienced increased role complexity, particularly in relation to their interaction with the public.

*"There is an awful lot of increased expectation being loaded onto frontline staff with no reduction in service expectation. Just keeping up with covid related emails from our employer is almost impossible and absolutely impractical".*

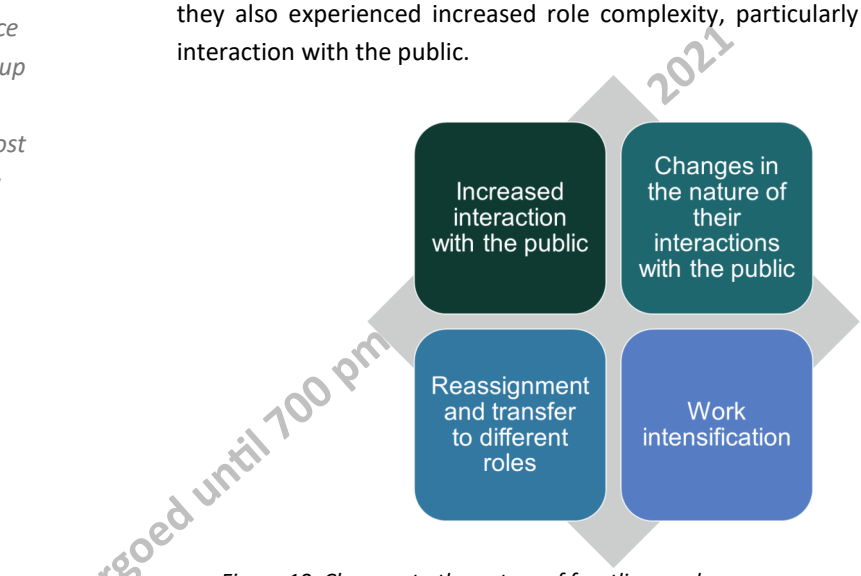




*Figure 10. Changes to the nature of frontline work*

*"The stress of having to gown up when going to a potential cardiac arrest whilst the family are pleading with you to hurry up."*
*[Paramedic]*

Changes in the nature of interactions with the public included:

- Increased workload due to PPE
- Managing client relationships through PPE, including gloves, masks and protective clothing
- Anger and frustration in the community due to lockdowns, fines, border closures
- Increased domestic violence and mental illnesses in the community, as documented by the Australian Institute of Health and Welfare (AIHW, 2021) and the Australian Institute of Criminology (Boxall *et al.*, 2020)

*"Confusing and conflicting instructions. Blaming the staff for anything that goes wrong during covid even when it is clearly an organisational failure."*

Work intensification due to reassignment and transfer to different roles included managing:

- Staff absences (on leave, working from home, transferred to other duties)
- Rostering and shift changes– e.g. from 8 hours to 12 hours, less hand over time, less peer support

*"The push back from the community and the disrespect at our protective measures."*

Increasing roles and task complexity included:

- needing to stay up to date on changing rules/regulation information
- remote working – technology challenges – Zoom, increased emails, WFH
- –cleaning protocols in offices, public spaces, vehicles, hot desks.

All of these factors contributed to increased stress exhaustion in the workplace.

## 4. Organisational stressors

Organisational factors can exacerbate or alleviate the workplace stresses and anxiety experienced by workers. While it should be acknowledged that there were some participants who felt appropriately supported and valued by their organisations, the incidence of these perceptions was relatively rare across all participants. Some of the strongest messages from the data related to key elements of organisational culture: Communication, Leadership, Support. Participants identified that:

- Leadership teams did not communicate clearly with frontline staff
- Leadership did not receive and respond to communication from the frontline

This resulted in the perception of a lack of appreciation of challenges and difficulties faced by frontline staff by senior management. Staff identified that messages of support and value would have validated their efforts and could perhaps have reduced feelings of burnout and exhaustion. More importantly, the messages of support need to come with actions demonstrating commitment and action.

*"Increased workload, Ambulance is overwhelmed, constantly changing information, every hospital ... has different procedures, can't keep up - reduction in patient care for non-covid cases."*

Organisational strategies to address extra workload and the loss of key workplace entitlements were identified as factors that could have created a stronger sense of support from senior management for frontline workers. Such strategies would have provided consistency of application and managed the long-term issues surrounding:

- Access to leave
- Requirement to use leave. There was some debate about what the organisation counted as COVID leave and what needed to be used as sick leave (e.g. isolating awaiting test results = sick leave?)
- Shifts and rostering
- Logistics of socially distanced workplaces
- Access to working from home and transparency between off and on site teams.

*"The main work-related stress related to the lack of care and direction from my managers. … The greatest barrier was having managers who trusted staff to work offsite and support them— rather than ride them. A very old school approach has been adopted by the dinosaurs in the ranks. …. The lack of trust and support has been by far the greatest stress."*

Many participants also identified the need for greater trust from managers and recognition of autonomy, particularly in working from home. The lack of trust undermined their sense of fairness and equity and contributed to poorer wellbeing.

Perceived benefits of WFH included improved productivity, reduced travel time, and flexibility. However, a number of staff also identified negative factors such as lack of ergonomic work areas, sound internet connections, and the presence of other family members working or schooling from home and generally increased work intrusion into family life. Working from home also created extra costs for workers such as electricity, heating and internet access, at a time when there was pressure to cut the pay of frontline workers. This created a degree of anger amongst some participants. A further source of stress was the tension experienced between staff who were permitted to work from home, and those who were required to work on site creating a perception of a lack of trust from managers for frontline workers.

# Findings
# Depression

## Depression

Depression was measured using the PHQ9. This scientifically validated and benchmarked scale is widely used in Australia and overseas.

## Severe and moderately severe depression

The proportion of staff with moderately severe, and severe depression was **10 times** the rate found in the general population and almost **57% higher that found in health** workers during COVID-19 in Norway (Johnson et al, 2020). This suggests as the first-response requirements increase, so does the impact on frontline workers' mental health.

*"The fact that I am working in a high-risk job, and the fact that I may bring this illness home to loved ones is frightening. It is also very stressful with the unthought out response from the … government which stretched the police capacity to the limit. Having to work 14 days straight or minimal rest days, and alternating shifts in any given roster. I don't know what day it is any more I don't even know what time I'm meant to be asleep - My body clock is broken and the lack of something positive to look forward to has caused significant despair."*

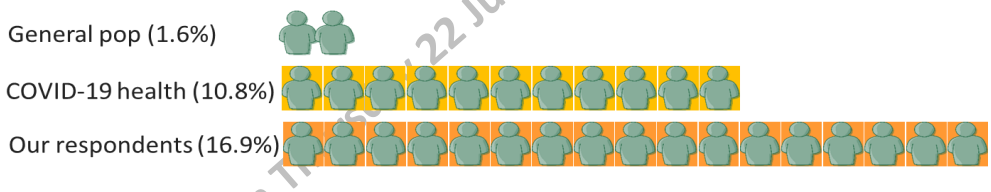


*Figure 11. Percentage with severe or moderately severe depression*
*(Comparative source data Kocalevent et al, 2013; Johnson et al, 2020)*



## Average depression scores

| General Population | 2.9 |
|---|---|
| Frontline pre-COVID-19 | 6.3 |
| Health post-COVID-19 | 5.5 |
| Our sample | 8.2 |

*Table 1. Average depression scores*
*(Comparative source data Kocavelent et al, 2013; Korol et al, 2019; Dobson et al,2021)*

## Depression scores distribution

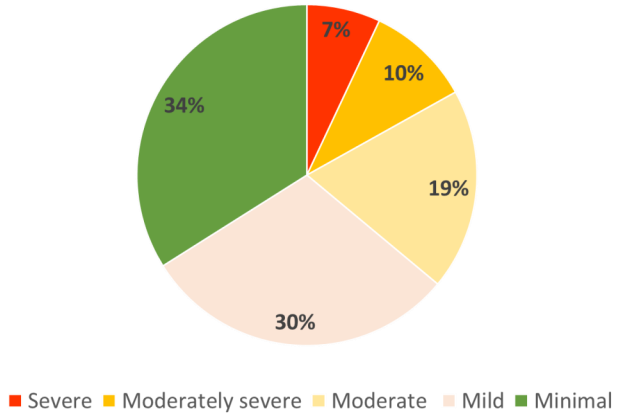


*Figure 12. Depression levels in survey respondents*

# Findings
# Anxiety

## Anxiety

The anxiety levels in our sample were measured using the GAD7. This evidence-based test is widely used in Australia and overseas.

## Severe and moderate anxiety

The proportion of the sample reporting moderate and severe anxiety was **4 times** that found n the general population and **37% higher** than the scores reported in human services workers in Norway during COVID-19.

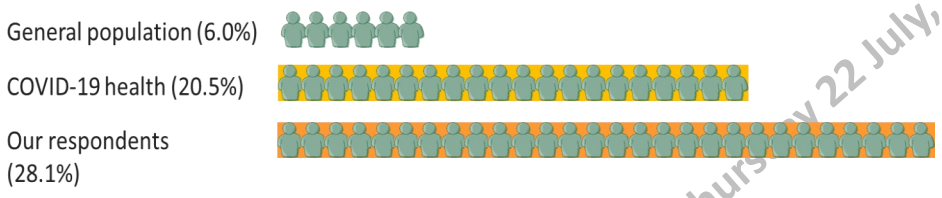


*Figure 13. Percentage reporting moderate and severe anxiety*
*(Comparative source data Lowe et al, 2008; Dobson et al, 2021; Roberts et al, 2021)*

*"Fear of infection and bringing home infection. Wife asked me to leave home to isolate from family."*

*"Unable to sleep at night with anxiety. Sleep deprived affecting all aspects of life."*

## Average anxiety scores

| General Population | 2.9 |
|---|---|
| Frontline pre-COVID-19 | 5.0 |
| Health COVID-19 | 5.5 |
| Our sample | 6.8 |

*Table 2. Average anxiety scores*
*(Comparative source data Lowe et al, 2008; Korol et al, 2019; Dobson et al, 2021)*

*"As a nurse we are required to do the covid clinic swabbing in the morning. I experience severe anxiety thinking I may contract the disease while swabbing then spread it to the community or ambulatory care clients we then go and see. Also fear of giving virus to my family and to the vulnerable clients at an aged care facility I work at casually 2 days a week."*

## Anxiety scores distribution

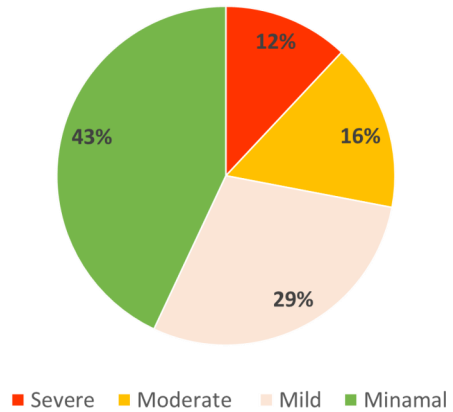


*Figure 14. Anxiety levels of survey respondents*

# Findings
# Burnout

*"... members are at breaking point with fatigue. Many members had leave cancelled and need a break."*

*Increased workload and cancellation of recreational leave, which has caused high levels of fatigue without an end date to focus on and work towards. Not being able to rest and take time off has caused burn out. [Police officer]*

*"Excessive workload due to COVID response requirements."*

*"Leave embargoes implemented due to COVID response requirements and no staff to cover. Had a total of one recreational leave day this calendar year. Suffered burnout became physically unwell. Completely isolated from family."*
*[Police officer]*

**Workplace burnout** can be measured across a variety of domains. Generally the term 'burnout' is a good description of the psychological state, characterised by feelings of tiredness, loss of enthusiasm and connection to work.

Occupational burnout was assessed using the Maslach Burnout Inventory (MBI). The MBI is scientifically validated and used extensively in international research and practice in workplace wellbeing. This scale was chosen because it allows direct comparison of the levels and extent of workplace burnout between our sample with similar occupational groups, before and during COVID-19.



The Maslach Burnout Inventory assesses three major factors:

- **Emotional Exhaustion** measures feelings of being overextended and emotionally exhausted by one's work: where workers feel fatigued, stressed, frustrated and at 'the end of the rope'.
- **Depersonalisation** measures feeling an impersonal and unfeeling response to service recipients, when workers become hardened emotionally, and callous towards people even to the extent of blaming them.
- **Personal Accomplishment** measures feelings of successful achievement and accomplishment in one's work. It is characterised by feeling effective, relaxed and even exhilarated about work, feeling that you are making a difference. It is sometimes labelled Personal Gratification, indicating that staff find their work gratifying.

Taken together, these scales provide an overall measure of worker wellbeing and burnout. Pages 21-24 report the outcomes of the MBI across these three factors.

Charles Sturt University

## Emotional Exhaustion (EE)

Over half the survey respondents scored high on emotional exhaustion.

## High Emotional Exhaustion

The proportion of our respondents with high levels of emotional exhaustion was higher than found in similar workforces pre-COVID-19 and higher than international samples of frontline health workers in COVID-19.

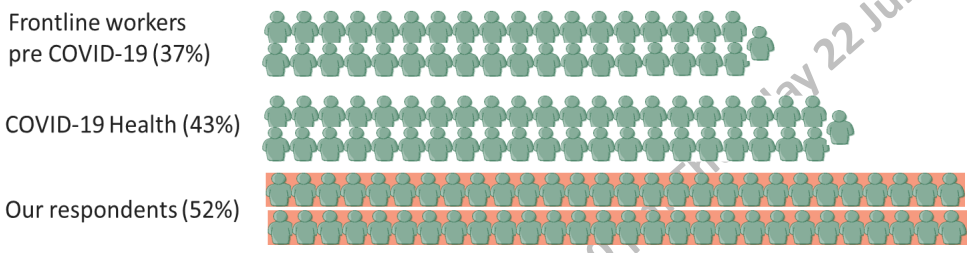


*Figure 15. Percentage with high EE scores (Comparative source data Hawkins 2001; Barello et al, 2020; Hu et al, 2020)*

## Average Emotional Exhaustion scores

| | |
|---|---|
| Frontline workers pre-COVID-19 | 19 |
| Health workers COVID-19 | 23 |
| Our Respondents | 27 |

*Table 3. Average EE scores (Comparative data Hawkins, 2001; Barello et al 2020; Hu et al 2020)*

## Emotional Exhaustion score distribution

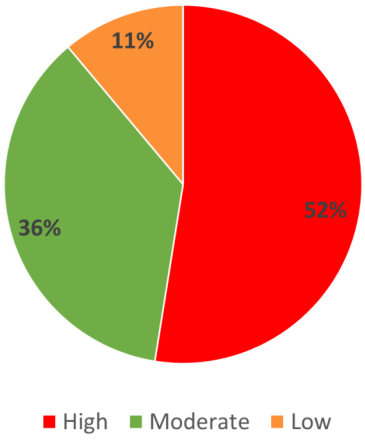


*Figure 16. EE levels in respondents*

*"The workforce is exhausted and the workload again seems to be increasing. I'm seeing very demoralised, tired colleagues every day, including myself." [Paramedic]*

*"… lack of engagement and debriefing means the emotional/psychological impact remains with me within my home, defaulting to bad habits such as smoking, feeling forgotten and isolated, no motivation to work, expectations to perform more given gained time with less travel etc., don't take proper breaks, decreased self care in terms of personal grooming." [Social Worker]*

*"Experienced anxiety and angry outbursts, aches and pains and difficulty sleeping. Sometimes impaired cognitive capacity, due to being burnt out and overwhelmed."*

# Burnout
# Depersonalisation

**Depersonalisation (DP)** measures the extent to which workers lose empathy and the capacity to see clients/patients as people.

## High levels of Depersonalisation

*"Makes me feel awful that I have run out of empathy." [Paramedic]*

The proportion of our sample showing high levels of Depersonalisation was close to similar occupational groups pre-COVID-19, and higher than that of health workers in COVID-19.

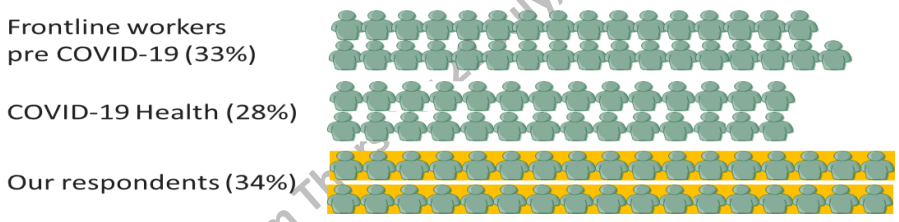


*Figure 17. Percentage with high Depersonalisation scores*
*(Comparative source data Rail, 2005; Barello et al, 2020; Lasalvia et al ,2021)*

*"We have also had a loss of patient rapport due to the barriers of PPE and the social distancing. There is a lack of compassion and actual physical touch which can sometimes help build relationships and deescalate situations."*



## Average Depersonalisation scores

| | |
|---|---|
| Frontline workers pre-COVID-19 | 8.2 |
| Health workers COVID-19 | 6.8 |
| Our Respondents | 9.7 |

*Table 4. Average Depersonalisation scores*
*(Comparative source data Savicki et al, 1994; Cenk, 2019; Barello et al, 2020; Hu et al, 2020)*

## Depersonalisation score distribution

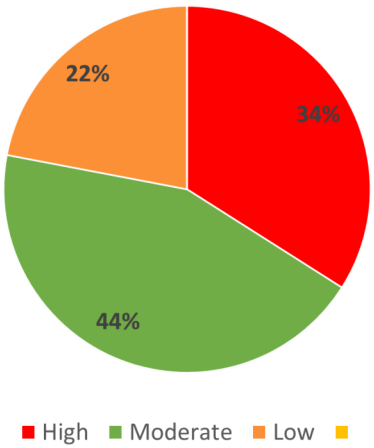


*Figure 18. DP levels in respondents*

# Burnout
# Personal Accomplishment

**Personal Accomplishment (PA)** is the extent to which you feel your work is making a difference. In this scale low scores are a sign of burnout. In this scale low scores are indicative of burnout.

## Low Personal Accomplishment (indicating high burnout)

The proportion of our sample showing low levels of Personal Accomplishment is much higher than that reported in similar samples pre-COVID-19 and higher than health workers in COVID-19.

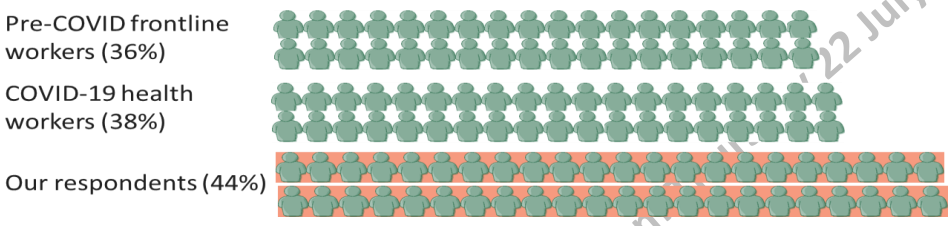


*Figure 19. Percentage with low Personal Accomplishment scores (Comparative source data Hawkins 2001; Barello et al, 2020)*

*"Nil recognition for the work we have done or for turning up at work each shift, just a potential pay cut while the Government are handing money out to welfare recipients." [Paramedic]*

*"The fact that I am working in high risk job, and the fact that I may bring this illness home to loved ones is frightening. It is also very stressful with the unthought out response from the...government which stretched the police capacity to the limit. Having to work 14 days straight or minimal rest days, and alternating shifts in any given roster. I don't know what day it is any more I don't even know what time I'm meant to be asleep - My body clock is broken and the lack of something positive to look forward to has caused significant despair."*

## Average Personal Accomplishment scores

| | |
|---|---|
| Frontline workers pre-COVID-19 | 37 |
| Health workers COVID-19 | 34 |
| Our Respondents | 32 |

*Table 5. Average Personal Accomplishment scores (Comparative source data Storm et al, 2003; Kukowski et al, 2013; Lasalvia et al, 2021; Hu et al, 2020)*

## Personal Accomplishment score distribution

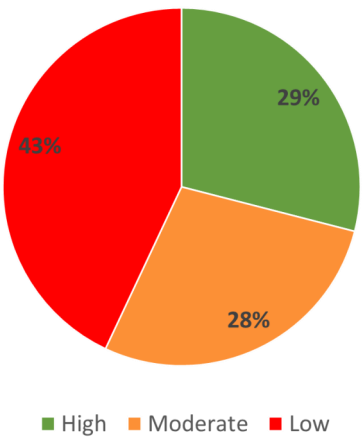


*Figure 20. PA levels in respondents*

# Findings
# Workplace engagement

*"Frontline workers including police should be acknowledged for the efforts and sacrifice. Frontline workers have done so much to stop this pandemic and the only acknowledgement we have been giving is to cut our pay rise, would be nice to be treated like a human not a robot."*
*[Police]*

*"Being exposed and not even getting paid our very basic pay rise whilst government officials happily give themselves a handsome pay rise whilst completely being physically removed from potential infection!"*

**Workplace engagement** measures intellectual, social and affective factors in the workplace. The positive results show only 1% of the combined cohorts are actively unhappy and disengaged. With the opposite group made up of almost **a quarter of employees** at the top of the distribution that are **highly engaged** with their *tasks* at work and hence have a profound connection to frontline service delivery.

The remaining group is made up of the **majority of employees** who show a **moderate level of work engagement** which is a typical result.



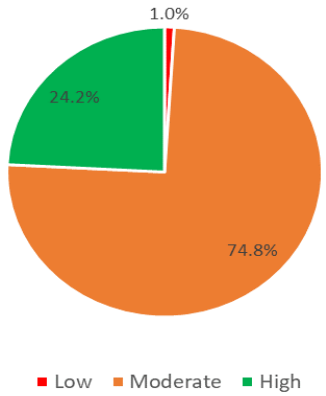


*Figure 21. Workplace engagement*

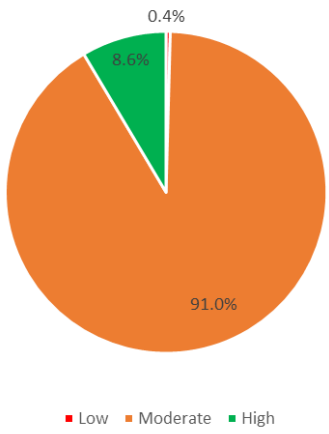


*Figure 22. Task performance*

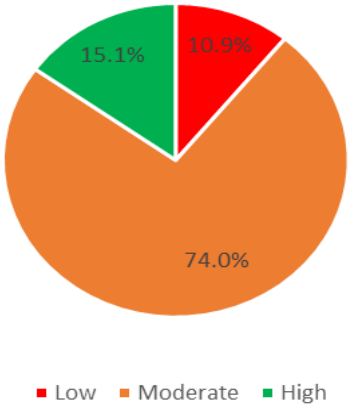


*Figure 23. Organisational citizenship behaviour*

*"Utter lack of overall direction from the start of the pandemic. Executive should have given team leaders clear directions on sending team members to work from home unless it is required for them to be in the office. Too much autonomy resulted in team leaders requiring members to be at work for no clear purpose…"*



Usually a positive workplace engagement result is associated with a negative intention to quit. But what has been reported shows a somewhat interesting result, given while the majority of employees are moderately or highly engaged **over one-third (35.9%)** of respondents are demonstrating they are potentially seeking alterative employment and 5% are actually actively seeking other employment. This could be associated with the level of burnout being expressed due to the pandemic and respective work demands, the lack of ability to take leave and hence a poor work-life balance.

*"Providing inconsistent messaging and allowing further division within our organisation — no recognition for frontline workers exposed to risk, while office workers WFH."*

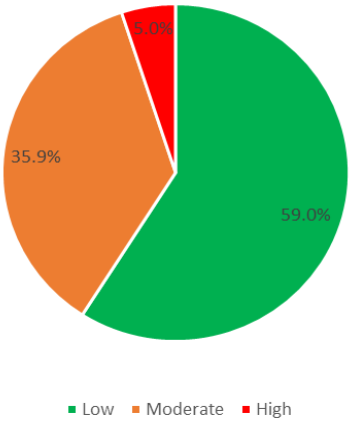


*Figure 24. Intention to quit*

# Findings
# Consultation & communication

## Consultation and communication

Staff were generally **dissatisfied with communication** from management. This included: dissatisfaction with consultation; communication to help alleviate stress and anxiety; and the volume, type and frequency of communication overall.

*"Come and meet the staff at the 'coal face'. Get a real idea of what is happening and how people feel. Make decisions after consultation with people that are affected."*

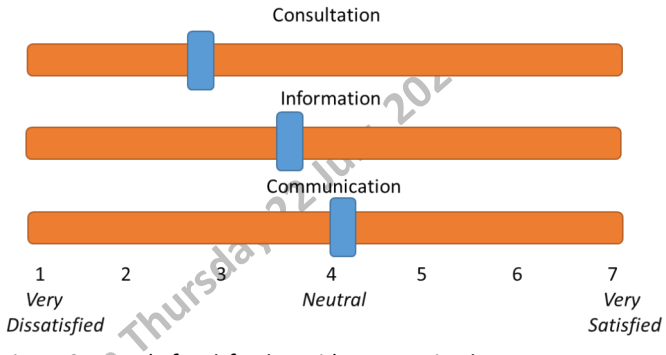


*Figure 25. Level of satisfaction with communication*

*"The repeating on the same email on a daily basis... it's got that bad that no one's is paying attention to them anymore which is making the standards now slip."*



## Overall summary rating of leadership communication

When asked: *"On the whole how satisfied are you with the communication from your leadership team?"* respondents gave an average score of **5.8 out of 10.**

The data suggests the need for executive management being far more engaged in consultation, and communication of basic operational procedures and information to alleviate stress and anxiety in times of major change and disruption.

*"No direction or guidance from executive on how to manage COVID especially in the early days and basically taking the brunt of anxiety/ stress/anger from staff." [Frontline manager]*

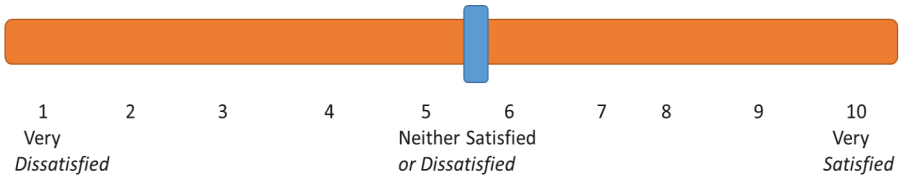


*Figure 26. Overall leadership communication*

## Organisational support

The most helpful support reported was from the workers' direct line manager and their workmates.

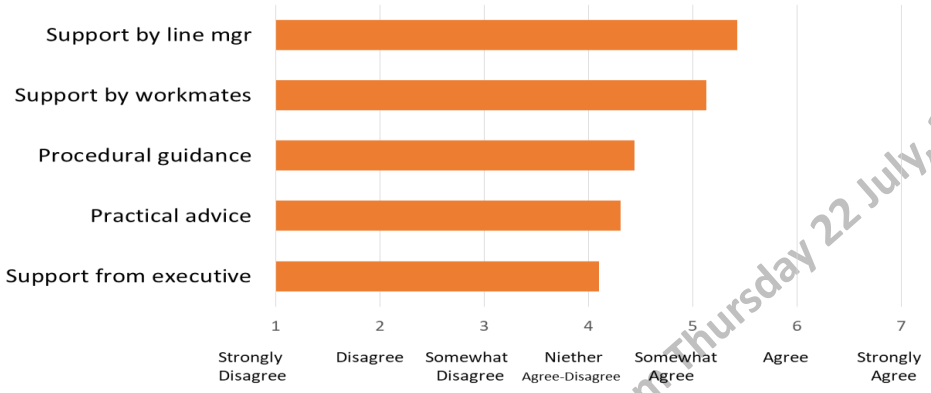


*Figure 27. Sources of support—employer related*



## Sources of support

Staff reported they were most satisfied with the support offered by family, friends and workmates. Consistent with previous research, the majority of staff took responsibility for sourcing support needed inside and outside their organisations.

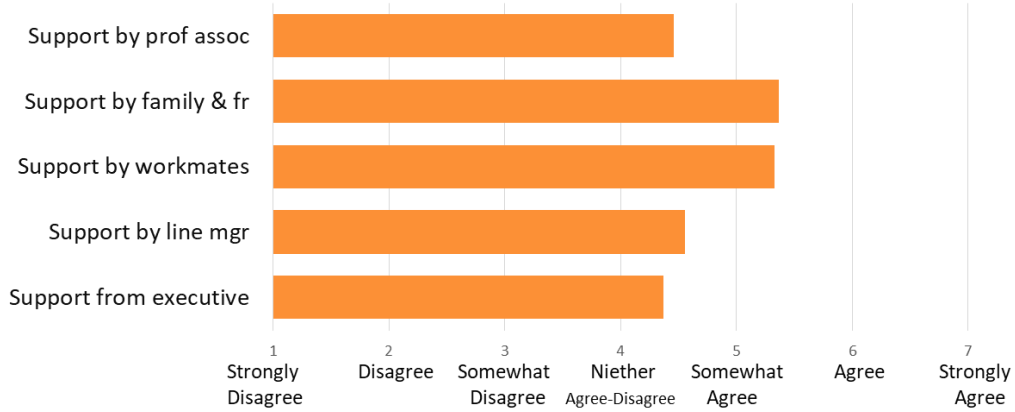


*Figure 28. Sources of support*

*"Leadership in a pandemic needs to be from the top for a single point of truth and guidance. This did not occur and as a result managers in different regions and areas interpreted a COVID-19 response in accordance with their own perceptions and beliefs."*

# Findings
# Helpful actions

The **Anna Karenina Principle** states that a deficit in any one of a number of key factors leads to overall failure. Conversely, a successful operation avoids all of these deficits. The following section reviews data on the factors related to successful and unsuccessful endeavours in response to COVID-19.

*All happy families are alike; each unhappy family is unhappy in its own way. [Tolstoy - Anna Karenina]*

## Most helpful thing your org did to support you during COVID-19?

Unsurprisingly,the actions most often considered as most helpful were: clear information updates; supply of PPE; and flexible work arrangements. Alarmingly 13% felt the organisation did nothing helpful in response to the evolving COVID-19 situation.



*"My direct supervisors and managers have been fantastic just checking in and explaining processes and ensuring we understand changes. Also being transparent when they didn't understand."*

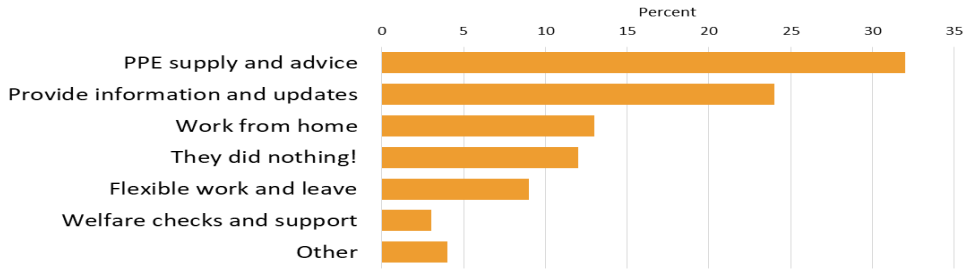


*Figure 29. Most helpful thing organisation did to support during COVID-19*

## Least useful

Many of the unhelpful things that organisations did were the opposite of the helpful initiatives (above). The least helpful thing organisations did was provide inconsistent, ambiguous or irrelevant communications. Excessive emails and communications, often the same email from numerous senders was similarly unhelpful. The lack of providing practical support, especially with respect to PPE and facilitating WFH arrangements was seen as an organisational failure.

*"Get out of your ivory towers, get in a patrol car and see how angry the community are with police. See how terribly members are being treated by the public and how it is affecting members' mental health."*

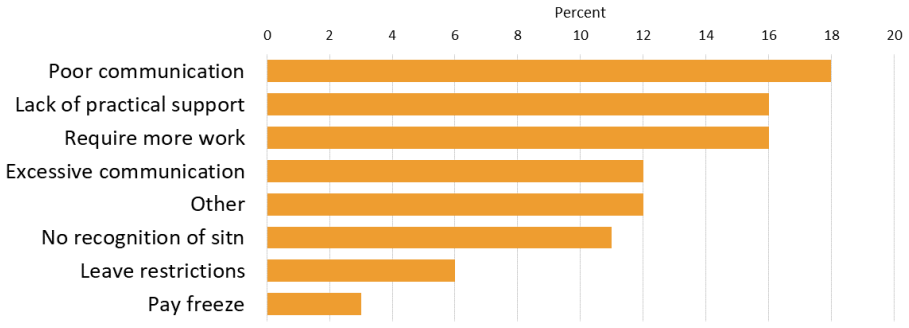


*Figure 30. Least useful thing organisation did to support during COVID-19*

# Findings
# Key messages from staff

## Key messages to leadership

The sample were asked *'What one piece of advice would you give to executive management?'* The advice most frequently offered focussed the need for the right amount of **clear, unambiguous advice and direction**. There were also strong themes of actively connecting to listen and better understand the challenges experienced by frontline staff. Also to talk with staff about potential actions in response to the challenges experienced.

Other themes that emerged included providing practical support, in terms of flexible work arrangements, deploying additional resources and personnel, and also making allowances for additional leave if needed. All of this is underpinned on a foundation of trust in the abilities and integrity of frontline staff. All of these processes can be summarised in the form of a reiterative process (*Figure 31*).

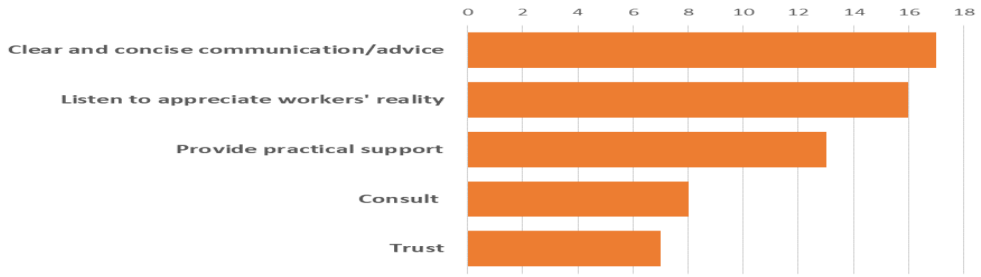


*Figure 31. Key messages to leadership*

*"Ask staff what we need, listen to them and act on their concerns."*

*"Communicating and acknowledging the increased stresses on staff and increased workload is only beneficial if backed up by associated changes or adjustments in the workplace to accommodate the increased demands on frontline staff."*

# Practical associations and conclusions

## Practical associations and conclusions

### Implications for organisational leaders

Two sources of data were interrogated to provide practical advice for leaders of frontline service organisations. The first was a direct question to staff. The second source of data was to analyse statistical relationships between question scores and the psychometric scales of depression, anxiety and workplace burnout.

*"Our Government certainly doesn't appreciate the fact that us as Paramedics are in the absolute frontline for risk and exposure. Further to this the Ambulance like to provide plenty of "reassuring emails" yet managers are able to sit in their offices and do not activate about the unappreciated workforce demands."*
*[Paramedic]*

### 1. Qualitative advice from staff

The first was to simply ask frontline workers: what *'one piece of advice would you give to you organisation's leadership?'* Comments were classified and their frequency calculated. Based on this analysis, the following priority list of recommended advice emerged:

1. ***Listen***
2. ***Consult***
3. ***Take action***
4. ***Communicate clearly***
5. ***Trust staff!***



*[There's been] "too much self-congratulations from pen pushing heroes. "*
*[Social worker]*

Upon inspection, the research team constructed a cyclical reiterative leadership action model. This model centres around trust and respect of staff capability, perspectives and integrity.


*Figure 32. An reiterative model of staff support*

## 2. Statistical associations

Simple statistical associations between ratings of management actions and performance were conducted across the key outcome measures of burnout, depression and anxiety. The following factors were found to be highly and significantly related to the Emotional Exhaustion scale of the Maslach Burnout Inventory. It should be noted that very similar associations were found with the scale scores for the MBI scales of Personal Accomplishment and Depersonalisation, and also for the anxiety and depression scale scores.




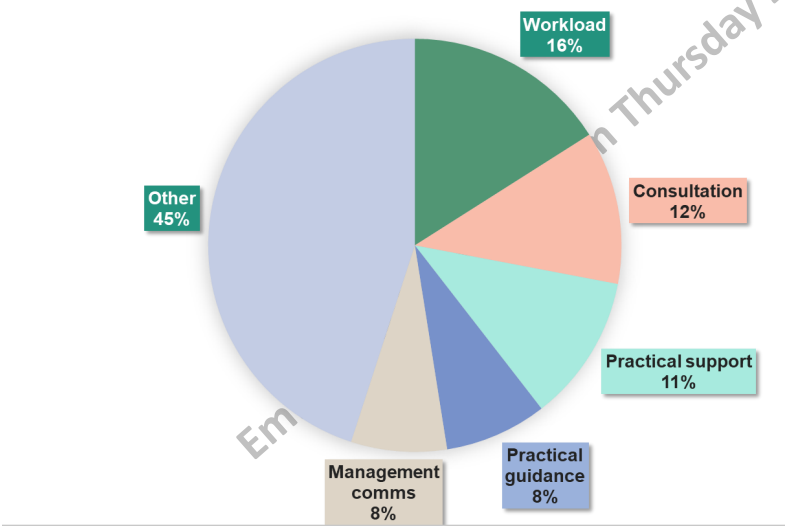


*Figure 33. Statistical associations with workplace burnout*

Figure 33 powerfully demonstrates the most effective mental health interventions are practical and preventative. EAP and employee support programs have their place, but the most effective approach is to prevent the mental health stress in the first place. Further, these actions should characterise basic sound leadership and management practice: it does not require expert mental health support.

## Summary

Consistent across both qualitative and quantitative investigative approaches are the following inter-related factors:

- ***Consultation***
- ***Practical support and guidance***
- ***Clear communication.***

# Recommendations

## Recommendation 1

### Services should ensure they deploy additional staff, and/or redeploy existing personnel, and provide the resources to meet increased work demands

COVID-19 placed additional demands and workload on frontline staff, most of whom were already carrying higher than reasonable workloads in the context of a risky, changing and unpredictable work environment. To protect the wellbeing of staff and ensure effective delivery of essential services, agencies must find ways to release additional workforce capacity to support their staff and the communities they serve.



## Recommendation 2

### Clear and transparent workplace polices on quarantine processes, working from home, access to leave, changes to shifts and work locations

Frontline staff recognise that in times of emergency rapid changes may occur in their environment and in workplace policies and arrangements. However, staff need clear communication and transparency in how these changes are implemented. There needs to be a consistent approach to the implementation of working from home and leave policies. It is important to avoid perceptions of favouritism or that there may be different policies for frontline staff as opposed to management.

## Recommendation 3

### Services should develop a communication plan/strategy in times of crisis

Staff were concerned about ambiguity of directives, overwhelmed by the frequency and amount of communications, and confused about the provenance (source/authority) of communications. Agencies should develop a communication plan that addresses the mode, medium, frequency and flagging the type and nature of the communication, which balances the parallel needs for information to be timely, but unambiguous and not contradictory.

## Recommendation 4

### Senior executives should demonstrate their awareness, understanding and connection to the experience and 'on-the-ground' realities of frontline service

Many staff expressed dissatisfaction with senior management's awareness and understanding of the challenges of frontline contact with the community during COVID-19. This severely undermined their morale, and their confidence and trust in management. Senior management should introduce processes (virtual if necessary) to show their concern, connect with frontline staff, and learn of the challenges they confront on a day-to-day basis.

## Recommendation 5

### Frontline staff should be provided with appropriate PPE and PPE training

Frontline workers were confronted with change in the intensity and complexity of interaction with the public due to higher visibility in community settings. Staff also experienced work intensification (e.g., maintaining safe working environment) and expansion of existing roles (e.g., PPE, infection control quarantine). It should be ensured that staff are equipped with the relevant protective equipment (e.g., face shields) and in a timely manner. Attention should be drawn to the public (e.g., TV spots) that the frontline staff are doing a highly valuable job for the protection of all citizens and that inappropriate behaviour can cause harm and detrimental effects to the officers and beyond. Assistance should be provided for tasks that can be done by non-frontline staff (e.g., cleaning of facilities, administration etc.) so they can focus on their core tasks.



## Recommendation 6

### A range of mental health support services and links must be provided to staff

Even quite late in the COVID-19 response there were alarmingly high levels of depression, anxiety and work-related stress. These workforce sectors are not traditionally help-seeking. In addition, many staff are concerned that acknowledging mental illness can be 'career-limiting'. As such, in addition to EAP and workplace wellbeing consultants, agencies should facilitate access to a range of social-emotional support services external to the agency.

## Recommendation 7

### Recognise that work has social components that are essential for workplace wellbeing

Frontline work is inherently social and requires workers to interact with their community and colleagues. Workers are also embedded in families, households and social networks. The impact of emergency situations such as COVID-19 on the social relations of work cannot be ignored. Increased challenges in dealing with the community need to be recognised and the contributions of staff need to be valued by senior management.

## Recommendation 8

Aim to avoid cutting wages or delaying pay increases for frontline staff when they are working excessive hours and doing an essential public service.

# Respondent demographics

## Respondents

*The sample included a high proportion of respondents from rural and regional Australia.*

One thousand five hundred and fortytwo (1542) police, paramedics, child protection and community health nurses responded to the survey.

The police and paramedics from every state and territory of Australia were surveyed. Child protection workers were surveyed from across NSW, and community health nurses from a rural district of NSW.

The age distribution of the respondents was relatively even across the range from 25 to 65 years (Figure 1). It should be noted that respondents from rural, remote and regional areas were overrepresented in the sample. With respect to work roles, 81% of respondents were either frontline workers or direct line managers of frontline workers.



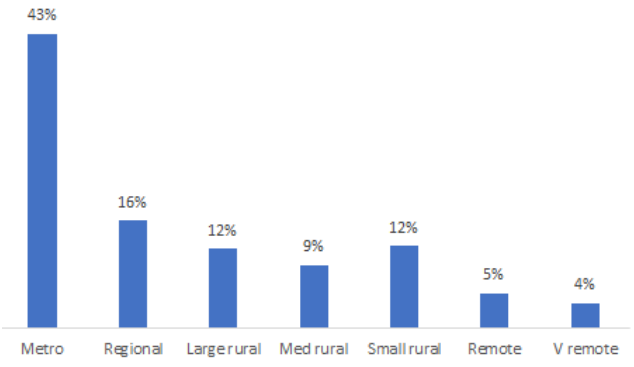


*Figure 34. Geographic distribution*

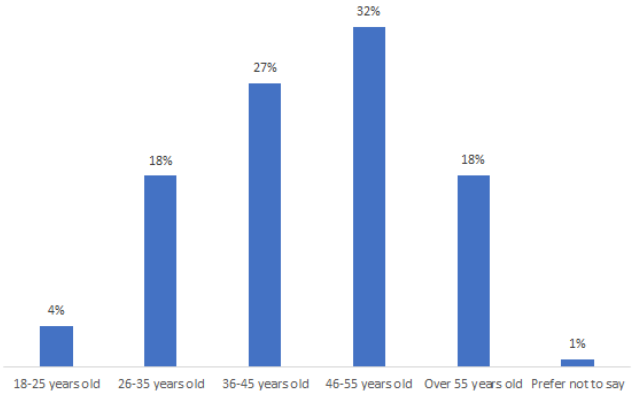


*Figure 35. Age distribution*

*Five hundred and eighty three (i.e., 81%) respondents were frontline workers and their direct line managers.*

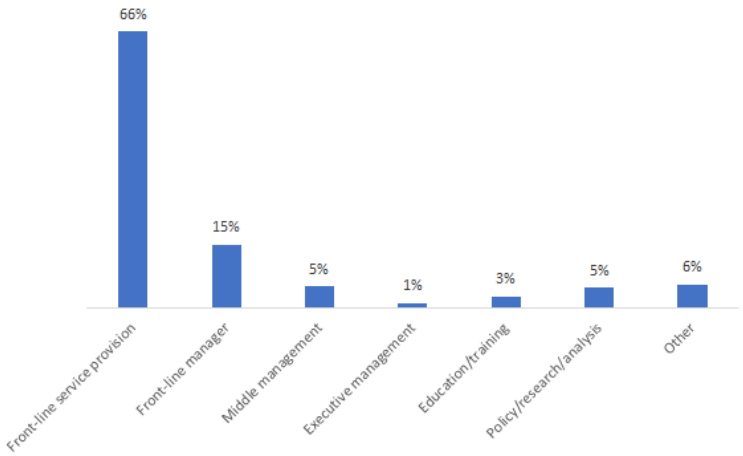


*Figure 36. Work role overview*

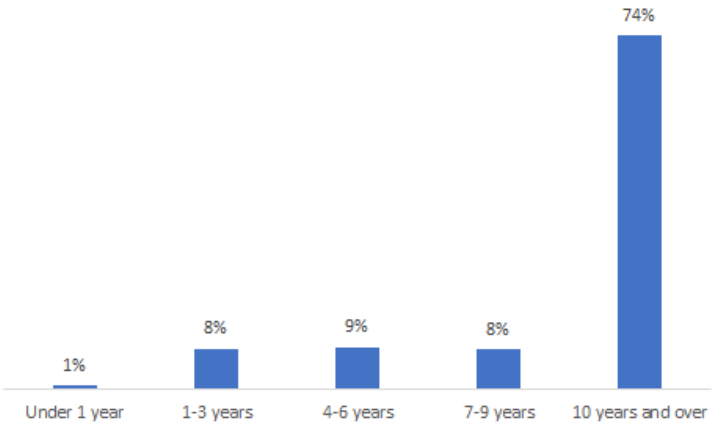


*Figure 37. Years of service*

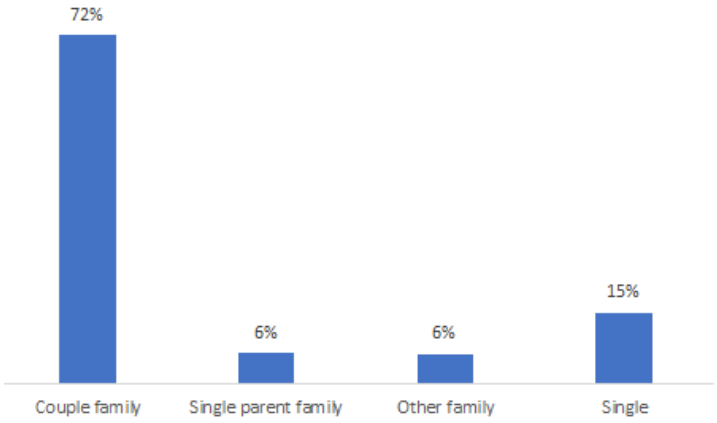


*Figure 38. Family status*

*This was not a new grad or 'eggshell' sample. Seventy two percent (n=532) had been working in their current organisation for over 10 years. As such they were well-placed to judge the additional demands of COVID-19 on their work situation.*

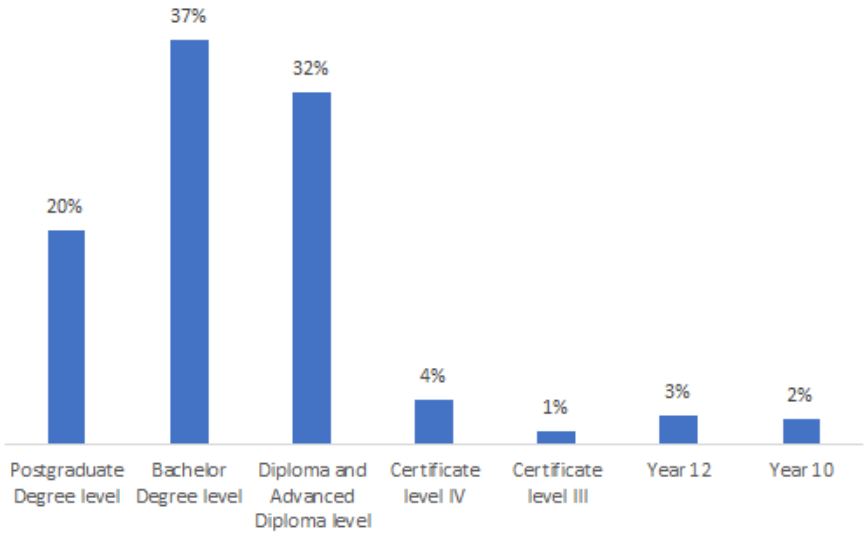


*Figure 39. Educational level*

*The respondents were predominantly well educated with over 90% having an advanced diploma, degree or post-graduate qualifications.*

# Appendix

## Differences in means between sociodemographic characteristics and workplace factors of frontline workers

| Variables | Covid-impact | Covid-stress | EE | DP | PA | PHQ9 | GAD7 |
|---|---|---|---|---|---|---|---|
| *Gender* | | | | | | | |
| Male | 5.82 | 5.04 | 26.61 | 11.02 | 31.89 | 8.32 | 6.90 |
| Female | 5.71 | 5.05 | 27.33 | 8.14 | 32.12 | 8.11 | 6.61 |
| t-statistic | 1.13 | -0.16 | -0.67 | 5.07*** | -0.33 | 0.47 | 0.68 |
| *Marital status* | | | | | | | |
| Coupled family | 5.79 | 5.06 | 27.24 | 9.65 | 32.65 | 8.10 | 6.74 |
| other family status | 5.71 | 5.04 | 26.41 | 9.75 | 30.78 | 8.54 | 6.96 |
| t-statistic | 0.84 | 0.21 | 0.74 | -0.16 | 2.59** | -0.84 | -0.45 |
| *Family status* | | | | | | | |
| with children ≤12 yrs. | 5.78 | 5.05 | 28.2 | 10.85 | 31.48 | 8.92 | 7.58 |
| other family status | 5.74 | 5.05 | 26.39 | 9.18 | 32.21 | 7.88 | 6.41 |
| t-statistic | 0.36 | 0.06 | 1.6 | 2.63** | -0.97 | 2.03** | 2.51** |
| *Education level* | | | | | | | |
| Cert.III or higher | 5.74 | 5.04 | 27.36 | 9.79 | 32.45 | 8.22 | 6.82 |
| High school level | 5.76 | 5.06 | 24.49 | 9.03 | 29.26 | 8.29 | 6.53 |
| t-statistic | -0.28 | -0.23 | 1.79* | 0.89 | 3.06*** | -0.06 | 0.30 |
| *Role level* | | | | | | | |
| frontline duties | 5.79 | 5.09 | 28.06 | 10.15 | 32.75 | 8.38 | 6.93 |
| other duties | 5.71 | 5.01 | 23.95 | 8.39 | 29.94 | 7.63 | 6.27 |
| t-statistic | 0.87 | 0.89 | 3.47*** | 2.84*** | 3.48*** | 1.35 | 1.28 |
| *Years of service* | | | | | | | |
| > 7 yrs. | 5.78 | 5.06 | 27.32 | 9.75 | 32.17 | 8.36 | 6.79 |
| < 7 yrs. | 5.71 | 5.03 | 25.86 | 9.51 | 31.46 | 7.67 | 6.84 |
| t-statistic | 0.75 | 0.28 | 1.21 | 0.36 | 0.89 | 1.16 | -0.11 |
| *Location of service* | | | | | | | |
| Metro | 5.71 | 5.04 | 25.96 | 9.93 | 30.56 | 8.27 | 6.81 |
| Regional | 5.81 | 5.06 | 28.49 | 9.32 | 34.23 | 8.16 | 6.79 |
| t-statistic | -1.01 | -0.11 | -2.29** | 1.02 | -5.40*** | 0.22 | 0.03 |
| *Additional task due to Covid* | | | | | | | |
| Yes | 5.91 | 5.25 | 28.74 | 10.52 | 32.07 | 8.56 | 7.22 |
| No | 5.42 | 4.6 | 22.5 | 7.64 | 31.79 | 7.43 | 5.76 |
| t-statistic | 5.06*** | 5.61*** | 5.32*** | 4.86*** | 0.36 | 2.17** | 3.11*** |
| *Received training for community interaction* | | | | | | | |
| Yes | 5.71 | 4.86 | 24.94 | 7.8 | 34.29 | 7.29 | 5.87 |
| No | 5.76 | 5.12 | 27.76 | 10.47 | 31.05 | 8.63 | 7.20 |
| t-statistic | -0.6 | -2.18** | -2.36** | -4.48*** | 4.62*** | -2.64** | -2.90*** |
| *Take Covid initiative outside workplace* | | | | | | | |
| Yes | 5.87 | 5.23 | 27.81 | 9.63 | 32.36 | 8.41 | 7.13 |
| No | 5.66 | 4.91 | 25.63 | 9.77 | 31.42 | 7.94 | 6.29 |
| t-statistic | 2.38** | 3.17*** | 1.97* | -0.24 | 1.34 | 0.94 | 1.86* |

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# PROJECT TEAM


**Professor Russell Roberts** began his career as a Clinical Psychologist in South Australian, before moving to Queensland to establish the Clinical Psychology Program at Griffith University (GC). He then served as Executive Director of a comprehensive mental health service organisation in regional NSW (1000+ staff). He has also served on the NSW Mental Commission Advisory Council, is a board member of the ANZ Mental Health Association, and Chair of the Australian Workplace Mental Health Symposium.

**Dr Stacey Jenkins'** last role in industry was as a National Human Resources Manager for a private organisation in the Detention / Correctional industry. More recently she has been the head of a teaching school/department at Charles Sturt University. She is currently an advisory committee member of the Australian and New Zealand Workplace Mental Health Symposium, and a member of the Domestic Violence Steering Committee for Wagga Wagga. Stacey's research outputs to date contribute towards the following three global Sustainable Development Goals SDG(s): good health and wellbeing; gender equality; and peace, justice and strong institutions.



**Dr Alain Neher** is a Course Director and Senior Lecturer at Charles Sturt University. Before joining academia, he worked for more than 25 years in industry including management and leadership roles in private, public, and not-for-profit organisations, as well as in armed forces logistics focussing on support services.

**Associate Professor Larissa Bamberry** has extensive experience researching organisations, labour markets and gender relations in regional Australia. She has undertaken a range of qualitative and quantitative research projects for government and industry focussed on regional regeneration, workforce wellbeing and regional skills and labour markets, and has broad-ranging experience in the NSW public sector, working across a range of policy areas including labour market policy, education and training, industrial relations, women's policy and sport and recreation.

**Dr Mark Frost** is a Senior Lecturer with the School of Management and Marketing at Charles Sturt University. He currently teaches in management and is researching in areas such as expatriate human resource management, corporate entrepreneurship, the role of innovation and technology to facilitate effective dispersed and virtual team performance, valuing soil management practices and micro electricity grids. Mark has held senior leadership positions with the University and in the financial sector.

**Dr Abhishek Dwivedi** is a Senior Lecturer in Marketing in the School of Business, Charles Sturt University. He researches brand strategy, customer-brand relationships, and social entrepreneurship. He has published in the European Journal of Marketing, the Journal of Business Research, the Journal of Brand Management, the Journal of Marketing Theory and Practice, and the International Journal of Advertising.

**Clare Sutton** is a Senior Lecturer in paramedicine at Charles Sturt University. Her research interests relate to resilience and the promotion of health and wellbeing in emergency service workers, student paramedics and volunteer responders. She has extensive experience in the emergency services sector and has held a number of leadership positions, including program lead of paramedicine at CSU and Chair of the Mental Health and Wellbeing Special Interest Group for the Australasian College of Paramedicine (ACP).



**Professor Peter O'Meara** is an Adjunct Professor in the Monash University Department of Paramedicine and a Director of the Global Paramedic Higher Education Council. Peter is an internationally recognised expert on paramedicine models. He is a registered paramedic, with qualifications in health administration, public policy, and agricultural health and medicine.

**Dr Alfred Wong** is Senior Lecturer in the School of Business. His expertise is in statistical analysis, including large and meta-data sets, financial management, and applied economics. His research interests are in the areas of empirical finance and applied health care economics. He has won several teaching and research awards, published in international peer-reviewed academic journals and successfully completed several industry research grants. Alfred is a member of the Global Association of Risk Professionals, USA.

**Robyne Young** has 35 years' experience working in media , marketing and communications in education, health and the arts. Robyne has a particular interest in public communication campaigns in the emergency services and health fields. In the summer of 2009-10, she worked with the Country Fire Authority (Vic) developing the communication strategy for the North East region.

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