Psychological Wellbeing and Impact of Traumatic Events on Frontline Health Service Staff Amid the Covid19 Pandemic

By
Kevin Peter Murphy

Dissertation
Submitted to Trinity College Dublin in partial fulfilment of the degree of Doctor of Philosophy with the TCD School of Psychology

2025

Supervised by Prof Tim Trimble

Declaration

I declare that this thesis has not been submitted as an exercise for a degree at this or any other university and it is entirely my own work.

I agree to deposit this thesis in the University's open access institutional repository or allow
the Library to do so on my behalf, subject to Irish Copyright Legislation and Trinity College Library conditions of use and acknowledgement.

I consent to the examiner retaining a copy of the thesis beyond the examining period, should they so wish (EU GDPR May 2018).

Summary

The current research sought to explore the psychological wellbeing and impact of traumatic events on frontline health service staff amid the Covid19 pandemic. There were 30 participants in the total sample; 19 participants worked as frontline staff in Social Inclusion, 11 in Public Health Nursing. Experiences were explored as several interconnected phenomena, in an attempt to curate participants' perspectives as comprehensively as possible. A mixed-methods longitudinal design was utilised, with both quantitative and qualitative measures. The study further consisted of 'time 1' and 'time 2' measures, allowing at least 6 months in between these to explore changes over time. During that period participants were engaged in frontline work where potentially traumatic events occurred.

The qualitative investigation itself was divided into three main research topics- the impact of the pandemic, the impact of the work itself, and a section relating to wellbeing supports. Using thematic analysis, the interview transcripts were coded and themes identified based upon these. From these themes a matrix was formed, which offered a visualised representation of participants' qualitative experience. The themes further subdivided participants' descriptive responses into three main aspects of life- micro, mesa and macro, and following this three main facets of how people live their lives- behaviourally, psychologically, and physiologically. While the focus of the study is on the qualitative piece, the quantitative data analysis provided a base descriptive overview of the participants to help contextualise the qualitative data.

A range of psychometric instruments were utilised to assess cognitions, emotional appraisal, mental wellbeing and resilience. These included the Life Events Checklist for the DSM V (LEC-5), the Professional Quality of Life Scale (ProQOL), the Secondary Traumatic Stress Scale (STSS), Maslach Burnout Inventory Human Services Survey (MBI-HSS), Beck's Depression Inventory-II (BDI-II), Beck's Anxiety Inventory (BAI), and the Pandemic Experiences & Perceptions Survey (PEPS).

In terms of the research statement that 'there will be a change in a participant's felt professional quality of life over time during the pandemic', three of the hypotheses illustrated significance on the ProQoL. For the whole group, a significant difference was found between a participant's felt sense of compassion satisfaction with regards their

profession between Time 1 and Time 2, with there being significantly lower compassion satisfaction at Time 2 than at Time 1. This result was similarly found for the Social Inclusion subgroup, however not for the Nursing subgroup, when groups were analysed separately. Findings further yielded that Social Inclusion staff reported significantly greater levels of secondary traumatic stress at Time 2 when compared with Nursing staff. While the statistical tests themselves did not show significant differences at various timepoints, it is worth noting from the descriptives that levels of burnout were consistently concerning in the 'moderate' range for both groups and secondary traumatic stress 'moderate' for the Social Inclusion group.

With regards to the research statement 'there will be a change in a participant's experience of depression over time during the pandemic', two of the hypotheses showed significance on the BDI. Results indicated that, for the whole group, there was significantly lower levels of depression reported at Time 2 than at Time 1. This was similarly found for Social Inclusion staff on their own. For the research statement 'there will be a change in a participant's experience of anxiety over time during the pandemic', none of the hypotheses were found to be significant on the BAI. Descriptively, at both Time 1 and at Time 2, Social Inclusion staff appeared to report higher ranges of anxiety symptoms when compared to Nursing staff at the same time points, with over half reporting anxiety in the mild range or above.

With the research statement 'there will be a change in a participant's experience of burnout over time during the pandemic', none of the statistical tests illustrated significance using the MBI. However, it is important to highlight that for the MBI that, though there were no significant differences found between the different time points, at each time point and for each group there were moderate levels of emotional exhaustion, low levels of personal accomplishment, and average levels of depersonalisation reported on average across the board.

For the next research statement, 'there will be a change in a participant's experience of secondary traumatic stress symptoms over time during the pandemic', none of the statistical tests investigated were found to show significance using the STSS. However while not statistically significant, descriptively between the two groups, Social Inclusion appeared to report greater levels on each of the STSS subscales (intrusion; avoidance; arousal; secondary traumatic stress) at both Time 1 and at Time 2.

Acknowledgements

First and foremost, I would like to express extreme gratitude to my supervisor, Prof. Tim Trimble, for all his guidance, support and encouragement throughout this process. Further, to the invaluable feedback from my thesis committee members, Sam Cromie PhD, Clare Kelly PhD FTCD, and Ladislav Timulak PhD as the Director of Teaching and Learning. Each one of your input helped me maintain academic perceptions and connections alongside my clinically professional lens, ensuring calibre and purpose.

To my work colleagues, and in particular the manager who encouraged me to undertake this endeavour at the very beginning, Valerie Moffatt, and her successor upon retirement, Claire Donohoe for continuing that encouragement while I saw this research through to completion. You helped me not lose sight of the PhD even when our workplace was under extreme pressures itself due to the Covid19 pandemic.

My appreciation to the participants of the study is unremitting, like the endurance you embodied during the Covid19 pandemic, and indeed I extend this thanks to all frontline health staff that persevered throughout the pandemic- "*we are not robots*".

In addition, I would like to thank the support I received from all my family and friends. Notably, that of my amicable colleagues Ants and Juan Felipe who willingly (though no doubt painstakingly) proofread my dissertation when I was unable to see the wood for the trees.

Lastly, to my husband Rob. You have been there for me before, during, and after this ordeal, and have been a relentless support in all aspects of life. Your level of understanding towards the projects I become passionate about gives an eternal source of strength. This foundation enabled me to finally bring this research to fruition.

Abstract

The aim of this research was to better understand the interplay of factors which influence psychological wellbeing, particularly those which have a potentially negative impact, and to explore support structures that mitigated these while frontline health staff worked within a traumatic environment. During the research, a double layer was occurring- health staff were working with trauma as part of their day-to-day professions, while at the same time they were experiencing a global trauma, the Covid19 pandemic. Precipitating this, there had been much written on experiences of frontline staff with respect to burnout, compassion fatigue, vicarious trauma and secondary traumatic stress. However it was often neglected to differentiate the nuances between these phenomena, which could potentially lead to the misconception they are interchangeable and benefit equally from the same support interventions. The current study sought to understand the extent these could be viewed more holistically as part of a person's comprehensive experience, as individual phenomena yet not in isolation from each other. In doing so, it was endeavoured to better understand the complex web which these weaved, and from this the impact the work environment can have on frontline healthcare staff. This consequently would allow for the creation of more accurate, appropriate and beneficial support structures. A mixed-methods approach was used combining quantitative psychometrics alongside qualitative interviews, across two timepoints 6 months apart. From this a rich tapestry of staff's wellbeing while working within an area of social deprivation during the Covid19 pandemic was unearthed. Significant results were found within elements of the study's exploration of compassion satisfaction, depression, burnout, and secondary traumatic stress. These results were then better understood when presented against the contextual backdrop of the qualitative interviews, which underwent a thematic analysis. From this, a visual matrix representation of supports was formed. Thus the study significantly informed greater in-depth awareness of the experiences of society's frontline defence against ill health, our health service staff. It is hoped that the matrix that was created can aid organisations to reciprocally maintain their staff's psychological health and wellbeing, thus reducing the impact that working in a traumatic environment can have on them.

Table of Contents

List of Tables and Figures

Psychological Wellbeing and Impact of Traumatic Events on Frontline Health Service Staff Amid the Covid19 Pandemic

When research is undertaken in the world, we cannot ignore that the passage of time itself alters our understanding and awareness of the various phenomena that occur, and as such, the organic nature of the world itself can alter that research beyond anticipations. The current research began in concept from the researcher's clinical role working with people who have experienced trauma in their lives through his psychology practice and provision of therapeutic intervention. Unbeknownst to all however, the world was about to be introduced to a globally traumatic event. Originally, the centre point came from working with the traumatic stories of clients alongside other allied health professionals, where interest in furthering understanding of the impact on health professionals of working with these traumas developed. Essentially, what was the impact of working with traumatic events on the staff themselves?

In March 2020 the research was all set to begin- participants sourced, ethics approval had been granted, data collection had been scheduled. First round interviews were about to take place using the National Ambulance Service. But the news reports in the preceding weeks laid foundation for the inevitable 'writing on the wall'. That first week of interviews never happened, as the world shut down in the slew of initial Covid19 pandemic restrictions. The National Ambulance Service was in the thick of frontline response to what was an at-the-time ambiguous but extremely high risk virus outbreak. Thus they unfortunately needed to pull out of the research- a mutual decision taken a few months into the pandemic, because we simply had no way of knowing when some

semblance of normality would return. There were still no vaccines, our understanding of the virus was changing daily, services were overwhelmed, and indeed emergency services themselves had little time (or staff) to spare for anything deemed as not essential to coping with the crisis that was unfolding.

The research itself needed a redesign, because the pandemic had changed things insurmountably. It would not be possible to accurately investigate the impact of working with traumatic events on frontline healthcare staff over time as an isolated phenomenon, while those staff were both working through and experiencing themselves the impact of an ongoing globally shared traumatic event. Thus the study was altered, adding in more qualitative investigation into frontline staff's experience of the pandemic alongside the work they were doing. Two other possible participant samples that were accessible to the researcher were contacted, in the areas of Social Inclusion and Public Health Nursing, with both expressing an interest in being part of the research. Given the previous loss of the National Ambulance Service and the unpredictability of the future in relation to the virus, it was decided to proceed using both participant samples rather than choosing just one of them. While they would experience a different type of trauma than staff at the National Ambulance Service, both the Social Inclusion and Public Health Nursing staff that were engaging in the research were working with people every day who lived in environments where trauma was pervasive. They were frontline healthcare community-based services that worked in an area that had elements of high deprivation. Ethics approval again was sought and granted, and initial interviews arranged. What followed will be the subject of the rest of this dissertation.

From 'Adverse Childhood Events' to 'Trauma Informed Care'

As mentioned, the geographical location within which participants in the current research work posited a number of key factors that warrant exploration with respect to the research topic. While there are affluent pockets within the Dublin North East Inner City catchment, it is also typified as being an area of high deprivation, with increased levels of Adverse Childhood Events (ACEs) being experienced by its population. Dublin City Council describes the North East Inner City as '*an area with a history of socio-economic deprivation and is identified as being in need of both social and economic* regeneration' (Dublin City Development Plan 2022-2028 chapter 13.12 as cited on Dublin City Council, 2022). According to the Inner City Organisations Network, within its greater area, there are a total of 24 smaller areas which would be classified as 'disadvantaged', with 10 of these falling into the 'very disadvantaged' category, if using the Pobal HP Deprivation Index (Inner City Organisation Network, 2024).

In general, ACEs can be described as ranging from stressors within the house such as a child's parents experiencing mental health issues, domestic violence, addiction and incarceration to a child themselves experiencing more direct forms of emotional, physical, sexual abuse or neglect (Felitti et al, 1998). Felitti (2009), Hughes et al (2017) and Oh et al (2018) illustrate consequences in the health outcomes of adults that have experienced high ACEs scores. Skiendzielewski et al (2022) expanded beyond the link between ACEs and poor health in individual and family levels to include the community level. They found that those with ACEs scores greater than 4 tended to reside in areas where higher crime, poorer subjective mental and physical health, less access to healthy food, lower socioeconomic resources, and increased community poverty rates were evident;

important factors to comprehend when best positioning trauma informed supports (Skiendzielewski et al, 2022).

Conducting research into practical solutions to trauma-responsive care, Mersky et al (2021) purport that ACEs have enduring mental wellbeing consequences and, while there are empirically supported interventions available for those experiencing the impact of trauma, the inequality and limitations that exist around access to these interventions hinders their range of effectiveness. Further, communities that are high deprivation tend to experience access barriers to treatment resources, alongside a disproportionate ratio of ACEs and mental health diagnoses (Mersky et al, 2021).

In their study, Skiendzielewski et al (2022) found that if someone had experienced Adverse Childhood Events (ACEs) growing up, the attributes of the environment they live in as an adult can put them at both an increased risk of being retraumatized and disadvantaged in their everyday lives. Furthermore, associations have been reported through empirical research, such as Arcaya et al (2016) and Gustafsson et al (2014), between health outcomes and the community or neighbourhood a person resides in. Two important considerations here are that even though ACEs are normally defined within the context of the household or individual child, there can be context to view them from the community level perspective in circumstances like living in areas that are not safe or being eyewitness to violence/crime (Pachter et al, 2017; Wade et al, 2016) as having just as influential an impact. Further, if an adult is trying to manage or process the impact of having experienced past trauma, additional weight may be placed on them by living in an environment that is considered high deprivation and/or under-resourced (Skiendzielewski et al, 2022).

As Figley and Burnette (2017) point out, the treatment of trauma has in the past mostly been kept separate from research into family resiliency, which creates a gap given structural and ethnic diversities in combination with minorities often experiencing greater incidents of trauma. They posit that a balanced framework is needed in order to both address the trauma experienced as well as recognise avenues for growth- as trauma can either overwhelm the family system or prompt growth, being contingent on such things as resources and coping mechanisms that make up the family's resiliency (Figley & Burnette, 2016). Indeed, not addressing both and maintaining a problem-based rather than strengths-based depiction of marginalised populations only serves to bring knowledge further away from sustainable ways of support (Grandbois & Sanders, 2009; Figley & Burnette, 2017).

There is also a need to open up the discussion of what trauma is, and how it relates to concepts such as ACEs and what the context of our living environment or neighbourhood plays on it. Benjamin and Carolissen (2015) maintain that '*The effects of trauma in response to an event or events, real or perceived, violent or threatening, may not be discrete, but a whole-life experience. Trauma, therefore, is attributed to the subjective perspective of the person experiencing it*' (p414). They go on to postulate that trauma is generally conceptualised in constructs where there is a context of safety, which in itself is a privileged position, and thus not being wholly inclusive of areas where continuous adversity, high deprivation, and inequality are part of everyday life (Benjamin & Carolissen, 2015). Thus, efforts to reconceptualise trauma have generated new complexities such as generational cumulative trauma (Brave Heart, 2003), complex trauma (Cloitre et al, 2009) and continuous traumatic stress (Kaminer & Eagle, 2010). However as Benjamin & Carolissen (2015) point out, despite broadened criteria for

diagnosing post-traumatic stress disorder being included in the Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM-V) (American Psychiatric Association [APA], 2013), there remains a discrepancy within the concept of trauma having occurred in the past tense when it applies in the context of people living in an environment where they are continuously under some form of threat (Kaminer et al, 2013).

Further coming under scrutiny has been the change in the DSM-V alterations to Criterion A for PTSD regarding what types of events can be considered traumatic, such as May and Wisco's (2016) systematic review into whether indirect exposure to a traumatic event can lead to PTSD, as well as direct exposure to the traumatic event.

Indeed, though mentioned the DSM-V (APA, 2013), this highlights that while there is overlap between trauma and ACEs, they are not the same thing. ACEs includes factors such as a parent having a mental health diagnosis or emotional neglect, which would fall outside the realm of what could be considered a traumatic event within the DSM-V PTSD diagnosis criteria. However other ACEs, such as domestic violence and forms of abuse (physical, sexual) would be considered, as it describes trauma as experiencing or serious injury, sexual violence, and actual or threatened death (Mersky et al, 2021).

Herman (1992) expresses that attachments are breached by traumatic events, be they family, friends, community or love, and that traumatic events also undermine meaningful belief systems. Following from this, in circumstances where the threat of violence permeates people's community, the devastating impact of that trauma transcends multiple systems by weakening the attachment and connections people have with each other (Benjamin & Carolissen, 2015). For example, Rayburn et al (2005) found a predictive link between avoidant coping styles and depressive symptoms amongst women who resided in shelters that had experienced physical or sexual abuse or death/injury of a

friend when they were a child. They also reported a greater diversity of trauma amongst women living in low-income housing or homeless shelters (Rayburn et al, 2005). Benjamin and Carolissen (2015) further emphasise that through denial and silence, violence becomes normalised, and that avoidance itself can be perceived more as a feasibly adaptive strategy to survive real threat rather than merely a psychological defence mechanism. In environments where there is ongoing threat of violence or harm, there is an inherent restriction placed on how much autonomy or agency a person can exert on their own life (Benjamin & Carolissen, 2015).

The idea of continuous traumatic stress was first explored by Straker (1987), and since then developments have been made into other nuances of the complexities of ongoing traumatic environments. While collective trauma was initially outlined by Erikson as a "*blow to the basic tissues of social life that damages the bonds of attaching people together and impairing the prevailing sense of community*" (1976; p194), the concept can be further expanded on by both Alexander's idea of cultural trauma (2004) and Volkan's chosen trauma (2000)- both of which relate to the societal or group scale/systemic impact of the traumatic experience. Bloom (1996) reflected that people in a community can fall into patterns of avoidance, detachment, denial and depersonalisation as a response to managing collective trauma, gradually becoming the cultural reality for newer generations. This concept stems from Menzies Lyth's (1959) concept of social defence mechanisms, which built on the work by Jaques (1955), and observed that in hospital-based nurses these aforementioned social defences can become rooted in a group's culture if individual anxiety in response to change is not addressed (Benjamin & Carolissen, 2015).

Collective trauma can be seen to have impact on the individual through to community or societal levels. When there is displacement or injury on the person from being in large-scale disasters, research has shown that this can be linked to psychological impacts such as PTSD and other mental wellbeing issues such as depression and anxiety (Duane et al, 2020). Similarly, alongside communal alterations to mood and alienation, other community level impacts can be seen, on fragmentation of social and support networks, group disorder and group feelings of endangerment (Keynan, 2018). When these concepts are applied to areas that are high in deprivation, and thus prior to a disaster were likely to be experiencing more hardship in relation to support structures, access to resources and levels of trauma, then there is justification for greater concern as more pressure is then being placed on these already at-risk systems (Duane et al, 2020). Demonstrating this point, research into the impact of Hurricane Katrina found that there was increased instance of PTSD amongst survivors that came from low-income backgrounds (Kessler, Galea, Jones & Parker, 2006) and that these communities required greater long-term mental health support services (Rhodes et al, 2010).

To be able to best support communities, awareness of the interconnectedness across systemic structures as well as within them is important. A multifaceted perspective is needed to have the greatest possibility of managing the impact of traumatic events on neighbourhoods, across all levels from individual to family to community- and having these supports pre-emptively setup before a collective trauma occurs can be advantageous (Duane et al, 2020).

There has been a growing trend that seeks to address these concerns within organisational structures, in the notion of trauma-informed care (Substance Abuse and

Mental Health Administration [SAMHSA], 2014). In framing trauma-informed care, SAMHSA have proposed six principals- trustworthiness &transparency, physical & psychological safety, collaboration & mutuality, peer support, cultural & gender issues, and empowerment (2014). The premise behind trauma informed care asserts that an awareness of the consequences of trauma within systemic structures and by professionals which provide supports to service users who have potentially experienced trauma, will improve health outcomes due to guidance by these principles (Harris & Fallot, 2001). However, this premise has not been without criticism, particularly due to relative ambiguity of application of these principles across different settings, and consequently lack of shared understanding amongst professionals (Mersky et al, 2021). As Berliner and Kolko (2016) raise, are the trauma-informed care guidelines described by SAMHSA simply just good principles to follow in general practice, or are they specific to working with service users that have experienced traumatic events? Nonetheless, it has pointed towards progress at systemic and organisational levels in the wellbeing outcomes of service users that have had traumatic experiences in the past (Mersky et al, 2021).

A 'Global Trauma': The Covid19 pandemic

With cases first reported from Wuhan, China on the 31st December 2019, what we now call the Covid19 pandemic began (Rolin, Flis and Davis, 2022). On 11th February 2020 the International Committee on the Taxonomy of Viruses set the name of SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2), while on the same day the World Health Organisation established the name Covid19 (WHO, 2020), which it is most commonly referred to as. Indeed, due to the consequent turmoil in interpersonal,

organisational and societal connection and functioning, the Covid19 pandemic could be considered a collective trauma (Duane et al, 2020).

Rolin, Flis and Davis (2022) even suggest taking a look back at the 2003 Severe Acute Respiratory Syndrome (SARS) outbreak and its impact on healthcare workers, given its uncharacteristically increased rates of infection both in hospital settings and amongst health care workers. Maunder (2004) explored both quantitative and qualitative measures from health care workers in acute settings in Canada, and found some interesting factors that were associated with higher responses on the trauma scale as well as increased stress. These include those who had direct contact with SARS patients, alterations to workload or job function, avoidance of crowds or colleagues, healthcare workers that had children, and feeling excluded/avoided by others because they worked in healthcare (Maunder, 2004). Similar findings came from Koh et al (2005) in Singapore, who highlighted the importance of both personal protective measures as well as clarity in organisational responses, which is a key point particularly as one of Maunder's (2004) conclusions was that ability to cope during SARS was influenced by a person's already existing vulnerability factors. This has been what has led to researchers such as Rolin, Flis and Davis (2022) suggesting methods of stress appraisal and coping in order to pre-emptively allow workers to better manage when in similar situations.

Furthermore, in relation to the Covid19 pandemic, Salmon (2021) purports that those already living in disadvantaged conditions will disproportionately experience an increased risk of infections as well as negative psychological impact. Alongside people who are in poor quality and overcrowded housing, those who cannot work from home, and from ethnic minority groups, this also includes healthcare workers and those that

work in other risky frontline roles (Aknin et al, 2022; Helliwell et al, 2020; Salmon, 2021). Indeed many of the ways in which the world was being asked to manage the pandemic- social distancing, hand washing, sanitisers, lockdowns- can be seen as a privilege that is afforded to those that have the means to do them, from everything from having space and money to live on to access to running water (Gibson et al, 2021).

During the Covid19 pandemic there were several potential scenarios which healthcare workers could find themselves in which could exacerbate stress levels, impacting them in various ways. While the risk of exposure to Covid19 in their work environment and bringing that home to their families is an obvious one, there are others such as inadequate access to PPE (personal protective equipment like facemasks), lack of access to and communication of up to date knowledge on Covid19 to develop patient care management strategies, as well as care needs within family and home life due to impact of infection and the pandemic that their organisation cannot appropriately provide support for- like increased childcare required due to longer working hours (Veronese, Mahamid & Bdier, 2022). These issues can compound not only to the frustrations of healthcare workers, but also lead to increased levels of burnout (Ornell et al, 2020; Shanafelt et al 2020), something to which healthcare workers have already been reported to being vulnerable (Maslach et al, 2001).

The Covid19 pandemic itself has sparked much research into the effects on healthcare workers of the pandemic, many of which contain conclusions that involved mental wellbeing concerns, impact on mental health and trauma-related signs. Vagni et al (2020) reported a high risk of secondary trauma following exposure to increased stress in healthcare workers from Italy, and in Greece links were found between threatened or physical tension, negative emotions and post-traumatic stress symptoms in those that

worked in healthcare during the pandemic (Blekas et al, 2020). If they interacted with patients that were either suspected or known Covid19 positive, levels of anxiety, stress and poor psychological wellbeing were found in a study by Badahdah et al (2021) while they were investigating the mental health of Omani doctors and nurses. Similarly, other studies and systematic reviews have found that the incidence of stress and anxiety-related disorders amongst medical staff and healthcare professionals is one of the greatest psychological impacts of the Covid19 pandemic (Huang et al, 2020; Vizheh et al, 2020).

Alongside the negative conditions which have precipitated these findings of increased stress and anxiety on healthcare workers, it should also be noted that research has also identified factors which can help mitigate the impact of the pandemic. Psychological strengths, such as subjective wellbeing, can increase people's likelihood of attaining greater outcomes when it comes to coping, physical wellbeing, social relationships, health, and multiple life domains (Veronese, Mahamid & Bdier, 2022). Subjective wellbeing is where the individual utilises their cognitive appraisals and emotional responses to influence their perspective on general happiness and life satisfaction (Agbaria & Bdier, 2021), and it uses both a person's subjective attitude towards their inner experiences as well as outlook on the quality of their lives from the outside across domains (Diener et al, 2010). When exploring healthcare workers experience of the Covid19 pandemic, then, as well as when attempting to reduce the impact of stressful events, it is important to take into account areas of psychological strength rather than focus on vulnerabilities of causes of adversity.

Due to many factors and constraints that posed challenges for doctors, nurses and other healthcare workers during the Covid19 pandemic, there were frequent situations they found themselves in where difficult decisions had to be made. Hence, the concept of

moral injury became a risk factor during these arduous times (Litam & Balkin, 2021). When capacity to provide appropriate support/care is inhibited moral injury can occur and, as Kopacz et al (2019) point out, frontline healthcare staff are frequently in stressful circumstances where they may need to place their own safety over the health requirements of the patients they are caring for, which creates dissonance with their professional moral values. This can be influenced by systemic compromises on an organisational level, such as with public vs private health insurance or inadequate management, to situations such as insufficient personal protective equipment, access to vaccines or limitations to resources to provide appropriate medical care (Wang et al, 2022).

As Wang and colleagues (2022) suggest, higher levels of psychological distress, healthcare worker burnout, and decreased subjective wellbeing correlate with moral injury. They go further to assert that there may be bi-directional relationships between moral injury and burnout, that the stress of moral injury may lead to healthcare worker burnout and burnout itself can heighten chances of moral injury due to the effects of clinician burnout on work efficacy. Used as an example, Shanafelt et al (2010) reported that there was an 11% greater chance of a medical error being reported for each single point higher score in emotional exhaustion. Essentially, the level of healthcare received can be impacted if physicians are physically, mentally and emotionally exhausted (Wang et al, 2022).

While prior research reported burnout being mainly influenced by workload and compassion fatigue (eg Cavanagh et al, 2020), Litam and Balkin (2021) sought to investigate how much healthcare staff during the Covid19 pandemic were impacted by moral injury. They found significant correlation between moral injury and secondary

traumatic stress. Within this, they proposed that difficulty sleeping, hypervigilance, feeling on edge, avoidance of activities and preoccupation with others' wellbeing were strong manifestations in healthcare staff experience of traumatic stress (Litam & Balkin, 2021). It is also noteworthy that much of the impact may vary, with similarity and differences, depending on other factors such as type of work, proximity to Covid19 patients, and work location such as acute hospital vs community settings (Mittel et al, 2023).

Delving more into mental health providers' experience of the Covid19 pandemic, Mittel and colleagues (2023) suggest that in Covid19's wake these workers are concurrently being impacted by a mental health pandemic. A shared trauma is arising, in a way. Just as their clients are bringing to them worries around economic concerns, competing demands between work and home, health anxiety, safety anxiety, grief and loss, these professionals are withstanding these same stressors in their own lives as they are not impervious to this collective trauma. Because of this double edged sword, the Covid19 pandemic could potentially accelerate burnout, making mental health clinicians feel a reduced sense of accomplishment, exhausted, withdrawn, overwhelmed or depleted, among other symptoms (Mittel et al, 2023). Further adding to this, moderate levels of vicarious trauma, inversely associated with clinical experience, were reported by Aafjes-van Doorn et al (2020).

Positioning supports during a 'Global Trauma'

Despite these phenomena, psychology is also well-positioned to be able to aid in response to the Covid19 pandemic as it can have applicable skillsets in terms of communication styles for positive attitudes towards public safety & health measures, adjustment to lifestyle impacts, economic changes, as well as for supporting mental

health (Barbarin et al, 2021; Taylor et al, 2022). As Huremovic (2019) point out following SARS, the H1N1 2009 outbreak became potentially the first in which government policy, such as with disease mitigation plans containing mental wellbeing services, had noticeable input from the field of psychological research. Barbarin and colleagues (2021) suggest two core categories to divide coping strategies into- the first being problem focused coping, aiding with issues specifically related to the pandemic, such as having enough food and financial needs; the second is emotion focused coping, helping manage emotional responses such as depression and anxiety through behavioural and cognitive efforts such as reframing or distraction. Given the findings that in a study of 1,041 adults in Ireland during the Covid19 pandemic, Hyland et al (2020) reported a 20% rate of generalized anxiety disorder, 23% for depression, and 27% overall for a mood disorder, the utilisation of effective coping strategies is crucial during these times. Some areas alongside direct mental health and clinical supports in which psychology can play an important role are in collaboration with government and NGOs to help rally for resource sharing and cooperation amongst individuals and systems, as well as effective programme planning given the strong research/evaluation element in the field (Barbarin et al, 2021).

While literature exists on employee wellness programmes, research such as that by Rene and colleagues (2021) seek to apply these feasibly within the context of the Covid19 pandemic to healthcare workers on the frontline. They examined the rollout of online sessions dealing with different aspects of employee wellbeing related to Covid19 at a large university and health system (Rene et al, 2021). Other studies, motivated by potential long-term implications of the distress caused by burnout, anxiety and traumatic stress during the pandemic, propose frameworks such as the Matched Emotional Supports in Healthcare (MESH) stepped care model to support those working in

healthcare (Price, Becker-Haimes & Benjamin Wolk, 2021). Wang et al (2022) call upon approaches used to mitigate moral injury in military personnel to aid healthcare staff manage wellbeing and burnout. On a systemic level, the administrative side of health organisations can help with coping with the impact of the pandemic on frontline staff by establishing supportive structural systems. Being aptly prepared for the repercussions, both emotional and psychological, of difficult medical decisions may help lessen the experience of secondary traumatic stress in response to distress caused by the Covid19 pandemic (Litam & Balkin, 2021).

When considering the potential impact that the Covid19 pandemic has on frontline healthcare workers, it is important to highlight the different angles in which they are being affected. Healthcare workers are not only impacted because of working in proximity to the virus in healthcare settings, they are also part of the general population and thus are impacted alongside the rest of the world with the implications that that brings. So widespread is the collective trauma of this event, Holman and colleagues (2022) even refer to the temporal disintegration that can occur and its repercussions on mental health, when our perceptions of time itself become distorted such as when days blur into one, uncertainty about what is next and time feels like it has slowed down.

In their review, Wirkner et al (2021) utilise five attributes that form the multiple dimensions of stressors that are contained within the pandemic, demonstrating how almost no one could be immune to the impacts. The first they consider relates to the global uncertainty of Covid19 and its consequences, such as when it will end. Next, there is the impact on the individual level on mental health and across life's many domains. The third aspect is the potential sense of helplessness and loss of control. Following this, there is the heavy influence that the Covid19 pandemic has played at a systemic level

throughout the communities of the world. And lastly, there is the restrictions that have been placed on ability to access the range of protective factors which would typically be used to manage during day to day life, ranging from therapy to social events to engaging in various types of physical activity. (Wirkner et al, 2021)

While it has been shown previously that there are mental health risks if a person's coping resources are not able to meet the demand created by the duration and intensity of the stressful event (McEwan & Stellar, 1993), Wirkner et al (2021) found inconsistency in the research where they would have expected increases. They found studies varied from heightened levels of emotional distress, of depression and anxiety symptoms, to small effects, to no change at all. However, they do surmise that extraneous variables that influence the contrasting results could be differentiations in perceived threat, restrictions being implemented in the area, and incidences of Covid19, as well as that the longer-term effects of a persistently stressful environment are yet to be fully examined (Wirkner et al, 2021).

Some clarity around the variability can be seen from Rettie and Daniels (2021) study into links between tolerating uncertainty and ability to cope. Using a general UK sample during the Covid19 pandemic, they found significant evidence that the wider population's mental wellbeing was being influenced in a negative way by the pandemic, reporting heightened levels of health anxiety, generalized anxiety, and depression. However, they similarly reported that while a person's mental health state could be predicted by their faculty to tolerate uncertainty in the sample, it was also mediated by that individual's coping responses (Rettie & Daniels, 2021). This can be seen as a positive phenomenon when an individual has had the opportunity to develop healthy coping styles, however the opposite can be true as well. In referring back to ACEs from earlier,

when high levels of childhood adversity have been experienced, this may negatively impact a person's mental health during the Covid19 pandemic due to coping strategies such as expressive suppression being relied upon to manage emotional reactions (McCullen, Counts & John-Henderson, 2022). Similarly, while Mitchell and colleagues (2023) found that youth and young adults were more likely to experience mental health difficulties if they had recent exposure to self-directed violence, the opposite was true if they were engaged in a greater number of prosocial activities such as talking with peers.

Other common trends were found when investigating mental health trajectories during the pandemic. One study found that reports of anxiety and depression were high to start, saw a reduction over the summer, then increased again come autumn, whereas loneliness remained a stable experience (Lowe et al, 2023). This was similar to insights gained by Runkle et al (2023), adding incidents of reported abuse, substance use, and bereavement to these. While it can be difficult to assign causal relationships to any one factor, such as waves of infection rates, reduction in public guidance restrictions, or improvements in weather (Lowe et al, 2023; Runkle et al, 2023), the implications are of significance. For example given the relationship that loneliness itself can have on wellbeing, physical and mental health, it is important to understand the implications of Covid19 measures put in place such as social isolation, quarantining and physical distancing (Ernst et al, 2022).

Other consequences of the Covid19 pandemic restrictions, such as a decrease in physical activity, has pointed towards its impact on anxiety levels and the need for campaigns to raise awareness of the benefits of maintaining exercise even when the traditional means of such activity is unavailable (Vella Fondacaro, Vella Fondacaro & Camilleri, 2023).

Systemic changes that affected how we work as well as the environments around us have also received their share of attention. For example, the impact of mandated home-schooling due to school closures, alongside teleworking and working-from-home options for some but necessity to be in the work setting for others (eg with frontline healthcare workers). It has been found that during the Covid19 pandemic, 25% of caregivers reported poor mental health, 20% moderate to severe anxiety, and 75% categorising their caregiver strain as moderate to high (Radomski et al, 2022). Deacon and colleagues' (2021) study linked not only an increase in depression, anxiety and experiencing of traumatic stress with the demands of home-schooling, but also an increased when compared to pre-pandemic norms of the reliance on alcohol and cannabis to cope alongside lower levels of optimism amongst parents. The negative impact on wellbeing of the burden of childcare while working during the pandemic is observed in other professions as well when compared to non-parents, such as with academic research faculty (Gordon & Presseau, 2023)

In a scoping review of the effects on work life balance of teleworking/working from home, Elbaz, Richards and Provost Savard (2022) summarised a mix of both positive and negative aspects emanating from the research. They surmised that the bulk of psychological impacts from teleworking tended to be negative, and while these could be moderated by engaging in positive wellbeing activities such as social activities and physical exercises, much of these options were curtailed by the pandemic restrictions in effect. They reported that while job satisfaction and felt sense of job quality decreased, job performance appeared to show the greatest improvement. Further, while there were positive aspects of having more time to spend with family, other factors such as managing boundaries between work/home responsibilities, having children, dependents and pets

were areas that exhibited sources of tension (Elbaz, Richards & Provost Savard, 2022). Given research such as by McKee and colleagues (2022) finding a 50% or more increase in using tele-mental health for client appointments during the pandemic when compared with pre-pandemic, this spotlights the need to provide ample supports to the workforce so that they are able to better maintain healthy sense of wellbeing themselves.

The increase in staff working from home becomes more of concern as well when a person's role is exposing them to traumatic material, such as in Duran & Woodhams' (2023) investigation into analytical professionals that work in law enforcement, justice and police agencies. They further highlighted the need to promote strategies that encourage healthy boundaries, sense of belonging/community to reduce isolation, and creating safe spaces and supports when working from the home where traumatic material is an inevitability (Duran & Woodhams, 2023). Promising evidence in the value of training employees in elements of mental health training that facilitate development of protective factors comes from areas such as Wright and colleagues (2022) who demonstrated that individuals trained as peer specialists (eg recovery coaches) had fewer negative pandemic-related outcomes when compared with a non-peer specialist sample, in areas such as lower reported loneliness, better mental health outcomes, more positive outlooks, and less disruption in employment. Understanding the protective factors added as a result of training such as in peer specialist support can be important in guiding pre-emptive supports for staff amidst crises like the Covid19 pandemic (Wright et al, 2022).

In their study, Umil and colleagues (2023) try to address two points which can limit the generalisability of much of the research into the mental health of frontline healthcare workers, and more specifically from their perspective, physicians. They claim that much of the research focuses on doctors working in urban areas, while there are particular

challenges that are faced by those in more rural settings- such as fewer physicians per capita and availability of transport for themselves as well as their patients which can affect ability to provide appropriate patient care, which as we addressed earlier can lead to moral injury. They further asserted that many studies largely relied upon quantitative measures which, while incredibly valuable in their own right, because of the broad scope in nature can miss out on rich detail of lived experiences that can be gained from qualitative interviews (Umil et al, 2023).

Despite the longstanding difficulties with equipment, resources and staff shortages being exacerbated during the pandemic alongside surges in Covid19, Umil et al (2023) found that rural doctors persevered through their roles though confronted with the very real risk of burnout. Through qualitative means, they were able to gain deeper insight into the aspects that these doctors found most challenging to their mental health, as well as the coping strategies they were using to try to mitigate burning out. Five themes emerged when it came to the challenges- impact of added role responsibilities and extended working hours; anxiety and fear around exposure to Covid19 due to uncertainties around infection and transmission; challenges from adapting to ever-changing health protocols at work; difficulties relating to managing patients and employment; and the challenge of coping with limit of necessary supplies- for example as government hospitals were seen to get preferential priority when it came to personal protective equipment (Umil et al, 2023).

Following from the challenges impacting mental health, there were three common threads that coping with these experiences could be divided into. On a personal level, physicians recognised the need to mind their own wellbeing, utilising a range of coping strategies such as physical wellness, nature, and spiritual supports. On a wider level, they were aware of the positive role that social supports played in maintaining their mental

health. This was both from the home perspective, staying connected with family members for example, as well as in the work environment with the importance of remaining connected with their professional peer networks. The third thread was the need for organisational and government supports, in the form of features such as care for staff if they fall ill, extra resource funding, family supports as well as other financial incentives (Umil et al, 2023).

During the Covid19 pandemic itself as the governments around the world enforced and lifted restrictions on their populations, the systems themselves need to be able to respond to the trauma created as a consequence in order to promote resilience and recovery (Griffin, 2020). Covid19 has impacted the very core of what trauma can be and the impact it can have, with some suggesting that we need to realign the current paradigms of trauma that exist such as that in the DSM-V, updating them with more up to date knowledge. For example, Kira (2022) suggests we need to consider a range of pervasive impacts from pre-identity attachment disruptions and ACEs, trauma to identity (personal, social, physical), interdependence, aging traumas and stressors, and severity.

The original iteration of the current research was intending to investigate the effects over time of working with people who have experienced trauma. While this is still the case to a large degree, we have entered a context where there is a concurrent global trauma occurring which is also affecting the way in which the staff themselves can manage their own responses and reactions in both home and work environments. Thus, it was decided to expand the research paradigm to further include the impact of the pandemic on them, their work, and their perspectives pertaining to relevant support mechanisms for psychological wellbeing. From this, the current research attempts to explore the lived experience in detail of two different cohorts of frontline healthcare staff,

those in Social Inclusion and those in Public Health Nursing, at two different time points during the pandemic. In doing so, the research seeks to create a tapestry of knowledge from which we can derive ways of supporting our frontline workers to better perform their duties and support themselves.

Utilising both qualitative and quantitative measures, the present study takes an in-depth look at the participants' emotional wellbeing as well as cognitive and environmental circumstances, covering the interconnected phenomena of burnout, compassion fatigue, job satisfaction, vicarious trauma, secondary traumatic stress, depression, anxiety, significant life events and pandemic experiences. These phenomena will be outlined in more detail in the next chapter, which will hopefully provide a foundational awareness of how these concepts are similar, how they differ, and the possible variations in which they can be interconnected within a person's lived experience of events.

Literature Review

The current literature review is influenced by the overarching motivation to investigate the impact experiencing traumatic events during the line of work has on frontline, healthcare and emergency services staff. In order to ascertain this it was felt important to first delineate between four common terms which are often used interchangeably, yet are actually distinct from each other and quite different despite the apparent overlap. The four areas explored are burnout, compassion fatigue, vicarious traumatisation, and secondary traumatic stress. Each term is discussed separately with respect to defining factors, salient research in its field, and building resiliency. From this, it is hoped that more depth of understanding can be gained as to why they are associated terms, how they differ, and also illustrate the need for furthering our awareness of these phenomenon. The importance of providing supports for frontline, healthcare and emergency services staff in relation to each is also discussed.

As noted previously in the Introduction chapter, the Covid19 pandemic occurred at a point when the research study was already underway. As the pandemic itself has created its own furthering of knowledge with relation to burnout, compassion fatigue vicarious trauma and secondary traumatic stress, I will first discuss these prevalent topics with relevance to knowledge gained prior the pandemic, and then place these postulations within the context of research published since the pandemic began.

It has been estimated in epidemiological studies that between fifty and seventy percent of the general population are impacted from exposure to a traumatic event, with a 6%-14% prevalence of Post-Traumatic Stress Disorder (PTSD) (Qureshi et al, 2011). Alongside this, Hayes et al (2012) suggest that the characteristics of PTSD- such

as hyper-vigilance surrounding potential threats in the environment, avoidance of reminders, disruptive memories and nightmares- involve alterations to cognitive processes. Given the potentially profound impact that a single traumatic event can have on a member of the general population, it is not surprising that attention in research has also turned towards what impact encountering traumatic events on a daily basis can have in professions such as frontline healthcare and emergency services.

Further, to better develop supports for those engaged in high stress and potentially traumatic roles, it is important to understand what the impacts of these experiences

are on people's cognitions, on how they perceive and interpret the world around them, and the way in which emotions influence engagement with it. That is, if working in an environment that exposes staff to trauma on a regular basis has a resultant effect on mental resilience, wellbeing, and on how they consequently perceive the world around them. Through increasing knowledge into these processes, insight may arise into how to best support people working in these professions. With this, preventative measures can be developed that can be utilised by both organisations and individual members of the population to mitigate adverse impacts of repeated exposure to traumatic events on health and wellbeing.

In the present literature review, four related yet distinct concepts related to adverse reactions in staff will be explored- burnout, compassion fatigue, vicarious traumatisation, and secondary traumatic stress. While there is much overlap, it is important to delineate these as four distinct concepts, to be able to better understand the underlying processes that occur.

Burnout

Organisational, job, and individual are three key spheres in which burnout can be largely seen as emanating from (Bakker et al, 2014). Simionato and colleagues (2019) list several risk factors subdivided into these categories: organisational risks come from factors such as limited resources, limited support, poor recognition, perceptions of in-equitability and inflexible hierarchies; job-related influences such as time pressure, emotional demands, excessive workload, level of autonomy, amount of control over workload, role conflicts and social support; and individual considerations such as coping strategies, personal traits, and socio-demographics. When first depicted by Freudenberger (1974), the indicators of burnout included symptoms such as discouraged, hopeless, disenchanted, fatigued, instantaneous irritation, resentful, confused quickness to anger, bored- being seen as 'a psychological condition involving a prolonged response to enduring interpersonal stressors' (Woo et al, 2020; p9). Maslach and Jackson (1981) expanded on burnout outside of Freudenberger to define three domains distinguished within it- diminished sense of personal accomplishment, emotional exhaustion, and depersonalisation.

One domain of research into burnout has focused on the aspects and influences, largely from the work-environment perspective, that can lead to burnout. Petitta and Jiang (2020) sought to reconcile between individual worker traits and job insecurity in researching the connection between burnout and emotional contagion. Other studies focused on behaviours as a defining experience, such as Knoll and colleagues (2019) who investigated the links between burnout and intentionally motivated employee silence.

As a whole, burnout has indeed been acknowledged as a serious health issue by the World Health Organisation (WHO, 2019) in their International Classification of

Diseases 11th Revision, simultaneously affirming it as an occupational phenomenon. It is no surprise, then, that it has been the subject of much research across many occupational domains from university employees (Park, 2019), teachers (Kim & Buric, 2019; Koenig et al, 2018), research and development workers (Rice & Liu, 2019), firefighters (Chen et al, 2019), and healthcare workers (Leiter & Maslach, 2016).

Woo et al (2020) conducted a meta-analysis and systematic review of burnout amongst nurses, and the prevalence of burnout symptoms in this cohort. They report that it can have far-reaching costs and impact on areas such as quality of care, nurses' mental and physical health, the workplace, and the condition/recovery of patients. Including 45,539 nurses encompassing 49 countries, in 113 published studies, symptoms of high burnout were reported in just over one tenth of nurses (11.23%; Woo et al, 2020). With one survey reporting that 35% of non-practicing nurses attributing not working in practice to burnout (McHugh et al, 2011), absenteeism and employment withdrawal is put into perspective when discovering the effects on nurses of anxiety, insomnia, fatigue, headaches, sleep disorders, and reported reduced memory and concentration (Merces et al, 2017). Broadening out from the focus on nurses, Gomez-Urquixa et al (2016) purport that as healthcare workers in general provide complex care and treatment they are going to be at risk of burnout due to the nature of their profession, as they are routinely exposed to emotionally draining stressors.

Similarly to that of nursing, the impact of burnout leading to employee turnover, lower sense of accomplishment, increase in depersonalisation and poorer patient outcomes has been a growing concern in other areas of health care, such as with physicians (Zubatsky et al, 2019). Ghannam et al (2019) also reiterate this, further expanding it to medical students and medical residents. They purport that in areas where

there can be such high implications such as these professions, there is an important onus to figure out an efficient and effective way of addressing the pervasiveness of burnout. While they outlined that some organisations implemented strategies ranging from improving communication skills to therapeutic supports to self-care workshops, there was a lack of clarity in the effectiveness of these supports. In their study, however, they found a reduction in the levels of burnout amongst medical residents after rolling out and delivering an effective stress management intervention (Ghannam et al, 2019).

Within the realm of psychotherapy, Simionato and colleagues (2019) take the impact of burnout a step further and explore the ethical implications of its occurrence for psychotherapists. By the very nature of therapy as a profession, the contexts of trauma, conflict and loss are regularly visited themes that frequent most workdays for therapists. As such, they are potentially at an increased risk of burnout. They acknowledge that in this field burnout can materialise in quite a range of ways, including not just disengagement but also excessive engagement, which can be dictated by the variability in coping style and vulnerabilities experienced by each psychotherapist. Similar to the professions previously described, the effects of burnout can again have far-reaching implications on psychotherapist wellbeing, absenteeism, professional practice, and have an impact on the therapy itself (Simionato et al, 2019).

A complication with the structuring of burnout has been its acknowledged overlap with depression, which as Schonfeld et al (2019) point out can be stemmed from an overload of punitive, adverse experiences and a scarcity of fulfilling, positive ones. In their research it was suggested that, in effect, scales measuring depression and anxiety and scales measuring burnout are assessing the same phenomenon. While this connection could be explained by the overlap of the inclusion of factors such as fatigue across the

measures (Maslach & Leiter, 2016), the sought explanation may be more aptly reasoned by the occurrence of other common experiences, such as distress/dysphoria. Subsequently, yet another alternative rationalisation of this is that the conditions are comorbid (Schonfeld et al, 2019). In another study investigating the association between burnout, depression, and underlying job stressors (Hatch et al, 2019), it was found that symptoms of burnout and symptoms of depression are separately correlated to the demands at work, while they both do appear to change in tandem with each other. Their conclusions highlight the weight of needing to take into account all three (job stressors, burnout, and depression) when studying the mental health of employees/workers (Hatch et al, 2019).

Alongside trying to understand the aetiology of burnout in the workforce, and it's occurrence within a plethora of work contexts, attention has further been given to how to manage burnout in the workforce. These have ranged from simple interventions as the moderating role of having a leisure-time physical activity (Gerber et al, 2020), to the more complex such as mindfulness, acceptance, and value-based interventions (Kinnunen et al, 2020). Indeed, with the onus to reduce the potential personal, professional and organisational costs associated with burnout, it may be necessary to frame its management in a more wholistic approach, from consideration in a person's initial professional training, prevention through responsive training, professional advocacy in relation to workplace wellbeing, promotion of awareness of the importance of self-care and support networks (Simionato et al, 2019).

Compassion Fatigue

Similarly to repercussions of burnout, compassion fatigue can have significant impact on both the professional experiencing it and the patient in their care. Compassionate fatigue stems from being repeatedly exposed to client trauma, with the prevalent aspect being diminished empathy towards a client (Gallardo & Rohde, 2018), compassion towards others, and manifesting both emotional and physical exhaustion (Turgoose & Maddox, 2017). Figley (1995) explained it as the resultant fatigue and empathic strain from managing those in distress, in which it makes sense that there is an increased risk of developing psychological distress for those whose occupational roles are involved in helping others in distress. While it is usually accepted that burnout occurs following extended periods of the experiences described in the previous section, compassion fatigue differs in that it can occur after even just one encounter (Koenig et al, 2018).

Again the importance of understanding the predisposing and underlying factors of compassion fatigue, can be quantified in respect to the costs it can impose on the professionals' wellbeing, on impeding standards of service delivery, and other organisation costs such as absenteeism and staff turnover. Alongside compassion fatigue being caused by the persistent, enduring use of empathy in supporting the distress of others (Figley, 1995), research has also attempted to identify other correlates such as behavioural and cognitive coping styles, the trauma history of the professionals themselves, psychosocial factors (Turgoose & Maddox, 2017) and personality (Gallardo & Rohde, 2018).

Given the context in which it is understood that compassion fatigue occurs, the vast majority of research has given attention to medical and health care professionals.

Indeed in studying working with human trafficking victims, Ramirez et al (2020) purport a multidisciplinary approach is needed in this understanding, ranging from general and specialist medical, emergency medicine, social work, psychology, mental health, forensic nursing, and other community based services that are involved in the case management. They concluded that there is significant risk of prolonged distressing consequences, both behaviourally and psychologically, across health care providers (Ramirez et al, 2020).

In discerning areas which need reflection in the area of forensic mental health Pirelli, Formon and Maloney (2020) identify four parameters- risk factors; protective factors; barriers to self-care; therapeutic interventions. They outline several risk factors of compassion fatigue, such as high natural empathy, unresolved trauma history, a heightened drive to alleviate distress in others, and work environment (eg working with traumatized youth), which along with a high caseload mirror findings of other researchers (Turgoose & Maddox, 2017). Protective factors for compassion fatigue include adaptive coping strategies, trait-based emotional intelligence and healthy emotional management, which perhaps explains correlations between mindfulness of and lower levels of compassion fatigue (Pirelli et al, 2020; Turgoose & Maddox, 2017).

The importance of self-care techniques are being reframed as essential to the work of helping professions, and one area it has been asserted as integral is in social work- particularly due to the impact compassion fatigue can have on vital aspects of the job like custodial decisions (Denne et al, 2019). Denne and her team (2019) concluded that social workers who experience compassion fatigue experience a shift in how they assess child abuse cases and attitudes towards parental capacity. While embedding teaching self-care itself through practicum is key as a protective factor for social workers (Lewis & King, 2019), Yi et al (2018) focus on the individual experiences to gain increased

knowledge on when compassion fatigue hits and how individuals deal with it. While preventing it in the first instance is important, given that we can view overextending our empathy as a commonplace work hazard, the more quickly its onset can be identified alongside awareness of personal strategies that help manage it, are equally as crucial. The themes uncovered by Yi et al (2018) were that compassion fatigue tends to affect social workers during the times they are building close bonds with clients, when experiencing ineffective capacity to support their clients, when there was client bereavement, and while facing organisational barriers. In managing it, themes which emerged were establishing their professional boundaries, building career identity, communication such as in supervision, and engaging in self-care activities like socialising, exercise, reading, keeping a diary, traveling, etc (Yi et al, 2018).

Along a similar vein, while a lot of literature highlights the importance of self-care in regulating the impact of compassion fatigue, approaches in psychotherapy also acknowledge the importance of managing the professional's experience in parallel with the client's intervention/engagement with the client through integral supports like clinical supervision (Miller & Sprang, 2017). The function of clinical supervision may then span several contexts and can be utilised as a protective factor, preventative, management, and support mechanism postvention.

Though, because of its definition, compassion fatigue research has largely concentrated on healthcare professions, it has been expanded to other areas where people's roles involve helping others. While Turgoose and colleagues (2017) did not find a link between compassion fatigue and empathy in police officers that work with rape victims, they did observe that there were higher levels of compassion fatigue in specialist officers that had served for longer. In exploring the relationship between compassion

fatigue and low compassion satisfaction amongst police officers Grant and colleagues (2019) posit that the 'cost of caring' spiral asserted by Figley (2002) is one which can in time lead to burnout. In trying to mitigate this, they affirm that people working in helping professions perhaps do not maintain self-care. While self-care can be seen as an individual's support mechanism, other organisational approaches are suggested such as peer support, supervision, access to counselling, anxiety management and mindfulness, and having space to talk safely about their experiences (Turgoose et al, 2017).

Indeed, not all research has focused on professions which deal with humans. Rohlf (2018) and Hill et al (2020) were interested in how animal care workers experienced compassion fatigue. Drawing similarities with healthcare contexts, the nature of the work-role may vary the scope of compassion fatigue. For example animal control officers, exposure to animal cruelty/neglect, and needing to carryout euthanasia correlated the strongest with high compassion fatigue (Hill et al, 2020).

Searching through literature illustrates that mindfulness and other approaches which can fall under the 'cognitive behavioural therapy' framework dominate the references for therapy-based interventions (Rohlf, 2018). However, from a wider view we can see that there is a full range of perspectives supporting psychoeducational (Williamson, 2019), looking at self-care through quality of life (Klein et al 2018) or vitality (Martin-Cuellar et al, 2019), social supports (Barr, 2017), mindfulness-based training programmes (Delaney, 2018), to name but a few. In all likelihood, there is no one answer or factor that can be addressed to manage compassion fatigue, but more possibly a flexible and encompassing approach which can create a protective network of supports would prove to be more valuable.

Vicarious Traumatisation

While Compassion Fatigue can stem from exposure to client trauma and results in reduced empathy, vicarious trauma was first established by McCann and Pearlman (1990) and is used to describe the progressive negative alterations to a clinician's belief system, perspective of the world, emotional needs and thoughts (Pirelli et al, 2020; Branson, 2019). In engaging effectively in a therapeutic, empathic relationship with a client that has experienced trauma, a clinician needs to empathically connect with the client's perspective, disclosures, values and narratives. Incidentally this empathic engagement creates a vulnerability in the clinician, to be susceptible to the client's experience altering their own subjective worldview, by virtue of the effort to convey understanding of the client's meaning of their trauma (Branson, 2019). Signs of being vicariously traumatised such as emotional and cognition alterations, intrusive thoughts, mood and self-identity disturbances can echo those of having been directly exposed to trauma. And following, personal exposure to direct trauma in the past, and having less experience working with trauma in training or practice, increase the chances of vicarious trauma becoming a concern (Pirelli et al, 2020).

Research such as that by McCormack and Adams (2016) sought to increase understanding around vicarious trauma within the medical model under which many healthcare organisations operate. Just like with burnout being influenced by organisational stressors, therapeutic relationships do not operate in a vacuum- the phenomenon needs to be understood within the environment it correlates with. In inpatient settings, being restricted to a medical model way of working with complex trauma increased the risk to therapists' psychological wellbeing, while allowing for authenticity around therapeutic integrity had a positive effect on wellbeing (McCormack

& Adams, 2016). Furthermore, Foreman's (2018) results illustrated that vicarious trauma was significantly lower when exposure to trauma within client work was regulated by greater overall sense of wellness. Thus, while vicarious trauma is conceptually based in the therapeutic relationship experience, its occurrence is influenced by much more than just that.

Revisiting the authors who penned the term, McCann and Pearlman (1990) even posited that vicarious trauma is not an abnormal process for the clinician to experience when engaging with the traumatic narratives of clients. Some, like Boulanger (2018), put forward that vicarious trauma in and of itself can be an indispensable therapeutic tool in long-term clinical work. Following influence from the phenomena of transference and countertransference within psychodynamics, clinician's processing vicarious trauma is part of the overall therapeutic journey with the client, if it is allowed be a dynamic and intersubjective element of the process. However, if unacknowledged and left as an inadvertent and undesirable impact from exposure to client trauma, the adverse connotations that are associated with vicarious trauma occur (Boulanger, 2018).

Another product of studies into vicarious trauma has highlighted the occurrence of vicarious traumatic growth. While Boulanger's (2018) notion of using awareness of vicarious trauma to play a dynamic therapeutic inter-relational role between the client and therapist, there can also be potential that after having engaged with client trauma a clinician can experience growth in respect of their worldview, self-identity, cognitions and interpersonal relationships once the distress can be appropriately regulated (Long, 2020). From her meta-analysis, Long (2020) emphasises the importance of supervision to facilitate this, alongside an influential network of self-care, coping strategies, meaning-making, and witnessing client progress.

Within social work, Ashley-Binge and Cousins (2019) took the standpoint that vicarious trauma is a health and safety issue which organisations, rather than assuming appropriate levels of supervision and self-care, should be taking a more proactive pre-emptive duty about. From reviewing literature that spanned ten years, they found effective ways of addressing vicarious trauma took into consideration not just supervision, but also available resources, workload, culture of the work environment, vicarious trauma training, as well as support for continued professional development (Ashley-Binge & Cousins, 2019).

Outside of the traditionally therapeutic-orientated professions, there has been increasing consideration given to the impact of digital content investigations leading to psychological repercussions and vicarious trauma. For example Burress, Holt and Wall-Parker (2018) studied digital forensic examiners' levels of vicarious trauma and coping behaviours. The very nature of having to review disturbing images repeatedly during investigations, coupled with large caseloads and a restriction to display emotions, persisting to maintain a visage of toughness, can lead to the cognitive dissonance and emotional dysregulation and distress consistent with increased vicarious trauma. Similar to previously discussed contexts, their findings encouraged a comprehensive approach to vicarious trauma within the environment- supervision, wellness programmes, counselling, and a broader shift in promoting communication and social supports within the work culture (Burress et al, 2018).

Secondary Traumatic Stress

The fourth closely linked term which is important to differentiate is secondary traumatic stress, often appearing in literature alongside burnout, compassion fatigue and

vicarious trauma. While similarities can be drawn with vicarious trauma, in that the secondary traumatic stress comes from the resultant psychological distress of being exposed to somebody else's trauma (Turgoose & Maddox, 2017; Figley, 1995), there are key differences. Secondary traumatic stress is typified by symptoms which mirror post-traumatic stress disorder and can occur following a single exposure, rather than emanating from a cumulative empathic relationship which initiates changes to cognitions (Branson, 2019; Turgoose & Maddox, 2017).

In exploring secondary traumatic stress in deployed healthcare staff, Penix and colleagues (2019) provided further considerations between it and post-traumatic stress, alongside the latter being primary exposure to trauma itself and the former being indirect experience of it. They suggest that by and large, in healthcare research, while secondary traumatic stress mirrors symptoms, those experiencing it are not doing so to the same clinically significant degree as if they were to be assessed for PTSD. Further, many frontline healthcare staff work in high-risk settings, where they are at risk of both indirect and direct trauma exposure (Penix et al, 2019).

Indeed, mental health professions have received their share of attention in this area. Diehm and colleagues (2018) looked at a population of Australian psychologists finding that there was a correlation between personal trauma history, the amount of client trauma exposure, and perceptions of outcome with the amount of secondary traumatic stress reported. One of the major mediators in managing secondary traumatic stress came from levels of social support, which aided creating a balance with caseload severity (Diehm et al, 2018). In examining child welfare and mental health sectors, time pressures were found to be a prevalent influence, and protective factors identified on the micro, mezzo and macro level. Individual (micro) highlighted the value in emotional

regulation, perception of professional competence, education of secondary traumatic stress; organisationally (mezzo) elements like clear leadership and appropriate supervision were constructive; at the community (macro) level, being able to work on an interprofessional scale mitigated amounts of secondary traumatic stress in mental health (Strolin-Goltzman et al, 2020).

Social workers, particularly those dealing with trauma survivors, have also been empirically shown to exhibit higher correlations with secondary traumatic stress (Owens-King, 2019). The pervasiveness and conceivable impact of it have paved the rationale for increased attention on protective and coping strategies. Lee, Gottfried and Bride (2018) found that secondary traumatic stress in this context could be linked to physical health concerns, alongside heightened symptoms of intrusion, avoidance and arousal.

Similarly to the areas discussed in previous sections, much research has explored the crucial nature of self-care in addressing secondary traumatic stress. On the individual level, Oginska-Bulik and Michalska (2020) concentrated on psychological resilience in nurses working with palliative care; individual resilience was found to be important within multi-disciplinary teams caring for heart and lung transplants (Carey et al, 2019); and wellbeing played an integral role, particularly correlating with staff retention, in trauma-informed care with teachers (Christian-Brandt et al, 2020).

Sprang and her colleagues (2019) posit that despite the acknowledgement that secondary traumatic stress receives, because of its enmeshed nature with vicarious trauma, compassion fatigue, burnout, and indeed post-traumatic stress, there is no discernible concrete definition which has allowed for interventions specific to secondary traumatic stress to be empirically developed. Hence, this is possibly a reason why these phenomena each have quite similar patterns in the literature in terms of protective

factors, risks and interventions. For example, with secondary traumatic stress, protective factors on an individual level align with resiliency and wellbeing, covering such areas as interpersonal strengths and resources, self-regulation skills, mindfulness, emotional awareness, and meaning-making; on a broader level themes emerge in professional perception of value, competency, training, social supports, supportive work atmosphere, and appropriate supervision (Sprang et al, 2019). Risk factors emanate from occurrences which may negatively influence these, such as maladaptive coping strategies, lack of perceived organisational support, overwhelming caseload. Similarly, interventions centre around workshops, trainings and supports which attempt to upskill across the protective factor elements- mindfulness workshops, trauma informed care training, self-care promotion, more appropriate supervision, etc (Sprang et al, 2019).

The Covid19 Pandemic

Given the extraordinary strain placed on both healthcare systems and healthcare workers globally, much research has focused on the impact that the Covid19 pandemic has had. As previously illustrated, even prior to Covid19 there were higher levels of burnout, anxiety, depression and psychological distress due to factors such as poor work-life balance, high workloads, sleep disturbance from shift work, long hours, and distressing patient interactions in health care settings (Petrie et al, 2020). With the further increase on demands placed by the pandemic, such as lack of PPE, increased workloads, moral injury and risk of infection, this has led to researchers such as Morina et al (2023) to investigate into supportive interventions that can help reduce the impact of scenarios such as the Covid19 pandemic has on the wellbeing of healthcare staff. Through implementing a randomised control trial with healthcare staff, they found two important

outcomes. The first is that there was a reduction in burnout, worry, psychological distress and moral injury on a two month follow-up to their videoconferencing intervention. The second was that those in the 'treatment as usual' group overall reported more psychological distress than in the group which received the support intervention, suggesting an important preventative element to healthcare staff receiving their brief skills-based psychological intervention (Morina et al, 2023).

Spurred by pre-pandemic reports of increases in doctors' burnout from 40% to 51% in the four year period running up to 2017, and an 11.23% presence of burnout amongst nurses globally (Woo et al, 2020), Parandeh and colleagues (2022) conducted a meta-analysis using the Maslach Burnout Inventory Questionnaire to investigate the burnout levels during the Covid19 pandemic of healthcare staff based in health centres. They found moderate depersonalisation and emotional exhaustion amongst nearly half, alongside severe levels of reduced personal accomplishment in more than half, of healthcare workers sampled in studies comprising of 4,419 participants. This demonstrates that healthcare workers were reporting moderate and severe across all three of the categories of burnout syndrome scaled by the Maslach Burnout Inventory (Parandeh et al, 2022).

Berkout and Clair (2022) purport that one approach that should be considered as an intervention to mitigate the impact of the Covid19 pandemic on healthcare workers is Acceptance and Commitment Therapy (ACT) training. They view several key features of ACT as being potentially beneficial in the context of support for healthcare staff. Describing ACT as non-pathologizing and focusing away from evaluation of reactions, it may help validate emotions in response to the difficulties encountered by frontline healthcare, as it instead emphasises value-consistent and adaptive responses to difficult

cognitions (Berkout & Claire, 2022). Thus Berkout and Claire (2022) assert that as ACT has been beneficial in supporting healthcare staff mitigate burnout and workplace stress, through its approach of promoting responding to painful events through their own value systems, ACT offers strong potential in coping with the uncertainties and challenges faced during a pandemic.

In other research, Caldas, Ostermeier and Cooper (2021) sought to better understand the relationship between healthcare staff's internal resource depletion the greater the exposure to the Covid19 response at their workplace environment. This came from their assertion around workers needing to ignore personal concerns for their family, themselves and other co-workers when faced with pandemic realities of trying to do the best they could for their patients while contending with limited PPE (personal protective equipment), staffing shortages, ever-changing infection prevention & control guidelines and growing uncertainty around when the Covid19 pandemic would end. Surveying physicians and nurses at two separate points, one pre-pandemic and one during the pandemic itself, the findings illustrated that there were increased levels of emotional exhaustion in the workplace connected to intensity of frontline involvement, as well as showing that this was even greater when there was an increased sense of prosocial motivation, perhaps due to felt sense of duty (Caldas, Ostermeier & Cooper, 2021).

Even anecdotally, prior to the growing amounts of research demonstrating the impact of the Covid19 pandemic on frontline staff, one could say that avoiding at least some negative repercussions given Covid19's pervasive magnitude globally is almost impossible. This then refocuses attention from prevention to managing the inevitability and postvention. Caldas, Ostemeier and Cooper (2021) suggest that the first part of this is locating those who are in most risk of experiencing negative mental wellbeing and

distress, such as the frontline staff identified in their research. Following this they emphasise the need to provide adequate and ample resource into these areas, such as with training, equipment, and staffing infrastructure. Lastly, they encourage the need to provide healthcare staff with the supports to be able to recuperate following periods of intensified emotional exhaustion- as even though there may already be staff shortages, not allowing supports like recovery days may only lead to more staff shortages as a result of staff heading towards things like burnout (Caldas, Ostemeier & Cooper, 2021).

Incorporating depression, PTSD and burnout, Testoni and colleagues (2023) investigated into the mental wellbeing of Italian medical staff working during the initial Covid19 pandemic wave in relation to dehumanization and moral injury. They found mental health symptoms presenting in over half of their sample- with greater incidences of depression and burnout associated with dehumanisation, as well as PTSD symptoms when having higher Covid19 workloads. Moral injury was further linked to these mental health symptoms (depression, burnout, PTSD) even more so than dehumanization, and indeed was correlated with dehumanization as well. Interestingly, they also found associations between mental wellbeing and demographic variables such as family structure- for example a negative corelation between age and PTSD, with more PTSD symptoms in those without children, and higher incidences of depression in participants who were single (Testoni et al, 2023).

Other research has focused on the impact that enmeshed boundaries between work and domains like personal or family life can have on healthcare workers' experience of burnout, such as with Rapp, Hughey & Kreiner (2021). In their study, they elaborated on grounded theory principals to both offer further insight into how burnout is exacerbated by boundary violations, and consequently offer strategies that healthcare

workers can utilise to help mitigate the exhaustion, detachment and inefficiency caused by these violations by reshaping boundaries. Rapp and colleagues felt their research added to the field due to prior research largely being either measuring simply the prevalence of burnout, and also limiting the exploration to the workplace setting; whereas their study sought to qualitatively explore the why and how of burnout, supporting measures that can be implemented, across all settings of a worker's life (2021). Ultimately, the negative effects of the Covid19 pandemic on healthcare staff on their work/life boundaries are being tabled against a working environment that is simultaneously overwhelming. Understanding garnered from this research allows for empathy, and awareness of the relevant actions that can be taken- allowing management to encourage development of healthy boundaries, and opportunities to individualise as necessary, where there is a known presence of burnout amongst their staff (Rapp, Hughey & Kreiner, 2021).

While much of the pandemic-related research with healthcare staff has focused on those that work directly with the Covid19 virus, there is also the need to understand the impact that the pandemic is having on other healthcare workers who are still affected in some way by the virus, with Rossi et al (2020) using the term 'second-line health care workers' to denote staff that are essential workers yet not necessarily on the extreme frontline. One such study, conducted by Mittal and colleagues (2023), investigated the how mental health providers were impacted by the Covid19 pandemic, both in terms of on the work itself and their own personal health. Results yielded that the biggest shift in service provision was moving to online supports/teletherapy rather than in-person, with the strict social distancing measures implemented to contend with the virus, with the majority not having prior experience in this method of mental health intervention.

Nonetheless, Mittal and colleagues (2023) found both negative and positive impacts on the participants in their study- the negative being on wellbeing and subjective sense of clinical efficacy, highlighting burnout and exhaustion similar to previous research; the positive being garnering a sense of meaning and pride in that they are helping others through the work that they are able to do. They lastly go on to suggest that utilising supports such as mindfulness exercises, personal psychotherapy and other general stress-reduction forms of coping could be useful for mental health providers in managing their multiple level exposures to Covid19 through the workplace, their clinical interventions, and in their personal lives (Mittal et al, 2023).

Mullin and colleagues (2021) described their attempt to mitigate the wellbeing risks to their frontline staff by proactively rolling out a psychological first aid programme, which can be used to provide structured support following traumatic experiences by both mental health and non-mental health professionals. Seeking to lower rates of PTSD and increase retention for medical staff, the programme implemented provided regular communication and contact between behavioural health and physicians. This allowed them to respond in an appropriately supportive manner when psychological distress and threats were identified, such as listening, onward referral information, or escalating threat awareness to leadership where necessary (Mullin et al, 2021).

To further highlight the individual differences that can affect how frontline healthcare workers are impacted by aspects of the Covid19 pandemic, it has also been found that coping styles have an impact on both psychological distress and work engagement (Rolin, Flis & Davis, 2022). When compared with an emotion-focused style, they revealed a negative correlation between problem-focused coping with depression and anxiety, as well as a greater levels of perceived control and less subjective sense of

threat. Given the findings, they express the importance of incorporating awareness of coping styles into resiliency and wellness initiatives for frontline healthcare staff to lessen risks of distress and burnout during the Covid19 pandemic (Rolin, Flis & Davis, 2022).

Perhaps making up the biggest part of the workforce in healthcare settings, it is no surprise that research into the impact of the Covid19 pandemic has included the experience of nurses. While much is focused on distress, some focus on positive experiences such as with adversarial growth- like that by Yeung and colleagues (2023). Their study utilised a sample of nurses in Hong Kong during the fifth pandemic wave, exploring how adversarial growth is linked to coping, posttraumatic stress and secondary traumatic stress, and sociodemographic variables. Finding similar levels of adversarial growth to other countries such as acute sector nurse sin Australia (Aggar et al, 2022), they further reported that secondary traumatic stress and adversarial growth were positively associated to a significant degree- suggesting a link between it and caring for patients that have been exposed to traumatic events (Yeung et al, 2023). Two other noteworthy points unearthed in the study were that adversarial growth could be correlated with social support, perhaps due to it facilitating the broadening of perspective in interpretating negative events, as well as a positive association with job satisfaction. Nurses were reporting more adversarial growth from the Covid19 pandemic if they similarly experienced more satisfaction with aspects such as the hospital policies, the salary they were being paid and their respective workloads (Yeung et al, 2023).

Indeed, secondary trauma was experienced by many during the Covid19 pandemic, especially those on the frontline as well as other healthcare providers (Kendall-Tackett, 2023). Providing insight into another cohort of the Covid19 pandemic response, Powell and colleagues (2022) surveyed healthcare volunteers in a New York City field

hospital, who helped provide physical and mental health supports to vulnerable patients alongside staff. While reporting slightly less PTSD symptoms than non-volunteer and general populations, their study did report several interesting findings, including high compassion satisfaction, low to mild burnout, and elevated secondary traumatic stress. Similar to research discussed earlier, adaptive coping styles were linked to lower burnout and secondary traumatic stress, as well as social support associated with both these and higher levels of compassion satisfaction amongst healthcare volunteers. The strongest predictor of burnout, PTSD and secondary traumatic stress in their study was an avoidant emotional coping style, and they reported that healthcare volunteers experienced much greater levels of secondary traumatic stress if they worked more than 70 hours per week (Powell et al, 2022).

Along these lines, Kalaitzaki, Tamiolaki and Tsouvelas (2022) sought to greater understand the vicarious post traumatic growth that may emanate from vicarious exposure to traumatic events, with healthcare workers being both caring for Covid19 patients and being in the pandemic themselves, as well as how personal coping strategies influence secondary traumatic stress and vicarious post traumatic growth. Finding a significant portion of healthcare workers reporting moderate to low levels of secondary traumatic stress during the initial lockdown period, there were also moderate to low levels of vicarious post traumatic growth in this same timeframe. However, there were greater scores illustrated on the categories of appreciation of life and personal strength. From this the researchers posit that facing a disease that is life-threatening may increase subjective appreciation of life, and that working within and through such an adversarial environment increases confidence in what we are capable of (Kalaitzaki et al, 2022).

Consideration of PTSD

In exploring the above concepts together, while it is evident of the huge overlap between burnout, compassion fatigue, vicarious traumatisation, and secondary traumatic stress, the distinctions between them also begins to gain more clarity. In acknowledging the commonalities between these concepts it can be seen why the terms are often used interchangeably- indeed all are reactions to exposure to adverse events, be they a singular occurrence or happening over time. It is when each concept is explored deeper, the details can be seen to start to differ. This notion can further be applied to understanding the protective factors and coping/management interventions as well. While the interventions for each concept overlap, as can be seen from the previous discussion, it is perhaps deeper within the details of each intervention where the variation between what positively impacts each presentation occurs. As iterated earlier, to better develop supports for those engaged in high stress and potentially traumatic roles, it is important to understand what the impacts of these experiences are on people's cognitions, on how they perceive and interpret the world around them, and the way in which emotions influence engagement with it. The best starting block to ensuring psychological wellbeing is a foundation of knowledge and understanding from which to draw on in supporting interventions, in supporting each other, and in ensuring optimum support for those who have the rightful expectation to be kept as safe as possible in the line of their duty.

While there is also previous research into the experience of post-traumatic stress disorder (PTSD) in healthcare staff (such Dewar et al, 2023; Moallef et al, 2021; Shields et al, 1999) as well as those seeking to understand PTSD within the context of the Covid19 pandemic (eg Greene et al, 2024; Zerach & Levi-Belz, 2022; Blekas et al, 2020), PTSD itself as a construct was not included in the current research. The main reason for this is

attributed to the ongoing developmental nature of both the research protocol as a necessary adaption to account for environmental unknowns, as well as of the pandemic itself. When the research began, there was no pandemic, and the intended participant group were not anticipated to have direct exposure to a traumatic event. Even when the pandemic then emerged at the beginning of 2020, the extent of impact it would have and how much of 'traumatic event' it could be considered itself was unknown. While this became clearer as time progressed, the study was already underway following its initial redesign and subsequent rollout.

Trauma in Healthcare Staff Pre-Covid:

Prior to the pandemic, alongside what has previously been mentioned there are other research studies of note which have bearing on the impact of trauma on healthcare staff. Kirby et al (2011) for example, explored how different coping strategies impact the psychological well-being of paramedics exposed to traumatic events. The study involved 125 paramedics who completed questionnaires assessing posttraumatic growth (PTG), posttraumatic stress symptoms (PTS), and coping strategies. The research identified specific coping strategies as adaptive (e.g., self-help, approach, accommodation) or maladaptive (e.g., avoidance, self-punishment). Adaptive coping was linked to positive post-trauma outcomes, while maladaptive coping was associated with negative outcomes. Paramedics who had experienced personal trauma reported higher levels of both PTG and PTS compared to those who only experienced vicarious trauma. Personal trauma seemed to evoke stronger reactions. Results indicated that adaptive coping strategies were predictive of higher PTG scores, whereas maladaptive strategies correlated with higher PTS scores, particularly in relation to intrusion, hyperarousal, and avoidance symptoms.

The findings emphasize the importance of understanding coping strategies within emergency services to improve psychological support and training for paramedics. The authors advocated for interventions that promote adaptive coping mechanisms to enhance resilience and well-being among emergency workers. Overall, the study highlights the nuanced role of coping strategies in managing trauma among ambulance personnel, suggesting that both personal and professional experiences of trauma significantly affect their psychological outcomes (Kirby et al, 2011).

Another study explored the impact of secondary trauma and burnout on healthcare professionals working in cancer support and palliative care (Breen et al, 2014). It revealed that these professionals, including psychologists, social workers, and nurses, often experience high levels of emotional exhaustion due to their continuous exposure to grief and loss, which can compromise their well-being and the quality of care they provide.

According to Breen et al (2014), healthcare providers face considerable emotional challenges as they support patients and families dealing with cancer-related grief. This emotional load can lead to secondary trauma, making it difficult for professionals to maintain their own mental health. A high prevalence of burnout was reported among cancer care professionals, which is linked to factors like inadequate training in grief support, high patient loads, and insufficient organizational support. Their study highlighted the importance of self-care and psychological supervision for healthcare staff. Participants emphasized the need for strategies to manage emotional fatigue and prevent burnout, including debriefing, supervision, and personal self-care practices. The presence of secondary trauma among healthcare workers was suggested to affect their ability to provide effective support to patients, ultimately impacting the quality of care for those

affected by cancer. The research underscores the necessity for healthcare organizations to address the emotional well-being of their staff to enhance both provider resilience and patient care (Breen et al, 2014).

Albeit in a unique context itself, the research by Penix et al (2019) does provide insight into impact of working within extreme environmental conditions. They explored the experiences of secondary traumatic stress (STS) on U.S. military healthcare personnel deployed in Afghanistan. The study found that while most staff reported low levels of STS symptoms, those who did experience STS exhibited diminished job performance and family connectedness. Factors such as exposure to combat events, professional demands, and burnout were positively linked to STS, whereas self-care and supportive leadership were inversely related. Notably, behavioural health staff who employed trauma narrative techniques in therapy reported higher levels of STS. Findings suggested that STS can hinder effective clinical practice, and highlighted the importance of self-care and health-promoting leadership in mitigating the effects of trauma on healthcare staff working in challenging environments. They suggested that future research should explore better measures of STS and its impact on various aspects of functioning (Penix et al, 2019).

Shiri et al's (2010) study highlighted that healthcare providers, such as rescuers, nurses, and rehabilitation teams, can experience both negative outcomes, like traumatic stress symptoms (TSS) and posttraumatic stress disorder (PTSD), as well as positive outcomes, termed posttraumatic growth (PTG). According the Shiri et al (2010), healthcare workers can suffer from TSS due to their exposure to traumatic events, but they may also experience PTG, which can manifest as improved self-image, deeper understanding of self, increased spirituality, and enhanced interpersonal relationships. Their investigation employed cognitive orientation theory to understand how beliefs

about goals, norms, oneself, and reality influence the extent of PTG following secondary trauma exposure. The study found that cognitive beliefs and thematic factors related to motivation played a significant role in predicting PTG among healthcare workers. Beliefs about goals were positively associated with PTG, while certain themes around optimism and the benefits of suffering also contributed to positive psychological outcomes. The findings emphasize the need for awareness of the psychological risks faced by healthcare staff and suggest that fostering certain beliefs and themes related to coping and resilience can enhance their capacity for PTG after exposure to trauma. The complex psychological landscape which healthcare providers navigate when dealing with trauma was underscored, highlighting both the risks and potential for personal growth in the aftermath of their experiences (Shiri et al, 2010).

The focus of the study by Gibbons et al (2014) was the impact of trauma on active duty military health care providers deployed in combat or terrorist regions. Their study highlighted that these providers, including nurses and physicians, experienced significant psychological stress due to their exposure to traumatic events while caring for injured soldiers. Many health care providers reported symptoms of anxiety, depression, posttraumatic stress, and compassion fatigue as a result of their experiences. However, the research also indicated that despite these challenges, many employed adaptive coping mechanisms such as seeking social support, engaging in calming activities, and maintaining a sense of purpose and control in their roles. These strategies helped mitigate some of the negative effects of trauma and contributed to healthier responses to their experiences.

In their analysis, Gibbons et al (2014) emphasized the need for targeted interventions to support the mental health of military health care providers and suggested that training in

coping strategies aligned with psychological first aid principles could be beneficial in reducing the psychological distress associated with traumatic experiences.

Additional perspective on mediating factors was illustrated by Veronese & Pepe (2014), who examined the effects of trauma on Palestinian health providers. They highlighted the significant risk of developing psychological distress due to exposure to traumatic environments. In their study, they discussed how a Sense of Coherence (SOC)—a personal trait that encompasses meaningfulness, comprehensibility, and manageability—can mediate the relationship between trauma exposure and psychological outcomes such as anxiety, social dysfunction, and loss of confidence. SOC was found to partially mediate the impact of trauma on anxiety and social dysfunction, and fully mediated the relationship between trauma and loss of confidence. The importance of SOC as a protective factor was emphasized, positing that this can help health providers cope with the adverse effects of trauma, thus promoting better psychological well-being despite challenging working conditions. Further, the need for interventions that enhance SOC among health care staff to improve their resilience and functioning in high-stress environments was underpinned (Veronese & Pepe, 2014)

Pandemic Consortium Studies:

In March 2020, a collaboration formed called the Covid19 Psychological Research Consortium (C19PRC) Study, with the aim to investigate longitudinal impacts of the pandemic waves both socio-economically and psychologically throughout Ireland, the UK, Spain and other countries (McBride et al, 2022a; McBride et al, 2022b; McBride et al, 2021a; McBride et al, 2021b; Spikol et al, 2021; McBride et al, 2020). To give an

impression of the scope of this study, McBride et al (2020) reported a sample of 2025 adults of which 1406 were followed up.

On review of their publications, there are themes which can be identified that are both quantitative and qualitative. Quantitatively, statistical analyses revealed that health care workers reported significantly higher levels of stress, anxiety, and burnout during the pandemic. Standardized measures of psychological distress showed that scores were well above pre-pandemic baselines. Further, regression models identified key predictors of increased psychological strain. Factors such as prolonged work hours, direct exposure to Covid19 patients, and shortages of personal protective equipment (PPE) were significantly associated with higher levels of burnout and depression. The models controlled for demographic variables (age, gender, years of experience), underscoring that work-related stressors were primary drivers. The quantitative data also indicated a decline in work performance metrics. Increased absenteeism and lower self-reported efficiency were statistically correlated with elevated stress and burnout scores, suggesting that the mental health challenges were directly affecting professional functioning. From the qualitative perspective, reported interviews with health care workers highlighted intense feelings of emotional exhaustion and anxiety. Many described the experience as overwhelming, with constant fear of contagion and concern for the well-being of their families. Participants frequently mentioned the rapid pace of work and the pressure to make critical decisions under uncertainty. The lack of adequate PPE and evolving safety protocols added to a sense of vulnerability and stress. Despite the challenges, some health care workers shared accounts of adaptive strategies—such as peer support groups, informal debriefings, and personal resilience practices—that helped mitigate the impact. However, these coping mechanisms were not uniformly available,

underscoring the need for systemic support. A recurring theme was the desire for more robust mental health resources, including counselling services and structured debriefings. Many participants emphasized that institutional support could play a crucial role in managing the long-term consequences of the pandemic on their well-being (McBride et al, 2022a; McBride et al, 2022b; McBride et al, 2021a; McBride et al, 2021b; Spikol et al, 2021; McBride et al, 2020).

The integration of quantitative and qualitative data provided a well-rounded picture of the pandemic's toll on health care workers. Statistically significant findings of elevated stress and burnout were enriched by personal narratives that reveal the day-to-day realities of working during a global health crisis. The combined data suggested that immediate interventions were needed to address both the psychological and occupational challenges faced by health care workers. This included not only immediate mental health support but also systemic changes such as improved PPE availability, more flexible scheduling, and ongoing resilience training. The findings pointed to the importance of longitudinal studies to track the long-term impact of the pandemic on health care workers' mental health and job performance. Further research could also explore the effectiveness of specific interventions aimed at reducing burnout and enhancing resilience. Overall, their research indicated that the pandemic has had a profound and multifaceted impact on health care workers, highlighting urgent areas for intervention and support (McBride et al, 2022a; McBride et al, 2022b; McBride et al, 2021a; McBride et al, 2021b; Spikol et al, 2021; McBride et al, 2020).

Summary:

While the preceding chapters have provided an informative overview of domains, discussions have largely treated the constructs of burnout, compassion fatigue, vicarious trauma and secondary traumatic stress in isolation. It is hoped throughout this study that a more nuanced exploration of their interrelatedness will begin to form, given the relatedness between these phenomena and the overlapping nature of some of their symptoms. This multiplicity of constructs presents both opportunities and challenges. On the positive side, recognizing distinctions between them can lead to a more tailored approach in addressing the needs of affected professionals. However, the negatives may include confusion in measurement and intervention strategies.

Burnout is itself a multifaceted issue that stems from organizational, job-related, and individual factors (Bakker et al., 2014). Simionato et al. (2019) categorize risk factors into these three spheres: organizational risks include limited resources and support; job-related influences encompass time pressure and excessive workload; and individual considerations involve coping strategies and personal traits. Initially defined by Freudenberger (1974), burnout manifests through symptoms such as fatigue, irritability, and feelings of hopelessness. Maslach and Jackson (1981) expanded this definition into three critical domains: diminished personal accomplishment, emotional exhaustion, and depersonalization.

Compassion fatigue, rooted in repeated exposure to client trauma, significantly affects both the professional and the patient. It is characterized by diminished empathy, emotional exhaustion, and overall strain (Gallardo & Rohde, 2018; Turgoose & Maddox, 2017). Unlike burnout, which develops over time, compassion fatigue can arise from a single encounter (Koenig et al., 2018). Understanding the factors that contribute to

compassion fatigue is crucial due to its potential costs in terms of professional wellbeing and service quality.

Vicarious trauma, as defined by McCann and Pearlman (1990), describes the negative alterations to a clinician's worldview as a result of empathic engagement with a client's trauma narrative. This phenomenon can lead to emotional and cognitive disturbances similar to those experienced by individuals directly exposed to trauma (McCormack & Adams, 2016; Foreman, 2018).

Secondary traumatic stress is akin to vicarious trauma but is characterized by symptoms that mirror PTSD and can arise from a singular exposure to another's trauma (Branson, 2019; Turgoose & Maddox, 2017). Research indicates a correlation between secondary traumatic stress and personal trauma history, with significant implications for healthcare professionals experiencing high levels of client trauma (Diehm et al., 2018).

Rationale & Position for Thesis:

Research prior to the pandemic indicated that healthcare professionals were already at risk for mental health concerns due to high workloads and stressful interactions (Petrie et al., 2020). The Covid19 pandemic has further exacerbated existing issues related to burnout, compassion fatigue, vicarious trauma, and secondary traumatic stress among healthcare workers, intensifying the challenges these workers face (Morina et al., 2023).

Overall, the COVID-19 pandemic significantly disrupted the lives of health care workers worldwide. The various research studies that I have cited throughout highlight trends which warrant the current investigation. Many frontline workers reported heightened levels of stress, anxiety, depression, burnout, and even symptoms related to secondary

traumatic stress. Repeated exposure to high mortality, long hours, and fear of infection added to emotional strain. Health care workers experienced unprecedented workload increases. Surveys and reviews indicate that patient-to-nurse ratios worsened, and many staff had to work extra shifts, often under extreme conditions. Chronic understaffing, shortages of personal protective equipment (PPE), and rapid changes in protocols forced workers into unsustainable work patterns. Additionally, the pandemic exposed longstanding systemic vulnerabilities. Many workers had to isolate from their families to prevent virus transmission, which blurred the boundaries between work and personal life, intensifying feelings of loneliness and fatigue. Alongside these, despite overwhelming challenges, many workers demonstrated resilience by leveraging peer support, teamwork, and individual coping strategies such as mindfulness. Effective leadership and robust organizational support also played a crucial role in buffering some of the adverse impacts.

Much of this knowledge has been garnered from research that was being carried out at the same time as the current research data was being gathered, and published after the research data in this dissertation was gathered. Thus while the introductory chapters have attempted to integrate these, it is important to note that the current research was undertaken in an exploratory capacity, because at the time of data-gathering much less was empirically known about the pandemic's impact. The research sought to further knowledge about how the healthcare staff taking part were experiencing these psychological domains with respect to the work that they carried out, during the Covid19 pandemic. To do so, it was felt that using both qualitative and quantitative measures would provide the most comprehensive overview. While much of the richness of the knowledge would be achieved through the qualitative interviews, including quantitative

psychometrics which covered the prevalent research domains could allow this richness to be grounded in statistical data relevant to the themes as they arise.

Research Questions:

The primary research questions are qualitatively framed to openly explore the experiences of participants. These are:

- What was the impact of the pandemic on the psychological wellbeing of frontline health workers?

- What impact does the work environment have on the psychological wellbeing of frontline health workers?

- What are the perceptions of wellbeing supports amongst frontline healthcare workers?

To ground the qualitative data, a number of quantitative points of interests were attained based on the prevalent domains in the research. Notably, these provide numeric data within which the qualitative themes can be contextualised. These measures seek to provide insight into whether, during the pandemic, there will be a change in a participant's:

- felt professional quality of life
- experience of depression
- experience of anxiety
- experience of burnout
- experience of secondary traumatic stress symptoms

Methodology

The current research sought to explore the psychological wellbeing and impact of traumatic events on frontline health service staff amid the Covid19 pandemic.

In investigating the psychological impact on cognitions and emotional experiences on frontline staff of the continuous exposure to traumatic events during the Covid19 pandemic, it was clear that suitable conclusions could not be drawn accurately from just one hypothesis or sole research question. Thus, there emanated a need to divide this exploration into several interconnected phenomena, in an attempt to curate participants' experience in a way that reflected this as comprehensively as possible. An approach including both qualitative and quantitative made sense to provide context to the data, as well as creating several hypotheses based on psychometrics which covered the salient themes uncovered during the literature review. This allows space to analyse the data from each psychometric in isolation prior to integrating them into a more systemic construction with which to perceive the participant experiences more wholistically.

Design- Mixed Methods

The current study utilised a mixed-methods longitudinal design, wherein both quantitative and qualitative measures were used. The main study further consisted of 'time 1' and 'time 2' measures, allowing at least 6 months in between these to explore changes over time. During that time participants would have to have been engaged in frontline work where potentially traumatic events occur.

A mixed methods approach was chosen with taking a few factors into consideration. The first was in relation to the initial design of the study being more heavily

weighted towards the quantitative metrics. However, in restructuring the study following the advent of the pandemic there was still a need to justify including both elements rather than shifting to a purely qualitative design. It would be easy to base this decision in perspectives such as Rubin et al (2018) that many counselling psychologists adopt methodologically quantitative approach to qualitative research- proposing that this may be due to them learning quantitative first and in striving to establish perceived scientific rigour. Indeed, Grzanka & Moradi (2021) feel that '*this results in a persistently frequentist approach to coding and data analysis that can turn nuanced data into reductionist accounts of most common themes that elide the whole purpose of qualitative inquiry…counting frequencies in data is not inherently a bad practice. But it is not the only or even best way to account for what is occurring or most important in qualitative data*" (p 255).

In the current research, thematic analysis was chosen as the method to analyse the qualitative data. Within this, it can be purported that data does not hold only one single thematic analysis, that multiple analyses are possible, and that the decisions around development of themes that work best for a particular study are necessarily dependent on researchers knowledge, of concepts and existing theories (Braun & Clarke, 2022). It was felt that continuing to include the quantitative data alongside the qualitative data was an important part of acknowledging the existing theories and research in the field, given as can be seen throughout the literature review of the understanding that the phenomena which are being measured in these psychometrics are prevalent throughout the existing literature. Retaining the psychometrics to utilise for descriptive purposes would potentially allow more inferences to be drawn from the qualitative data after the thematic analysis was formed. As Braun & Clarke elucidate, "*data analysis is always*

underpinned by theoretical assumptions, and these assumptions need to be acknowledged and reflected upon" (p9), with reflexivity and the researcher's own perspectives in articulating and their generative role in the analysis being key. To contextualise, I am a counselling psychologist who had been working in clinical practice for 12 years at the time the data was being collected. Including the psychometrics pertaining to the main mental health concerns within the study parameters could be considered a form of managing my own assumptions in awareness around these phenomena in the reader. The inclusion of these topics and codes/themes ascertained by me was not just simply from my years of having worked with people expressing similar experiences, but rooted in a combination of the existing research and relevant empirical measures. The quantitative data could provide a kind of grounded-ness for the clinical symptom description of the qualitative data, without an over-reliance of assumption on my professional experience.

The study utilised a range of psychometric instruments to assess cognitions, emotional appraisal, mental wellbeing and resilience.

To quantitatively assess participants' experiences in work and interpretation of the world, the Life Events Checklist for the DSM V (LEC-5) and the Professional Quality of Life Scale (ProQOL) was used. To assess participants' emotional experience, the Secondary Traumatic Stress Scale (STSS), Maslach Burnout Inventory Human Services Survey (MBI-HSS), Beck's Depression Inventory-II (BDI-II) and Beck's Anxiety Inventory (BAI) were used. To assess participants' experience of the Covid19 pandemic, the Pandemic Experiences & Perceptions Survey (PEPS) was used. The addition of primary measures for burnout and secondary traumatic stress alongside the ProQOL came at the recommendation of the TCD Thesis Committee overseeing the research and research protocol.

There was also a qualitative opportunity for participants to describe their experience and indicate any further information about their roles which they deemed important (for example, supports provided and accessed throughout their line of work). The rationale behind this was to aid in identifying any environmental variances that may arise.

Data was collected over MS Teams audiovisual interview. The original intent was to collect data during in-person interviews, however changing pandemic restrictions set by the Irish government and Trinity College Dublin meant that at the time when data was due to be collected, the procedure needed to be adapted as in-person interviews within the study context were not permitted. This method allowed for the data to be collected in a way that reduced risk of exposure to Covid19 as much as was possible.

Interviews that were conducted for 'Time 1' were held during Level 5 of the Irish Government's lockdown protocol, during March/April 2021. The second round of data collection, 'Time 2', occurred in September/October 2021 during Level 1 of lockdown protocol, where restriction guidelines were at their most lenient with the possibility at the time of restrictions being lifted completely. Prior to the 'Time 1' interviews taking place, all participants had been offered the vaccine.

Below is a timeline of the progression of Covid19 in Ireland, from p6 of the HSE's 'Epidemiological Report: First year of the COVID-19 pandemic in Ireland' (HSE Health Protection Surveillance Centre, 2021):

1. *On 29th February 2020, the first case of COVID-19 in Ireland was reported*
2. *On 12th March 2020, schools, colleges and childcare facilities were closed and people were asked to work from home*
3. *On 16th March 2020, advice was given to avoid all non-essential travel*

4. *On 27th March 2020, the first national lockdown in Ireland was announced with the "Stay at home" order*
5. *Wave 1 peaked during Week 16 2020, with 1,130 cases reported on 14th April 2020*
6. *On 18th May, the Government published a roadmap for the phased easing of lockdown restrictions*
7. *In August 2020, increasing cases of COVID-19 were reported in Kildare, Offaly and Laois, including a number of outbreaks occurring in meat processing plants, resulting in a regional lockdown being implemented*
8. *On 15th September 2020, a medium-term plan for living with COVID-19 was announced by the Irish government with details of a 5-level approach (with the highest restrictions at Level 5) to deal with the pandemic in Ireland (https://www.gov.ie/en/campaigns/resilience-recovery-2020-2021-plan-for-living-with-covid-19/)*
9. *On 18th September 2020, Dublin was placed under Level 3 restrictions with the remainder of the country under Level 2 restrictions*
10. *Wave 2 peaked during Week 42 2020, with 1,267 cases reported on 16th October 2020*
11. *On 21st October 2020, Level 5 restrictions were introduced nationwide for a period of 6 weeks up to 1st December 2020*
12. *Many restrictions were lifted from early December 2020 in the lead-up to the Christmas and New Year holidays*
13. *By the end of Week 51 2020 (late December), there were signs that COVID-19 cases were increasing again*

14. *There was a surge in cases from Week 53 2020 to Week 3 2021 (last week of December 2020 and first 3 weeks of January 2021)*
15. *On 31st December 2020, Level 5 restrictions were re-introduced nationwide*
16. *Wave 3 peaked during Week 1 2021, with 8,238 cases reported on 7th January 2021; however, the surge in COVID-19 at this time resulted in a delay in processing cases with many cases from Week 53 2020 not being notified until Week 1 2021. Based on the epidemiological date (see definition in the Methods section below), the peak of Wave 3 occurred in Week 51. The alpha variant dominated during wave 3*
17. *On 29th December 2020, the COVID-19 vaccination campaign started when a 79-year old woman became the first person in Ireland to receive the Pfizer-BioNTech vaccine in St James's Hospital, Dublin*

During Level 5 lockdown restrictions, a general overview of strictness of the guidelines were that it was made to be a criminal offense to leave your house unless you had a reason which fell within a list of 'reasonable excuses' (for example for exercise a person was allowed within a 5km radius of their house, if they were an essential worker, or for the purposes of accessing childcare); household events could also not include people from other dwellings. When these restrictions eased during Level 1, it allowed social venues such as bars/restaurants to reopen with booking/seating capacity limits, gyms reopened, and outdoor activities had resumed (Casey et al, 2021).

While the study was conducted over two timepoints (Time 1 and Time 2), this was the initial structure from the first iteration of the research, as detailed in earlier chapters. This original iteration was intended to be more reliant on quantitative statistics, with

changes explored over time within a much larger sample size. The evolving nature of the research to incorporate the pandemic, and consequently the shift in focus to the qualitative data, made the need for two separate timepoints less necessary. However, it was decided to maintain the two timepoints as part of the research. At the time of research rollout, there was no way of knowing if the pandemic was going to be concluded by the time the second stage of interviews were due to take place. If this were the case, it would have allowed greater depth and perspective to be garnered across the two timepoints. However, unfortunately the pandemic continued on well into the future after the data collection concluded. As such, though nuances can be drawn in participant experiences over time during the pandemic longitudinally, the main focus of the study remained in the qualitative exploration of participants' experiences rather than in pre-post analysis.

Between 'Time 1' and 'Time 2', participants then attended a 1-hour educational and reflective group workshop entitled 'Minding Ourselves during the Pandemic', which is a workshop that had been gradually rolled out across the Health Service in the area since earlier in the pandemic. The staff would have been due to receive this workshop regardless of whether they were in the study or not, as it is part of the HSE psychosocial supports that have been developed in response to the pandemic for frontline staff.

Setting & Participants

The research included HSE Public Health Nursing staff in the North East Inner City (approximately 19 staff) and case managers/project worker staff in the HSE Social Inclusion Hub in the same area (approximately 17 staff). A convenience sampling technique was used, in that all staff within this criteria were offered the opportunity to

take part in the study. It was anticipated that not all staff would be able to participate in the research due to work or personal circumstances.

The participants were all frontline health workers that have been working throughout the pandemic.

In terms of choosing the participant population, there are nuances here which should be highlighted. The initial research population was intended to be staff in the National Ambulance Service, and a pivot was necessitated after the pandemic began due to the original population not being able to take part due to the nature of the pandemic. Time was spent reflecting on the nuances of the research domains, such as what falls under exposure to trauma as well as the representation in the literature at the time. With discussion with the research supervisor, it was agreed to pursue accessibility to samples within community health within the inner city. This was based on awareness of the level of exposure to traumatic stories from working within an area of high ACEs and high deprivation scores (see previous chapters), alongside much of the health staff research being focused on acute settings (resulting in a potential gap in research for frontline staff from community settings rather than hospital-based within pandemic research, for example).

Recruitment was initiated through the Director of Public Health Nursing and the Director of Social Inclusion. They were provided with an email including the study information and consent form**.** They cascaded this email down to the relevant local managers who then forward the email to relevant staff (eg those that worked within the catchment area being investigated). Staff were given the choice to reach out to the researcher via email if they wished to take part in the study. Staff that reached out to the

researcher were then contacted to follow study procedures around informed consent and setting up the timeline for the interviews.

To give a brief overview of what the roles contain, the focus of public health nurses is in providing clinical nursing care and health & wellbeing promotion across the lifespan. PHNs as part of multi-disciplinary teams based in Primary Care Centres, working with individuals, families and communities (https://www.hse.ie/eng/services/list/2/primarycare/national-phn-service/).

Social Inclusion's role has foundations in social determinants of health, inclusion and community development approaches. They work with service users with respect to planning, design, delivery, monitoring and evaluation with the goal to improve the engagement in health services of socially excluded and vulnerable groups/communities. Some examples of these groups are those experiencing homelessness, addiction, LGBTI, Irish travellers and Roma, intercultural health, and those experiencing domestic, sexual and gender-based violence (https://www.hse.ie/eng/about/who/primarycare/socialinclusion/about-social-inclusion/).

Table 1

Demographic Breakdown of the Participants in the Study

		Nursing (*n=11*)	Social Inclusion (*n=19*)
Gender			
	Female	11	13
	Male	0	6
Age Range			
	25-34	0	3
	35-44	4	8
	45-54	4	5

	55-64	3	3
Time in Role			
	< 2 years	0	10
	2-5 years	4	6
	6-10 years	1	0
	11-15 years	4	3
	> 15 years	2	0
Time in Profession			
	< 5 years	0	2
	6-10 years	1	6
	11-15 years	4	4
	16-20 years	1	2
	> 20 years	5	5
Highest level of education			
	Level 7 (Ordinary Degree)	0	2
	Level 8 (Honours Degree)	3	10
	Level 9 (Master's Degree)	8	6
	Level 10 (Doctorate/PhD)	0	1

Materials

Definitions:

Burnout: 'a psychological condition involving a prolonged response to enduring interpersonal stressors' (Woo et al, 2020; p9)

Compassion Fatigue: stems from being repeatedly exposed to client trauma, with the prevalent aspect being diminished empathy towards a client (Gallardo & Rohde, 2018), compassion towards others, and manifesting both emotional and physical exhaustion (Turgoose & Maddox, 2017). Figley (1995) explained it as the resultant fatigue and empathic strain from managing those in distress

Compassion Satisfaction: the positive aspects and the fulfilment someone experiences from being able to perform well at work (Stamm, 2010)

Secondary Traumatic Stress: comes from the resultant psychological distress of being exposed to somebody else's trauma (Turgoose & Maddox, 2017; Figley, 1995), is typified by symptoms which mirror post-traumatic stress disorder, and can occur following a single exposure

Depression: characterized by enduring feelings of sadness and despair, along with a diminished interest in activities that once brought joy. In addition to these emotional symptoms, depression can also present with physical signs like chronic pain or digestive issues. For a diagnosis to be made, these symptoms must be observed for at least a two-week period. According to the DSM-5, a person must exhibit five or more symptoms during the same two-week span, and at least one of those symptoms should be either a persistently low mood or a significant loss of interest or pleasure (https://www.healthcentral.com/condition/depression/dsm-5-depression-criteria)

Anxiety: while anxiety is a typical response to stress, anxiety disorders are not the same as fleeting nervousness; they involve much stronger and more persistent feelings of fear or anxiety. In the DSM-5, anxiety is specifically defined as an excessive worry and a sense of apprehension that occur most days over a period of at least six months (https://www.medcentral.com/behavioral-mental/anxiety/assessment-diagnosis-adherence-anxiety)

Life Event: an event that someone may have experienced at some point in their lives which has the potential to have been experienced as traumatic (Weathers et al, 2013)

Emotional Exhaustion: refers to the feelings a person is experience of being exhausted and emotionally overextended by their work (Maslach et al, 1997)

Depersonalisation: refers to a person experiencing an impersonal response or one of unfeeling towards the service user under their care/receiving treatment from them (Maslach et al, 1997)

Personal Accomplishment: refers to a person's sense of successful achievement and competency feelings attached to their work (Maslach et al, 1997)

Intrusion: refers to a person experiencing intrusive imagery related to disclosures by the service users they support (Bride et al, 2004)

Avoidance: refers to a person experiencing avoidant responses to thoughts, feelings or behaviours related to their work, such as avoiding working with certain service users (Bride et al, 2004)

Arousal: refers to experience of physical, emotional or cognitive arousal that a person experiences, such as becoming easily annoyed (Bride et al, 2004)

The main psychometrics tests and self-report measures being used in the study are all standardised, with their reliability and validity being assessed in research. The qualitative interview questions were being used as prompts only to allow the participants to openly reflect on and explore their experience of working in an environment where they are exposed to traumatic incidents.

To assess participants' experiences in work and interpretation of the world, the Life Events Checklist for the DSM V (LEC-5) and the Professional Quality of Life Scale (ProQOL) were used. To assess participants' emotional experience, the Secondary Traumatic Stress Scale (STSS), Maslach Burnout Inventory (MBI), Beck's Depression Inventory-II (BDI-II) and Beck's Anxiety Inventory (BAI) were used. To assess participants' experience of Covid19, the Pandemic Experiences & Perceptions Survey (PEPS) was used.

The Professional Quality of Life Scale

The Professional Quality of Life Scale (ProQOL; Stamm, 2010) is a self-report questionnaire that consists of 30 items. The respondent uses a Likert scale ranging from 1 ("Never") to 5 ("Very Often") to indicate how much each item statement reflects their experience within the preceding 30 days. Stamm (2010) defines professional quality of life as how a person experiences and the conditions they feel in with regard to aspects of doing their job within their helping profession. This psychometric was chosen for the current study as Stamm (2010) was cognisant of the fact that 'helpers' can come from a range of professions- from frontline health workers to police to airline staff to disaster response teams- and that they can be the ones who respond crises at global, national community and 1:1 levels.

The ProQOL scale itself is divided into two separate facets of a person's perceived professional quality of life. The first is 'Compassion Satisfaction', which accommodates for the positive aspects and the fulfilment someone experiences from being able to perform well at work. Secondly, there is 'Compassion Fatigue', which is further broken down into two parts. Of these subdivisions, there is 'Burnout' which examines commonly understood characteristics of burnout like anger, exhaustion, depression, frustration; then there is 'Secondary Traumatic Stress', which the ProQOL asserts happens when fear and work-related trauma evokes negative feelings, and that the trauma itself can be both secondary and primary (Stamm, 2010).

With the ProQOL, good construct validity is demonstrated through utilisation of the measure in published papers, as well as separate constructs being measured by the three scales within it. According to Stamm (2010, pp13-14):

"The Compassion Fatigue scale is distinct. The inter-scale correlations show 2% shared variance (r=-.23; co-σ = 5%; n=1187) with Secondary Traumatic Stress and 5% shared variance (r=.-.14; co-σ = 2%; n=1187) with Burnout. While there is shared variance between Burnout and Secondary Traumatic Stress the two scales measure different constructs with the shared variance likely reflecting the distress that is common to both conditions. The shared variance between these two scales is 34% (r=.58;; co-σ = 34%; 14 n=1187). The scales both measure negative affect but are clearly different; the BO scale does not address fear while the STS scale does."

The ProQOL was administered in a similar fashion to the other psychometrics used in the research. The participants had received a copy of the scale prior to meeting with the researcher. In the quantitative portion of the interview, the researcher explained the scale to the participant using the description on the top of the ProQOL survey page. The participant had the opportunity to ask questions for clarification throughout. As the interviews were conducted virtually over MS Teams, the interviewer would read out each statement and the participant would nominate their answer response, which the researcher would then record on their copy of the ProQOL form. Following the interview, the researcher calculated the scores for each participant using the steps provided in the ProQOL manual. The initial step in this was to reverse the items which required this, and then summing the items within each subscale. Z scores could then be converted to T scores based on the table in the manual. The ProQOL also included cut scores at the 25th and 75th percentile, allowing for guideline categorisation within each subscale for the scores- 'Low', 'Moderate' or 'High' (Stamm, 2010).

Scores and categories from the ProQOL were recorded into the Statistical Package for Social Sciences (SPSS) for data analysis, including the total scores, and whether this score was in the low/moderate/high range for the compassion satisfaction, burnout and secondary traumatic stress subscales.

A copy of the ProQOL can be found in Appendix A.

The Beck Depression Inventory-II

As part of the quantitative assessment battery, the Beck Depression Inventory-II (BDI-II; Beck et al, 1996) was utilised to provide more insight into the emotional experience of the participants. The BDI-II was a considerable revision of its predecessors, the BDI and BDI-IA, as it was identified that there was a need to modernise by the authors given progression in the field and with the publishing of the Diagnostic and Statistical Manual of Mental Disorders- Fourth Edition (DSM-IV; American Psychiatric Association, 1994). Mapping on to the DSM-IV, the BDI-II was revised to correspond to the outlined symptoms and it's criteria for reaching diagnoses for the depressive disorders. Thus, for those old 13 years old into adulthood, the BDI-II provides a means of measuring the severity of depression, in the form of a 21 item self-report psychometric form (Beck et al, 1996).

In terms of reliability, the BDI-II demonstrates good internal consistency, with a coefficient alpha of .92 for outpatient sample and .93 for the comparative student sample used by the authors. Furthermore, for both samples on the 21 items, all corrected item-total correlations were significant beyond the .05 level, as well as a test-retest significant correlation of .93 ($p < .001$; Beck et al, 1996). With similar significant results to these, Beck

and colleagues demonstrated content validity, construct validity, factorial validity, and correlations with age, ethnicity and sex (Beck et al, 1996).

As it formed part of the quantitative assessment during the participant interviews, the BDI-II was used at the beginning of each interview. The BDI-II presented as an ideal measure as it has been developed for both self-administration as well as oral administration, which meant it did not need to be adapted for use over MS Teams due to the pandemic restrictions requiring the interviews to be virtual. Prior to the interviews, participants would have received the BDI-II form. During the interview, the researcher also had a copy of the BDI-II. On the BI-II, there are instructions for the participant to follow that are there in the scenario of self-administration, and there are verbal instructions in the BDI-II Manual (1996) for oral administration, both of which were utilised in the interviews. This allowed for assured understanding by participants, and opportunity was provided for any clarification required. Following the instructions being explained, the researcher would then read out each group of statements and ask '*which of the statements best describes the way you have been feeling during the past two weeks, including today*' (*p 8*; Beck et al, 1996). Participants would nominate a response to each of the 21 items, and researcher would record these responses on their copy of the BDI-II.

For scoring, each of the 21 items are summed based on a 4 point scale ranging from 0 to 3, creating a total score with a maximum of 63. In cases where a participant chose more than one statement in each item, as per the Manual, the statement with the highest rating allocation is used for calculating the total score. Beck et al (1996) provide cut scores that can be utilised for the purposes of categorising severity of depressive-symptom presentation, ranging from minimal, mild, moderate and severe, and express that these are based on the clinical considerations for which it is being intended. Scores in

the 0-13 range are considered ‘minimal’, in the 14-19 range are considered ‘mild’, in the 20-28 range fall into the ‘moderate’ category, and from 29-63 would be considered ‘severe’ (Bek et al, 1996).

Data from the BDI-II were recorded into the Statistical Package for Social Sciences (SPSS) for data analysis including total score and whether this was in the minimal, mild, moderate or severe range.

A copy of the BDI-II can be found in Appendix B.

The Beck Anxiety Inventory

The Beck Anxiety Inventory (BAI; Beck & Steer, 1993) was used as part of the quantitative assessment battery during interview to provide more insight into the emotional experience of the participants. It was developed to ascertain anxiety levels experienced by respondents, in both adolescents and adults, with a revision to the descriptive labels and diagnostic scoring ranges offered in its most recent iteration (Beck & Steer, 1993). The content itself remained the same, with the BAI comprising of 21 statements which portray recognised symptoms/traits of anxiety. For each statement, the respondent indicates on a 4 point scale how much that statement resonates with them- from ‘not at all’ to ‘mildly; it did not bother me much’ to ‘moderately; it was very unpleasant, but I could stand it’ to ‘severely; I could barely stand it’. While the BAI is a self-reported measure of anxiety and is designed to be administered and scored by both professionals and paraprofessionals, it is recommended that only professionals with the applicable clinical competency use and interpret the BAI (Beck & Steer, 1993). Beck and Steer (1993) also recommend that due to anxiety’s frequent co-morbidity with depression, that the BAI can be used with other mood-related psychometrics such as the

BDI-II to provide differential diagnoses and a more comprehensive perspective on the respondent's presentation.

In developing the BAI, three outpatient clinical samples were used, alongside a non-clinical sample of university students, with those in the clinical sample all having been diagnosed with anxiety disorders using semi-structured clinical interviews alongside the current Diagnostic and Statistical Manual of Mental Health Disorders of the time from the American Psychiatric Association (APA; DSM-III; 1980; DSM-III-R; 1987). In terms of the reliability of the BAI, for internal consistency cronbach's coefficient alphas of .92 and .94 were found, alongside corrected item-total correlations for five diagnostic groups reaching significance beyond the .05 level and significant test-retest correlation where $p < .001$ (Beck & Steer, 1993). In the BAI manual, Beck and Steer (1993) also demonstrate the BAI's content validity, construct validity, concurrent validity, factorial and discriminant validity, as well as address considerations in adjustments for age and gender.

As previously mentioned, the BAI was administered as part of the quantitative assessment battery in the initial part of each participant interviews. Similar to the BDI-II, the BAI is designed for both self-administration and oral administration, and takes between five and ten minutes approximately for a participant to fill out. This makes it ideal for use during a virtual interview over MS Teams as no adaption was needed to the testing protocol. Research participants were provided with a copy of the BAI for them to have in front of them to follow, and to be able to review the self-administer scale description and instructions on the BAI form itself. The researcher also held a copy of the BAI form, and provided the oral administration guidelines from the manual:

'*This questionnaire contains 21 symptoms. I will read each symptom allowed one by one. After each symptom that I read, I want you to tell me if you were not bothered at all, mildly bothered, moderately bothered, or severely bothered by this symptom during the past week, including today. That includes right now. "Mildly" means that the symptom did not bother you much; "moderately" means that you were bothered very much by the symptom; and "severely" means that you could barely stand it'* (*p4*; Beck & Steer, 1993)

In scoring the BAI, each rating for the 21 statements have a value ranging between 0 and 3 depending on the response given by the participant, which are summed to provide a total score up to a ceiling of 63. A participant is deemed to be in the 'minimal' range if their total score is between 0 and 7; in the 'mild' range of experienced anxiety where scores fall between 8 and 15; 'moderate' levels of anxiety if in the total score range of 16 to 25; and 'severe' range of anxiety if the participant's total score is between 26 and 63. As per the manual, it is important that the BAI score ranges are interpreted within the context and population that the BAI is being utilised for (Beck & Steer, 1993).

Data from the BAI were recorded into the Statistical Package for Social Sciences (SPSS) for data analysis including the total score as well as whether this was within the minimal, mild, moderate or severe range.

A copy of the BAI can be found in Appendix C.

The Life Events Checklist for the DSM-5

Another self-report measure that was used in the current study was the Life Events Checklist for the DSM-5 (LEC-5; Weathers et al, 2013). On this form, participants take into

consideration their entire lifetime to indicate which, if any, of 16 potentially traumatic events they may have experienced. Alongside these 16 types of events, there is the option to indicate an additional event that is not encapsulated in the other categories. Initially intended to be implemented with the Clinician-Administered PTSD Scale for DSM-IV (CAPS), the predecessor to the LEC-5, the LEC, was shown as a standalone assessment to have the sufficient requisite psychometric properties in gauging traumatic exposure. As there were minimal changes between the LEC and the LEC-5 (change of wording for item 15 and 'part of my job' added as a response category), few psychometric differences were expected between them (Weathers et al, 2013). When compared to measures of psychopathology correlated to exposure to trauma, the LEC was also found to have strong convergent validity (Gray et al, 2004).

The LEC-5 was administered as part of the quantitative test battery at the beginning of each participant interview. The measure was explained to each participant as per the description on the form, that it was being used to gather information about the different events they may have experienced across their entire life which could be considered traumatic, across a range of degrees/contexts of exposure (for example 'happened to me', 'learned about it', 'witnessed it', 'part of my job'). Participants were able to nominate several levels of exposure to a trauma type as was relevant to them across the six point nominal scale, as they may have both experienced something themselves and also witnessed it on another occasion, or at work etc. As the measure is used as a form of information gathering about the variety of types and levels of exposure to potentially traumatic events that happen to a person, there is no specific score or scale used other than descriptive format to add to contextual information (Weathers et al, 2013). Given that the purpose of the inclusion of the LEC-5 in the research was solely to

add exploratory information to the range of experiences each participant had, rather than to establish meeting the criteria for Criterion A for PTSD for any one specific event in the DSM-V, the standard self-report version was used.

Data from the LEC-5 were recorded into the Statistical Package for Social Sciences (SPSS) for data analysis including the type of event and under what context.

A copy of the LEC-5 can be found in Appendix D.

The Secondary Traumatic Stress Scale

The Secondary Traumatic Stress Scale (STSS) was originally developed by Bride and colleagues (2004), as they sought to construct a scale to assess the levels of avoidance, intrusion and arousal symptoms experienced by professionals when they are exposed to events that are distressing by means of the traumatised service users they work with. It consists of a 17-item self-report form which form three subscales scores ('Intrusion', 'Avoidance', 'Arousal'), and a 'Total' score. Using the 'Total' score, a score of 27 or below places the respondent into the 'little or no STS' range; a score between 28-37 indicates the 'mild STS' range; a score between 38-43 indicates a 'moderate STS' range; scoring between 44-48 indicates a 'high STS' range; and score of 49 or above places the respondent in the 'severe STS' range. From it's inception, Bride et al (2004) provided evidence that the STSS was shown to have factorial validity, convergent and discriminant validity, and reliability. Their initial population focused on social work practice, and since then this has been expanded by other published papers in a variety of fields and iterations, such as with Benuto et al (2018) and Jacobs et al (2019).

The STSS was introduced to participants in the study as part of the quantitative test battery during the interview over MS Teams. Both the participant and the researcher

had a copy of the form. The researcher read out the STSS description and instructions from the top of the form, allowing for the participant to ask for clarification and check for comprehension where necessary. Following this, the participant would nominate a response for each item using the five point nominal scale provided ('never', 'rarely', 'occasionally', 'often', 'very often'), and the researcher would record the participant's response on their form. Following the completion of the interview, the scale items were summed as per the instructions on the STSS form, with scores calculated for each participant for the Intrusion, Avoidance and Arousal subscales, as well as a Total score (Bride et al, 2004).

Scores and categories from the STSS were recorded into the Statistical Package for Social Sciences (SPSS) for data analysis for each subcale and whether the participant's score places them in the little or no, mild, moderate, high, or severe range.

A copy of the STSS can be found in Appendix E.

The Maslach Burnout Inventory- Human Services Survey

To focus more specifically in on the experience of burnout amongst participants, the Maslach Burnout Inventory- Human Services Survey (MBI-HSS) was utilised. This version of the scale was chosen as it was most applicable to the research population, when compared with the Educators Survey and the General Survey. According to Maslach et al (1997), the precursor to scale itself being developed was due to staff in areas such as human services are at risk of burnout syndrome- which is typified by depersonalisation, emotional fatigue, and reduced sense of efficacy. They also felt that this is related to the staff involvement with people, and more specifically the staff-service user engagement

being constantly focused on service user problems which are generally high in negative emotions like fear, anger, despair, embarrassment (Maslach et al, 1997).

The MBI-HSS contains 22 items that make up three separate subscales- 'Emotional Exhaustion', 'Depersonalisation' and 'Personal Accomplishment'- which it considers to be the three main elements that underpin burnout. Emotional Exhaustion consists of nine of the items on the MBI-HSS forms, Depersonalisation relates to five of the items, and there are 8 items that relate to Personal Accomplishment. Each item is written as a statement, to which the person completing the form responds as to how frequent they experience that feeling/attitude along a seven point nominal scale from 'never' to 'every day'. While the Personal Accomplishment subscale was found to be independent of the other two subscales, the correlations between Depersonalisation and Emotional Exhaustion were explained through there being common theoretical factors within them in experiencing burnout while still being separate constructs (Maslach et al, 1997).

As well as displaying convergent validity, discriminant validity, and stable test-retest reliability over time, the MBI's Cronbach's coefficient alpha (n = 1,316) estimated its internal consistency. The Emotional Exhaustion subscale had a reliability coefficient of .90 and a standard error of measurement of 3.80. The Depersonalisation subscale had a reliability coefficient of .79 and a standard error of measurement of 3.16. Lastly, the Personal Accomplishment subscale had a reliability coefficient of .71 and a standard error of measurement of 3.73 (Maslach et al, 1997).

Most notably as a difference between the MBI-HSS and the other quantitative forms used in the current research, is that though the MBI-HSS investigates burnout the term 'burnout' does not feature within the respondent's form. Maslach et al (1997) express this is so that respondents to the form are not influenced to negatively or

positively weight their responses with respect to their understanding of burnout, with the form being explained to them more neutrally as a survey of attitudes that could relate to one's work. During the quantitative portion of the participant interview, the researcher would read each item on the form along with the seven point nominal scale of frequencies. The researcher would record the participant's response to each item. Following the participant interview, and as per the administration instructions, the relevant items for each subscale were summed to achieve a total score on Emotional Exhaustion, Depersonalisation and Personal Accomplishment, as well as an average score obtained for each subscale. While the MBI-HSS is not a diagnostic instrument, using the MBI Manual these scores could then be compared to normative data as well as contextualised with the other quantitative and qualitative information garnered about each participant in the interviews (Maslach et al, 1997).

Scores and categories from the MBI-HSS were recorded into the Statistical Package for Social Sciences (SPSS) for data analysis, with high scores representing elevated levels of emotional exhaustion, depersonalisation, and/or personal accomplishment relatively.

In line with copyright agreements, example items from the MBI-HSS can be found in Appendix F.

The Pandemic Experiences & Perceptions Survey

The final questionnaire used in the quantitative portion of the participant interview was the Pandemic Experiences & Perceptions Survey (PEPS), which was developed by one of the authors involved in the MBI, Michael P Leiter, and similar to the MBI can be accessed through https://www.mindgarden.com . The PEPS was developed as a means to

be able to investigate the experience of staff that were working during the Covid19 pandemic, and consists of 35 items covering the following areas:

- ***"Disruption:*** *extent of workflow disruption*
- ***Resources:*** *to what extent were key resources adequate to meet demands*
- ***Risk Perception:*** *to what extent did employees feel at risk. What contributed to risk perceptions: Contact, Control, Potential harm*
- ***Impact on worklife areas:*** *Workload, Control, Reward, Community, Fairness, and Values Congruence*
- ***Perceptions of leadership*** *including Overall Leadership and Immediate Manager*
- ***Open-text items*** *identifying what would help employees now and what gives them hope"*

(https://www.mindgarden.com/346-pandemic-experiences-perceptions-survey#horizontalTab4)

The PEPS was administered to participants just prior to the qualitative portion of the research interview. Instructions were given as per the form, and the participants had the opportunity to ask for clarification throughout. The PEPS was an addition to the quantitative battery of psychometrics following the advent of the Covid19 Pandemic, to encapsulate specific experiences that related to the participants' experience of the pandemic, alongside the other aspects of the interview which also included up to whole-life perspectives. The survey itself was used as an exploratory mechanism to provide quantitative context to participants' qualitative experiences, which were further explored in the qualitative portion of the interview following. The items were scored as per the nominal scales, descriptive values and categories.

Scores and categories from the PEPS were recorded into the Statistical Package for Social Sciences (SPSS) for data analysis, allowing for individual inspection of participants' responses using descriptive statistics and histograms.

In line with copyright agreements, example items from the PEPS can be found in Appendix G.

Qualitative Questions

Following completion of the quantitative test battery, the participants were made aware that we were moving on to the qualitative portion of the interview. It was outlined to them that the qualitative questions were open ended and that they could articulate as much or as little as they felt they wanted or as they felt was relevant to the topic being discussed. The qualitative questions were developed in consultation with the research supervisor following reflection on how to best obtain as open-ended responses as possible, with minimal direction being provided by the researcher to the participants (for example, not using the word 'trauma' itself in the question as that may be leading the response). A major determinant in this approach was in trying to adhere to keeping the qualitative part as exploratorily pure as possible, given that we would be able to later utilise the quantitative data in making the qualitative bed. Indeed, as Grzanka & Moradi (2021) state:

> *Too much work in the field adopts a quantitative methodological orientation to qualitative inquiry. This is unsurprising, given that most qualitative researchers in counseling psychology are trained in quantitative methods first (Rubin et al., 2018). This results in a persistently frequentist approach to coding and data*

analysis that can turn nuanced data into reductionist accounts of most common themes that elide the whole purpose of qualitative inquiry in the first place: The opportunity to account for the unexpected, the unanticipated, the unpredicted. To be sure, counting frequencies in data is not inherently a bad practice. But it is not the only or even best way to account for what is occurring or most important in qualitative data. (p255)

The questions that were being used were chosen to gain insight into participants'' perspective, attitudes, beliefs, awareness and behaviour of the research topic. There were originally six questions, with a seventh question specifically being related to the Covid19 Pandemic being added in after the pandemic began. This was again because the pandemic was hypothesised to be having a major impact on staff's experience of working with trauma within their workplace, and adding a separate question allowed for distinction between them referring to work in general both pre-pandemic and during, versus about the impact of the pandemic itself. To best be able to attain as in-depth and thorough responses as possible, open-ended questions were used alongside standard probing prompts based on reflections of the words that the participant themselves used or clarification on points where needed (for example 'can you tell me more about that').

The qualitative questions that were felt would elicit the most beneficial responses with respect to the research purpose were:

1. What has been your experience so far of how the work itself impacts on your life?
2. What was your experience of the Covid19 Pandemic on your work?
3. What kind of supports are you aware of that can help with managing the impact of your work on you?

4. Which of these supports, if any, have you availed of?
5. What has been your impression of them?
6. Would you have any suggestions that you think might help reduce the impact of this type of work?
7. Is there anything else that you think is important to add to the research?

Prior to the qualitative questions being asked, participants were asked again if they consented to the interview being audio recorded for the purposes of transcription and analysis of the data afterwards. They were assured of the confidentiality of these recordings and transcripts. All participants consented to the recording. They were made aware when the audio recorder was being switched to record.

The qualitative interview questions were identical for both Time 1 and Time 2. The shortest qualitative interview length was 18 minutes, and the longest was 67 minutes.

Following the participant interviews, the audio from each interview was transcribed by the researcher using Microsoft Word. Next, the researcher utilised a thematic analysis approach to manually review the transcripts and begin identifying nodes and themes throughout the interview responses. After this, the transcripts were uploaded into NVivo software, where the researcher was able to fine tune these nodes and themes by coding them, still within using the thematic analysis approach.

Demographic details were also collected as part of the interview, including participants' age, gender, the time spent working in their current role, the time spent working in their professional overall, as well as their highest level of qualification.

Procedure of data collection

Ethical approval was initially applied for prior to the Covid19 pandemic beginning. In the initial application the only clarification sought by the TCD Ethics Committee was around the anonymisation of data when data was being analysed over two timepoints. The ethics application was amended to clarify this, and Ethics approval was granted. Data collection was due to start the week the lockdown began in Ireland, in March 2020. As a result of the lockdown and introduced infection prevention and control measures, the data collection needed to be postponed. Following this due to the significant demands this placed on the initial participant population, within the National Ambulance Service, they had to withdraw from the research. Further, as the Covid19 pandemic quickly became a global trauma, the study itself had to be redesigned in order to factor in this variable as it was a mitigating factor on the initial research topic. The following description of data collection will outline the procedure undertaken following these alterations being made.

Ethical approval was sought for the new research investigation protocol and granted in November 2020. The only amendment which was required at the time by the TCD Ethics Committee was that the interviews were to be conducted virtually over MS Teams due to the guidelines at that point in place by TCD, which were in line with the Irish Government lockdown restrictions. The TCD guidelines dictated the choice to administer the surveys and hold the qualitative interviews over MS Teams. The psychometrics and interviews were held during the same meetings online via MS Teams, as the TCD Ethics Approval had been granted on the basis that the researcher was also a qualified

counselling psychologist that would be able to triage to supports if any distress concerns arose (for example the statements on suicidal ideation in the BDI-II).

Due to the impact of Covid19 restrictions, while the optimal form of interview would have been face-to-face, interviews and workshops were adapted to be carried out virtually over Microsoft Teams. All measures were able to be completed virtually without significant alteration to the procedure. For example, the psychometrics could be completed by asking the questions over Microsoft Teams and the researcher recording the responses, as opposed to the participant completing the forms themselves when in-person.

Consent was obtained via the information and consent form (see Appendix H), about which participants were able to ask questions during the initial meeting with the researcher prior to signing.

The information and consent forms (see Appendix H) were disseminated by the relevant service managers initially to their teams, who were given the option to consent in or out to receiving email contact from me in relation to the study. Those that consented were contacted via email with the information and consent forms again attached, inviting them to ask questions and/or take part in the study if they wished.

Those participants that consented to be in the research were then asked to sign and return a consent form prior to arranging an initial appointment. At this point, they were provided with a copy of the quantitative questionnaires that would be filled out during the initial interview, as it was felt more efficient for both them as well as the interviewer to have a copy during the MS Teams meeting for better comprehension of the questionnaires' items. Interview times were then arranged with each of the participants at a time that would best suit them within the context of their work/caseloads. They were

then sent out a secure invite link for the MS Teams interview to the email address they had nominated to be contacted on. Participants were also given a contact phone number for the researcher should they experience any technological difficulty in accessing the MS Teams platform initially or in case there were any disruptions due to technical difficulties during the interview.

In the first meeting, clients were introduced again to the study and reminded of the information/consent form. Any questions they had were addressed. The participants were then asked to complete a battery of self-report measures (Life Events Checklist-V, Professional Quality of Life scale, Secondary Traumatic Stress Scale, Beck's Depression Inventory-II, Beck's Anxiety Inventory, Maslach's Burnout Inventory Human Services Survey, Pandemic Experiences and Perceptions Survey). During this, the interviewer would explain each questionnaire in turn and go through the items with the participant. The participant would verbally indicate their rating/response on each item, and the interviewer would note this answer on their copy of the forms. Throughout this process if the participant had any questions or queries around the items they had the opportunity to clarify with the interviewer.

Once they had completed the self-report questionnaires, participants were asked to provide some qualitative answers to the open questions. All qualitative interviews were audio recorded for the purposes of accuracy during the thematic analysis following the data collection. Prior to audio recording, it was confirmed again with participants that they consented to the interview being recorded for said research purposes, and given the option for no recording if preferred. All participants consented to the audio recording. At this point, if agreeable, the researcher asked questions/prompts in relation to their

experience from working in their current environment. The list of prompt questions can be found in Appendix I.

The participant were then thanked for their time and reminded of the contact details pertaining to the study if any questions should arise in relation to it between now and the next they were contacted by the researcher for the next part of the study.

The 1-hour educational and reflective group workshop entitled 'Minding Ourselves during the Pandemic', was being gradually rolled out across the Health Service in the area since earlier in the pandemic. The staff would be due to receive this workshop regardless of whether they are in the study or not, as it was part of the HSE psychosocial response supports. The teams on which the participants were part of were offered the opportunity to attend this workshop approximately 3 months following the 'Time 1' interviews. The workshop focussed on staff wellbeing during the pandemic, drawing on principles from Psychological First Aid, trauma informed care, and mindfulness. These workshops were delivered online through MS Teams.

At 6 months following the 'Time 1' interviews, the participants were contacted via email to schedule the 'Time 2' interviews. Similar to the first round, these were to be held through MS Teams and links were sent out to the participants for their preferred times. They were sent a copy of the battery of quantitative questionnaires in advance of this interview.

During the 'Time 2' interview, the participant was reminded of the study rational, the information and consent forms, and told that the interview would follow the same structure as the initial meeting. Similarly, each of the questionnaires was completed (Life Events Checklist-V, Professional Quality of Life scale, Secondary Traumatic Stress Scale, Beck's Depression Inventory-II, Beck's Anxiety Inventory, Maslach's Burnout Inventory

Human Services Survey, Pandemic Experiences and Perceptions Survey) with the participant as the interviewer recorded their responses. Following this, consent again was verbally confirmed for the audio recording of the qualitative portion of the interview. The same qualitative prompts as in the first interview were used (see Appendix I).

After the completion of the 'Time 2' interviews, each participant was thanked for their contributions to the research and again provided with the contact details of the research and other support resources should anything have arisen for them as a result of participating in the study, or if they had any follow-up questions.

With the pivot to the primary research aims being qualitatively driven, the sample size was determined based on qualitative research benchmarks. Consequently, a power analysis was not obtained in relation to the quantitative data given the discrepancy that would exist between the power analysis as it relates to quantitative research and qualitative research.

As Fugard and Potts (2015) assert, unlike quantitative studies- where sample sizes can be calculated using power analyses- qualitative research does not have a one-size-fits-all formula. Instead, qualitative sample sizes are determined by balancing two competing needs: having a sample small enough to manage and large enough to capture the rich, diverse experiences required to address the research question. Qualitative studies must lean on more subjective, context-specific judgment. In qualitative research, the key consideration is achieving a balance: the sample must be small enough to allow a deep, detailed analysis yet large enough to capture a richly textured understanding of the phenomenon. Researchers often use the concept of saturation- the point at which no new themes or insights emerge- to decide when enough data have been collected. Various

empirical studies, such as Guest et al (2006), and expert opinions suggest that saturation can sometimes be achieved with as few as 6 to 12 interviews, although the exact number will depend on factors such as the heterogeneity of the sample, the study's scope, available resources, and the depth of analysis required. Other practical factors- ethical concerns, participant availability, and time constraints- also play significant roles in determining the final sample size (Fugard & Potts, 2015).

Within each of the psychometrics there are procedures to follow when there is missing data- eg if an item has not been responded to by a respondent. In general, each measure allows for this to be accommodated for within the normative sample for up to 2 missing items for any given scale. For subscales, total figures are divided by number of items scored rather than total number of items (for example if only 7 or 8 items relating to that subscale were responded to, the total subscale score would be divided by 7 instead of 8 to arrive at the relevant score). Due to the interviews being carried out live over audiovisual means, it allowed both for the interviewer to keep track so that an item was not missed and also for participants for ask for clarification on what an item meant if they were unsure. As a result, there were no missing items with respect to scores on psychometrics which were included in the quantitative analysis. There were missing items on the Pandemic Experiences & Perceptions Survey, however this was due to the item not being felt relevant by the participant to their role. The PEPS was not use for quantitative analysis in SPSS, but rather associated descriptively where relevant during the qualitative analysis. This was as the PEPS was a newly developed survey which scope was to capture as wide a picture possible across all health staff (for example, one question around access to appropriate treatment equipment, which was not relevant to most of the participants within the current research).

Procedure of Data Analysis

The statistical methods chosen for the quantitative data was done so primarily because the limitations presented by the sample size in attaining meaningful standalone quantitative results. Following the pivot of the research to focus on the qualitative data as the main source of reflection, the quantitative data was felt best utilised as additional descriptors within the context of the respective salient existing literature of ways working with trauma can impact frontline staff (eg through burnout, compassion fatigue, etc). Through this they may provide further nuances between samples and timepoints which may allow for expansion on various aspects of the thematic analysis.

Thematic analysis was chosen as it is not just a method within qualitative psychology that is widely utilised, but that it is also one which '*requires deliberation from researches, the importance of a thoughtful, reflective research practice- a practice emphasized as crucial in many quality standards and guidelines (*Braun & Clarke, 2022*, p4),* eg Levitt et al, 2017; Yardley, 2015; Elliot et al, 1999.

Those conducting research using qualitative methods are generally seeking to make sense of quite a diverse range of phenomena, and within that it makes sense then that research questions are guided by what the investigator is attempting to understand through the analysis of their data. According to Braun & Clarke (2022), reflexive thematic analysis is an ideal option as a method for research where questions centre on exploring sense making of participants experiences- which happen to also be of most interest to psychologists. They outline specific types of research questions which indicate reflexive thematic analysis as a suitable approach. Within these, they ascertain that questions which focus on "*people's contextually situated lived experiences and interpretations of*

subjective phenomena' as well as "*the views, perceptions, understandings, perspectives, needs, motivations of particular groups, about particular phenomena, in particular contexts (often combined with lived experience questions)"* and "*the factors or social processes that influence the shape and texture of particular phenomena*" (Braun & Clarke, 2022; p 11) all point towards thematic analysis as an ideal approach. Given that the research questions within the current research fall within the confines of these types of questions, it was felt appropriate that thematic analysis be utilised as the approach to qualitative data analysis.

The concept of "data saturation" as a straightforward rationale for deciding sample size in thematic analysis (TA) research is important to address here. Researchers often claim they have reached data saturation when no new insights emerge, making it a seemingly self-evident justification for the chosen sample size. This idea, which evolved from "theoretical saturation" (Glaser & Strauss, 1967), is frequently assumed without explicit definition (Braun & Clarke, 2019b). Instead of viewing sample size as a fixed number, it is described as an iterative, context-specific decision where adequacy is determined through continuous interpretation during data collection. Sim et al. (2018) emphasize that determining when enough data has been collected is an evolving process tied to the study's aims.

The notion of stopping data collection once "no new" information is obtained (Morse, 1995) can be questioned, as qualitative research is inherently reflexive. Researchers may always derive fresh perspectives by engaging with data differently (Mason, 2010; Ho et al., 2017). Rather than precise calculations based solely on saturation, the concept of "information power" (Malterud et al., 2016) is proposed by

Braun & Clarke (2022). This model encourages researchers to consider the richness and relevance of the data in relation to their study's objectives, thereby advocating for a more flexible and nuanced approach to determining sample size. While data saturation is widely cited in TA research as an indicator for sample adequacy, its application is more rhetorical than definitive. The decision about sample size should be reflective, iterative, and based on the information richness of the data, rather than a fixed endpoint when no new data seems to emerge (Braun & Clarke, 2022).

For each participant in the research study, there were 7 questionnaires from the 'Time 1' interview- the Life Events Checklist-V, Professional Quality of Life scale, Secondary Traumatic Stress Scale, Beck's Depression Inventory-II, Beck's Anxiety Inventory, Maslach's Burnout Inventory, and the Pandemic Experiences and Perceptions Survey. There was also a qualitative interview portion for each participant in 'Time 1'.

Similarly, there were the same identical 7 questionnaires for each participant that completed the 'Time 2' interviews, as well as a qualitative interview portion which included the same main prompt questions as the 'Time 1' interview.

Each participant was anonymised and coded so that the 'Time 1' and 'Time 2' questionnaires and interviews could be linked together but without personally identifying information about the participant who completed them.

Next, the researcher scored and coded each of the seven questionnaires for each participant for both 'Time 1' and 'Time 2'. Once this was completed, the data was input into an SPSS data sheet (Statistical Package for Social Sciences) for analysis of the quantitative data. The demographic details of the participants were also input into SPSS for the purposes of gaining insight into the demographics of the sample used.

Descriptive statistics, including frequencies, means, and standard deviations were ran where relevant for each of the questionnaires, both as a whole group and separated by participant group (Social Inclusion group and Nursing group).

For each of the questionnaires, paired-samples t-tests were ran to ascertain if there was a significant difference between Time 1 of participants responses and Time 2, six months later. This was carried out for the groups as a whole, and for each group independently. A between-samples t-test was also carried out to compare the Social Inclusion and Nursing groups' responses for Time 1 and for Time 2, for each psychometric, to investigate if there was a significant difference between them.

As previously mentioned, the quantitative data was being utilised to add numeric descriptive value and contextualisation to the qualitative themes. The quantitative measures sought to provide insight into whether, during the pandemic, there would be a change in a participant's felt professional quality of life, experience of depression, experience of anxiety, experience of burnout, and experience of secondary traumatic stress symptoms.

The qualitative data was utilised to address the primary research questions, namely: What was the impact of the pandemic on the psychological wellbeing of frontline health workers?; What impact does the work environment have on the psychological wellbeing of frontline health workers?; What are the perceptions of wellbeing supports amongst frontline healthcare workers?

The 'Time 1' and 'Time 2' audio recordings were transcribed for the purposes of thematic analysis of the qualitative data. The step-by-step process for Thematic Analysis as described by Braun & Clarke (2006) was then applied to the qualitative data. Braun &

Clarke's (2006) first step was to become familiar with the data. The process of transcribing allowed the researcher to develop an in depth understanding of the responses given by the participants during the study. This set the precursors for the ensuing steps, where data itself could then be broken down into different subgroups, allowing for examination of individual nuances as well as cross-comparing of the themes. The data could be considered as a whole group, as a 'Time 1' vs 'Time 2' comparison, and as a 'Public Health Nurses' vs 'Social Inclusion staff'.

Following the transcribing, step 2 involved generating initial codes- the researcher reviewed the transcripts in detail, identifying key points of interest relevant to the research questions. From these key points, nodes were created with a view to identifying salient themes throughout, aligning with step 3 of searching for themes (Braun & Clarke, 2006).

Aiding with Braun & Clarke's (2006) step 4 of reviewing themes, the transcripts were then input into NVivo software, which is a software commonly used for the purposes of analysis qualitative interviews. Utilising the key points identified during the initial analysis of the data, nodes and themes were created that would capture these with respect to the participant interviews. This consequently allowed for step 5, where the themes were defined prior to write up.

With further regard to ensuring rigour in both the research design and coding process, Braun & Clarke (2022) note that good quality coding can be obtained from a single analyst, rather than being dependant on multiple coders, though it can be achieved through collaboration. This occurs as codes and themes arise from a process which involves reciprocal immersion in the data and reflective distancing for them to develop. In the current research, the researcher combined this process while also collaboratively

engaging the research supervisor in giving him access to a selection of the transcripts, and subsequently the initial codes and themes as they were developing, for corroboration. Themes are more than summaries of meaning related to a topic, but more patterns of meaning anchored in a shared concept. They are produced through analytic engagement with the data by the researcher and underpinned by the organic development of theoretical understanding gained through continuous engagement with the data and understanding of prevalent and emerging research in the field. As such, the themes are an output of the data following the aforementioned dual processes of immersion and distancing has occurred over prolonged engagement (Braun & Clarke, 2022).

Ethical issues

Though there would not be a focus on specific traumatic events during the study, it was possible that clients might become distressed when identifying associated emotions or emotional stressors. As the researcher was a Chartered Psychologist with the Psychological Society of Ireland, a full member of the PSI Division of Counselling Psychology, and worked as a Senior Psychologist with over a decade of professional experience, it was felt that the expertise was there to be able to contain and provide a safe space to support any adverse reactions that might have occurred, as well as to be able to encourage access to the available supports to the participants. Information regarding supports available (eg through their organisation's Employee Assistance Programme) were on hand and made available to the participants at several points throughout the testing process.

Results part 1: Quantitative Data Analysis

As previously outlined, there is quantitative data within which it is endeavoured to help contextualise the qualitative data. These quantitative points of interests were attained based on the prevalent domains in the research. The psychometric measures used provide insight into whether, during the pandemic, there will be a change in a participant's felt professional quality of life, experience of depression, experience of anxiety, experience of burnout, and experience of secondary traumatic stress symptoms. The analysis of the quantitative data may highlight nuances in the data which prompt discussion talking points with respect to the qualitative outcomes.

While the focus of the study is on the qualitative piece, the quantitative data analysis will be outlined first. The rationale for this is that it provides an initial base descriptive overview of the participants and data prior to introducing the qualitative threads to the tapestry. Further, it allows for the main relevant quantitative elements to be coherently drawn into the qualitative discussion with respect to the main research questions, rather than detracting from the qualitative flow by reverting to excessive quantitative descriptives post-hoc.

Demographics

There were 30 participants in the total sample. Of these, 19 participants worked as frontline staff in Social Inclusion, and 11 in Public Health Nursing. For Time 1 there were complete sample numbers of all participants, however there was an attrition of 4 for Time

2; 2 from Social Inclusion and 2 from Nursing did not attend for Time 2 interviews. A demographic breakdown of the participants in the study can again be seen in Table 2.

Table 2

Demographic Breakdown of the Participants in the Study

		Nursing (*n=11*)	Social Inclusion (*n=19*)
Gender			
	Female	11	13
	Male	0	6
Age Range			
	25-34	0	3
	35-44	4	8
	45-54	4	5
	55-64	3	3
Time in Role			
	< 2 years	0	10
	2-5 years	4	6
	6-10 years	1	0
	11-15 years	4	3
	> 15 years	2	0
Time in Profession			
	< 5 years	0	2
	6-10 years	1	6
	11-15 years	4	4
	16-20 years	1	2
	> 20 years	5	5
Highest level of education			
	Level 7 (Ordinary Degree)	0	2
	Level 8 (Honours Degree)	3	10
	Level 9 (Master's Degree)	8	6
	Level 10 (Doctorate/PhD)	0	1

The age range of the total sample was from 30-62 years old with mean age 46.57 years and range of 32. Three participants were in the 25-34 age range, twelve in 35-44 range, nine were in the 45-54 range, and six in 55-64 age range. For the Social Inclusion

group, the age range pf participants was 30-61 with mean age of 44.47 years and a range of 31. Three were in the 25-34 range, eight in 35-44, five in 45-54, and three participants in 55-64 years range. In the Nursing participant group, the age range was 37-62 with a mean age of 50.18 years and a range of 25. Four Nursing staff participants were in the 35-44 bracket, four in the 45-54 bracket, and three in the 55-64 age bracket.

In terms of gender, for the total participant group there were 6 males and 24 females. Split between groups, there were 6 males and 13 females working in Social Inclusion, and 11 females working in Nursing.

In terms of time spent working in their current role, for the whole group, 10 were in their role less than 2 years, 10 were in it between 2-5 years, 1 was 6-10 years, 7 were 11-15 years, and 2 were in their roles greater than 15 years. The mean time working in their roles was 5.76 years with a range of 19.7 years. Separately for Social Inclusion, 10 participants were in their roles for less than 2 years, 6 were between 2-5 years, and 3 were working in their roles for 11-15 years. The mean length in work-role for Social Inclusion was 3.33 years, with a range of 12.7 years. In Nursing, 4 of the participants were working in their roles from 2-5 years, 1 was there 6-10 years, 4 were between 11-15 years, and 2 were greater than 15 years. The mean time in role for Nursing was 9.96 years with a range of 18 years.

Alongside time in their current role, the present study asked participants how long they had worked in their profession (which would have included experience in other organisations or agencies). For the total spent working in their respective profession, for the whole group 2 were in the profession less than 5 years, 7 were 6-10 years, 8 were 11-15 years, 3 were 16-20 years, and 10 were working in their profession for greater than 20 years. The mean time in profession was 16.37 years, with a range of 29 years. In terms of

the Social Inclusion group, 2 participants were working in the profession for less than 5 years, 6 were in it between 6-10 years, 4 were between 11 to 15 years in the profession, 2 were in it 16-20 years, and 5 were working in the sector for greater than 20 years. The mean time in the profession for Social Inclusion participants was 14.9 years, with a range of 29 years. In the Nursing group, 1 participant was working in the profession between 6-10 years, 4 were between 11 to 15 years, 1 was in Nursing 16-20 years, and 5 were working in the Nursing profession for greater than 20 years. The mean time in profession for Nursing participants was 18.91 years, with a range of 22 years.

Participants were also asked for their highest level of education received to date. In the Irish education system, and for the purposes of the research, a 'level 7' is considered equivalent to an ordinary bachelor's degree, a 'level 8' would be an honours bachelor's degree, a 'level 9' a master's degree, and a 'level 10' would be a doctorate/PhD. For the whole group, in total 2 of the participants held level 7 qualifications, 13 held level 8, 14 held level 9, and 1 held level 10 qualifications. In the Social Inclusion group, 2 participants held level 7, 10 held level 8, 6 held level 9, and 1 held a level 10 qualification. For the Nursing group, 3 of the participants held level 8 qualifications, and 8 held level 9 qualifications.

Life Events Checklist for the DSM-V

The Life Events Checklist for the DSM-V provides an descriptive overview of the types of traumatic events that a participant has experienced throughout their life, as well as the context/environment in which it occurred. There were some variations between Time 1 and Time 2 – however numbers may have been impacted by the dropout of 4

participants at Time 2. Two participants from each group did not complete the second round of psychometrics.

Whole group:

For the whole group in Time 1, the number of events that happened to a participant ranged from none to 8 events, with a mean of 3.3; the number of events witnessed ranged from none to 8, with a mean of 2.87; the number of events learned about ranged from none to 15, with a mean of 3.9; the number of events experienced as part of their job ranged from none to 15, with a mean of 6.23; events they were not sure about ranged from none to 8 with a mean of .5; does not apply ranged from 1 to 12 with a mean of 7.3; and total experienced ranged between 2 and 43 with a mean of 15.3

For the whole group in Time 2, the number of events that happened to a participant ranged from none to 6 events, with a mean of 2.58; the number of events witnessed ranged from none to 8, with a mean of 2.27; the number of events learned about ranged from none to 16, with a mean of 4.38; the number of events experienced as part of their job ranged from none to 11, with a mean of 3.08; events they were not sure about ranged from none to 2 with a mean of .35; does not apply ranged from 0 to 13 with a mean of 6.85; and total experienced ranged between 3 and 34 with a mean of 12.31

The number participants in the whole group that experienced the respective traumatic events for each category, at Time 1 and Time 2, on the LEC-5 can be seen in Table 3 below:

Table 3

Aggregate Item Responses on the LEC-V for the Whole Group

	Happened to me		Witnessed it		Learned about it		Part of my job		Not sure		Doesn't apply	
Event	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
Natural disaster	8	7	5	2	8	4	6	1	1	0	17	16
Fire or explosions	4	1	6	6	4	3	7	4	1	1	14	11
Transportation accident	9	10	8	1	6	4	5	3	0	1	12	9
Serious accident at work, home, or during recreational activity	6	4	5	3	6	7	9	3	1	2	15	12
Exposure to toxic substance	0	0	0	0	1	5	2	1	1	0	26	18
Physical assault	14	9	13	8	9	9	14	8	0	1	5	4
Assault with a weapon	8	3	6	5	8	7	13	6	0	0	9	11
Sexual assault	8	7	1	0	10	10	15	8	1	0	11	9
Other unwanted or uncomfortable sexual experience	9	10	2	1	9	10	14	6	2	0	10	9
Combat or exposure to a war-zone	1	1	1	0	5	4	5	0	0	0	22	21
Captivity	0	0	2	0	6	4	10	6	1	0	18	16
Life-threatening illness or injury	3	4	8	11	11	6	16	6	1	0	9	8
Severe human suffering	3	2	9	6	8	8	20	7	2	1	3	6
Sudden violent death	3	1	5	6	12	12	24	8	1	0	1	4
Sudden accidental death	2	1	4	6	7	10	16	7	0	1	7	7
Serious injury, harm, or death you caused to someone else	0	0	0	0	0	4	1	1	0	0	29	23
Any other stressful event or experience	10	7	6	4	5	7	6	5	2	3	10	2

Social inclusion

For the Social Inclusion group in Time 1, the number of events that happened to a participant ranged from 1 to 8 events, with a mean of 4.37; the number of events witnessed ranged from none to 8, with a mean of 3.05; the number of events learned about ranged from none to 15, with a mean of 4.58; the number of events experienced as

part of their job ranged from none to 15, with a mean of 6.79; events they were not sure about ranged from none to 8 with a mean of .58; does not apply ranged from 1 to 12 with a mean of 6.95; and total experienced ranged between 2 and 43 with a mean of 17.21 events.

For the Social Inclusion group in Time 2, the number of events that happened to a participant ranged from none to 6 events, with a mean of 3.29; the number of events witnessed ranged from none to 8, with a mean of 2.71; the number of events learned about ranged from none to 13, with a mean of 3.71; the number of events experienced as part of their job ranged from none to 11 with a mean of 3; events they were not sure about ranged from none to 2 with a mean of .35; does not apply ranged from none to 13 with a mean of 6.59; and total experienced ranged between 3 and 34 with a mean of 12.71 events.

The number participants in the Social Inclusion group that experienced the respective traumatic events for each category, at Time 1 and Time 2, on the LEC-5 can be seen in Table 4 following:

Table 4

Aggregate Item Responses on the LEC-V for the Social Inclusion Group

	Happened to me		Witnessed it		Learned about it		Part of my job		Not sure		Doesn't apply	
Event	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
Natural disaster	5	4	3	2	5	2	4	1	0	0	13	12
Fire or explosions	2	1	4	5	3	1	5	3	1	0	8	7
Transportation accident	7	7	5	1	4	2	2	2	0	0	7	7
Serious accident at work, home, or during recreational activity	5	4	4	3	4	3	5	1	1	2	9	7
Exposure to toxic substance	0	0	0	0	1	3	0	0	1	0	17	13
Physical assault	12	8	9	4	7	5	10	6	0	1	1	1

Assault with a weapon	7	3	6	5	5	5	8	4	0	0	5	5
Sexual assault	8	7	1	0	8	6	11	5	1	0	4	4
Other unwanted or uncomfortable sexual experience	8	9	2	1	7	6	10	4	1	0	5	4
Combat or exposure to a war-zone	0	0	0	0	3	3	5	0	0	0	15	14
Captivity	0	0	1	0	6	3	9	5	1	0	8	9
Life-threatening illness or injury	3	4	5	7	10	4	11	3	1	0	5	4
Severe human suffering	3	1	4	4	6	3	14	5	2	1	2	4
Sudden violent death	3	1	4	6	7	6	16	5	1	0	1	2
Sudden accidental death	2	1	2	5	6	5	11	4	0	1	4	3
Serious injury, harm, or death you caused to someone else	0	0	0	0	0	2	0	0	0	0	19	15
Any other stressful event or experience	7	6	3	3	3	4	4	3	0	2	8	1

Nursing

For the Nursing group in Time 1, the number of events that happened to a participant ranged from none to 4 events, with a mean of 1.45; the number of events witnessed ranged from none to 7, with a mean of 2.55; the number of events learned about ranged from none to 8, with a mean of 2.73; the number of events experienced as part of their job ranged from none to 13, with a mean of 5.27; events they were not sure about ranged from none to 1 with a mean of .36; does not apply ranged from 2 to 12 with a mean of 7.91; and total experienced ranged between 2 and 23 with a mean of 12 events.

For the Nursing group in Time 2, the number of events that happened to a participant ranged from none to 3 events, with a mean of 1.22; the number of events witnessed ranged from none to 3, with a mean of 1.44; the number of events learned

about ranged from none to 16, with a mean of 5.67; the number of events experienced as part of their job ranged from none to 10, with a mean of 3.22; events they were not sure about ranged from none to 1 with a mean of .33; does not apply ranged from 1 to 13 with a mean of 7.33; and total experienced ranged between 3 and 22 with a mean of 11.56 events.

The number participants in the Nursing group that experienced the respective traumatic events for each category, at Time 1 and Time 2, on the LEC-5 can be seen in Table 5 following:

Table 5

Aggregate Item Responses on the LEC-V for the Nursing Group

	Happened to me		Witnessed it		Learned about it		Part of my job		Not sure		Doesn't apply	
Event	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
Natural disaster	3	3	2	0	3	2	2	0	1	0	4	4
Fire or explosions	2	0	2	1	1	2	2	1	0	1	6	4
Transportation accident	2	3	3	0	2	2	3	1	0	1	5	2
Serious accident at work, home, or during recreational activity	1	0	1	0	2	4	4	2	0	0	6	5
Exposure to toxic substance	0	0	0	0	0	2	2	1	0	0	9	5
Physical assault	2	1	4	4	2	4	4	2	0	0	4	3
Assault with a weapon	1	0	0	0	3	2	5	2	0	0	4	6
Sexual assault	0	0	0	0	2	4	4	3	0	0	7	5
Other unwanted or uncomfortable sexual experience	1	1	0	0	2	4	4	2	1	0	5	5
Combat or exposure to a war-zone	1	1	1	0	2	1	0	0	0	0	7	7
Captivity	0	0	1	0	0	1	1	1	0	0	10	7
Life-threatening illness or injury	0	0	3	4	1	2	5	3	0	0	4	4
Severe human suffering	0	1	5	2	2	5	6	2	0	0	1	2
Sudden violent death	0	0	1	0	5	6	8	3	0	0	0	2

Sudden accidental death	0	0	2	1	1	5	5	3	0	0	3	4
Serious injury, harm, or death you caused to someone else	0	0	0	0	0	2	1	1	0	0	10	8
Any other stressful event or experience	3	1	3	1	2	3	2	2	2	1	2	1

There will be a change in a participant's felt professional quality of life over time during the pandemic

To investigate this research question, the ProQoL was utilised. In the ProQoL there are three subscales- 'compassion satisfaction', 'burnout' and 'secondary traumatic stress'. These three subscales were analysed across Time 1 and Time 2 for the group as a whole, separately for the individual groups (Social Inclusion and Nursing), as well as between the two groups. To control for the family-wise error rate due to multiple comparisons, a Bonferroni correction was employed, adjusting the p-value threshold by dividing the initial alpha level of 0.05 by the number of comparisons (15), resulting in a new threshold of 0.00333. Results were considered statistically significant if the p-value was less than or equal to 0.00333 (Bonferroni corrected).

For the whole group:

To check the data for distribution, a Shapiro-Wilk test was not significant, $W(30) = .948$, $p = .153$, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in participant's felt sense of compassion satisfaction using the ProQoL with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that compassion satisfaction at

Time 2 (*M* = 38.54, *SD* = 5.03) was significantly lower than compassion satisfaction at Time 1 (*M* = 41.73, *SD* = 4.11), *t*(25) = 4.48, *p* <.001.

To check the data for distribution, a Shapiro-Wilk test was not significant, W(30) = .97, p = .541, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in participant's felt sense of burnout using the ProQoL with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the felt sense of burnout at Time 1 (*M* = 22.23, *SD* = 4.09) and felt sense of burnout at Time 2 (*M* = 23.15, *SD* = 5.11), *t*(25) = -1.59, *p* = .125 .

To check the data for distribution, a Shapiro-Wilk test was not significant, W(30) = .935, p = .065, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in participant's felt sense of secondary traumatic stress using the ProQoL with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of the pandemic lockdown. The results indicate that there was no significant difference between the felt sense of secondary traumatic stress at Time 1 (*M* = 21.65, *SD* = 4.75) and felt sense of secondary traumatic stress at Time 2 (*M* = 22.31, *SD* = 5.73), *t*(25) = -.69, *p* = .498 .

For the Social Inclusion group:

To check the data for distribution, a Shapiro-Wilk test was not significant, W(19) = .919, p = .107, and thus normal distribution is assumed and a parametric test was used. A

paired samples *t*-test was performed to evaluate whether there was a difference in Social Inclusion participant's felt sense of compassion satisfaction using the ProQoL with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that compassion satisfaction in Social Inclusion frontline staff at Time 2 (M = 38.12, SD = 5.4) was significantly lower than compassion satisfaction at Time 1 (M = 42.47, SD = 4.35), $t(16)$ = 5.608, p <.001.

To check the data for distribution, a Shapiro-Wilk test was not significant, W(19) = .948, p = .364, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Social Inclusion participant's felt sense of burnout using the ProQoL with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. While approaching significance, the results indicate that felt sense of burnout at Time 2 (M = 24.76, SD = 5.22) was not significantly higher than burnout at Time 1 (M = 22.94, SD = 4.67), $t(16)$ = -2.42, p = .028 amongst Social Inclusion frontline staff after the Bonferroni correction was applied.

To check the data for distribution, a Shapiro-Wilk test was not significant, W(19) = .923, p = .127, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Social Inclusion participant's felt sense of secondary traumatic stress using the ProQoL with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the felt sense of secondary traumatic stress at Time 1 (M =

23.12, *SD* = 5.02) and felt sense of secondary traumatic stress at Time 2 (*M* = 24.24, *SD* = 5.3), *t*(16) = -.92, *p* = .373 .

For the Nursing group:

To check the data for distribution, a Shapiro-Wilk test was not significant, W(11) = .936, p = .475, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Nursing participant's felt sense of compassion satisfaction using the ProQoL with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Nursing participants compassion satisfaction at Time 1 (*M* = 40.33, *SD* = 3.43) and compassion satisfaction at Time 2 (*M* = 39.33, *SD* = 4.44), *t*(8) = -.849, *p* = .421 .

To check the data for distribution, a Shapiro-Wilk test was not significant, W(11) = .956, p = .722, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Nursing participant's felt sense of burnout using the ProQoL with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that that there was no significant difference between the felt sense of burnout at Time 1 (*M* = 20.89, *SD* = 2.37) and felt sense of burnout at Time 2 (*M* = 20.11, *SD* = 3.37), *t*(8) = 1.31, *p* = .228 .

To check the data for distribution, a Shapiro-Wilk test was not significant, W(11) = .956, p = .721, and thus normal distribution is assumed and a parametric test was used. A

paired samples *t*-test was performed to evaluate whether there was a difference in Nursing participant's felt sense of secondary traumatic stress using the ProQoL with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the felt sense of secondary traumatic stress at Time 1 (M = 18.89, SD = 2.62) and felt sense of secondary traumatic stress at Time 2 (M = 18.67, SD = 4.87), $t(8) = -.143$, $p = .89$.

Between groups at Time 1 and Time 2:

An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participants' felt sense of compassion satisfaction on the ProQol with regards their profession at Time 1 during level 5 of pandemic lockdown. The results indicate that there was no significant difference between Social Inclusion and Nursing staff, $t(28) = 1.8$, $p = .083$, despite Social Inclusion (M = 42.32, SD = 4.18) reporting a higher level of compassion satisfaction than Nursing (M = 39.64, SD = 3.44).

An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participants' felt sense of burnout on the ProQol with regards their profession at Time 1 during level 5 of pandemic lockdown. The results indicate that there was no significant difference between Social Inclusion and Nursing staff, $t(28) = 1.15$, $p = .26$, despite Social Inclusion (M = 22.79, SD = 4.58) reporting a higher level of burnout than Nursing (M = 21.09, SD = 2.21).

An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participants' felt sense of secondary traumatic stress on the ProQol with regards their profession at Time 1 during level 5 of pandemic lockdown. While approaching significance, after the Bonferroni correction was applied the results indicate that there was not a significant difference reported between Social Inclusion and Nursing staff, $t(28) = 2.14$, $p = .041$, though Social Inclusion ($M = 23.16$, $SD = 4.97$) reported a higher level of secondary traumatic stress than Nursing ($M = 19.64$, $SD = 2.91$).

A parametric test was used as a Shapiro-Wilk test was not significant for either group's data distribution at Time 2- for Social Inclusion W(17) = .955, p = .534 and for Nursing W(9) = .933, p = .509. An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participants' felt sense of compassion satisfaction on the ProQol with regards their profession at Time 2 during level 1 of pandemic lockdown. The results indicate that there was no significant difference between Social Inclusion and Nursing staff, $t(24) = -.58$, $p = .57$, despite Social Inclusion ($M = 38.12$, $SD = 5.4$) reporting a lower level of compassion satisfaction than Nursing ($M = 39.33$, $SD = 4.44$).

A parametric test was used as a Shapiro-Wilk test was not significant for either group's data distribution at Time 2- for Social Inclusion W(17) = .967, p = .755 and for Nursing W(9) = .973, p = .919. An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participants' felt sense of burnout on the ProQol with regards their profession at Time 2 during level 1 of pandemic lockdown. Though approaching significance, the results

indicate that that there was not a significant difference reported between Social Inclusion and Nursing staff, $t(24) = 2.41$, $p = .024$, after the Bonferroni correction was applied. Though not statistically significant, social Inclusion ($M = 24.76$, $SD = 5.22$) reported a higher level of burnout than Nursing ($M = 20.11$, $SD = 3.37$).

A parametric test was used as a Shapiro-Wilk test was not significant for either group's data distribution at Time 2- for Social Inclusion W(17) = .917, p = .129 and for Nursing W(9) = .92, p = .392. An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participants' felt sense of secondary traumatic stress on the ProQol with regards their profession at Time 2 during level 1 of pandemic lockdown. The results indicate that there was a significant difference reported between Social Inclusion and Nursing staff, $t(24) = 2.62$, $p = .015$, with Social Inclusion ($M = 24.24$, $SD = 5.3$) reporting a significantly higher level of secondary traumatic stress than Nursing ($M = 18.67$, $SD = 4.87$).

Descriptives:

Below is a summary of the descriptive score ranges across the three subscales on the ProQoL (compassion satisfaction, burnout, and secondary traumatic stress), in order to provide a sense of the range that participant scores fell into, as illustrated in Table 6.

Table 6

Descriptive Score Ranges Across the ProQOL Subscales

			Low Range	Moderate Range	High Range
Compassion	Whole Group	Time 1		15 (50%)	15 (50%)
Satisfaction		Time 2		17 (65.4%)	9 (34.6%)
	Social Inclusion	Time 1		8 (42.1%)	11 (57.9%)

		Time 2		11 (64.7%)	6 (35.3%)
	Nursing	Time 1		7 (62.6%)	4 (36.4%)
		Time 2		6 (66.7%)	3 (33.3%)
Burnout	Whole Group	Time 1	15 (50%)	15 (50%)	
		Time 2	12 (46.2%)	14 (53.8%)	
	Social Inclusion	Time 1	7 (36.8%)	12 (63.2%)	
		Time 2	5 (29.4%)	12 (70.6%)	
	Nursing	Time 1	8 (72.7%)	3 (27.3%)	
		Time 2	7 (77.8%)	2 (22.2%)	
Secondary	Whole Group	Time 1	17 (56.7%)	13 (43.3%)	
Traumatic		Time 2	10 (38.5%)	16 (61.5%)	
Stress	Social Inclusion	Time 1	8 (42.1%)	11 (57.9%)	
		Time 2	4 (23.5%)	13 (76.5%)	
	Nursing	Time 1	9 (81.8%)	2 (18.2%)	
		Time 2	6 (66.7%)	3 (33.3%)	

In terms of the whole group at Time 1, for ‘Compassion Satisfaction’ there were 15 participants in ‘moderate’ range (50%) and 15 in ‘high’ range (50%). For ‘Burnout’ there were 15 in ‘low’ range (50%) and 15 in ‘moderate’ range (50%). For ‘Secondary Traumatic Stress’ subscale there were 17 in ‘low’ range (56.7%) and 13 in ‘moderate’ range (43.3%)

In terms of the Whole group at Time 2, for ‘Compassion Satisfaction’ there were 17 participants in ‘moderate’ range (65.4%) and 9 in ‘high’ range (34.6%). For ‘Burnout’ there were 12 in ‘low’ range (46.2%), 14 in ‘moderate’ range (53.8%). For the ‘Secondary Traumatic Stress’ subscale 10 were in the ‘low’ range (38.5%) and 16 in ‘moderate’ range (61.5%).

In terms of Social Inclusion, at Time 1 for ‘Compassion Satisfaction’ there were 8 participants in ‘moderate’ range (42.1%) and 11 in ‘high’ range (57.9%). For ‘Burnout’ there were 7 in ‘low’ range (36.8%), 12 in ‘moderate’ range (63.2%). For ‘Secondary

Traumatic Stress' subscale 8 were in the 'low' range (42.1%) and 11 in 'moderate' range (57.9%).

In terms of Social Inclusion at Time 2, for 'Compassion Satisfaction' 11 participants were in the 'moderate' range (64.7%) and 6 in 'high' range (35.3%). For 'Burnout', 5 in 'low' range (29.4%) and 12 in 'moderate' range (70.6%). For the 'Secondary Traumatic Stress' subscale 4 were in the 'low' range (23.5%) and 13 in 'moderate' range (76.5%).

In terms of Nursing at Time 1, for 'Compassion Satisfaction' there were 7 participants in 'moderate' range (62.6%), 4 in 'high' range (36.4%). For 'Burnout' there were 8 in 'low' range (72.7%), 3 in 'moderate' range (27.3%). For 'Secondary Traumatic Stress' subscale there were 9 in 'low' range (81.8%) and 2 in 'moderate' range (18.2%).

In terms of Nursing at Time 2, for 'Compassion Satisfaction' there were 6 participants in 'moderate' range (66.7%), 3 in 'high' range (33.3%). For 'burnout' there were 7 in the 'low' range (77.8%) and 2 in 'moderate' range (22.2%). For the 'Secondary Traumatic Stress' subscale 6 were in the 'low' range (66.7%), and 3 in 'moderate' range (33.3%).

There will be a change in a participant's experience of depression over time during the pandemic

To investigate this research question, the BDI was used. Scores on the BDI were analysed across Time 1 and Time 2 for the group as a whole, separately for the individual groups (Social Inclusion and Nursing), as well as between the two groups. To control for the family-wise error rate due to multiple comparisons, a Bonferroni correction was employed, adjusting the p-value threshold by dividing the initial alpha level of 0.05 by the

number of comparisons (5), resulting in a new threshold of 0.01. Results were considered statistically significant if the p-value was less than or equal to 0.01 (Bonferroni corrected)

For the whole group:

A Shapiro-Wilk test showed a significant departure from normality, W(30) = .916, p = .021, and thus a non-parametric test was used to analyse the data. A Wilcoxon test was performed to evaluate whether there was a difference in participant's reported experience of depression using the BDI at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that experiences of depression at Time 2 (*Mdn* = 8.5) was significantly lower than experiences of depression at Time 1 (*Mdn* = 6), *W* = 30.00, *z* = -2.811, *p* = .005.

For the Social Inclusion group:

To check the data for distribution, a Shapiro-Wilk test was not significant, W(19) = .944, p = .315, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Social Inclusion participant's reported experience of depression using the BDI at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that felt sense of depression at Time 2 (*M* = 10.12, *SD* = 8.55) was significantly lower than depression at Time 1 (*M* = 13.47, *SD* = 9.64), *t*(16) = -2.96, *p* = .009 amongst Social Inclusion frontline staff.

For the Nursing group:

To check the data for distribution, a Shapiro-Wilk test was not significant, W(11) = .947, p = .604, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Nursing participant's reported experience of depression using the BDI at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between Nursing participants' experiences of depression at Time 1 (*M* = 6.22, *SD* = 4.82) and experiences of depression at Time 2 (*M* = 5.11, *SD* = 3.41), *t*(8) = 1.32, *p* = .223 .

Between groups at Time 1 and Time 2:

An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's reported experience of depression using the BDI at Time 1 during level 5 of pandemic lockdown. Though approaching significance, after applying the Bonferroni correction the results indicate that there was no significant difference reported between Social Inclusion and Nursing staff, *t*(28) = 2.25, *p* = .032. While not significant, Social Inclusion (*M* = 13, *SD* = 9.3) reported a higher level of depression than Nursing (*M* = 6.18, *SD* = 4.9).

A parametric test was used as a Shapiro-Wilk test was not significant for either group's data distribution at Time 2- for Social Inclusion W(17) = .985, p = .056 and for Nursing W(9) = .973, p = .919. An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's reported experience of depression using the BDI at Time 2 during level 1 of pandemic

lockdown. The results indicate that there was no significant difference between Social Inclusion and Nursing staff, $t(24) = 1.67$, $p = .107$, despite Social Inclusion ($M = 10.12$, $SD = 8.55$) reporting a higher level of depression than Nursing ($M = 5.11$, $SD = 3.41$).

Descriptives

Below is a summary of the descriptive score ranges for the BDI, in order to provide a sense of the range that participant scores fell into, as illustrated in Table 7.

Table 7

Descriptive Score Ranges on the BDI

		Minimal Range	Mild Range	Moderate Range	Severe Range
Whole Group	Time 1	21 (70%)	5 (16.7%)	3 (10%)	1 (3.3%)
	Time 2	20 (76.9%)	3 (11.5%)	3 (11.5%)	
Social Inclusion	Time 1	11 (57.9%)	4 (21.1%)	3 (15.8%)	1 (5.3%)
	Time 2	11 (64.7%)	3 (17.6%)	3 (17.6%)	
Nursing	Time 1	10 (90.9%)	1 (9.1%)		
	Time 2	9 (100%)			

For the whole group at Time 1, there were 21 participants in 'minimal' range (70%), 5 in 'mild' range (16.7%), 3 in 'moderate' range (10%), and 1 in 'severe' range (3.3%). At Time 2, there were 20 participants in 'minimal' range (76.9%), 3 in 'mild' range (11.5%), and 3 in 'moderate' range (11.5%).

For the Social Inclusion group at Time 1, there were 11 participants in 'minimal' range (57.9%), 4 in 'mild' range (21.1%), 3 in 'moderate' range (15.8%), and 1 in 'severe' range

(5.3%). At Time 2, there were 11 participants in 'minimal' range (64.7%), 3 in 'mild' range (17.6%), and 3 in 'moderate' range (17.6%).

For the Nursing group at Time 1, there were 10 participants in 'minimal' range (90.9%) and 1 in 'mild' range (9.1%). At Time 2, there were 9 participants in 'minimal' range (100%).

There will be a change in a participant's experience of anxiety over time during the pandemic

To investigate this research question, the BAI was used. Participants' scores on the BAI were analysed across Time 1 and Time 2 for the group as a whole, separately for the individual groups (Social Inclusion and Nursing), as well as between the two groups. To control for the family-wise error rate due to multiple comparisons, a Bonferroni correction was employed, adjusting the p-value threshold by dividing the initial alpha level of 0.05 by the number of comparisons (5), resulting in a new threshold of 0.01. Results were considered statistically significant if the p-value was less than or equal to 0.01 (Bonferroni corrected)

For the whole group:

A Shapiro-Wilk test showed a significant departure from normality, $W(30) = .852$, $p < .001$, and thus a non-parametric test was used to analyse the data. A Wilcoxon test was performed to evaluate whether there was a difference in participant's reported experience of anxiety using the BAI at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that

there was no significant difference in the whole group's reported experiences of anxiety at Time 1 (*Mdn* = 7.00) and at Time 2 (*Mdn* = 8.50), W = 113.50, *z* = -.070, *p* = .944.

For the Social Inclusion group:

A Shapiro-Wilk test showed a significant departure from normality, W(19) = .874, p = .017, and thus a non-parametric test was used to analyse the data. A Wilcoxon test was performed to evaluate whether there was a difference in Social Inclusion participant's reported experience of anxiety using the BAI at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that that there was no significant difference between the Social Inclusion participants' experiences of anxiety at Time 1 (*Mdn* = 11) and experiences of anxiety at Time 2 (*Mdn = 11*), W = 37.50, *z* = -.561, *p* = .575 .

For the Nursing group:

To check the data for distribution, a Shapiro-Wilk test was not significant, W(11) = .887, p = .127, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Nursing participant's reported experience of anxiety using the BAI at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Nursing participants experiences of anxiety at Time 1 (*M* = 4.89, *SD* = 3.95) and experiences of anxiety at Time 2 (*M* = 4.22, *SD* = 4.12), *t*(8) = .56, *p* = .584 .

Between groups at Time 1 and Time 2:

As previously indicated, the Social Inclusion data for Time 1 was non-normative. Thus, the non-parametric Mann-Whitney U test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's reported experience of anxiety using the BAI at Time 1 during level 5 of pandemic lockdown. The results indicate that there was no significant difference reported between Social Inclusion and Nursing staff, $U = 59.000$, $Z = -1.966$, $p = .052$, with Social Inclusion having a mean rank of 17.89 and Nursing having a mean rank of 11.36.

A parametric test was used as a Shapiro-Wilk test was not significant for either group's data distribution at Time 2- for Social Inclusion W(17) = .928, p = .2 and for Nursing W(9) = .842, p = .061. An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's reported experience of anxiety using the BAI at Time 2 during level 1 of pandemic lockdown. Though approaching significance, after applying the Bonferroni correction the results indicate that there was no significant difference reported between Social Inclusion and Nursing staff, $t(24) = 2.33$, $p = .029$. Though not significant, Social Inclusion ($M = 12.41$, $SD = 10.03$) reported a higher level of anxiety than Nursing ($M = 4.22$, $SD = 4.12$).

Descriptives

Following is a summary of the descriptive score ranges for the BAI, in order to provide a sense of the range that participant scores fell into, as illustrated in Table 8.

Table 8

Descriptive Score Ranges for the BAI

		Minimal Range	Mild Range	Moderate Range	Severe Range
Whole Group	Time 1	16 (53.3%)	10 (33.3%)	3 (10%)	1 (3.3%)
	Time 2	12 (46.2%)	8 (30.8%)	4 (15.4%)	2 (7.7%)
Social Inclusion	Time 1	9 (47.4%)	6 (31.6%)	3 (15.8%)	1 (5.3%)
	Time 2	6 (35.3%)	5 (29.4%)	4 (23.5%)	2 (11.8%)
Nursing	Time 1	7 (63.6%)	4 (36.4%)		
	Time 2	6 (66.7%)	3 (33.3%)		

In terms of the whole group at Time 1, there were 16 participants in 'minimal' range (53.3%), 10 in 'mild' range (33.3%), 3 in 'moderate' range (10%), and 1 in 'severe' range (3.3%). At Time 2, there were 12 participants in 'minimal' range (46.2%), 8 in 'mild' range (30.8%), 4 in 'moderate' range (15.4%), and 2 in 'severe' range (7.7%).

In terms of the Social Inclusion group at Time 1, there were 9 participants in 'minimal' range (47.4%), 6 in 'mild' range (31.6%), 3 in 'moderate' range (15.8%), and 1 in 'severe' range (5.3%). At Time 2, there were 6 participants in 'minimal' range (35.3%), 5 in 'mild' range (29.4%), 4 in 'moderate' range (23.5%), and 2 in 'severe' range (11.8%).

In terms of the Nursing group at Time 1, there were 7 participants in 'minimal' range (63.6%), and 4 in 'mild' range (36.4%). At Time 2, there were 6 participants in 'minimal' range (66.7%) and 3 in 'mild' range (33.3%).

There will be a change in a participant's experience of burnout over time during the pandemic

To investigate this research question, the MBI was used. In the MBI there are three subscales- 'emotional exhaustion', 'depersonalisation' and 'personal accomplishment'. These three subscales were analysed across Time 1 and Time 2 for the group as a whole, separately for the individual groups (Social Inclusion and Nursing), as well as between the two groups. To control for the family-wise error rate due to multiple comparisons, a Bonferroni correction was employed, adjusting the p-value threshold by dividing the initial alpha level of 0.05 by the number of comparisons (15), resulting in a new threshold of 0.00333. Results were considered statistically significant if the p-value was less than or equal to 0.00333 (Bonferroni corrected)

For the Whole group:

To check the data for distribution, a Shapiro-Wilk test was not significant, W(30) = .96, p = .306, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in participant's felt sense of emotional exhaustion using the MBI with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference in the whole group's reported experiences of emotional exhaustion at Time 1 (*M* = 16.88, *SD* = 10.29) and at Time 2 (*M* = 18.54, *SD* = 10.72), *t*(25) = -1.82, *p* = .082.

A Shapiro-Wilk test showed a significant departure from normality, W(30) = .905, p = .011, and thus a non-parametric test was used to analyse the data. A Wilcoxon test was

performed to evaluate whether there was a difference in participant's felt sense of depersonalisation using the MBI with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference in the whole group's reported experiences of depersonalisation at Time 1 (*Mdn* = 3) and at Time 2 (*Mdn* = 4.5), W = 117.00, *z* = -.315, *p* = .753.

To check the data for distribution, a Shapiro-Wilk test was not significant, W(30) = .947, p = .137, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in participant's felt sense of personal accomplishment using the MBI with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference in the whole group's experiences of reduced personal accomplishment at Time 1 (*M* = 37.46, *SD* = 5.21) and at Time 2 (*M* = 36.85, *SD* = 6.15), *t*(25) = -.71, *p* = .484.

For the Social Inclusion group:

To check the data for distribution, a Shapiro-Wilk test was not significant, W(19) = .953, p = .447, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Social Inclusion participant's felt sense of emotional exhaustion using the MBI with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. Though approaching significance, after applying the Bonferroni correction the results indicate that emotional exhaustion in Social Inclusion

frontline staff at Time 2 (*M* = 21.18, *SD* = 11.98) was not significantly higher than emotional exhaustion at Time 1 (*M* = 18.41, *SD* = 12.25), *t*(16) = -2.66, *p* = .017.

To check the data for distribution, a Shapiro-Wilk test was not significant, W(19) = .915, p = .091, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Social Inclusion participant's felt sense of depersonalisation using the MBI with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Social Inclusion participants' experiences of depersonalisation at Time 1 (*M* = 5.35, *SD* = 3.69) and experiences of depersonalisation at Time 2 (*M* = 5.71, *SD* = 3.29), *t*(16) = -.63, *p* = .539 .

To check the data for distribution, a Shapiro-Wilk test was not significant, W(19) = .95, p = .388, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Social Inclusion participant's felt sense of personal accomplishment using the MBI with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Social Inclusion participants' experiences of personal accomplishment at Time 1 (*M* = 37.88, *SD* = 4.97) and experiences of personal accomplishment at Time 2 (*M* = 36.41, *SD* = 5.85), *t*(16) = 1.429, *p* = .172 .

For the Nursing group:

To check the data for distribution, a Shapiro-Wilk test was not significant, W(11) = .932, p = .433, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Nursing participant's felt sense of emotional exhaustion using the MBI with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Nursing participants experiences of emotional exhaustion at Time 1 (*M* = 14, *SD* = 4.03) and experiences of emotional exhaustion at Time 2 (*M* = 13.56, *SD* = 5.41), *t*(8) = .276, *p* = .789 .

A Shapiro-Wilk test showed a significant departure from normality, W(11) = .648, p = <.001, and thus a non-parametric test was used to analyse the data. A Wilcoxon test was performed to evaluate whether there was a difference in Nursing participant's felt sense of depersonalisation using the MBI with regards their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Nursing participants experiences of depersonalisation at Time 1 (*Mdn* = 2) and experiences of depersonalisation at Time 2 (*Mdn* = 1), W = 5.50, *z* = -1.450, *p* = .147 .

To check the data for distribution, a Shapiro-Wilk test was not significant, W(11) = .947, p = .608, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Nursing participant's felt sense of personal accomplishment using the MBI with regards

their profession at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Nursing participants experiences of personal accomplishment at Time 1 (M = 36.67, SD = 5.85) and experiences of reduced personal accomplishment at Time 2 (M = 37.67, SD = 6.96), $t(8) = -.663$, $p = .526$.

Between groups at Time 1 and Time 2:

An independent samples t-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's felt sense of emotional exhaustion using the MBI with at Time 1 during level 5 of pandemic lockdown. The results indicate that there was no significant difference between Social Inclusion and Nursing staff, $t(28) = 1.13$, $p = .269$, despite Social Inclusion (M = 18.42, SD = 11.75) reporting a higher level of emotional exhaustion than Nursing (M = 14.27, SD = 3.98).

As previously indicated, the Nursing data for Time 1 was non-normative. Thus, the non-parametric A Mann-Whitney U test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's felt sense of depersonalisation using the MBI with at Time 1 during level 5 of pandemic lockdown. The results indicate that there was no significant difference between Social Inclusion and Nursing staff, U = 70.000, $Z = -1.495$, $p = .145$, despite Social Inclusion (mean rank = 17.32) reporting a higher level of depersonalisation than Nursing (mean rank = 12.36).

An independent samples t-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's felt sense of personal accomplishment using the MBI with at Time 1 during level 5 of pandemic

lockdown. The results indicate that there was no significant difference between Social Inclusion and Nursing staff, $t(28) = .802$, $p = .43$, despite Social Inclusion ($M = 38.05$, $SD = 4.79$) reporting a higher level of personal accomplishment than Nursing ($M = 36.55$, $SD = 5.26$).

A parametric test was used as a Shapiro-Wilk test was not significant for either group's data distribution at Time 2- for Social Inclusion W(17) = .934, p = .25 and for Nursing W(9) = .925, p = .437. An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's felt sense of emotional exhaustion using the MBI with at Time 2 during level 1 of pandemic lockdown. The results indicate that there was no significant difference between Social Inclusion and Nursing staff, $t(24) = 1.8$, $p = .084$, despite Social Inclusion ($M = 21.89$, $SD = 11.98$) reporting a higher level of emotional exhaustion than Nursing ($M = 13.56$, $SD = 5.4$).

Though not significant for Social Inclusion- W(17) = .913, p = .113- at Time 2 for Nursing staff, a Shapiro-Wilk test showed a significant departure from normality, W(9) = .743, p = .004, and thus a non-parametric test was used to analyse the data. A Mann-Whitney U test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's felt sense of depersonalisation using the MBI at Time 2 during level 1 of pandemic lockdown. While approaching significance, after applying the Bonferroni corrections, the results indicate that there was no significant difference reported between Social Inclusion and Nursing staff, $U = 35.500$, $Z = -2.222$ $p = .025$. Though not significant, Social Inclusion (mean rank = 15.91) reported a higher level of depersonalisation than Nursing (mean rank = 8.94).

A parametric test was used as a Shapiro-Wilk test was not significant for either group's data distribution at Time 2- for Social Inclusion W(17) = .968, p = .789 and for Nursing W(9) = .938, p = .558. An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's felt sense of personal accomplishment using the MBI with at Time 2 during level 1 of pandemic lockdown. The results indicate that there was no significant difference between Social Inclusion and Nursing staff, $t(24) = 1.487$, $p = .63$, despite Social Inclusion ($M = 36.41$, $SD = 5.85$) reporting a lower level of personal accomplishment than Nursing ($M = 37.67$, $SD = 6.96$).

There will be a change in a participant's experience of secondary traumatic stress symptoms over time during the pandemic

To investigate this research question, the STSS was utilised. In the STSS there are four subscales- 'intrusion', 'avoidance', 'arousal' and 'total secondary traumatic stress'. These four subscales were analysed across Time 1 and Time 2 for the group as a whole, separately for the individual groups (Social Inclusion and Nursing), as well as between the two groups. To control for the family-wise error rate due to multiple comparisons, a Bonferroni correction was employed, adjusting the p-value threshold by dividing the initial alpha level of 0.05 by the number of comparisons (20), resulting in a new threshold of 0.0025. Results were considered statistically significant if the p-value was less than or equal to 0.0025 (Bonferroni corrected)

For the Whole group:

A Shapiro-Wilk test showed a significant departure from normality, W(30) = .904, p = .01, and thus a non-parametric test was used to analyse the data. A Wilcoxon test was performed to evaluate whether there was a difference in participant's felt sense of intrusion using the STSS at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference in the whole group's reported felt sense of intrusion at Time 1 (*Mdn* = 8) and at Time 2 (*Mdn* = 9), W = 96.00, *z* = 1.001, *p* = .317.

A Shapiro-Wilk test showed a significant departure from normality, W(30) = .886, p = .004, and thus a non-parametric test was used to analyse the data. A Wilcoxon test was performed to evaluate whether there was a difference in participant's felt sense of avoidance using the STSS at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference in the whole group's reported felt sense of avoidance at Time 1 (*Mdn* = 11) and at Time 2 (*Mdn* = 13.50), W = 108.00, *z* = -.920, *p* = .357.

A Shapiro-Wilk test showed a significant departure from normality, W(30) = .922, p = .031, and thus a non-parametric test was used to analyse the data. A Wilcoxon test was performed to evaluate whether there was a difference in participant's felt sense of arousal using the STSS at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference in the whole group's reported felt sense of arousal at Time 1 (*Mdn* = 10) and at Time 2 (*Mdn* = 10), W = 105.50, *z* = -.350, *p* = .726.

A Shapiro-Wilk test showed a significant departure from normality, W(30) = .906, p = .012, and thus a non-parametric test was used to analyse the data. A Wilcoxon test was performed to evaluate whether there was a difference in participant's total felt sense of secondary traumatic stress symptoms using the STSS at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference in the whole group's reported total felt sense of secondary traumatic stress symptoms at Time 1 (*Mdn* = 28) and at Time 2 (*Mdn* = 34), W = 126.00. *z* = -.366, *p* = .715.

For the Social Inclusion group:

To check the data for distribution, a Shapiro-Wilk test was not significant, W(19) = .919, p = .108, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Social Inclusion participant's felt sense of intrusion using the STSS at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Social Inclusion participants' felt sense of intrusion at Time 1 (*M* = 10.35, *SD* = 3.64) and felt sense of intrusion at Time 2 (*M* = 10.12, *SD* = 2.85), *t*(16) = .394, *p* = .699 .

To check the data for distribution, a Shapiro-Wilk test was not significant, W(19) = .932, p = .189, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Social Inclusion participant's felt sense of avoidance using the STSS at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown.

The results indicate that there was no significant difference between the Social Inclusion participants' felt sense of avoidance at Time 1 (M = 14.94, SD = 5.98) and felt sense of avoidance at Time 2 (M = 16, SD = 5.77), t(16) = -1.24, p = .234 .

To check the data for distribution, a Shapiro-Wilk test was not significant, W(19) = .923, p = .126, and thus normal distribution is assumed and a parametric test was used. A paired samples t-test was performed to evaluate whether there was a difference in Social Inclusion participant's felt sense of arousal using the STSS at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Social Inclusion participants' felt sense of arousal at Time 1 (M = 11.06, SD = 3.94) and felt sense of arousal at Time 2 (M = 11.82, SD = 4.39), t(16) = -.86, p = .402 .

To check the data for distribution, a Shapiro-Wilk test was not significant, W(19) = .944, p = .313, and thus normal distribution is assumed and a parametric test was used. A paired samples t-test was performed to evaluate whether there was a difference in Social Inclusion participant's total felt sense of secondary traumatic stress symptoms using the STSS at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Social Inclusion participants' total felt sense of secondary traumatic stress symptoms at Time 1 (M = 35.76, SD = 12.09) and total felt sense of secondary traumatic stress symptoms at Time 2 (M = 37.94, SD = 11.45), t(16) = -1.07, p = .299 .

For the Nursing group:

To check the data for distribution, a Shapiro-Wilk test was not significant, W(11) = .881, p = .106, and thus normal distribution is assumed and a parametric test was used. A paired samples *t*-test was performed to evaluate whether there was a difference in Nursing participant's felt sense of intrusion using the STSS at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Nursing participants' felt sense of intrusion at Time 1 (*M* = 7.33, *SD* = 2.4) and felt sense of intrusion at Time 2 (*M* = 6.89, *SD* = 2.09), *t*(8) = .567, *p* = .586 .

A Shapiro-Wilk test showed a significant departure from normality, W(11) = .778, p = .005, and thus a non-parametric test was used to analyse the data. A Wilcoxon test was performed to evaluate whether there was a difference in Nursing participant's felt sense of avoidance using the STSS at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Nursing participants' felt sense of avoidance at Time 1 (*Mdn* = 10) and felt sense of avoidance at Time 2 (*Mdn* = 9), W = 16.00, *z* = -.284, *p* = .776 .

A Shapiro-Wilk test showed a significant departure from normality, W(11) = .829, p = .023, and thus a non-parametric test was used to analyse the data. A Wilcoxon test was performed to evaluate whether there was a difference in Nursing participant's felt sense of arousal using the STSS at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no

significant difference between the Nursing participants' felt sense of arousal at Time 1 (*Mdn* = 8) and felt sense of arousal at Time 2 (*Mdn* = 8), W = 13.00, *z* = .711, *p* = .477 .

A Shapiro-Wilk test showed a significant departure from normality, W(11) = .766, p = .003, and thus a non-parametric test was used to analyse the data. A Wilcoxon test was performed to evaluate whether there was a difference in Nursing participant's total felt sense of secondary traumatic stress symptoms using the STSS at Time 1 during level 5 of pandemic lockdown, and Time 2 six months later during level 1 of pandemic lockdown. The results indicate that there was no significant difference between the Nursing participants' total felt sense of secondary traumatic stress symptoms at Time 1 (*Mdn* = 27) and total felt sense of secondary traumatic stress symptoms at Time 2 (*Mdn* = 25), W = 17.00, *z* = .654, *p* = .513 .

Between groups at Time 1 and Time 2:

An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's felt sense of intrusion using the STSS at Time 1 during level 5 of pandemic lockdown. While approaching significance, after applying the Bonferroni correction, the results indicate that there was no significant difference reported between Social Inclusion and Nursing staff, *t*(28) = 2.325, *p* = .014. Though not significant, Social Inclusion (*M* = 10.53, *SD* = 3.72) reported a higher level of intrusion than Nursing (*M* = 7.64, *SD* = 2.3).

As previously indicated, the Nursing data for Time 1 was non-normative. Thus, the non-parametric Mann-Whitney U test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's felt sense of

avoidance using the STSS at Time 1 during level 5 of pandemic lockdown. While approaching significance, after applying the Bonferroni correction the results indicate that there was no significant difference reported between Social Inclusion and Nursing staff, U = 54.000, Z = -2.183, p = .03. Though not significant, Social Inclusion (mean rank = 18.16) reported a higher level of avoidance than Nursing (mean rank = 10.91).

As previously indicated, the Nursing data for Time 1 was non-normative. Thus, the non-parametric Mann-Whitney U test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's felt sense of arousal using the STSS at Time 1 during level 5 of pandemic lockdown. While approaching significance, after applying the Bonferroni correction the results indicate that there was no significant difference reported between Social Inclusion and Nursing staff, U = 48.000, Z = -2.446, p = .014. Though not significant, Social Inclusion (mean rank = 18.47) reported a higher level of arousal than Nursing (mean rank = 10.36).

As previously indicated, the Nursing data for Time 1 was non-normative. Thus, the non-parametric Mann-Whitney U test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's total felt sense of secondary traumatic stress symptoms using the STSS at Time 1 during level 5 of pandemic lockdown. While approaching significance, after applying the Bonferroni correction the results indicate that there was no significant difference reported between Social Inclusion and Nursing staff, U = 53.000, Z = -2.221, p = .026. While not statistically significant, Social Inclusion (mean rank = 18.21) reported a higher level of secondary traumatic stress symptoms than Nursing (mean rank = 10.82).

A parametric test was used as a Shapiro-Wilk test was not significant for either group's data distribution at Time 2- for Social Inclusion W(17) = .955, p = .547 and for Nursing W(9) = .873, p = .132. An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's felt sense of intrusion using the STSS at Time 2 during level 1 of pandemic lockdown. While approaching significance, after applying the Bonferroni correction the results indicate that there was no significant difference reported between Social Inclusion and Nursing staff, $t(24) = 2.99$, $p = .006$. Though not statistically significant, Social Inclusion ($M = 10.12$, $SD = 2.85$) reported a higher level of intrusion than Nursing ($M = 6.89$, $SD = 2.01$).

A parametric test was used as a Shapiro-Wilk test was not significant for either group's data distribution at Time 2- for Social Inclusion W(17) = .96, p = .624 and for Nursing W(9) = .886, p = .183. An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's felt sense of avoidance using the STSS at Time 2 during level 1 of pandemic lockdown. While approaching significance, after applying the Bonferroni correction the results indicate that there was no significant difference reported between Social Inclusion and Nursing staff, $t(24) = 2.494$, $p = .02$. Though not statistically significant, Social Inclusion ($M = 16$, $SD = 5.77$) reported higher level of avoidance than Nursing ($M = 10.67$, $SD = 3.78$).

A parametric test was used as a Shapiro-Wilk test was not significant for either group's data distribution at Time 2- for Social Inclusion W(17) = .93, p = .215 and for Nursing W(9) = .865, p = .109. An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's felt sense of arousal using the STSS at Time 2 during level 1 of pandemic lockdown. While

approaching significance, after applying the Bonferroni correction the results indicate that there was no significant difference reported between Social Inclusion and Nursing staff, $t(24) = 2.231$, $p = .035$. Though not statistically significant, Social Inclusion (M = 11.82, SD = 4.39) reported a higher level of arousal than Nursing (M = 8.22, SD = 2.73).

A parametric test was used as a Shapiro-Wilk test was not significant for either group's data distribution at Time 2- for Social Inclusion W(17) = .957, p = .585 and for Nursing W(9) = .843, p = .063. An independent samples *t*-test was performed to evaluate whether there was a significant difference between Social Inclusion and Nursing participant's total felt sense of secondary traumatic stress symptoms using the STSS at Time 2 during level 1 of pandemic lockdown. While approaching significance, after applying the Bonferroni correction the results indicate that there was no significant difference reported between Social Inclusion and Nursing staff, $t(24) = 2.819$, $p = .009$. Though not statistically significant, Social Inclusion (M = 37.94, SD = 11.45) reported a higher level of secondary traumatic stress symptoms than Nursing (M = 25.78, SD = 8.14).

Descriptives

Following is a summary of the descriptive ranges for the total scale scores on the STSS, in order to provide a sense of the range that participant scores fell into, as illustrated in Table 9.

Table 9

Descriptive Score Ranges for Total Scale Scores on the STSS

		Little or no STS	Mild STS	Moderate STS	High STS	Severe STS
Whole Group	Time 1	13 (43.3%)	6 (20%)	6 (20%)	2 (6.7%)	3 (10%)

	Time 2	12 (46.2%)	2 (7.7%)	7 (26.9%)	3 (11.5%)	2 (7.7%)
Social Inclusion	Time 1	6 (31.6%)	3 (15.8%)	6 (31.6%)	2 (10.5%)	2 (10.5%)
	Time 2	5 (29.4%)	2 (11.8%)	5 (29.4%)	3 (17.6%)	2 (11.8%)
Nursing	Time 1	7 (63.6%)	3 (27.3%)	1 (9.1%)		
	Time 2	7 (77.8%)	2 (22.2%)			

In terms of the whole group at Time 1, there were 13 participants in the 'little or no STS' range (43.3%), 6 in the 'mild STS' range (20%), 6 in the 'moderate STS' range (20%), 2 in the 'high STS' range (6.7%), and 3 in the 'severe STS' range (10%). At Time 2, there were 12 participants in the 'little or no STS' range (46.2%), 2 in the 'mild STS' range (7.7%), 7 in the 'moderate STS' range (26.9%), 3 in the 'high STS' range (11.5%), and 2 in the 'severe STS' range (7.7%).

In terms of the Social Inclusion group at Time 1, there were 6 participants in the 'little or no STS' range (31.6%), 3 in the 'mild STS' range (15.8%), 6 in the 'moderate STS' range (31.6%), 2 in the 'high STS' range (10.5%), and 2 in the 'severe STS' range (10.5%). At Time 2, there were 5 participants in the 'little or no STS' range (29.4%), 2 in the 'mild STS' range (11.8%), 5 in the 'moderate STS' range (29.4%), 3 in the 'high STS' range (17.6%), and 2 in the 'severe' range (11.8%).

In terms of the Nursing group, at Time 1 there were 7 participants in the 'little or no STS' range (63.6%), 3 in the 'mild STS' range (27.3%), and 1 in the 'severe STS' range (9.1%). At Time 2 there were 7 participants in the 'little or no STS' range (77.8%), and 2 in the 'moderate STS' range (22.2%).

Results part 2: Qualitative Data Analysis

There were a total of 56 interviews that were utilised during the qualitative analysis. During Time 1, there were 30 interviews conducted, and during Time 2 there were 26 interviews conducted. The attrition rate of 4 participants equated to 2 from each group- there were two from the Social Inclusion group that did not complete the second interview, and there were 2 participants from the Nursing group that did not complete the second interview. The qualitative data itself was divided into three main results topics- the impact of the pandemic, the impact of the work, and a section relating to wellbeing supports. Thus, in an effort to maintain clarity the results section will discuss these three partitions separately, though overlaps will be evident between them.

The qualitative data analysis followed the previously described step-by-step process for Thematic Analysis in the Methodology section. The first step of becoming familiar with the data began with transcribing, which allowed the researcher to develop an in depth understanding of the responses given by the participants during the study. This set the precursors for the ensuing steps, where data itself could then be broken down into different subgroups, allowing for examination of individual nuances as well as cross-comparing of the themes. Step 2 involved generating initial codes- the researcher reviewed the transcripts in detail, identifying key points of interest relevant to the research questions. From these key points, nodes were created with a view to identifying salient themes throughout, aligning with step 3 of searching for themes. To assist with Step 4 of reviewing themes, the transcripts were then input into NVivo software, which is a software commonly used for the purposes of analysis qualitative interviews. Utilising the key points identified during the initial analysis of the data, nodes and themes were

created that would capture these with respect to the participant interviews. This consequently allowed for step 5, where the themes were defined prior to write up.

With the above described thematic analysis, the interview transcripts were coded and themes identified based upon these. From these themes a matrix was formed with thematic domains, which offered a visualised representation of participants' qualitative experience. These thematic domains, while guided by the qualitative research questions, were ones which increasingly made sense as the data was being analysed. The thematic domains allowed for participants' descriptive responses to be further subdivided into three main aspects of life- micro, mesa and macro, and following this three main facets of how people live their lives- behaviourally, psychologically, and physiologically. Table 10 following serves as a rudimentary example of how these thematic domains begin to interplay, which can be used as a guide to refer back to during the following paragraphs outlining nodes and themes from participant responses. Within each of these areas tables will be presented helping to outline the formation process of each matrix domain from coding to thematic defining. In the results section these will purely be named as they occur, though will be discussed in more detail during the discussion section:

Table 10

Matrix Formed Following Thematic Analysis of Qualitative Interviews

	Micro	Mesa	Macro
Psychological	Ways of impact Ways of coping	Ways of impact Ways of coping	Ways of impact Ways of coping
Behavioural	Ways of impact Ways of coping	Ways of impact Ways of coping	Ways of impact Ways of coping
Physiological	Ways of impact Ways of coping	Ways of impact Ways of coping	Ways of impact Ways of coping

What was the impact of the pandemic on the psychological wellbeing of frontline health workers?

The PEPS was used as an exploratory mechanism to provide quantitative context to participants' qualitative experiences, which were further explored in the qualitative portion of the interview. The items were scored as per the nominal scales, providing descriptive values and frequencies across the categories. The table 11 below illustrates the descriptive statistics for the whole group:

Table 11

Descriptive Statistics for PEPS Item Responses for the Whole Group

	N	Minimum	Maximum	Mean	Std. Deviation
	T1 / *T2*	T1 / *T2*	T1 / *T2*	T1 / *T2*	T1 / *T2*
Extent of Impact on Organisation	30 / *26*	3 / *2*	5 / *5*	4.20 / *4*	.714 / *.8*
Extent of Impact on Work Unit	30 / *26*	3 / *2*	5 / *5*	4.03 / *3.69*	.615 / *.884*
Extent of Impact Personally	30 / *26*	3 / *2*	5 / *5*	3.77 / *3.58*	.626 / *.902*
Resource Adequacy of Protective Equipment	30 / *26*	2 / *2*	5 / *5*	3.80 / *3.96*	.805 / *.72*
Resource Adequacy of Treatment Equipment	30 / *26*	2 / *2*	5 / *5*	3.87 / *4.05*	.860 / *.826*
Resource Adequacy of Support Staff Availability	30 / *26*	2 / *2*	5 / *5*	3.57 / *3.5*	.971 / *1.03*
Resource Adequacy of Support Staff Competence	30 / *26*	3 / *2*	5 / *5*	4.03 / *3.81*	.669 / *.981*
Resource Adequacy of Information from Management	30 / *26*	2 / *2*	5 / *5*	3.53 / *3.65*	.937 / *.797*
Risk Perception to Yourself	30 / *26*	2 / *2*	5 / *5*	3.83 / *3.73*	1.020 / *.919*
Risk Perception to Your Family	30 / *26*	1 / *1*	7 / *7*	4.30 / *4*	1.535 / *1.233*
Risk Perception to Your Patients	30 / *26*	1 / *1*	7 / *5*	4.57 / *3.65*	1.406 / *1.325*
Risk Perception to Your Colleagues	30 / *26*	2 / *1*	7 / *5*	4.00 / *3.69*	1.174 / *1.192*
Risk Perception Frequency of Contact with Virus	30 / *26*	1 / *1*	5 / *5*	2.67 / *2.73*	1.213 / *1.313*
Risk Perception Professional Control Over Virus	30 / *26*	2 / *2*	5 / *5*	3.37 / *3.38*	.809 / *.697*
Risk Perception Dangerous To You Personally of Virus	30 / *26*	1 / *1*	5 / *5*	3.23 / *3.04*	.971 / *1.148*
Work/life Hours Were Manageable	30 / *26*	1 / *1*	5 / *5*	3.63 / *3.42*	1.217 / *1.172*
Work/life Within Areas Of Competency and Practice	30 / *26*	1 / *1*	5 / *5*	3.57 / *3.54*	1.135 / *1.24*

Work/life Felt Decisions Were Supported	30 / *26*	2 / *1*	5 / *5*	4.00 / *3.69*	.947 / *.97*
Work/life Efforts Were Appreciated	30 / *26*	2 / *1*	5 / *5*	3.77 / *3.58*	1.040 / *1.137*
Work/life Felt Social Support in Work Group	30 / *26*	3 / *1*	5 / *5*	4.43 / *4*	.568 / *.98*
Work/life Work Assigned Fairly	30 / *26*	2 / *1*	5 / *5*	3.83 / *3.58*	.913 / *1.027*
Work/life Organisations Values Consistent with Own	30 / *26*	2 / *2*	5 / *5*	4.07 / *3.58*	.868 / *.809*
Leadership expressed hope for success	30 / *26*	1 / *2*	5 / *5*	3.70 / *3.5*	1.022 / *.86*
Leadership identified actions to improve capabilities	30 / *26*	2 / *3*	5 / *5*	3.60 / *3.54*	.968 / *.761*
Leadership expressed confidence in capacity to take effective action	30 / *26*	2 / *2*	5 / *5*	3.77 / *3.69*	.817 / *.838*
Leadership helped me feel safe	30 / *26*	1 / *1*	5 / *5*	3.63 / *3.65*	1.098 / *.977*
Leadership gave an honest assessment of situation	30 / *26*	1 / *2*	5 / *5*	3.73 / *3.58*	1.202 / *.857*
Supervisor expressed hope for success	30 / *26*	2 / *1*	5 / *5*	3.87 / *3.65*	.819 / *.892*
Supervisor identified actions to improve capabilities	30 / *26*	2 / *1*	5 / *5*	3.80 / *3.54*	.847 / *.905*
Supervisor expressed confidence in capacity to take effective action	30 / *26*	3 / *1*	5 / *5*	4.10 / *3.65*	.803 / *.977*
Supervisor helped me feel safe	30 / *26*	1 / *1*	5 / *5*	3.60 / *3.62*	1.070 / *1.098*
Supervisor gave an honest assessment of situation	30 / *26*	2 / *1*	5 / *5*	3.73 / *3.5*	1.015 / *.99*

Histograms plotting the frequencies for each of the items can be found in Appendix J.

The frequencies in responses by participants is illustrated in the bar charts, split into their separate groups of Social Inclusion and Nursing, for Time 1 and Time 2, can be found in Appendix K and Appendix L respectively.

During the reporting and discussion of the qualitative data, the relevant corresponding and notable data from the PEPS questionnaire will be referenced.

In describing the impact that the pandemic has had on their work, one participant succinctly surmised that '*it's made it very challenging*'. As will be illustrated by the following thematic analysis, this statement was a very simplistic way of encapsulating the plethora of ways that the pandemic had impacted how frontline healthcare workers go

about their day to day duties, roles and responsibilities. In this section we will first describe how the pandemic has affected on the micro, mesa and macro levels of participants' worlds, and following this we will touch upon how it has had unique effects on participants' behaviours, physical impacts, and psychological impacts; all of which relate to their overall wellbeing.

It is important to note that participants were instructed that they did not need to replicate their answers from the first interviews, thus if some of the themes did not appear in a person's Time 2 interview this should not be interpreted as that they no longer experienced that theme as an impact, unless they explicitly said something to the contrary.

Micro (individual)

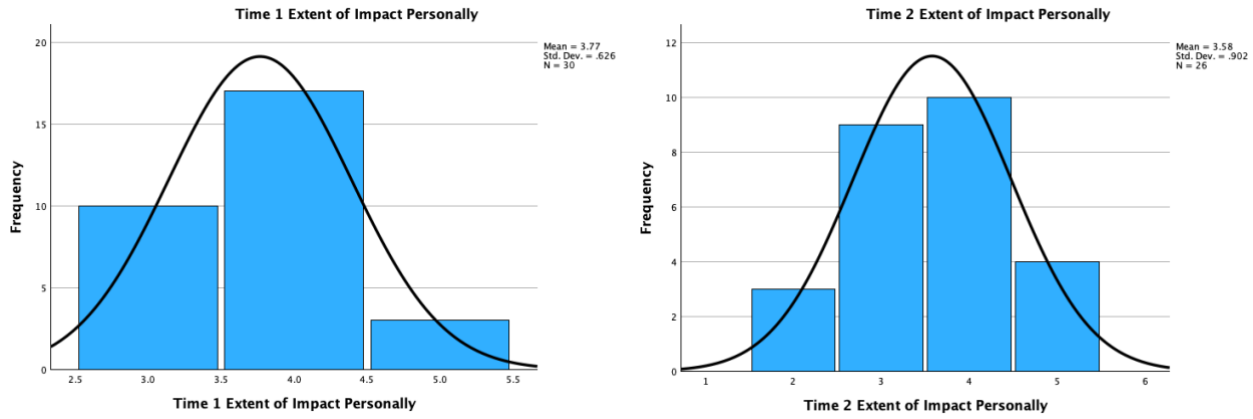
References to impacts on the micro level appeared in all of the participant interviews, at both Time 1 and Time 2. The least number of occurrences during a single interview of impact on the micro level was one, with the most in a single interview being 20. There were a total of 347 nodes during the interviews which could be attributed, giving an average of 6.2 references per interview, to pandemic impacts on the micro level.

From the PEPS results, the histograms below illustrate from a Likert scale of 1 to 5, where 1 equals "no effect at all" and 5 equals "completely dominated the work", of the extent that the pandemic impacted the participants personally/individually at work at the first and second interview timepoints. Overwhelmingly, participants scored above 3 on average (3 = moderate, 4 = large, 5 = dominating effect) at both Time 1 and Time 2. In the

context of the current findings, this highlights that participants were reporting that the pandemic was having quite an impact personally on them with respect to the work that they do.

Figure 1

Extent of Impact of the Pandemic on the Participant Personally at Time 1 vs Time 2



On an individual level theme, experiences largely centred around the difficulties associated with changing the nature of how participants carried out their role- for example, Participant 1A said:

> *"it's been challenging to kind of get settled into it and find the way to work with people, because this role outside of the pandemic would involve a lot of meeting people in different services and moving from place to place and meeting a lot of different people. Which obviously is the exact opposite of what we're allowed to do now. So a lot of the work is over the phone which is quite different for me. I'm not used to that…it is making it challenging…I think the clients are really feeling that as well. It's very hard for them, to keep them motivated, to keep them engaged, and*

you kind of feel like you're not able to offer them as much support as you would like to. So it's difficult."

On a micro level participants described experiencing their need to change how they work frustrating, disheartening, and abandoned left to figure things out for themselves, alongside the risk and fear of Covid19 itself. There was a sense of not feeling like they could ask for more support because everyone was equally as busy, despite an increase in pressure at work. This then had an impact at home, such as with Participant 1D saying "*I know with my girlfriend for the last 4-5, maybe six weeks, I have been extremely distant, disconnected, but I know it's got to do with work. I know I'm feeling extremely irritated and I'm feeling I can't listen because I've no space to listen"*. The impact of the pandemic on limiting access to personal levels of self-care, such as a participant's therapy finishing as their therapist was unable to see people in person, to not being able to go to the gym or on holidays further exacerbated the increase in pressure at work:

"It just constantly feels like I'm not getting to sit back, breathe or take any type of rest or like it would be counterproductive for me to take annual leave because I'd be sitting at home thinking about it. So I might as well be sitting in work thinking about and that's why it's exhausting…" (Participant 1D)

While there was a lack of feeling connected to colleagues due to social distancing restrictions, there were positive aspects that participants reported- such as morale boosts when accomplishing personal work goals and a sense of pride when they were successfully able to work with a client/service user or saw progress in their work.

Table 12

Outline of Pandemic Impact - Micro Thematic Domain: Including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Micro			
Emerging themes identified:	Individual Impact of pandemic on their work		Individual impact of pandemic on their personal life outside of work	
Theme Description:	Experiences that centred around the changing nature of how participants carried out their work role		Experiences that centred around the changing nature of how participants carried out their personal lives	
Supporting evidence / excerpts	*So a lot of the work is over the phone which is quite different for me. I'm not used to that.*	*I don't think it was well handled. I think without which we felt quite abandoned.*	*I know with my girlfriend for the last 4-5 maybe six weeks I have been extremely distant, disconnected I know I'm feeling extremely irritated and I'm feeling I can't listen because I've no space to listen*	*I would have done the personal counselling, only for the pandemic I probably would have still been doing it at the minute.*
	the work and the level of pressure to the level of work has doubled, tripled.	*I think up until I got covid myself in January and then when I got it and I recovered and I went back to work I found I was different.*	*It just constantly feels like I'm not getting to sit back, breathe or take any type of rest or like it would be counterproductive for me to take annual leave because I'd be sitting at home thinking about it.*	*there was no enjoyment in my maternity leave because we were in the middle of a pandemic and we couldn't go anywhere, people couldn't see my baby*
	a different type of stress- it was panic, it was chaos, it was organized but it was uncertainty. And that's something that I really struggle with, is being uncertain.	*I said it just feels like I'm constantly firefighting, I'm just putting out fires, and I feel like I can't take a breath*	*It's turned everything upside down, it really has. It's just made life very much more difficult.*	*I was terrified to take him outside*
	I suppose for me its frustration. It's frustration that I know I could have a client at a certain point if it wasn't for these times.	*Being separated. I'd ring my colleague on the phone and talk to her, but like even that was strange like. So I definitely changed the way I worked, my thinking and practice*	*my partner has massive health problems…she was genuinely afraid that if she caught covid that she would die… anytime I went out to work, it just stresses her out so much that I could be bringing something back that could kill her*	*I suppose over the first and second lockdowns I did struggle a little bit with my own mental health, but with the gym, took it and turned it around.*

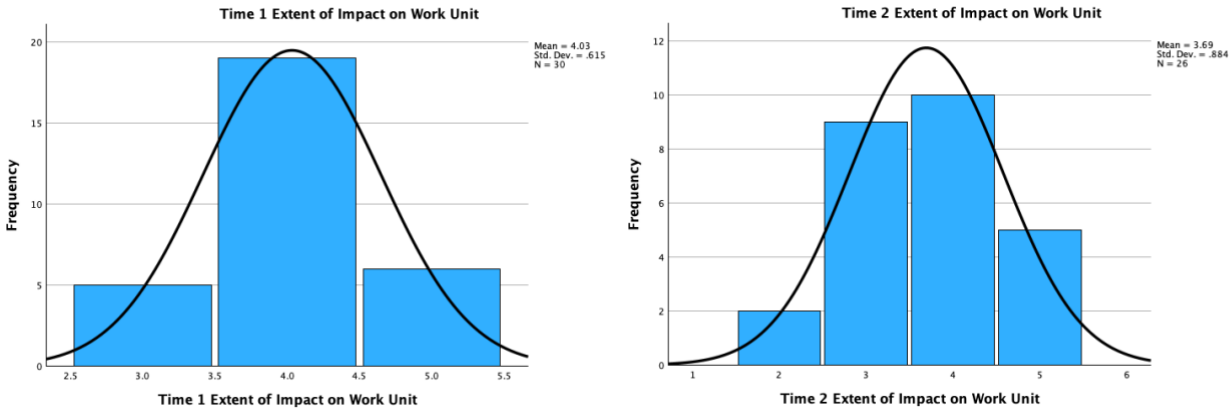
Mesa (team)

References to impacts on the mesa level appeared in 48 of the participant interviews over Time 1 and Time 2, and were mentioned by all 30 participants in at least one of their two interviews. The least number of occurrences during a single interview of impact on the mesa level was one, with the most in a single interview being 23. There were a total of 202 nodes during the interviews which could be attributed, giving an average of 4.21 references per interview, to pandemic impacts on the mesa level.

From the PEPS results, the histograms below illustrate from a Likert scale of 1 to 5, where 1 equals “no effect at all” and 5 equals “completely dominated the work”, of the extent that the pandemic impacted the participants team at work at the first and second interview timepoints. Similarly to on the personal level, participants overwhelmingly scored above 3 on average (3 = moderate, 4 = large, 5 = dominating effect) at both Time 1 and Time 2. In the context of the current findings, this highlights that participants were reporting that the pandemic was having quite an impact on their teams at work.

Figure 2

Extent of Impact of the Pandemic on the Work Unit at Time 1 vs Time 2



Many of the difficulties being reported on the team-based level could be seen as extensions from the individual ways of working that had to be altered based on the impact of the pandemic restrictions. For example, Participant 1A expressed when working with wider teams:

> *"it's harder to gauge necessarily what's going on, or maybe they won't answer the phone then and you kind of don't get to catch up with them, or just even something simple like if you were doing referrals for somebody you need to see them together to get the form signed…And just a lot of services that we would refer people to aren't operating either like just a lot less support for people. So they're struggling with that, like you can definitely see the impact it's having on people and their mental health very much."*

Participants described struggling with change from being in a team environment that was connected, fun and supportive to one they felt was more distant, more sterile They felt worry about keeping their colleagues safe as well as keeping everyone in a job. The infrastructure at a team level was no longer there. There was more difficulty in maintaining work boundaries too, with feeling disconnected and distant at home with family members, more easily becoming irritated- "*I think you'd your normal stress, and you had the adverse stress, and then…had the worry of the team and then me wanting to be a part of that because not expecting them to do something I would never do, and then the worry of your clients as well on top of that. It was definitely very stressful"* (Participant 1D).

Participants also felt that workflow was severely impacted as more time was spent with less people due to the confines of the restrictions- for example fewer allowed in a

room, more time needed in between to disinfect area and change PPE. Having some team members in different circumstances made things trickier to manage, such as some being able to cope better than others. There was a combination of understanding of individual situations but also frustration at the impact this had overall.

On another side of things, the home 'mesa' level of having to home-school children and manage childminding was another impact that the pandemic had on participants. There was also the fallout of family relationships due to risk associated with coming into work, stress and damage caused to relationships, such as when there were elderly parents or those who were immuno-compromised at home, as Participant 2J expressed "*nobody wanted to be near us at the start, you know when it was really bad and everybody was terrified, it was like it was nearly like saying you had leprosy, saying you were a nurse. People were just terrified and like when you were trying to find people to mind kids at the start, people wouldn't do it because you were a nurse. So I found that really hard.*"

There were also some positive reflections offered by some participants, such as they felt proud when the team were able to come up with creative ways to stay together and work/support their service users, learning and developing new skills. One participant reported feeling exhilarating at the time with how the team coped with challenge when they were in crisis mode, but then afterwards realising the challenge was too much and were now contending with that impact. When they felt that their team really came together and got work done, showing how well they worked as a team, was positive. Some participants also became more aware of others' struggles on their teams and would

try to support each other where they could, which made them appreciate their team more.

Table 13

Outline of Pandemic Impact - Mesa Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Mesa			
Emerging themes identified:	Team-based Impact of pandemic on their work		Family and close friends impact of pandemic on personal life/outside of work	
Theme Description:	Experiences reported on the team-based level, at times extensions from the individual ways of working that altered the team based on the impact of the pandemic restrictions		Experiences that centred around the changing nature of how participants were able to interact and be with their family and close social network in their personal lives	
Supporting evidence / excerpts	*it's been challenging to kind of get settled into it and find the way to work with people, because this role outside of the pandemic would involve a lot of meeting people in different services and moving from place to place and meeting a lot of different people. Which obviously is the exact opposite of what we're allowed to do now.*	*And just a lot of services that we would refer people to aren't operating either like just a lot less support for people. So they're struggling with that, like you can definitely see the impact it's having on people and their mental health very much.*	*getting a few holidays throughout the year sort of as the self-care, with the family, and you feel reenergized and rejuvenated after that. And then there's none, can barely get them, the biggest holiday is Tesco's that you get. That's the biggest impact, the restrictions and things like that.*	*I know with my girlfriend for the last 4-5 maybe six weeks I have been extremely distant, disconnected,*
	They pulled their socks up, including me, we went to do the job. Not one person hide in their in their bedroom at home. They were all frontline, they all did the work. It brought us closer together and we	*I think you'd your normal stress, and you had the adverse stress…and had the worry of the team and then me wanting to be a part of that because not expecting them to do something I*	*My mom would been terrified of me coming into work, she wouldn't let me in her house or anything, she wouldn't let me near her because she was terrified of the virus*	*no interaction with the girls and like that it was all through Zoom and that was tiring at the start. But then we got a handle on it and it was actually good, and we're still doing it today*

	were a very tight unit.	*would never do… very stressful.*		
	We worked really well together as a team, but I think the external pieces that fed into us as an organization caused chaos.	*there was a number of rows. Like heated rows between staff members because we were tired*	*It took away an awful lot of the fun and connectedness*	*I live alone. I have a boyfriend but he's outside the 5 kilometres, so we couldn't meet and I have an elderly, my mom is wonderful but she lives alone and I'm the only sibling living near her so I had to, not had to, but I chose my mom as my bubble so (he) didn't get to see me, and that's been a real challenge*
	There was conflict between the social care staff and the security staff as our points of view would be very different in terms of people in addiction. It was a strange one.	*it involves coordinating a lot more. It would be more coordinating other services, coordinating care. I suppose honestly it's a little bit more arduous and a little bit more lengthy and time is so precious, and more time is taken up*	*I'm not so good at staying connected because we don't have an awful lot to tell each other, apart from I mean closer friends are different, but from the circle that you would meet you don't get to link with them as often as you might have done*	*And nobody wanted to be near us at the start, you know when it was really bad and everybody was terrified, it was like it was nearly like saying you had leprosy, saying you were a nurse.*

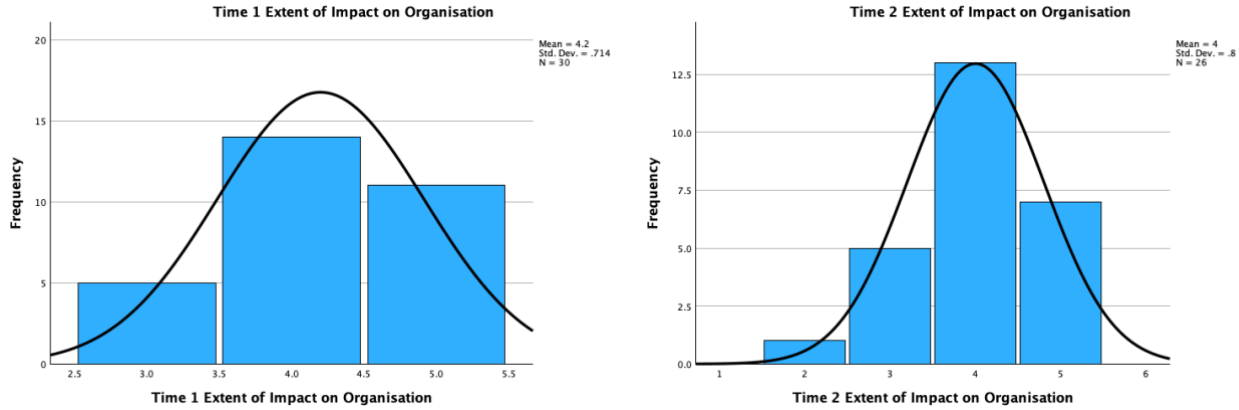
Macro (organisation/environment/society)

References to impacts on the macro level appeared in 53 of the participant interviews, inclusive of Time 1 and Time 2, and were mentioned by 29 out of the 30 participants in at least one of the two interviews. Only one participant did not make reference to macro level impacts of the pandemic on their work. The least number of occurrences during a single interview of impact on the macro level was one, with the most in a single interview being 37. There were a total of 252 nodes during the interviews which could be attributed, giving an average of 4.75 references per interview, to pandemic impacts on the macro level.

From the PEPS results, the histograms below illustrate from a Likert scale of 1 to 5, where 1 equals “no effect at all” and 5 equals “completely dominated the work”, of the extent that the pandemic impacted the participants work organisation at the first and second interview timepoints. Participants overwhelmingly scored 4 or above on average (4 = large, 5 = dominating effect) at both Time 1 and Time 2. In the context of the current findings, this highlights that participants were reporting that the pandemic was having quite an impact on their organisation.

Figure 3

Extent of Impact of the Pandemic on the Organisation at Time 1 vs Time 2

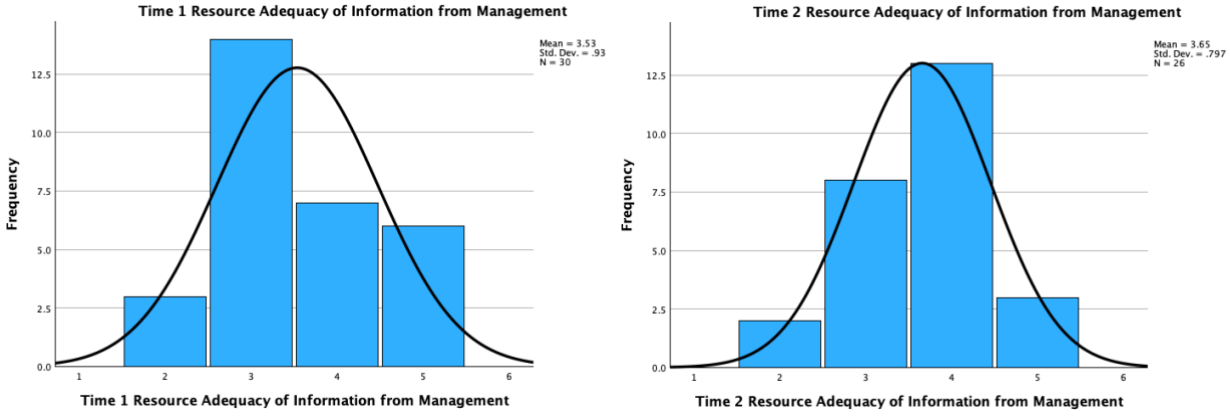


From the PEPS results, the histograms below illustrate from a Likert scale of 1 to 5, where 1 equals “completely inadequate” and 5 equals “completely adequate”, of the participants’ experience of adequacy of information from management about the pandemic. There was a slight improvement in the median score, from ‘somewhat adequate’ at Time 1 to ‘mostly adequate’ at Time 2, which was reflected in the qualitative interviews where language and communication were felt to have an impact of the experience of participants at work. In the context of the current findings, this highlights

that participants were reporting that in general there was a sense of adequacy or above with regard to the information they were receiving from their management around the pandemic.

Figure 4

Adequacy of Information Resources from Management at Time 1 vs Time 2



A common theme from participants was the impact of a lot of other services not operating having a pervasive impact across other services that were operating, and the impact on complexity of carrying out roles due to changing infection prevention and control and restrictions. Following from this there was a reflection that resources are being increasingly stretched with an increasing workload, which caused frustration towards other services that had closed. Feeling that there were organisational politics that were being heightened as a result of the pandemic, which can have a frustrating impact on frontline staff trying to do their job. In Participant 1B's experience, organisationally "*I don't think it was well handled…we felt quite abandoned*". The shifting environment that was happening at an organisational and environmental level had a destabilising effect- with Particpant 1D, "*I like to know what's happening and I'm a very structured, routined*

person. So to wake up and have that taken away from me was initially something that I really struggled with…I'd get quite anxious".

How organisations handled the vaccine program and made the participants feel valued, or in this case undervalued with the language that was being used to communicate, permeated throughout.

The importance of information flow and management was highlighted throughout. There was acknowledgement of the ever-changing knowledge about what COVID was, though there was criticism with the clarity in how this was sometimes explained. However, there was also positive feedback about instructional videos, like from Participant 2D:

> *"at one stage it really did feel like we're watching a dance, that that you've never danced before, and that it was all knew and you were making notes to say you wouldn't forget you know but I think that was the fear factor that was associated with this virus that we didn't know how contagious it was…initially it wasn't meant to be airborne and the next thing you're told it could be…initially it was that it was OK to not wear masks and then you were told well you have to wear masks. So I thought the instruction videos were good I have to say I would complain still about the constant changing of procedures…getting emails coming at you and not having time to sit and read them meant that it was really just telling you there was information but you were not informing yourself about that information"*
>
> (Participant 2D)

For some, the pandemic not only changed their work role, but also the environment/place that they worked as well as the team that they worked with, which took time to get used to. They are also anxious about what it will mean for the future of

their services- "*It's had a huge knock on effect and will do for the next couple of years in regards to waiting lists*" (Participant 1J).

Positively, some participants reported how they saw organisations come together and work well, and "*actually delivered appropriate services for people*" (Participant 1G), hoping that after the pandemic these organisations will be able to continue to work well in the new ways when the 'bureaucracy' was taken away. How on an organisational level they were having creative ideas of working with service users, and these were rolled out successfully.

Table 14

Outline of Pandemic Impact - Macro Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Macro			
Emerging themes identified:	Organisational level of impact of pandemic on their work		Societal and extended social network impact of pandemic on personal life	
Theme Description:	Experiences around how the pandemic affected through other services not operating the same, changing infection prevention and control and restrictions, organisational politics, and resources being stretched		Experiences that centred around societal changes, the changing nature of how participants were able to interact their wider social network and society in general in their personal lives	
Supporting evidence / excerpts	*the general stress of resources…our resources at the moment are just ridiculously stretched, because we have twice the clients coming…because we're one of the very few organizations that are still working face to face with clients.*	*So my workload has quadrupled and I have much less space with which to do the work. And I don't feel that that's being understood by management because they're stressed-out to bits as well.*	*I think risk. Fear I think probably. There's the whole, well a lot of the people are not as risk averse as we are as staff*	*the 'everything is going to be ok and it will be OK soon and it'll be back to normal', and I'm going like most of us now, most of the staff, for us it's not going back to normal.*
	They're stressed, they're also being kind of under pressure with we were threatened with redeployment	*I'm a little bit depressed by my colleagues in the community and voluntary sector, I have to be honest.*	*It took away an awful lot of the fun and connectedness.*	*It's turned everything upside down, it really has. It's just made life very much more difficult.*

	and we didn't want to be redeployed, so we were there kind of trying to prove our work. So then there saying to us can you prove your work to us so that we can prove your work to them, and that just feels kind of attacking	*People who made decisions to stay at home and only stay at home, and like organizations that didn't look for opportunities for direct face to face contact.*		
	I think a lot of organizations got very tribal, very inward looking, and they forgot that they actually work on behalf of people who really needed to see somebody	*The other thing I suppose is that we didn't waste the crisis, in terms of we really learned, Jesus, we've been doing that piece work that way because that's the way we did it maybe we need to really reconfigure, you know, our whole service delivery and design..*	*I'm finding that even people, those people that I'm telling you about, that just take things in their stride, they're really feeling it now.*	*I have friends who at last are going back to work, they work in IT or Banking, and they've been a year and a half at home working online. I was a bit angry. I was like, 15 months at home, very nice for you and then suddenly your party times are going to go back*
	I think one of the biggest stresses of the whole year was the roll out of the vaccination program	*It's had a huge knock on effect and will do for the next couple of years in regards to waiting lists.*	*I think particularly last year as well like for older it was a lot, I think the kind of the impact on loneliness and stuff has been huge I think for the elderly, the elderly population as well*	*I think since people got their vaccine, there's a lot of you know, the panic has gone down really, people aren't as panicked. And we're doing more and the weather is improving*

Behavioural

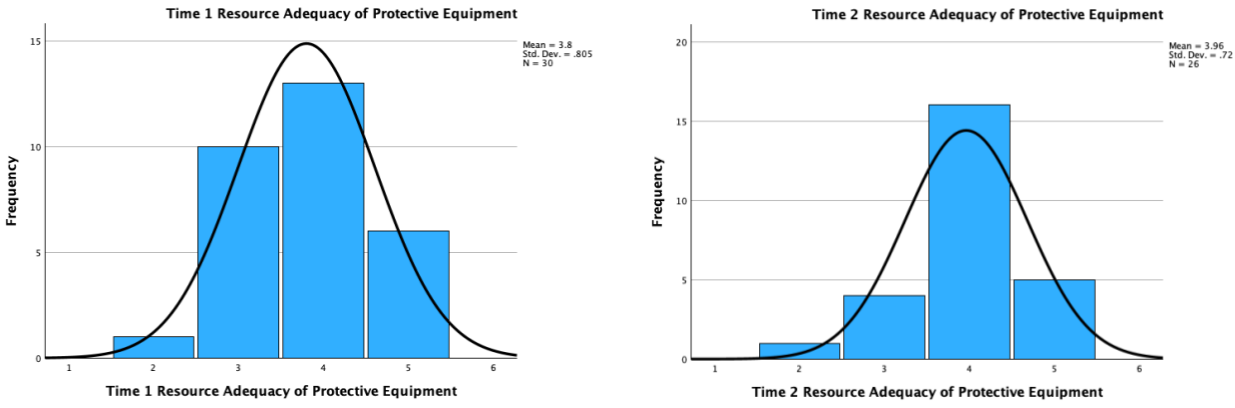
References to pandemic impacts on the behavioural level appeared in 55 of the participant interviews, inclusive of Time 1 and Time 2, and were mentioned by all participants in at least one of the two interviews. The least number of occurrences during a single interview of impact on the behavioural level was one, with the most in a single interview being 11. There were a total of 203 nodes during the interviews which could be

attributed, giving an average of 3.7 references per interview, to pandemic impacts on the behavioural level.

From the PEPS results, the histograms below illustrate from a Likert scale of 1 to 5, where 1 equals “completely inadequate” and 5 equals “completely adequate”, of the adequacy of the protective equipment (eg masks, gloves etc) that participants needed to perform their work at the first and second interview timepoints. Participants averaged a score of just under 4 (3 = somewhat adequate, 4 = mostly adequate) at both Time 1 and Time 2, when it came to having enough PPE to be able to carry out their roles, which could have an effect on how they behaviourally carried out their duties. In the context of the current findings, this highlights that participants were reporting that at the time of interview the levels of availability of PPE were at least somewhat adequate, and that this had improved between the timepoints.

Figure 5

Adequacy of Protective Equipment Resources at Time 1 vs Time 2



Focusing on references to negative impact following from the histograms, PPE was something that had become a pervasive part of participants’ work roles since the

pandemic began. While it was mentioned that there were times when PPE was scarce, at the time of interview most participants felt it was mostly adequate. However, it was frequently reported that the addition of the time it took to put on PPE and implement IPC (infection prevention and control) protocol had a significant impact on the length of time it took to carry out their duties- "*it takes twice as long to do half as much*" (Participant 1P). This carried itself over to the over-the-phone work as if they were unable to get through to service users it took more time, as well as longer to form a professional rapport/connection with them and be able to provide appropriate levels of support- "*I guess more chaotic, less consistent, less outcome, more frustration on my part at times*" (Participant 1H).

Participants further reported that the lockdown restrictions made them feel that they were being controlled, although they understood the need to the restrictions. Outside of the work environment and on how the pandemic changed their behaviours at work, participants reported how the restrictions caused them to change their behaviours at home. This was largely with respect to self-care techniques such as not being able to go for hikes, to the gym, or finding new ways to do this such as yoga over Zoom. They also spoke of changes within areas like childcare, schools closing, and needing to work from home because of these. Having to go into work brought with it its own effect, because of the risk involved, as Participant 1M spoke of:

> *"I felt that by going into work that I could bring something home to my family, and my partner has massive health problems, really immune-compromised, and has all the complications, and maybe I was picking up sometimes on her fear but she was genuinely afraid that if she caught covid that she would die. She genuinely thought that she would die if she caught covid and anytime I went out to work, it just*

stresses her out so much that I could be bringing something back that could kill her."

Focusing on the positive, participants reported that when they were able to do their job, with Participant 1B asserting "*They pulled their socks up, including me, we went to do the job. Not one person hid in their in their bedroom at home. They were all frontline, they all did the work. It brought us closer together and we were a very tight unit.*"

Table 15

Outline of Pandemic Impact – Behavioural Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Behavioural			
Emerging themes identified:	Impact of pandemic on behavioural elements of their work		Impact of pandemic on behavioural elements of their personal life	
Theme Description:	Experiences around how the pandemic affected the things that they were able to do within their work environment and work roles		Experiences that centred around how the pandemic affected the things they were able to do throughout their personal lives	
Supporting evidence / excerpts	*it's been challenging to kind of get settled into it and find the way to work with people, because this role outside of the pandemic would involve a lot of meeting people in different services and moving from place to place and meeting a lot of different people*	*So a lot of the work is over the phone which is quite different for me. I'm not used to that.*	*I know I'm feeling extremely irritated and I'm feeling I can't listen because I've no space to listen. So therefore it's just a matter of getting through the day, get through this day, get this behind us and I'll be fine when ABC happens*	*really struggling in this lockdown. We're really struggling- we feel really controlled, everything is the same, nothing is different.*
	I know that I have my set days from Monday to Friday and I know exactly where I'm going to be on them days, but overnight that was gone and I was kind of like, well what do I do?	*Addiction is still happening, homelessness is still happening, mental health is still happening. So even though all that stuff has stopped, the referring, all that*	*once the five kilometre rule goes just go for that drive, just to go for that walk somewhere will be a really big relief. I think for the both of us. It comes down to the*	*Even though we're trying to do different things it still feels the same, because we're in the same environment*

	And I'd get quite anxious in that. That was difficult	*stuff is still going on in the background, and its getting worse and worse because people are isolated*	*lockdown this time.*	
	Just a lot harder instead of a kind of being able to put my work onto another agency, like as a case manager referring people, it just became more of a support piece because there weren't as many referrals going out	*It kind of leads to frustration for me because I can't provide the service that I would've once been able to provide to people.*	*I'd be very used to you know being a free-bird and getting a few holidays throughout the year sort of as the self-care, with the family, and you feel reenergized and rejuvenated after that. And then there's none, can barely get them, the biggest holiday is Tesco's that you get..*	*I love going to the country, getting a bit of peace. I'm very much a nature person as well you know. I come back with just a different mindset. And you can't even do that*
	it completely changed my job in general. At the time I was working in an STA service on Dorset St. It was a really lovely service, I'd worked there for six years but when I came back that had closed and my job was now in a cocooning unit	*it takes twice as long to do half as much.*	*then there's the thing as well with the home schooling and the kids at home and then working from home, trying to adapt that much running. It can be tough going, you know, my wife having to acclimatize as well.*	*we're constantly on the go with the pandemic and all that, and it's like everything in life its only when you wind down after the event is when you'll actually see the real impact of it.*

Physical

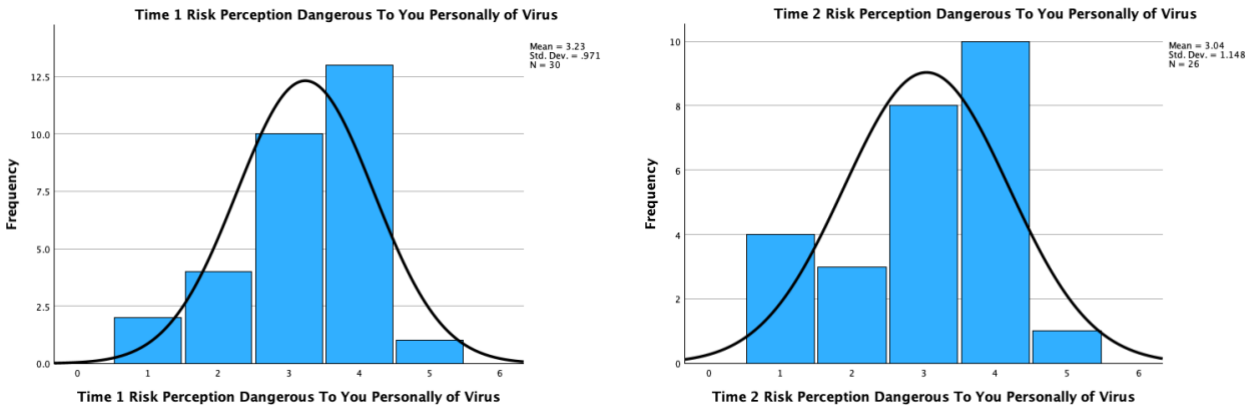
References to pandemic impacts on the physical level appeared in 25 of the participant interviews, inclusive of Time 1 and Time 2, and were mentioned by 20 out of the 30 participants in at least one of the two interviews. The least number of occurrences during a single interview of impact on the physical level was one, with the most in a single interview being 6. There were a total of 50 nodes during the interviews which could be

attributed, giving an average of 2.5 references per interview, to pandemic impacts on the physical level.

From the PEPS results, the histograms below illustrate from a Likert scale of 1 to 5, where 1 equals “no danger to me” and 5 equals “life threatening danger”, of how dangerous the Covid19 virus was to the participant while at work during the pandemic period at the first and second interview timepoints. The median participant score was 4 (greater than usual potential for harm), with the average score being slightly above 3 (usual potential for harm) at both Time 1 and Time 2. In the context of the current findings, this highlights that participants were reporting that the pandemic was having an impact on their perceived level of danger to them because of their work role.

Figure 6

Perception of Dangerous Risk from Virus Personally at Time 1 vs Time 2



On the negative aspects that the pandemic has impacted on the physical level, many references related to the change in physical space and environment due to the virus. For example, ranging from services and entire environments being shut down, not being able to be in the same room as people, to being in the same room but being socially

distanced, wearing masks thus not being able to fully see someone. The changes to participants' physical space also extended beyond the typical work environment to their homes, where they were also managing children that were being home-schooled due to school closures, multiple adults working from home, and the logistic demands which accompany that.

> *"A total transformation really. The underlying work remains the same and I have a lot of experience, I'm around a long time…most of the tasks that come my way I've got the experience to be able to take them without a great change but the difference since March of last year is we have been having to embrace this pandemic and realize that every encounter with clients and with colleagues and with family has…this umbrella over which is this covid pandemic, and the risk of contracting it or I suppose what really worried me more was the risk of passing it on. And that would have been true through work or at home."* (Participant 2D)

The communication of changing guidelines to physical space, such as regulations pertaining to wearing PPE, distancing guidelines, and other requirements, was commented on, thus highlighting the importance again of language and clear communication. This was particularly true in the face of constantly changing knowledge about the Covid19 virus. As Participant 2G said, "*if you look back on it, the kind of things that kept us a safe, it was a lot of practical things that keep everyone safe really…the covid thing didn't really bother me as much, because you know I just felt OK there's rules to follow…but I felt the system really let us down, and then…some of our colleagues were shattered"*.

A positive reflection which arose was an awareness and appreciation of the physical space around us, and of the value of physical activity. For example, when being

allowed travel within 5km Participant 1D reflected "*we were saying once the five kilometre rule goes just go for that drive, just to go for that walk somewhere will be a really big relief"*. While there was acknowledgement across the interviews of the changes in physical space at work, these were taken with stride as necessary to mitigate the impact of the virus in the work environment. This was contrasted with a strong awareness of the need for physical space for a lot of self-care activities outside of work to balance the stress at work, and once the restrictions eased there was a reported positive impact of this on participants' wellbeing.

Table 16

Outline of Pandemic Impact – Physical Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Physical			
Emerging themes identified:	Impact of pandemic on physical elements of their work		Impact of pandemic on physical elements of their personal life	
Theme Description:	Experiences around how the pandemic affected the physical space and environment within their work environment and work roles		Experiences that centred around physical space and environment throughout their personal lives	
Supporting evidence / excerpts:	*it's been challenging to kind of get settled into it and find the way to work with people, because this role outside of the pandemic would involve a lot of meeting people in different services and moving from place to place and meeting a lot of different people*	*even something simple like if you were doing referrals for somebody you need to see them together to get the form signed*	*once the five kilometre rule goes just go for that drive, just to go for that walk somewhere will be a really big relief*	*I love going to the country, getting a bit of peace. I'm very much a nature person as well you know. I come back with just a different mindset. And you can't even do that*
	there was no windows or anything in our office, was nearly pitch black. I remember saying to one of the girls	*There was time when we were dishing out masks and there was you know one box to health centres at a time, which I just*	*You might get a walk in and can go for a drive if you can pass the checkpoints, but there's just too much reflection*	*people were getting off, and they had their gym, and they had their food, and they had their weekends away,*

	that it's like something out of American Horror Story, like you're coming into this bloody dark, red and black office	*thought this is craziest thing I ever heard, jaw-dropping like. That they were literally being that controlled*	*too much sitting. Even if it's just a bit pf shopping, even a bit of pottering around, going for something to eat, all that's gone. I think this time's a lot harder.*	*and the hotel. All that self-care piece. So they were spinning themselves up, do you understand? None of that was happening.*
	there was a lot of that and you know we went from the concern about having enough PPE, making sure it was all there, making sure it's all fitting right and correct, to then it was the whole issue about the vaccinations	*I thought that there surely would be some guidance from our managers and there was nothing. A full week we waited and then I got on to them and I said lads you know is there some guidance around this, are we meant to be wearing masks, what kind of, are we doing home visits, what do we have to do. And we were, I was in touch with covid very early you know and I was very blessed and fortunate that I didn't pick it up*	*it had an effect on how it could be caught, on the dangers of it. I mean because like obviously it was only myself and the two daughter. One of her colleagues tested positive, she was tested and she was positive, and then I was on the sofa, She's upstairs. So she was upstairs, we were all staying downstairs and then I lost my taste and smell, which was kind of scary because I'm not a kind of, I'm never sick, you know that kind of way.*	*I think when things started opening a bit back up, and the schools opened, it got a bit better, but it's been really hard, definitely, and you kind of feel like I said, I love my job, but I just felt nearly like bitter about doing things for people because, you know like I was doing everything yet nobody's helping me. Like the schools were closing and when the teachers, remember the special needs schools were meant to open and then they said they wouldn't*
	As much as people are saying we are now coming out of Covid 19, for us on the ground the story has not really changed. You still have to wear masks because we're HSE and in HSE space so the mask is not going anywhere.	*in the office because we are all double vaccinated we can be mask free but in reception area where there are clients and we are not sure if they are vaccinated we need to wear our masks.*	*I have had very little limited contact with people other than my husband who has health issues*	*I have met a lot of friends on Zoom, gone to theatre events on Zoom, gone to music events on Zoom, done loads of things*

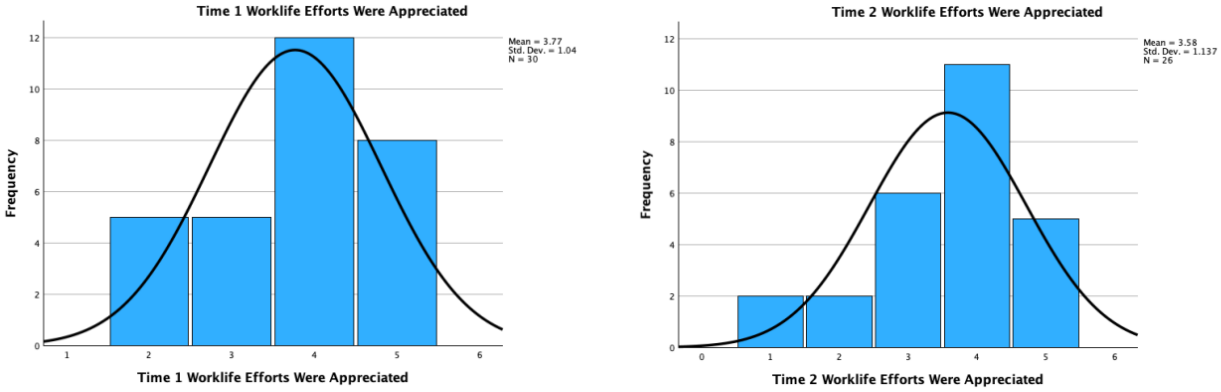
Psychological

References to pandemic impacts on the psychological level appeared in all of the participant interviews, at both Time 1 and Time 2. The least number of occurrences during a single interview of impact on the psychological level was one, with the most in a single interview being 20. There were a total of 273 nodes during the interviews which could be attributed, giving an average of 4.88 references per interview, to pandemic impacts on the micro level.

From the PEPS results, the histograms below illustrate from a Likert scale of 1 to 5, where 1 equals “strongly disagree” and 5 equals “strongly agree”, of the extent to which participants felt their efforts were appreciated at work during the first and second interview timepoints. The median score of participants was 4 (agree) at both Time 1 and Time 2, however it is worth noting that several chose 3, which denoted ‘hard to decide’, with the average score being between 3 and 4. In the context of the current findings, this highlights that participants were reporting that while the median response was that they felt their efforts at work during the pandemic were appreciated, there were a number who felt ambiguous to whether they were appreciated at work.

Figure 7

Felt Sense that Efforts were Appreciated at Work at Time 1 vs Time 2



Negative responses ranged from relating to exposure to the virus itself, such as Participant 1A reflected "*initially I would have had anxiety…because you didn't know how much at risk that was going to put you in*"., to on the organisational level, with Participant 1B finding the changing politics from managers that weren't engaged in frontline work "*frustrating and disheartening and demoralizing*" due to a disconnect between what was happening on the ground and the decisions that were being made on a service-level.

Typical psychological impacts were on an emotional level as well as impact on cognitions. Common themes were worry, anxiety, stress, anger, feeling selfish and guilty when putting own self-care first, feeling distant and disconnected, struggling, panic, uncertainty, low tolerance and empathy, avoidance, drained, frustration, despair, hopelessness, dismissed, doing things is a chore, no enjoyment, losing joy in the work, fear, depressed, sadness, undervalued, alone, forgotten about, powerless, jaded, worn out, bitter, resentful, depleted, overwhelmed, increased irritability, bitter, hypervigilant: *"It just constantly just feels like the fire is never extinguished, it just keeps coming"* (Participant 1D).

"I was extremely terrified of covid at the start, but I felt mentally I needed the structure of work during the pandemic" (Participant 1I).

Positive responses consisted of participants expressing being proud of their team and in having a positive impact on service users, exhilarated and energised initially with the creativity they saw and dynamic mobility of how they worked, relief when restrictions were lifted and able to reengage with self-care activities, like with Participant 1L saying "*over the first and second lockdowns I did struggle a little bit with my own mental health, but with the gym, took it and turned it around".* Following this, feeling refreshed,

rejuvenated, reenergised. When they received gestures of appreciation from others, there were feelings of gratefulness.

Table 17

Outline of Pandemic Impact - Psychological Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Psychological			
Emerging themes identified:	Impact of pandemic on psychological elements of their work		Impact of pandemic on psychological elements of their personal life	
Theme Description:	Experiences around how the pandemic affected the psychological aspects their work environment and work roles, including both emotional and cognitive contexts		Experiences that centred around the psychological affects that the pandemic had on their personal lives, including both emotional and cognitive contexts	
Supporting evidence / excerpts:	*I was working in a residential service so obviously initially I would have had anxiety around that because you didn't know how much at risk that was going to put you in*	*I'm not someone who works well with politics but I've been kind of caught in it to some extent, and that's what I found frustrating and disheartening and demoralizing.*	*they're struggling with that, like you can definitely see the impact it's having on people and their mental health very much*	*Being in a crisis that nobody obviously expected and that we'd never experienced before. Quite stressful*
	I don't think it was well handled. I think without which we felt quite abandoned.	*Looking back at it, aside from the anger with part of people in the HSE, again back to the team feeling they embraced it.*	*Guilt from you know trying to be in work, kids at home trying to combine that as well. Feeling guilty about the work feeling guilty about the kids.*	*I have been extremely distant, disconnected*
	Even in work, I I know exactly where I'm going to be on them days, but overnight that was gone and I was kind of like, well what do I do? And I'd get quite anxious in that	*it would be a lot more draining. Because you're there kind of supporting people on some levels, you know mostly just a chat, that just impacted on me a bit more.*	*We're really struggling- we feel really controlled, everything is the same, nothing is different.*	*there's frustration and you have to recognize that*
	I guess more chaotic, less consistent, less outcome, more frustration on my part at times.	*It kind of leads to frustration for me because I can't provide the service that I would've once been able to provide to people.*	*at first, I suppose over the first and second lockdowns I did struggle a little bit with my own mental health, but with the gym, took it*	*I've always had the ability to try and say well I've done everything I can do and now this is my weekend off but this year it's creeping into*

			and turned it around.	*your mind a bit more, it's changed*

What impact does the work environment have on the psychological wellbeing of frontline health workers?

"I think my experience so far is that if you're not looking after yourself outside of your job, your job gets impacted. You can't do your job as good and it just drains the life out of you. And then it impacts on the outside of it, so it just goes back and forth." (Participant 1H)

Micro:

References to impact of the work itself on the micro level appeared in 55 of the participant interviews, over both Time 1 and Time 2. The least number of occurrences during a single interview of impact on the micro level was one, with the most in a single interview being 17. There were a total of 294 nodes during the interviews which could be attributed, giving an average of 5.35 references per interview, to how their work environment impacts on the micro level.

"When I'm having a good time at work things are great and that has a positive impact on my life but if I'm having a difficult time at work it's very hard for me to draw the line and take a step back. So that can kind of impact on my relationships, on my mental health" (Participant 1M).

With negative aspects on the personal level, participants mentioned one difficulty being work/life boundaries, thinking about what's going on for clients when they were not at work. They mentioned sometimes waking up exhausted going to work. Over time,

tolerance level was lower, and one participant explicitly expressed she got to a stage of burnout. Self-awareness was important to be able to manage day-to-day tasks, as Participant 1C feels she will schedule an 'admin' day when "*you know you're not going to be effective in your work because your mind is elsewhere or your emotional balance is off that day*". Flashbacks to incidents of danger such as violence, aggression, and suicide were noted, as was poor sleep, and tiredness. Participants reported feeling frustrated and anxious when seeing inequality, constantly seeing trauma around them. Experiences such as emotional numbness, transference, existential issues, overthinking, and becoming more guarded over time were expressed. Feeling incapable of managing clients well enough, while work placed staff wellness of staff in second place behind the wellness of service users. Boundaries at work were also described, such as not staying within own work role to go 'above and beyond' which became a bigger burden.

Desensitised from the work came up in many interviews, which can have an impact on personal life too- such as being less empathic towards friends and family; '*Always giving myself to people*' (Participant 1D). Some participants described compassion diminishing over time, with boundaries not as concrete as they were; "*My experience is dealing with stuff outside of the job I can find difficult, because it's almost like if it's a bottle, you're at the brim of the bottle, from the work you do during the day. So if a family member has an issue or is not good, it can be difficult to tolerate that. That's a big one for me*" (Participant 1F). Being exposed to a lot of "*darkness*" (Participant 1M), and a skewed world view due to this. And overarching sadness, yet commenting "*we're not robots*" (Participant 1S).

Positive elements noted the use of supervision, which aided participants find it easier to work with clients from a personal perspective and feel grateful. They were able to be empathic towards to trauma of others. When boundaries are good, Participant 1C felt that "*it's impacted quite positively. Enjoying my work- I enjoy knowing I am making a difference to clients without my life revolving around the clients*". The understanding of clients over time helped manage the emotional impact of their stories, and gaining meaning from work. Participants also realised the importance of self-care outside the job as well as in it, and when working in a good supportive team, feeling personally better able to cope with the work. One participant spoke about post-traumatic growth, being able to feel stronger as a result of managing the adversity exposed to at work. It was reported that work can give energy, motivation, and resilience.

Table 18

Outline of Work Impact - Micro Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Micro			
Emerging themes identified:	Impact of their work role on an individual level at work		impact of their work role on an individual level in their personal life	
Theme Description:	Experiences that centred around how participants' work role affected them on an individual level		Experiences that centred around how participants' work role affected them on an individual level	
Supporting evidence / excerpts:	*when I'm not waking up exhausted and going to work, I know I go to that team it's grand because it's a generally really good team.*	*I have an issue, and sometimes I think it's due again back to my time I saw the potential burnout, with a specific group of clients which is when a client wants wants wants and takes takes takes.*	*depending on who you work with sometimes, what's going on for them, it can be something that you do find yourself thinking about when you go home.*	*when you wake up on the days and you're like today is not the day for people; because your mind is elsewhere or your emotional balance is off that day*
	I enjoy knowing I am making a difference to clients without my	*I think identifying when you need admin days as opposed to people days, knowing*	*I do think from year one to now I have progressively desensitized myself to a lot,*	*I wouldn't have as much compassion with my personal people as I would*

	life revolving around the clients.	*your tolerance levels from day to day.*	*which effectively has an impact on my personal life*	*with my clients or my colleagues*
	I'm sick of hearing the sound of my own voice a lot of the times and sometimes I just I feel like, am I at work or am I at home? So I get really irritated then, if that makes sense	*a couple of years ago I would have been very good at creating that boundary and being able to maintain and manage it quite effectively. But I have found as time has gone on, that is diminishing over time.*	*when I come home sometimes I just don't feel like I've anything left to give*	*It creates a disconnect between me and my personal people.*
	the incidents I would have been involved in, would really have an impact on me where sometimes they just pop into my head today.	*It was that emotional numbness …Things just weren't phasing me that they normally would. I was nearly too flaky around scenarios.*	*maybe at 10:00 o'clock in the night and I'd go to bed, maybe trying to wind down, an hour later and then will be waking up high alert.*	*It has made me I suppose more aware and more guarded in the sense of who I have in my life and things like that.*

Mesa:

References to impacts on the mesa level appeared in 37 of the participant interviews, over both Time 1 and Time 2, being mentioned by 26 of the participants in at least one of their interviews. The least number of occurrences during a single interview of impact on the mesa level was one, with the most in a single interview being 14. There were a total of 135 nodes during the interviews which could be attributed, giving an average of 3.65 references per interview, to how their work environment impacts on the mesa level.

"I think you depend a lot on your team- if you choose your team well and wisely and they are experienced people, this collaboration and trust makes the work easy" (Participant 1B).

Participants commented on the negative impact of always giving to others, which impacts compassion, and extends to team members as well where at times the team feels disconnected. They reported feeling it was difficult to managing everything around their environment, team and family. Seeing politics in teammates, long hours and being exposed to a lot of environmental trauma brought frustration, reduced empathy at home. Participants report experiences from the past of being on teams that they did not feel were supportive, and expressed feelings of burnout and compassion fatigue, as well as stress and frustration, being disheartened as a result of this, and a relief when leaving those teams. They also reported the negative impact when it felt like '*staff wellness was second place*" (Participant 1K), and seeing limitations of what a team can achieve can be disheartening. One participant described a traumatic incident that occurred in a previous job that was not handled well on the mesa level- the supports offered were not felt genuine, and they found their own professional peer network more supportive.

Positively, participants reflected that having a supportive team was hugely positive and helped with retention, wellbeing, and feeling safe/secure at work. When feeling exhausted, a good team can reenergise. Participants were proud of their teams, in that they found the team and manager really supportive and being able to identify when someone may need more support if having a bad day. Being supportive and approachable, and getting a sense of meaning from the team; feeling like a community of activists in their work, like a family. Further, seeing resiliency in their team was self-affirming. Other positive attributes included appreciating the experience of others on the team, group learning, and strength in numbers around important issues.

"*Being a little bit more short fused, recognizing and I think that's probably why it is so good that when you are working with a team that you've worked with for a long time we kind of know their characters. You kind of know when they're having maybe a bit of an off day and you might feel a little bit more comfortable to say look can I do something to help you*" (Participant 2B).

Table 19

Outline of Work Impact - Mesa Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Mesa			
Emerging themes identified:	Impact of their work role on a team-based level		Impact of their work role on family and close friends in their personal life	
Theme Description:	Experiences reported on the team-based level, at times extensions from the individual ways of working that altered the team based on the impact of the work		Experiences that centred around the changing nature of how participants were able to interact and be with their family and close social network in their personal lives	
Supporting evidence / excerpts:	*if you choose your team well and wisely and they are experienced people, this collaboration and trust makes the work so so easy*	*I'm very proud of the team and as much as I know you need a hierarchy, you do need a line manager, you do need team leaders.*	*But sometimes the more I understand and know about that, the more I don't want to understand and know about it. If I see it in my personal life I call it out, I don't want to explore it and it's not something I like to go into when I'm at home.*	*I have found as time has gone on, that is diminishing over time and it's getting a little bit problematic to a point where my compassion is, as I said, it can be very minimal depending on the day you come to me.*
	we don't meet outside ever. Even prior to covid, as much as I respect them and I'm very fond of them, I don't socialize with them.	*I feel I think a lot of time in my job I'm either giving myself to clients or I'm giving myself to staff, I'm always giving myself to somebody.*	*It creates that disconnect to a degree that people won't come to me anymore, because they feel I'm being dismissive or they feel I don't have what they are looking for.*	*My experience is dealing with stuff outside of the job I can find difficult, because it's almost like if it's a bottle, you're at the brim of the bottle, from the work you do during the day. So if a family member has an issue or is not good, it can be difficult to tolerate that.*

	then you've to deal with the different disciplines and the politics and you know there's an awful lot in it, there's so much more to it than just sitting down with the client. There's the other professionals, there's your teammates, there's a lot more	*I mean you are in a challenging environment and there's some days that it can have an impact on your life. But again it's about reaching out and putting them supports in place, basically using your*	*when you hear somebody, it could be a family member, could be a friend, giving out about something that's like a privilege in most cases, compared to our cohort of clients, that can be very frustrating and can be annoying*	*I'm around people that wouldn't be in the same work, they work on building sites or they have their own businesses, and it impacts me if they don't see what I see on a daily basis. They just dismiss, say, addiction or homelessness, do you know that type of way.*
	the Wellness of the staff was definitely second place, if not third, and it was the difference if the clients were looking for anything, but if the staff did that didn't happen or it was well we can do it outside working hours, or it was I think, 'you all just need to be getting on with it now'.	*I have support from colleagues which is great, you'd be kind of really lost I think. I think of all those public health nurses who work in maybe remote little health centres, who might be on their own. So at least we have a bit more of a team here which is great*	*there are sometimes where you're tired and not looking after yourself and you can take that way home. But it doesn't really work the same outside because there are people you're close to, they just don't take it because there's no need to, but sometimes I forget.*	*You're trying to do so much, and you forget about yourself and your own identity, and you forget about your relationship, and you forget about your marriage. And you have all these different hats to put on and take off.*

Macro:

References to impacts on the macro level appeared in 43 of the participant interviews, over both Time 1 and Time 2, being mentioned by 27 of the participants in at least one of their interviews. The least number of occurrences during a single interview of impact on the macro level was one, with the most in a single interview being 8. There were a total of 130 nodes during the interviews which could be attributed, giving an average of 3 references per interview, to how their work environment impacts on the macro level.

Negative attributes included "*the biggest stressor for me more than anything is the system*" (Participant 1Q). Referred to by Participant 2B as 'the above', they said "*there's always politics*", bureaucracy, and feeling like they have to put up with the politics. Participants reported anger at times when there are threats to job security of frontline posts, such as through funding cuts, which added to not feeling valued. Organisational limits that influence things like length of waiting lists were frustrating, alongside the constant changes in processes and paperwork that did not seem to take into appreciation the sometimes urgency of the work that's being done on the frontline- "*loading work on not really appreciating the person trying to deal with all of this…there was individually really good managers and stuff like that but as an organization that was difficult*" (Participant 1K). Work at times felt hectic when dealing with other organisations as well as people. As a result participants wanted to be on their own to recuperate on weekends but this can be difficult when work and home environments/locations overlap.

Frustration and anxiety at seeing inequality on a societal level and the injustice having a negative impact was also reported. When service policy does not translate to what happens on the ground, and feeling like a revolving door. Exposure to traumatic incidents within environment- "*the trauma that the staff go through on a daily basis is unreal*" (Participant 1L). It was felt like there was a 'shelf life' (Participant 1I) within certain organisations before having to move on for own wellbeing, to avoid burnout; seeing other frontline workers in other organisations happy in their work role motivated some participants to change jobs. Identity as a helper means that when work is going well it has a positive influence on their lives in general, but when work is not going well there

is a pervasive impact on all aspects of their lives outside of work such as relationships and mental health.

> *"I've been exposed to more darkness and I think sometimes what I find is I feel like people's experience of the world becomes their world in their mind, and my experience of my world is that 35-40 hours a week I am only hearing negative stories and badness and darkness. So say for example, it's skewed my worldview a bit, so my worldview is like skewed towards nearly everybody experiences sexual assault, nearly everybody experiences domestic violence, nearly everybody is let down by the system in some way, and actually when I assess that that doesn't mean that's not really true, but it's true of my work."* (Participant 1M).

Positively, there was recognition that there is a need for hierarchy, particularly with some bigger decisions. Supportive organisational structures were reported to make a hugely positive difference "*from the girls that work in reception right the way through, it feels like a family that everyone is just so supportive of each other*" (Participant 1K). There was a sense of meaning from being in a 'community activist' (Participant 1P) type of role. Getting meaning from work, if the organisation is aligned with own sense of values, as well as value of community development. Variety in the work helped sustainability, and interagency working can be amazing, making the work more manageable. Working in an area of deprivation there's an appreciation felt from service users, which gave one participant a sense of job satisfaction and fulfilment.

Table 20

Outline of Work Impact - Macro Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Macro			
Emerging themes identified:	Impact of their work role on an organisational/professional-wide level		Impact of their work role on a level that impacts their extended social network, community and societal level	
Theme Description:	Experiences reported that relate to the context of the organisation, systemically or profession in general		Experiences that centred around the changing nature of how participants were able to interact with their extended social network or communities in their personal lives	
Supporting evidence / excerpts:	*The Board has changed and gone, some are better than others, the funders have come and goes. There's always politics.*	*already quite traumatized by what was going on and by, they were retraumatized by being kind of nearly told it was under certain threats in relation to job security or funding if you didn't do what you were asked. So I was quite angry with that.*	*you're engaging with so many people. Not just clients but other organisations, and I find that on the weekends that sometimes I just want to be on my own, you know because I've been around people for five days and now this is the chance for me to sort of recuperate, I suppose, before Monday.*	*I suppose it impacts on my life in seeing the inequality within society, it's a massive thing, the injustice I suppose*
	then you've to deal with the different disciplines and the politics and there's an awful lot in it, there's so much more to it than just sitting down with the client. There's the other professionals, there's your teammates, there's a lot more, so you've to try and navigate your way through all that	*the HSE, I feel, come in and make all these changes under service level agreement…since August 2019 to now they've changed our initial assessment about 10 times. I remember one day working with a I spent two and a half hours with that girl but I spent another four hours doing paperwork*	*I get frustrated and anxious at times when I see the inequality*	*I worked in a residential place near where I lived, so some of the kind of knock on of that was I see clients out in the area where I was maybe with my family and I didn't like that. Kind of like I said I like to keep my work separate and so there was that was part of it.*
	I just find some of the stuff that they expect and put on	*loading work on not really appreciating the*	*I think one of the big things for me is identity. I feel like my*	*When I'm having a good time at work things are great and*

	us, and it's the same with, I mean I don't want to dish services, but the last service I worked in we had to get the whole building restructured because of GDPR. We had to get a specific filing room of filing keys and yet I went into direct HSE buildings and they don't have this	*person trying to deal with all of this, or if you know, people used to leave and their roles are just kind of disseminated amongst the team and you are still expected to the same level of work. And that was like more organizational.*	*identity is really tied up in being a helper which means that if I'm struggling with my job I'm struggling with my identity. So it's really hard to put a boundary in place, in some ways, between life and work because it's vocational. My work is my life. It's my identity, it's tied up in it.*	*that has a positive impact on my life but if I'm having a difficult time at work it's very hard for me to draw the line and take a step back. So that can kind of impact on my relationships, on my mental health*
	I think I've been exposed to more darkness and I think sometimes what I find is I feel like people's experience of the world becomes their world in their mind, and my experience of my world is that 35-40 hours a week I am only hearing negative stories and badness and darkness.	*I think there is an issue with value and I feel I think with feeling valued in the work. It is something that can help can help you kind of feel like your work is worthwhile…if you're feeling really stressed and under a lot of pressure and you feel like your work has taken a massive emotional toil, to then on top of that to feel that you're not valued*	*it just is like something that lives in the back of my head constantly that the world is this really dark horrible place which obviously isn't, you know, a positive thing.*	*I was coming out of the house on Sunday and there was a guy outside that I worked with, 'can I charge my phone in your house,' so then he was asking me to charge it in the car I was like, get away.*

Behavioural:

References to impacts on the behavioural level appeared in 38 of the participant interviews, over both Time 1 and Time 2, being mentioned by 26 of the participants in at least one of their interviews. The least number of occurrences during a single interview of impact on the behavioural level was one, with the most in a single interview being 7.

There were a total of 84 nodes during the interviews which could be attributed, giving an average of 2.2 references per interview, to how their work environment impacts wellbeing on the behavioural level.

On the negative side, participants reported being preoccupied about all the things that need to be done for a person while not at work, as the work can be a lot of tasks and practical, with boundaries becoming blurred. There was a tendency to take on too much, go outside of remit and carry a bigger burden, working long hours. It was hard to 'draw the line' and step back for some. One participant expressed needing to be blunt to get through appointments, rather than historically more patient. They reported calling out behaviours in personal life as less they were empathic towards it than in day job, irritated by it:

> *"somebody is coming to me with a really sensitive thing in my personal life as I said it depends the day, the time, you get me I could be very cut-throat and say this is your problem with this you need to do sort of stop moaning about it, or I could sit down and I could have very in depth conversation but it really varies from one end to the other"* (Participant 1D).

Body in fight or flight mode at work constantly, sleep really poor, tired and becoming desensitized was reported by several participants alongside feeling on autopilot; one participant when speaking about responding to a traumatic incident at work:

> *"I remember the colleague saying to me 'Jesus you were so calm, you're brilliant throughout that'. And I said to her I actually wasn't brilliant, that calm was actually*

after scaring me, because I was too calm almost. You know, and had this client have passed away I don't think it would have sparked anything in me at that stage, because I had seen so much." (Participant 1I).

There were some positive points too. Doing the work and seeing change give sense of fighting inequality, which made it worthwhile even if frustrated and anxious at times. Self-care is needed though; need to do things outside of work to looks after self in order to be able to be good in work. For one participant, the "*variety in the work makes it incredibly difficult, but rich*" (Participant 1O), and indeed having variety in the behavioural aspects of the work, the tasks they performed throughout the workday, was reflected positively in many participant responses.

Table 21

Outline of Work Impact – Behavioural Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Behavioural			
Emerging themes identified:	Impact of their work role on behavioural elements within their work environment		Impact of their work role on behavioural elements of their personal like	
Theme Description:	Experiences around how their work role affected the things that they did within their work environment		Experiences that centred around how their work role affected the things they did throughout their personal lives	
Supporting evidence / excerpts:	*I know it's got to do with work. I know I'm feeling extremely irritated and I'm feeling I can't listen because I've no space to listen. So therefore it's just a matter of getting through the day, get through this day*	*sometimes the more I understand and know about that, the more I don't want to understand and know about it. I'm fine when I do it with my clients when I'm able to say well you're presenting with this behaviour let's understand why.*	*I'm sick of hearing the sound of my own voice a lot of the times and sometimes I just I feel like, am I at work or am I at home? So I get really irritated then, if that makes sense*	*And so somebody is coming to me with a really sensitive thing in my personal life as I said it depends the day, the time, you get me I could be very cut-throat and say this is your problem with this you need to do sort of stop moaning*
	And then other things that you experience in it, suicides and	*Yeah and you just become desensitized to it. It becomes very*	*I'd be waking up, I'd be coming home from shifts maybe at 10:00*	*My sleep was really poor then. And then try to get up and manage*

	overdoses and fights and being assaulted with cups, and you know all things like that. So actually when you just step away from that it's like wow.	*much the norm you know. Where people be all saying 'you just go in' as if you were like putting on the kettle and giving them their Nalaxone and turning them over*	*o'clock in the night and I'd go to bed, maybe trying to wind down, an hour later and then will be waking up high alert.*	*life and you know, kids and then the other bits of stuff for your own mind, going training or swimming or whatever*
	I remember the last overdose that I was involved in, she was very unresponsive and my colleague was shaking like a leaf and I was just standing there as if this was the most normal thing on the planet. I remember coming away from it going 'this is no longer normal', I didn't get a fright anymore, there was no attachments	*I could stand and let somebody scream in my face for 40 minutes and not bat an eyelid, and people would be saying to me how the hell do you just stand there and let them scream at you like that. But it's over the years of having that, it just, it can be a skill and then it can be something then that trickles into your that's not helpful*	*Probably just more like you are just quite tired when you go home and you don't necessarily want to do anything sometimes, might just not be in the humour of doing something that maybe you would if you weren't as tired. Like you might…it's just the routine of go home, have dinner walk the dog, go to bed,*	*I had got into a situation in the homeless services in terms of me not focusing on myself as much because I was working probably 13 hour shifts and weekends and not eating right, not exercising, all that type of stuff.*
	I remember going back ten years ago and the first time I ever found somebody OD I made a mess of everything because I was in total panic. I was screaming at him breath breath and without actually doing anything. I don't feel like that today like: OD, get the team, ring the ambulance, do this, person down, stand back. It's just I'm like on autopilot	*keeping those boundaries strong? I've learned to be. I always say what's nobody else's job is my job, you pick up all the slack for a lot of stuff and you could be here until 6:30pm and you're never going to get to the end of you to-do list*	*I just feel that I kind of notice even at last year when I found my brother. When I found him first time I went into work mode and I just done CPR on him and then we got into James St hospital, and I maybe treated it like a client. Me sisters are in the hallway sobbing and broke down and my sister said to me how can you be so calm. I feel quite desensitized with stuff*	*I suppose over the years, it would have, you know that thing of thinking about clients when you come home or not sleeping properly worrying about either a client or how I was working with a client*

Physical:

References to impacts on the physical level appeared in 12 of the participant interviews, over both Time 1 and Time 2, being mentioned by 11 participants in at least one of their interviews. The least number of occurrences during a single interview of impact on the physical level was one, with the most in a single interview being 5. There were a total of 21 nodes during the interviews which could be attributed, giving an average of 1.75 references per interview, to how their work environment impacts wellbeing on the physical level.

In terms of the negative, participants spoke of waking up exhausted going to work. They found it difficult to 'wind down' after a busy work day, with difficulty relaxing in the evening. They were tired, as sleep was impacted greatly, and not wanting to 'do things' when getting home apart from the necessities. Physiological medical conditions were at times exacerbated by workload stress.

> *"I do think that I have to acknowledge that I wake up in the middle of the night, not about the [client population] but about operational stuff but I'm sure they're all connected. I haven't got that done or, oh Jesus Christ, I didn't respond to that letter. I'm not waking up going, oh my God, that women's experience of sexual abuse was horrific. It's not unmanageable but it's certainly enough for me to mark it, and definitely I'm a lot more physically tired than I was, and I feel that I am resourcing myself more to manage it"* (Participant 1O)

Positively, when on a good team this reduced impact of physical tiredness. Keeping active outside of work helped, and the structure of being in a 9-5 role helped one

client improve their self-care, whereas previously in a shift work role they reported not being able to eat healthily or exercise. One participant commented about their increased awareness of how their body lets them know if they are doing well or if they are feeling stressed, so that they know to slow up a bit.

> *"I've always felt that the things I enjoy doing outside of work helped me to stay refreshed and ready for the days' work. So I can certainly feel on a Monday, today is a Monday, I've got more energy today than I might have by the end of the week."* (Participant 2D)

Table 22

Outline of Work Impact – Physical Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Physical			
Emerging themes identified:	Impact of their work role on physical elements within their work environment		Impact of their work role on physical elements of their personal like	
Theme Description:	Experiences around how their work role affected the physical space, environment and them physically within their work environment		Experiences that centred around how their work role affected the physical space, environment and them physically throughout their personal lives	
Supporting evidence / excerpts:	*I had got into a in terms of me not focusing on myself as much because I was working probably 13 hour shifts and weekends and not eating right, not exercising, all that type of stuff.*	*And when I'm not waking up exhausted and going to work, I know I go to that team it's grand because it's a generally really good team*	*I'd be waking up, I'd be coming home from shifts maybe at 10:00 o'clock in the night and I'd go to bed, maybe trying to wind down, an hour later and then will be waking up high alert.*	*My sleep was really poor then. And then try to get up and manage life and you know, kids and then the other bits of stuff for your own mind, going training or swimming or whatever.*
	he just looked so bright eyed and happy and I was like Jesus he looks great and he was saying I'm telling you now it's the nine to five work, you will be very bright and cheery	*It's not unmanageable but it's certainly enough for me to mark it, and definitely I'm a lot more physically tired than I was, and I feel that I am resourcing myself*	*sleep, their relationships, relationships with family members, relationship with colleagues, stress levels and people being little bit more irritable.*	*more like you are just quite tired when you go home and you don't necessarily want to do anything sometimes…it's just the routine of go home, have dinner walk the*

	once you switch over as well, and we all did switch across and felt the benefit from it.	*more to manage it.*		*dog, go to bed, you mightn't do something else as well*
	I think it's always just trying to get a balance and it can be really difficult and I think some of us sometimes are a little bit quick at taking things on without not that we don't. Sometimes you don't have any choice you have to do it and you feel the responsibility	*So it's really, really difficult and unfortunately in here because we have so much lovely bright lights it's really bright. Like it's fine for a short while but for a full day it's quite difficult and then if you're on high steroids and immune compromised you can't be out as much with public*	*It makes it a lot more difficult to relax in the evening. That would be impacting on my relationship a little bit. Not much but a little bit impacting on it because I'm just so tired in the evening and I don't really want to interact too much. I'm a bit uninspired by life I suppose in general.*	*I do think that I have to acknowledge that I wake up in the middle of the night, not about the women but about operational stuff but I'm sure they're all connected*
	you can be very boundaried in working tomorrow, kind of more black and white, and then there are sometimes where you're tired and not looking after yourself and you can take that way home	*I've always felt that the things I enjoy doing outside of work helped me to stay refreshed and ready for the days' work. So I can certainly feel on a Monday, today is a Monday, I've got more energy today than I might have by the end of the week.*	*I swim in the mornings. I'm going in and have a swim and that is kind of puts me in. That's like my switch on, do you know what I mean? And then when I come back home, I listen to audio books and it switches me off,*	*well I'm sure everybody struggles with work life balance, I have to be honest about that. And there's been a lot of learning from Covid and people have, well I feel I have become more aware of who I want…what people I'd like to spend time with.*

Psychological:

References to impacts on the psychological level appeared in 53 of the participant interviews, over both Time 1 and Time 2. The least number of occurrences during a single interview of impact on the psychological level was one, with the most in a single interview being 14. There were a total of 291 nodes during the interviews which could be

attributed, giving an average of 5.49 references per interview, to how their work environment impacts wellbeing on the psychological level.

Negatively, ruminative thoughts about the work while at home, stress, worrying, "*carrying a lot home with you*" (Participant 1A) were reported. As was emotional burnout, reduced empathy towards the trauma of others, and feeling manipulated. Participants spoke of being more blunt with people, having less patience for listening. Flashbacks to traumatic stories from service users and incidents, anxiety and nightmares; "*it just is like something that lives in the back of my head constantly that the world is this really dark horrible place which obviously isn't, you know, a positive thing*" (Participant 1M), with the mind always in fight or flight, high alert mode. Being angry and triggered by job security threats from organisation due to funding, bringing up emotional turmoil already there from the work itself, and being desensitised, not having as much compassion with family and friends as with clients. For one participant, they were at times irritated at sound of own voice. Disconnected- "*it creates that disconnect to a degree that people won't come to me anymore, because they feel I'm being dismissive or they feel I don't have what they are looking for*" (Participant 1D). Following this, reduced tolerance outside of work, frustration, sadness, concentration difficulties, transference, emotional numbness, not caring about things as much as before; "*It's like nothing shocks me anymore"* (Participant 1J). Feeling unappreciated; "*on a kind of more personal level feeling incapable, or not incapable, maybe not capable enough*" (Participant 1K), minimising events, and avoidance.

On the positive side, participants spoke of enjoying the work, "*I enjoy knowing I am making a difference to clients without my life revolving around the clients*" (Participant

1C). Being aware of emotional balance and unbalance was important, to be able to gauge the day's work. When in a supportive environment where there was a balance at work, with participants being more relaxed. The structure at work reduced previous fear of uncertainty from unstructured workplace. A sense of worth, value, meaning was gotten through work. Positive impact on wellbeing of having a supportive manager was iterated, as was being passionate about work, energized, and buzzed. Post-traumatic growth was also reported in feeling stronger, gaining strengths through experience. "*It's certainly richer. I'm not sure if it's easier or harder, but it's richer*" (Participant 1O).

Table 23

Outline of Work Impact – Psychological Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Psychological			
Emerging themes identified:	Impact of their work role on psychological elements within their work environment		Impact of their work role on psychological elements of their personal like	
Theme Description:	Experiences around how their work role affected the psychological aspects their work environment and work roles, including both emotional and cognitive contexts		Experiences that centred around how their work role affected the psychological elements of their personal lives, including both emotional and cognitive contexts	
Supporting evidence / excerpts:	*you know you're not going to be effective in your work because your mind is elsewhere or your emotional balance is off that day*	*I have an issue, and sometimes I think it's due again back to my time I saw the potential burnout*	*I would have, I suppose, really worked on that over the years and I've gotten a lot better at not letting it get to me when I'm at home.*	*I wouldn't have as much compassion with my personal people as I would with my clients or my colleagues*
	I have found as time has gone on, that is diminishing over time and it's getting a little bit problematic to a point where my compassion is, as I said, it can be very minimal depending on the day you come to me	*I have been extremely distant, disconnected, but I know it's got to do with work . I know I'm feeling extremely irritated and I'm feeling I can't listen because I've no space to listen*	*when I come home sometimes I just don't feel like I've anything left to give*	*I'm sick of hearing the sound of my own voice a lot of the times and sometimes I just I feel like, am I at work or am I at home? So I get really irritated then,*

	the incidents I would have been involved in, would really have an impact on me where sometimes they just pop into my head today.	*Yeah and you just become desensitized to it. It becomes very much the norm you know. Where people be all saying 'you just go in' as if you were like putting on the kettle and giving them their Naloxone and turning them over*	*It creates that disconnect to a degree that people won't come to me anymore, because they feel I'm being dismissive or they feel I don't have what they are looking for.*	*My experience is dealing with stuff outside of the job I can find difficult, because it's almost like if it's a bottle, you're at the brim of the bottle…So if a family member has an issue or is not good, it can be difficult to tolerate that.*
	It was that emotional numbness I remember.	*think I just go into this flight mode and stuff just doesn't shock me. I remember going back ten years ago and the first time I ever found somebody OD I made a mess of everything because I was in total panic. I don't feel like that today…It's just I'm like on autopilot*	*when you hear somebody, it could be a family member, could be a friend, giving out about something that's like a privilege in most cases, compared to our cohort of clients, that can be very frustrating and can be annoying.*	*Things just weren't phasing me at home that they normally would. I was nearly too flaky around scenarios*

What are the perceptions of wellbeing supports amongst frontline healthcare workers?

For the section on supports for their psychological wellbeing, participants were asked what supports they had accessed or were aware of as well as what they would like to have/wanted going forward. The same matrix that was created from the thematic analysis to frame the impact of the pandemic and the impact of work is also applicable here.

Micro

Supports on a micro/individual level that participants accessed or were aware of included individual supervision, line management and clinical supervision, both internal and external supervision. Participants felt that in-person was better quality than online, and offsite better than inhouse. Flexibility around working from home if needed based on circumstances such as childcare was felt beneficial, as was individual support from colleagues which could be formal or informal. Participants found Employee Assistance Programmes where available helpful, as well as personal counselling/therapy and other organisations such as the Samaritans. Outside of work exercise like going training, gym, fitness,. swimming, meditation, mindfulness, going for walks, listening to music, reading, yoga, and going on holidays were seen as personal self-care. Doing an academic course or professional workshop. Being able to take time off of work, and having family at home understanding that they may need some time alone to switch off/process day before engaging, supportive partners, and peer support. Medication was also mentioned in some cases. At work, critical incident debriefing, open lines of communication, access to factual and helpful information, and self-help materials through occupational Health. Voluntary work outside of role too, such as organising events, being creative.

Supports that participants felt they wanted, or wanted more of (if already in receipt of them), often centred around supervision; "*the type of supervision we were talking about where you're looking at what is actually going on for you and how the work is impacting on your personal life and how your personal life is impacting on work kind of similar to what psychologists do. That kind of supervision I think should be there for everybody, should be part of the work, it should be as valuable as the line management*

supervision" (Participant 1M). Smaller caseloads with the ability to get support from team when going on leave was seen as desirable. Peer support was seen as important, and more of a focus on mindfulness, yoga and other types of self-care within the work environment as they can be forgotten about when really busy. Emotional support, such as counselling to prevent staff from becoming burnt out, as well as time to debrief after the pandemic, and group support/counselling. Extra supervision that has a focus on the emotional impact of the work, not just case management, help balancing work and personal life. Practical support like with childcare was also mentioned. "*It's a very subjective nature of how somebody can deal with it, especially in this line of work because its different from person to person. Maybe a subjective approach by management, to evaluate what they think would help that person, for themselves and a subjective individual approach naming the supports for each person*" (Participant 1C). Awareness support for vicarious trauma and clinical supervision, both group and individual, as well as consistent team meetings:

> *"I do find group supervision very beneficial and I think it needs to be a clinical type of supervision, it needs to be by somebody who's qualified to facilitate that type of supervision and to be able to work from that kind of seeking safety platform with staff members, for staff members to be better informed for what secondary trauma looks like, for what that vicarious piece looks like."* (Participant 1D).

Participants expressed the want to recognition for the work that they do- "*I think across our sector people are massively under-appreciated. Overworked and under-appreciated*" (Participant 1D); "*it's not that you even want thanks, it's just that you*

wanted someone to acknowledge that you're here working within the situation"

(Participant 2H).

Workshops around providing trauma-informed care and support around burnout were mentioned, as well as other types of CPD and training in areas like supervision. Extra annual leave days for self-care following the pandemic, and taking time out in general. It was felt that staff can get embedded in the work so it is helpful when managers remind staff to take holidays. Taking self out of the environment can rejuvenate the mindset, and space to process/reflect on own past experiences that may be impacting exposure to trauma on the job, so as not to be retraumatised themselves. Reduction in amount of paperwork as it takes away from being able to do direct client support work. Outside supervision at least quarterly was suggested. Staff wellness programme within working hours. Holistic treatment such as massages for staff, staff lunches, and other staff activities to boost morale. Financial/pay equity and job security across sectors. Support around individual management of workload and taking responsibility/ownership over it. An EAP programme in places where it does not exist. Breaks between heavy sessions. More frontline staff, more 'feet on the ground' (Participant 2A), practical support. Protected time to do things like supervision, paperwork and KPI returns.

Table 24

Outline of Supports Perceptions - Micro Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Micro	
Emerging themes identified:	Supports at an individual level within the work environment	Supports on an individual level within personal lives
Theme Description:	Expressions of types of individual supports that either were aware of, had accessed, or would like to have available within the work environment	Expressions of types of individual supports that either were aware of, had accessed, or would like to have

			available within personal lives/outside of work	
Supporting evidence / excerpts	*We get supervision in the job, and get like one-to-one supervision and we have group supervision. So there's a lot of support there in that way*	*I have found supervision very helpful for me and I like that process and having somebody to talk things through with.*	*a little bit from my friends and family but they don't really get that I'm at work. For them it's already emotional stuff,*	*the other bits of stuff for your own mind, going training or swimming*
	I would have used the EAP quite a lot	*I have great manager, she's always always available to me*	*I always use my holidays throughout the year as the light at the end of the tunnel, I'm going towards that light and it sort of, I have something to look forward to*	*I would be big into meditation, and I have my own things that I do outside the job.*
	It doesn't have to be a formal thing it can be an informal thing, it's very fluid and it might be, it's absolutely fine for me to just ring her up and say I'm just having a really shit day today, and she'd be like 'oh no what happened	*the clinical supervision does be about clients and anything that you're struggling with like from some of the clients that I have worked with*	*I would have done the personal counselling*	*just chilling out and listening to music*
	I get external supervision off a guy, and I find that beneficial	*there would be webinar, the stress relief, all those sort of things. But I tend to, work is very much work and then when I go home it's home. I go out and enjoy myself*	*I think on a personal level I've done the huge amount of work on myself. Like, a lot of those questions which would be talking about our own traumas, and I think that it's very important*	*I'm on medication for depression*

Mesa

Supports that were accessed or that they were aware of on the team level consisted of group supervision, support from team at work, multidisciplinary teamwork, and informal colleague/peer support were very helpful; "*if you choose your team well and wisely and they are experienced people, this collaboration and trust makes the work so so easy*" (Participant 1B). Importance was placed on family and friend network for emotional support, social supports. Supportive management team was seen as integral, and benefits of staff days out for team-building. This can be non-work related, such as organising group events for peers outside of work. Team training, external workshops and continuing professional development days were seen as positive, and learning from the more experienced colleagues on the team, such as help from teammates with administrative tasks and helping or sharing with teammates when dealing with tricky or resource-demanding cases, disseminating information. Group mindfulness, meditation and yoga. Access to appropriate treatment equipment to do the job safely. Being connected with others, communication. Critical incident debriefing- coming together and talking as a group. Having enough staff on a team made a difference for participants.

Supports that were wanted included more emphasis on informal peer support, as well as more formalised team support such as consistent team meetings. Clear team roles would help, and being able to share caseload amongst team when going on leave would reduce worrying about cases when at home. Group support and group counselling were mentioned, alongside group debriefing and facilitated group clinical supervision to feel

safe in bringing up issues amongst team.. More support for females that feel extra pressures, such as with childcare, which may negatively impact their career progression more than their male counterparts. Workshop/training around trauma-informed care, perhaps as part of new staff induction. Adequate staff funding, team building days/staff days out to reduce sense of isolation in the work, and a focus on wellness. Support groups to help prevent re-traumatisation of issues that may come up throughout the course of the work, such as if someone has been impacted by suicide in their personal life and that happens to someone on their caseload. External supervision, CPD and training, and group self-care classes like yoga, mindfulness, football, or something creative like art and music. Sharing of expertise and knowledge amongst team members from different disciplines. A 'chill room' that workers could go to recuperate after a heavy case, like a sensory breakout room, was also suggested (Participant 1P).

"I know in fairness it's not it's not the management's fault per se but sometimes you're like 'are they fighting as hard as they could for us?'" (Participant 1M).

Table 25

Outline of Supports Perceptions – Mesa Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Mesa			
Emerging themes identified:	Supports at a team level within the work environment		Supports on a familial level within personal lives	
Theme Description:	Expressions of types of team supports that either were aware of, had accessed, or would like to have available within the work environment		Expressions of types of family/close friends supports that either were aware of, had accessed, or would like to have available within personal lives/outside of work	
Supporting evidence / excerpts:	*we have group supervision. So there's a lot of support there in that way,*	*I suppose informally get a lot of support from colleagues as well*	*work told everybody listen if you need more leeway around working from home, around*	*a little bit from my friends and family, more so for emotional support*

			child care, we give leeway	
	if you choose your team well and wisely and they are experienced people, this collaboration and trust makes the work so so easy, I feel quite supported by them	*we've had a couple of staff days out. I think the thing is that you almost have to force the team to interact because there's always going to be cliques,*	*And then my own sort of supports- friends, I've a lot of friends that work in the services*	*my wife would be a major support as well. I have a lot of support, I would support a lot of people as well.*
	a good team like I worked with my team	*in the last few months I've used the team and the line manager, in there all the staff have heard from me at some point*	*I talk to one or two of my friends who would work in the kind of similar services, so that's the type of support that we have.*	*with both children I had post-natal anxiety and my line management were very accommodating in terms of supporting me with time off*
	I think mindfulness would really help, Health & Wellbeing that funded it for our nurses. And it was one of the staff that works part-time and she does yoga, and she did a six week online course and that was fantastic as well too	*peer support is really extremely good and I'm very lucky I work within a really good team and we have that rapport, which is great and that has been what sustained me*	*I think the other thing I think is to be aware of the fact that it doesn't have to be all work-related support, that it can actually be friendship, it can be interaction, can be reading, it can be listening to music and can be going for a walk in the park.*	*when I go to visit, I'm allowed window visits now with my mother and actually I have a visit with her on Friday, we go out there to hers in Dalkey, or we try to go to Dun Laoghaire or something like that. So those sort of things that act as supports*

Macro

Supports that participants accessed or were aware of on the macro level varied, such as a felt sense of support from senior management, whether formal or informal, and doing external professional activities to the organisation, such as further college education and conferences. Changing organisations for work when burnt out was mentioned. Support from wider professional network (colleagues that work in similar areas but in different organisations), and healthy communities initiatives/community based social supports. Working a secondment to get space from role as well as

learn/develop new skills was seen as being a way of coping. How the atmosphere and tone of work can impact on the individual was reported- eg valued vs unheard; competent vs stressful; consistent vs uncertainty/changeable. Organisational policies and procedures in place that give a sense of safety and value, such as the Dignity at Work policy, Infection Prevention and Control guidelines, were mentioned. Also reported as helpful was having reassurance/knowledge that everyone is working towards bettering the community, having a common goal and feeling connected.

Supports that were wanted on the macro level were adequate funding for services and staffing, as well as less bureaucracy and politics within and between organisations. Updated service level agreements which create equity of staff supports and policies/procedures between organisations and funding bodies would be useful. Reduction in unnecessary paperwork or more administrative support for clinical staff. Organisational support for self-care and staff wellness- "*having supports but not having the time to use those supports is a pointless exercise*" (Participant 2F). Feeling valued by organisation, recognition, financial equity, CPD and training outside the organisation all made an appearance. Working better across organisations and communities. Making the organisation and system trauma-informed- "*one of things is just acknowledging that this is toxic work and in order to do this very positive very life affirming work, it is going to cost you.*" (Participant 1Q). Better communication and awareness of language on an organisational level- "*even just to get a thank you from the higher management structure…very often our feelings are never expressed, we're just told you get on with it, so I think it's good that at least somebody acknowledges that we are human beings and that*

we do have feelings and that things can affect us" (Participant 2H); "*The biggest stressor for me more than anything is the system*" (Participant 1Q).

Table 26

Outline of Supports Perceptions – Macro Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Macro			
Emerging themes identified:	Supports at an organisational level within the work environment		Supports on a wider social circle, community and societal level within personal lives	
Theme Description:	Expressions of types of organisational supports that either were aware of, had accessed, or would like to have available within the work environment		Expressions of types of wider social circle, community and societal level supports that either were aware of, had accessed, or would like to have available within personal lives/outside of work	
Supporting evidence / excerpts:	*I'm aware of many different supports from working in the field, I have lots of friends in the field and different areas and I'm humble enough to ask for help if and when I needed it.*	*my director and head of services anything I brought to them or availed you know if something came up they were really on top of things*	*I focused on college in, so I'm lucky in a sense with I'm embedded with college so when I leave work I'm doing that anyway so it's not that, I am making plans*	*there's lots in the NEIC at the moment. We have the healthy communities and we have all the yoga and the fitness. So there's that piece where you can take care of your own self*
	I know I worked secondment for a year to the clinical leadership centre for international clinical leaders in centre nursing, we did some leadership development and one of the things we did among them was around taking care of yourself.	*extended friends, some of us are lucky we have friends who are working in areas with like, with information that was available, so you could physically ring somebody and say you know they were working in the national disease surveillance centre*	*I'm actually in the middle of doing a yoga teacher programme, so I'm trying to incorporate that into my daily activities, with my workouts to try and deal with it in a more productive way is that makes sense.*	*there are all these different books and things about burnout, it needs to be updated. It needs to be reviewed and people need to understand the trauma*
	I thought the instruction videos were good I have to say I would complain still about the constant changing of procedures and	*we're very connected, we tend to be, I mean we're very lucky that we would be well known in the Mater with all the, you know, actually*	*I think we probably don't know and we have to live with that uncertainty. And it's that thing of living with uncertainty I think*	*And the community did want to do that, you'd hear about it, you'd often see you know on the television maybe it going to acute*

	guidelines and I feel for me I think we're now on this policy portal and while that's an improvement	*we're very, and of course there is a huge amount of services out in the community here so we would know them all to be honest and they would know us and so we're very fortunate that way*	*some people really need certainty and other people don't need it to the same extent.*	*hospitals, so that might also be in that the HSE, we need to say well look the less obvious but equally as important services were happening in community*
	I think there is an issue with value and I feel I think with feeling valued in the work. It is something that can help can help you kind of feel like your work is worthwhile	*You can't change the culture of an organization as big as the HSE. Trying to struggling with your principle under the way they operate is just going to make you deeply unhappy.*	*I must mention CPD and training as well actually terms of support*	*I think just to acknowledge how hard people worked, I didn't see that anywhere. You know you get a thank you alright but it just didn't seem you know, I just didn't get this sense of people were valued enough*

Behavioural

Supports that fall within 'behavioural' types that were accessed or aware of including activities such as going on holidays for self-care, going on day trips and outings, and taking time to be on own when not at work to recuperate; daily walks, eating healthily, mediation, mindfulness, yoga, coming off social media for a length of time, turning off the phone. Doing relaxing things such as listening to music, reading, looking up research and learning were important. Doing educational courses and college work, gaining a sense of productivity. Making time for and engaging in supervision- whether that be individual, group, clinical, line management, internal and/or external. Changing jobs can be seen as a behavioural change. Having coffee with colleagues, informal as well as formal get-togethers, asking for help when needed and accessing supports to manage

workload better, working as part of a team and going on team-building days. Doing creative hobbies outside of work, visiting family and friends, organising activities with others such as going to the theatre, putting effort into leisure time as much as effort into career. Watching movies to mentally escape/switch off, being given space at home if having a hard day, having a cup of tea, taking a bath or going for a walk to get headspace. On a practical level, disseminating information amongst colleagues to keep each other safe, practicing necessary techniques such as putting on PPE. Attending workshops. Taking breaks during the day instead of working through them. Doing a 'check in' and 'check out' each day with colleagues at work. Seeing changes in service users from the work that you are doing gives a sense of personal accomplishment.

In terms of supports wanted included being allowed to do further training. Putting a subjective approach around the needs by individual staff for them to be able to access supports relative to their needs as needed, and engaging in supervision/clinical support. Workshops and CPD, for example around trauma-informed practice, being allowed to take time off of work, and being able to get out of environment- "*we're constantly just seeing trauma around us, whether that's with clients or just within the area…so it's about taking myself out of the work environment totally altogether*" (Participant 1G). Having less superfluous paperwork to do would be seen as a positive, alongside having the time to do wellness programmes, activities with the team, time to reflect, and team building and staff care days. Mindfulness, yoga, and meditation were seen as being beneficial, as well as having enough staff to do the work.

Table 27

Outline of Supports Perceptions – Behavioural Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Behavioural			
Emerging themes identified:	Supports that had a behavioural element within the work environment		Supports that had a behavioural element within personal lives	
Theme Description:	Expressions of types of supports that had a behavioural element that either were aware of, had accessed, or would like to have available within the work environment		Expressions of types of supports that had a behavioural element that either were aware of, had accessed, or would like to have available in personal lives/outside the work environment	
Supporting evidence / excerpts:	*We sit down and then sort of get some perspective on it like, I suppose it's easier and it just becomes a bit clearer.*	*I'm lucky in a sense with I'm embedded with college so when I leave work I'm doing that anyway so it's not that, I am making plans*	*getting a few holidays throughout the year sort of as the self-care, with the family, and you feel reenergized and rejuvenated.*	*I find that on the weekends that sometimes I just want to be on my own, you know because I've been around people for five days*
	we all decided to make the change together and jump over to the 9 to 5. Well one went first and he brought us, brought the rest of us over.	*I'm now very OK with asking for help when I need it because for many years I didn't which left me in a very dark place in my 20s. I just don't do that anymore.*	*just chilling out and listening to music*	*My experience is that, there's a lot of self-care in it, you have to have a of self-care, turn off your phone, good boundaries*
	I suppose the supervision I get is kind of like if I'm struggling with the case we won't really look where is the struggle coming from, but look at what we could do. It's very practical kind of focused, which is fine but I'm quite good at that stuff anyway	*I do tend to be kind of somebody that when in doubt go and read something or look up something or search for some research, or I'll search for some, something like that*	*Personally, it would have been that self-care piece. You know going and staying at a hotel for a weekend*	*I seen a lady on Zoom and she was really good just around some techniques, and I think it was just airing how crazy my head was thinking. I took all her advice and support- I banned the news out of my house and I came off social media for six months. I done all the self-care, so to stop, for walks daily, I was meditating a little bit more.*
	we had a few kind of days, you know what do you call them, the	*one of my colleagues got very good information from*	*I think the other thing I think is to be aware of the fact that it doesn't*	*I would have organized to do a lot of things as well like the*

	breakout rooms and these kind of team-y building days. I think we had started them before the pandemic, but I suppose it's just to schedule it as a regular would be nice.	*dentistry as well about hand washing and that was very good and I distributed that to clients as well and to family members*	*have to be all work-related support, that it can actually be friendship, it can be interaction, can be reading, it can be listening to music and can be going for a walk in the park.*	*mountain-to-sea festival I would go for a few things this weekend but make sure go to the 'big night's in' or the Irish Times so you know things like that and, I go more online now than I ever did really*

Physical

Supports accessed or aware of that were mentioned by participants on the physical level included training, exercise, gym, swimming, cycling, going for walks, hiking, outdoor activities, connecting with self physically after being on a screen all day, meditating, yoga, and taking medication as prescribed, eg for depression. Taking a bath to relax the body, having a healthy, balanced diet, and keeping self physically safe such as proper use of PPE. Minding self if unwell/sick, such as taking sick leave as needed, was important.

Supports wanted in this category centred around adequate physical space and the importance of the physical environment. Placing importance on physical self-care, whether through mindfulness, yoga, meditation, healthy eating, holistic supports like massages, or more active through hiking, fishing, football, gym or other activities was seen as necessary- "*it's ok in supervision, but sometimes an activity does a hell of a lot more than supervision*" (Participant 1L).

Table 28

Outline of Supports Perceptions – Physical Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Physical			
Emerging themes identified:	Supports that had a physical element within the work environment		Supports that had a behavioural element within personal lives	
Theme Description:	Expressions of types of supports that had a physical element that either were aware of, had accessed, or would like to have available within the work environment		Expressions of types of supports that had a physical element that either were aware of, had accessed, or would like to have available in personal lives/outside the work environment	
Supporting evidence / excerpts:	*We have the healthy communities and we have all the yoga and the fitness. So there's that piece where you can take care of your own self and self-help, self-care,*	*I think everyone, when you're staring into a screen all day and then you're trying connecting on a known person level, it can be hard. You don't take something, I'm very much a physical person, to connect*	*the other bits of stuff for your own mind, going training or swimming or whatever*	*I sort of mind myself, getting out, I love Bull Island and I'd be down there once a week most weeks.*
	I know that the videos were really good I mean things that we've done all our lives like universal precautions to prevent the spread of infection in actual fact the covid guidelines are really just if you like reiterating that but initially it didn't feel like that it felt like it was something totally new and strange. So putting on and taking off the PPE was really, they were good,	*with the kind of outdoor activities and the yoga and that I have found them absolutely brilliant because it's kind of giving you a focus, like there were some things we were doing online, but the fun that it brought, you know as well.*	*I like my training, and I'm still able to train somewhere. I'm a member of a private gym, but still I enjoyed going and getting away from work, I put my earphones in, and you're just left there. It's just for a little bit but you get away from it.*	*I seen a lady on Zoom and she was really good just around some techniques, and I think it was just airing how crazy my head was thinking. I took all her advice and support- I banned the news out of my house and I came off social media for six months. I done all the self-care, so to stop, for walks daily, I was meditating a little bit more.*
	I mean she just said would you like to do something you know we do we do meditation	*I think it was Health & Wellbeing that funded (yoga) for our nurses. And it*	*I've been doing a lot more walking and deliberately walking, been monitoring my*	*Not kind of work related, but I suppose I've kind of done things myself, as in just*

	we do reflexology she just asked would we like to do a little and then (the team physiotherapist) did that lovely think you know, the yoga, and that was a lovely idea	*was one of the staff that works part-time and she does yoga, and she did a six week online course and that was fantastic as well too. So that further stuff is really helpful.*	*food intake, making sure I've a good balanced diet and eating a lot healthier. I'm particularly clued in to that.*	*trying to exercise a bit more you know kind of eat healthily and yeah, just at home like with my husband you know trying to do things like that*
	there was stress management which I laughed at because they are from 1.00 o'clock or something in the Mater Hospital which when you are under stress the last thing you need is to drive somewhere to go to a stress management, that just doesn't work.	*we get massages inside the project probably every once every couple of months. But, to be brought out of that environment into a place where it's like I'll bring me and stuff like that, holistic treatment and a nice lunch*	*I suppose for me I like to keep fit, train 3 times a week and I might do a hike at the weekend.*	*just get on the bus for the weekend and head down the country, to separate myself from the area*

Psychological

In terms of psychological supports that participants accessed or were aware of, they mentioned aspects such as switching off and "*leaving work at work*" (Participant 1A) and maintaining good boundaries. Using the various types of supervision and management at work to process things psychologically, as well as using the support of friends and family to help process things emotionally without talking directly about the trauma. Employee Assistance Programme and counselling/therapy were reported as helpful, and keeping physically active helps with the 'mind'. The aspects as previously mentioned for supports are reflected upon as having a psychological support element as well (going on holidays, days out, exercise, socialising with friends, peer support from colleagues, taking time out on own, meditation, yoga, listening to music, personal

reflection and processing own traumas, medication for depression/anxiety). The emotional impact of seeing positive change in service users you're working with was reportedly supportive in maintaining self in career roles. Talking and being open with people about emotional experiences. Being able to take time for self-care as needed, such as with annual leave. Knowing that can manage caseload if feeling overwhelmed and felt sense of supportive team. Being able to check in with management and supervisor, self-care tips through Health and Wellbeing, stress management courses and being able to feel that workplace environmental stressors are being managed. Work/life balance such as being able to prioritise leisure when it's leisure time, rather than preoccupying with work. Outside supports such as the Samaritans phoneline to help emotionally. Flexibility around working hours and location due to family demands decreases psychological distress, as well as sense of personal satisfaction/achievement from voluntary work outside of main frontline work.

Psychological wellbeing supports that were reported as being wanted were having supports in place to alleviate some of the worries. Self-care such as mindfulness, peer support, clinical as well as line management supervision to help with vicarious trauma and secondary trauma, individual and group counselling, and a focus on what can be changed as opposed to what cannot. Trauma awareness training, easier access to emotional supports such as counselling or EAP (as some services did not have access to EAP), debriefing after traumatic events or hearing about traumatic events, and external supervision. Wellness programmes within work hours as well as outside of them would be helpful as not everyone had time to access them either within or outside (based on work roles and family circumstances). CPD that helps with self-management was seen as

helpful. Feeling valued in the work, and additional wind-down days that staff could take if getting burnt out would be seen as supportive.

Table 29

Outline of Supports Perceptions – Psychological Thematic Domain: including emerging themes that were identified, description, and examples of supporting evidence and excerpts from the qualitative data

Thematic Domain:	Psychological			
Emerging themes identified:	Supports that had psychological elements within their work environment		Supports that had psychological elements of their personal like	
Theme Description:	Expressions of types of supports that had psychological elements, including emotional and cognitive, that either were aware of, had accessed, or would like to have available within the work environment		Expressions of types of supports that had psychological elements, including emotional and cognitive, that either were aware of, had accessed, or would like to have available in their personal lives	
Supporting evidence / excerpts:	*I've done a lot of that clinical supervision and things around it. They'd still pop to my head every now and then you know. I'd be passing the old building where it was and I think of the last incidents. The last incident that I was sort of involved was the fellah cut his throat and his wrists, blood everywhere and things.*	*I would have used the EAP quite a lot*	*getting a few holidays throughout the year sort of as the self-care, with the family, and you feel reenergized and rejuvenated after that*	*I think the personal counselling was great. I think that was a great support from the time.*
	In supervision I spoke about being frustrated, running around like a headless chicken on some days and then some days are really good like.	*Well there's my supervision. It helps. It alleviates any parts in hearing what my manager or my team manager is thinking, definitely helpful for me. It gets me to find a solution to certain things when something's too much for me or a mess in my head, difficult to*	*I think on a personal level I've done the huge amount of work on myself. Like, a lot of those questions which would be talking about our own traumas, and I think that it's very important that people work on themselves*	*I suppose I have my own supports for my own troubles in the past, and I try to use those supports. I wouldn't bring my work into it or frustrations at work, you can say you're frustrated but wouldn't talk about work.*

		concentrate because there's so many things in my head		
	with both children I had post-natal anxiety and my line management were very accommodating in terms of supporting me with time off and just recognizing that I mightn't be up to scratch some days or being flexible around work times and stuff. So I've been very lucky to have a lot of support in terms of both organizations.	*She's not my supervisor but when it comes to personal things, women's things, anything like that she's very open to us giving her a call at any time.*	*I find it difficult to allow somebody to counsel me because I feel like I should be the one with the answers. And I'd say I'm a very difficult client to be honest, I wouldn't like to counsel me, but yeah I have accessed it*	*to be honest, I suppose when I was finding it difficult in recovery after the medical procedure, it literally took lumps out of me. I found it very hard, very tough, and I went through a stage of depression. I reached out to a support group through Facebook, like of people that went through the same procedure*
	I suppose I also have learned to be quite upfront about that in terms of if I am feeling, and finding a particular staff member really challenging, then I need to work that out because that can be worked out with the individual. That has to be worked out with my line manager.	*I done a three days, I think it was a three day workshop around the psychological effect of the Pandemic and for the first day I was really irritated and I was like, Pandemic again and all this. And we need to move on and that is me and that is what I do but the second day I got really into it because I started to understand, talking about the different systems with within the brain, and all the things that can be affected and the lead on from sleep and appetite and all the different things.*	*I'm on medication for depression, so I know it's been a major part of my life*	*I would do counselling every year for six weeks sessions and in different places just for myself I think it's really important to talk, and if there's any emotions or feelings to get them out and speak about them.*

Results Summary:

Prior to moving on to discussing the findings as a whole in the discussion section, it is first important to revert back and highlight any significant findings which came from the quantitative exploration. These can help contextually ground qualitative data.

In terms of the research statement that 'there will be a change in a participant's felt professional quality of life over time during the pandemic', three of the hypotheses illustrated significance on the ProQoL. For the whole group, a significant difference was found between a participant's felt sense of compassion satisfaction with regards their profession between Time 1 and Time 2, with there being significantly lower compassion satisfaction at Time 2 than at Time 1. This result was similarly found for the Social Inclusion subgroup, however not for the Nursing subgroup, when groups were analysed separately. Findings further yielded that Social Inclusion staff reported significantly greater levels of secondary traumatic stress at Time 2 when compared with Nursing staff. While the statistical tests themselves did not show significant differences at various timepoints, it is worth noting from the descriptives that levels of burnout were consistently concerning in the 'moderate' range for both groups and secondary traumatic stress 'moderate' for the Social Inclusion group.

With regards to the research statement 'there will be a change in a participant's experience of depression over time during the pandemic', two of the hypotheses showed significance on the BDI. Results indicated that, for the whole group, there was significantly lower levels of depression reported at Time 2 than at Time 1. This was similarly found for Social Inclusion staff on their own. While not significant, at both timepoints descriptively

Social inclusion staff reported higher levels of depression symptoms on the BDI than Nursing staff.

For the research statement 'there will be a change in a participant's experience of anxiety over time during the pandemic', none of the hypotheses were found to be significant on the BAI. Descriptively, at both Time 1 and at Time 2, Social Inclusion staff appeared to report higher ranges of anxiety symptoms when compared to Nursing staff at the same time points, with over half reporting anxiety in the mild range or above.

With the research statement 'there will be a change in a participant's experience of burnout over time during the pandemic', none of the statistical tests illustrated significance using the MBI. However, it is worth noting that the differences between Time 1 and Time 2 for Social Inclusion's sense of emotional exhaustion, and the differences between Social Inclusion and Nursing on reported levels of depersonalisation at Time 2, were approaching significance. Further, it is also important to highlight that for the MBI that, though there were no other significant differences found between the different time points, at each time point and for each group there were moderate levels of emotional exhaustion, low levels of personal accomplishment, and average levels of depersonalisation reported on average across the board.

For the next research statement, 'there will be a change in a participant's experience of secondary traumatic stress symptoms over time during the pandemic', none of the statistical tests investigated were found to show significance using the STSS. However while not statistically significant, descriptively between the two groups, Social Inclusion appeared to report greater levels on each of the STSS subscales (intrusion; avoidance; arousal; secondary traumatic stress) at both Time 1 and at Time 2.

The qualitative investigation itself was divided into three main research topics- the impact of the pandemic, the impact of the work itself, and a section relating to wellbeing supports. Using thematic analysis, the interview transcripts were coded and themes identified based upon these. From these themes a matrix was formed, which offered a visualised representation of participants' qualitative experience. The themes further subdivided participants' descriptive responses into three main aspects of life- micro, mesa and macro, and following this three main facets of how people live their lives- behaviourally, psychologically, and physiologically.

The qualitative results, along with the quantitative results, will be discussed with respect to current literature in the field in the 'Discussion' chapter. While the next chapter will largely focus on the qualitative results as the main focus of the research, the quantitative nuances above within the data will allow for some further annotations in their respective areas of exploration.

Discussion

The results section reported qualitative and quantitative findings across components which together formulated into the larger questions that the research endeavoured to address: the psychological wellbeing of frontline staff working within an environment rife with trauma during the pandemic. Nuanced changes appeared in some elements, with other elements not showing significant changes. Analyses compared psychometrics between two different timepoints, as a homogenous group, separately as two individual groups, and between the two groups. The data needs to be further reflected upon in relation to the context of which they were being reported, which is where the qualitative analysis becomes integral, alongside being embedded within the descriptive statistical data. This integration of data then illustrates the overall levels of burnout, compassion fatigue, secondary traumatic stress, emotional wellbeing and so forth that participants were living with. This was not a group of frontline staff that experienced a single acute traumatic event where I was able to obtain discrete pre- and post-incident scores and a follow-up interview. The frontline staff participating were working within an everchanging environment. The ongoing Covid19 pandemic was changing their work-lives in a myriad of unexpected ways, and simultaneously changing their lives outside of work in a myriad of unexpected ways. It was also changing the way that their clients were experiencing life, not just the environment in which they resided, further compounding participants' professional wellbeing.

In the discussion section following, I will endeavour to make sense of the qualitative and quantitative findings reported in the context of the prevalent components of research within the field. Namely, with respect to the topics of burnout, compassion

fatigue, secondary traumatic stress, vicarious trauma, and wellbeing support mechanisms. While the data analyses did not show many significant differences between the two participants groups, in places where their reported experiences differ these will be highlighted throughout the discussion as relevant.

Burnout

When exploring the concept of burnout, it is important for us to consider the findings on the ProQoL, the MBI, the BDI and the BAI.

On the ProQoL subscale that is correlated to burnout, it is important to highlight while even though there was not a significant difference between timepoints as a whole, that 50% of the entire research sample were already scoring in the 'moderate' range for burnout at Time 1, with 53.3% attaining a score that placed them in the 'moderate' burnout range at Time 2. When separating the sample, Social inclusion did illustrate higher levels than Nursing, with 63.2% in the 'moderate' burnout range at Time 2 and 72.7% at Time 2. And while reporting lower levels, there were still 27.3% of the Nursing sample that reported scores in the 'moderate' range at Time 1 and 22.2% at Time 2 for burnout.

Unlike the ProQoL, which measures a person's professional quality of life and has burnout as one of its subscales, the MBI itself measures the overall concept of burnout- which it further divides into the three separate subscales of emotional exhaustion, personal accomplishment, and depersonalisation. As previously outlined, it was found that there were greater levels of emotional exhaustion reported at Time 2 than at Time 1 for Social Inclusion staff, who also reported a higher level of depersonalisation at Time 2 than Nursing staff. These findings were in line with what was found on the ProQoL, in

terms of greater levels of burnout being expressed by Social Inclusion than Nursing. More similarities between the two psychometrics occur when elaborating on the descriptives in the participant scores, with there consistently being moderate levels of emotional exhaustion and low felt sense of personal accomplishment at both Time 1 and Time 2 amongst participants. The reported levels of depersonalisation were in the low-risk range at both timepoints.

The thematic analysis performed on the qualitative data divided themes into micro, mesa and macro spheres, which were in line with the concepts purported by Bakker and colleagues (2014) of organisational (macro), job (mesa) and individual (micro). The rationale for choosing alternative terms in the present study were due to a broadening understanding of these spheres from the investigative scenario, as 'macro' encompasses more than just the organisation in which someone works to include their wider professional identity, such as in multi-organisation roles and career development pathways, 'mesa' can incorporate both a person's job role on a multi-disciplinary team as well as interaction within that team (as opposed to organisation-wide), and micro can involve both individual and interpersonal elements. Indeed, the risk factors that were identified through these initial categories by Simionato and colleagues (2019) were found to be qualitatively evident in participants' experience during the current research:

Macro:

In March 2020, a collaboration formed called the Covid19 Psychological Research Consortium (C19PRC) Study, with the aim to investigate longitudinal impacts of the pandemic waves both socio-economically and psychologically throughout Ireland, the UK, Spain and other countries (McBride et al, 2022a; McBride et al, 2022b; McBride et al,

2021a; McBride et al, 2021b; Spikol et al, 2021; McBride et al, 2020). Quantitatively, statistical analyses revealed that health care workers reported significantly higher levels of stress, anxiety, and burnout during the pandemic. Standardized measures of psychological distress showed that scores were well above pre-pandemic baselines. Further, regression models identified key predictors of increased psychological strain. Factors such as prolonged work hours, direct exposure to COVID-19 patients, and shortages of personal protective equipment (PPE) were significantly associated with higher levels of burnout and depression. From the qualitative perspective, reported interviews with health care workers highlighted intense feelings of emotional exhaustion and anxiety. Many described the experience as overwhelming, with constant fear of contagion. Participants frequently mentioned the rapid pace of work and the pressure to make critical decisions under uncertainty. The lack of adequate PPE and evolving safety protocols added to a sense of vulnerability and stress.

In the current study, the issues with lack of PPE, for example, had been largely resolved. Similarly, at the time of interviews, all participants had been offered the vaccine. The infection prevention and control guidelines had largely been worked through. However, as you will hopefully see through the following sections, participants were able to recount their experiences of what it was like in the earlier stages of the pandemic, when PPE was scarce, vaccines weren't yet fully available, and the infection prevention and control guidelines were changing more rapidly due to a constant altering in the global understanding of the virus (any guideline changes occurring in real time were to coincide with government restriction and lockdown enforcements, rather than changing knowledge of the virus). The main change that was directly impacting the participants at the stage of the interviews was in relation to the government restrictions.

This will be revisited later in this section in relation to one of the quantitatively significant findings, where the level of depression was significantly reduced between Time 1 and Time 2 in the study.

In terms of limited resources (Simionato et al, 2019) - a major aspect in relation to resources was about accessibility to PPE during the pandemic, which was needed to allow participants to safely carry out their roles. While overall at the points of interview participants were mostly reporting adequate levels of PPE, they often spoke about the scarcity of PPE at times during the pandemic and the distress that this brought up. Some of this was related to the everchanging understanding of the virus and as a consequence infection prevention and control guidelines, which also brought up concerns with a lack of consistent concise communication around this; *"at one stage it really did feel like we're watching a dance, that you've never danced before…initially it wasn't meant to be airborne and the next thing you're told it could be…initially it was that it was OK to not wear masks and then you were told well you have to wear masks"* (Participant 2D). Another major aspect was in relation to the availability of vaccines, with particular reference to some frontline staff hearing that they were getting 'any leftover vaccines' (Participant 2D; Participant 2G)- despite them working the frontline they were not being prioritised, and the language that was being used around the decision was reportedly demoralising for them. The unequivocal predominant limited resource that was reported throughout the research was in relation to staffing numbers. With the increase in workload that came with the pandemic, alongside the increase in service-user needs, meant that already heavy workloads were becoming untenable but without sign of reprieve.

Limited support (Simionato et al, 2019)- While overall Social Inclusion felt supported by their management, it was felt that at an organisational level there were other threats to aspects such as funding, which created anxiety, as well as not readily having access to supports like an Employee Assistance Programme. Nursing spoke about there being awareness of support and general supportiveness from management, but that communication could be improved upon. While Nursing found that their regular line management supervision was helpful, they reported wanting a clinical-type of supervision similar to what other professionals like psychology and counselling receive to have the ability to work through the impact of work-based trauma exposure has on them. It was felt that even with the expression of support from the organisation, staff wellness itself was still second place to productivity demands; *"I felt the system really let us down…some of our colleagues were shattered"* (Participant 2G).

Poor recognition (Simionato et al, 2019)- small gestures of recognition were greatly valued and appreciated by participants, as well as recognition they were receiving from their supervisors and people they work with. There was reporting of feeling of not as recognised as other frontline staff that were in more visible locations (for example bigger clinical service hubs and hospitals). Financial recognition also made an appearance, both through pay equity as well as felt feasibility of being able to take leave- "*I think across our sector people are massively under-appreciated. Overworked and under-appreciated.*" (Participant 1D); "*it's not that you even want thanks, it's just that you wanted someone to acknowledge that you're here working within the situation*" (Participant 2H).

Perceptions of in-equitability (Simionato et al, 2019)- aspects of felt inequality appeared throughout the interviews. In some cases, while there was recognition that some people needed flexibility around being able to work from home or be in the office,

there was some inconsistency as to how this was assessed. Access to vaccines was further felt as being inequitable, though by the time of the research all staff had received/been offered the vaccine. For some staff the issue of pay equity was raised as a concern, when they were doing the same work as others who were in more permanent public sector roles yet were not entitled to the same pay structure and allowances as their public sector counterparts. Further, not just within the organisation but also frustrated and anxious at seeing inequality on a societal level, highlighting that also the perceived societal injustice within a person's work environment can have a negative impact.

Inflexible hierarchies (Simionato et al, 2019)- there were references to organisational politics having an impact, and information flow management. However, in other cases there was recognition of the need for a hierarchy due to the situation with the pandemic for bigger situations, and a desire for more concrete organisational decisions (for example around guidelines for face to face clinical work contacts); "*The biggest stressor for me more than anything is the system*" (Participant 1Q). Organisational limits on interagency work as well as changing organisational requirements in terms of paperwork and processes- "*loading work on not really appreciating the person trying to deal with all of this…there was individually really good managers and stuff like that but as an organization that was difficult*" (Participant 1K). When service policy does not translate to what happens on the ground, and feeling like the system is just a revolving door.

Mesa

Time pressures (Simionato et al, 2019)- there were increased time pressures placed on participants during the pandemic, featuring struggles with the addition of extra paperwork on top of their regular work, it taking longer to see each client due to the

infection prevention and control guidelines (eg having to change PPE, clean down/disinfect areas between appointments, conduct Covid19 screening phone calls), as well as increase in workload due to circumstances such as increase in referrals or other staff members being out of work on sick leave.

Emotional demands (Simionato et al, 2019)- participants spoke of the extra effort it took to relationally connect with service users/clients over the phone, which created further demands on their emotions in being able to assess and communicate this connection with their clients. Alongside this, it was noted from some participants about the emotional distress they experienced from knowingly exposing family members to potential harm by going in to work each day. Other participants spoke of having to stay away from partners due to their work environment and pandemic restrictions, which decreased their access to what would allow them to refill their emotional reservoir, thus placing greater demands on the emotional energy they had. "*I think you'd your normal stress, and you had the adverse stress, and then…had the worry of the team and then me wanting to be a part of that because not expecting them to do something I would never do, and then the worry of your clients as well on top of that. It was definitely very stressful."* (Participant 1D).

Excessive workload (Simionato et al, 2019)- This featured more-so from the impact that adding in 'infection prevention and control guidelines' had on work, increasing time demands of the same level of work previously, as well as the knock-on effect of some staff working from home while others were in the office with the logistical impact of this. The need for these were understood, however the acknowledgement that it was felt more staff could have greatly influenced this not becoming overwhelming is needed. Many participants commented a frustration in the level of administrative tasks that had become

required without the rationale behind them being properly explained, and without being given the benefit of 'protected time' to complete these tasks (eg they needed to be completed alongside all the tasks they were already expected to perform); "*It just constantly just feels like the fire is never extinguished, it just keeps coming"* (Participant 1D).

Level of autonomy (Simionato et al, 2019)- Several participants felt a positive influence in being able to work with relative autonomy in their roles, particularly when they were able to be creative in coming up with ways to respond to circumstantial difficulties as a result of the pandemic- such as ways to engage with their clients, and ways of interagency working. However, there was also the converse reported, where staff felt 'abandoned' (Participant 1B) to figure things out for themselves- showing that a subjective form of managerial support is needed, depending on circumstance. A main struggle that was being reported from the interviews was in relation to feeling that there were at times excessive paperwork/administrative tasks where they were being asked to 'prove their worth' (Participant 1M).

Amount of control over workload (Simionato et al, 2019)- A situation which rose a few times was how in Nursing they do not operate with a 'waiting list' like other services do, for example when they get a referral in for something like a wound that needs redressing, that's not something that can wait on a list. As a result, when there are staff off due to illness or annual leave, or vacant staff posts, it creates extra pressures on the staff that are there. However, participants noted a healthy team environment where they supported each other to ensure they had balanced caseloads or being able to help a colleague out if they were feeling overwhelmed.

Role conflicts (Simionato et al, 2019)- The main aspect where this appeared to arise was where they felt they were going beyond the remit of their role, while at the same time feeling it was necessary to do so in order to be able to perform their work role. An example with Nursing was to be liaising with other services involved in client care because they were the ones doing house-calls/face to face when others weren't, but the coordination of these other services were necessary for the health supports of that client. In Social Inclusion, an example could be in finding new ways to engage with their clients so that they continued to access services, such as with acquiring funding for technology and online telecommunication training. Some participants did comment on the difficulties that can arise if they were from or lived within/near the catchment area that they worked in, from being approached in the supermarket being asked questions while off duty, to having pre-existing connections to people who were now service users. The use of supervision in these circumstances was reported as very important.

Social support (Simionato et al, 2019)- Participants emphasised social support as being an integral part of their self-care for their work/life balance in general. Thus, it was notable the impact of the absence of being able to rely on these resources following the restrictions during the pandemic. They were unable to have what would typically help with the normal day-to-day stresses of work and family, but now simultaneously were also coping with added stresses that were emanating from the pandemic's impact at work. Over time participants reported being able to reconnect using online technology, such as yoga classes or book clubs, though it was expressed that virtual did not have the same level of positive benefit as face to face;

> "*nobody wanted to be near us at the start, you know when it was really bad and everybody was terrified, it was like it was nearly like saying you had leprosy, saying*

you were a nurse. People were just terrified and like when you were trying to find people to mind kids at the start, people wouldn't do it because you were a nurse. So I found that really hard." (Participant 2J).

Micro

Coping strategies (Simionato et al, 2019)- a myriad of coping strategies were described by participants, and this will be delved into in more detail later in the discussion in relation to supports. Many acknowledged the importance of balancing the impact of work with enjoyable activities/hobbies in their personal lives, as well as the importance of coping methods at work (such as utilising supervision, peer support, continuing professional development, and so on). These aspects were heavily curtailed by the pandemic restrictions, thus having a negative impact on the participants wellbeing, with an improvement in this wellbeing when restrictions were lifted at the 'level 5' of lockdown during the Time 2 interviews; "*I've always felt that the things I enjoy doing outside of work helped me to stay refreshed and ready for the days' work. So I can certainly feel on a Monday, today is a Monday, I've got more energy today than I might have by the end of the week"* (Participant 2D).

Personal traits (Simionato et al, 2019)- while not investigated in the current research, participants did describe different aspects of being resilient as well as psychologically aware of their wellbeing. Some participants spoke of knowing they have a tendency to 'take on too much' outside of their role and needing to learn to have firmer boundaries; "*I enjoy knowing I am making a difference to clients without my life revolving around the clients*" Participant 1C).

Socio-demographics (Simionato et al, 2019)- While not strictly investigated, the education level achieved from the participants in the study was at quite a high level (between level 7 and level 10). It was mentioned about over-identifying at times with clients if they were from similar background or the same catchment area, however in these instances the importance of using supervision as well as personal counselling was frequently referred to.

Tying in with the MBI subscales and, given the lasting timeframe involve, further emanating from Freudenberger's (1974) factor of enduring interpersonal stressors, the symptomatic indicators of burnout as listed by Woo and colleagues (2020) appeared throughout the current research:

Table 30

Qualitative Excerpts which Align with Symptomatic Indicators of Burnout List by Woo et al (2020)

"*frustrating and disheartening and demoralizing*" (Participant 1B)
"*It just constantly just feels like the fire is never extinguished, it just keeps coming"* (Participant 1D)
"I have been extremely distant, disconnected, but I know it's got to do with work. I know I'm feeling extremely irritated and I'm feeling I can't listen because I've no space to listen" (Participant 1D)
"It just constantly feels like I'm not getting to sit back, breathe or take any type of rest or like it would be counterproductive for me to take annual leave because I'd be sitting at home thinking about it. So I might as well be sitting in work thinking about and that's why it's exhausting" (Participant 1D)
"Being a little bit more short fused" (Participant 2B)

"you kind of feel like you're not able to offer them as much support as you would like to" (Participant 1A)
"we felt quite abandoned" (Participant 1B)

These few quotes alone cover the aforementioned indicators of discouraged, hopeless, disenchanted, fatigued, instantaneous irritation, resentful, confused quickness to anger, and bored, offered by Woo et al (2020; p9).

The current research also found evidence of the impact on burnout and wellbeing of elements such as job insecurity and employee silence, following similar veins to Petitta & Jiang (2020) and Knoll et al (2019). With job insecurity, some participants reported that they felt they had no choice but to accept redeployment during the pandemic or funding for their jobs would be put at risk, threatening their livelihood. Participants further reported that there was a sense of not feeling like they could ask for more support because everyone was equally as busy, despite an increase in pressure at work. As a result they felt like they were being left and abandoned by management to figure the situation out for themselves, in many cases not speaking up as they did not feel they would be heard. "*Even just to get a thank you from the higher management structure…very often our feelings are never expressed, we're just told you get on with it"* (Participant 2H).

The BDI and BAI are both relevant to burnout as they represent important elements of a person's emotional experience which can have a profound impact on their sense of wellbeing, alongside inform how we interpret the impact of the events around us on our wellbeing. Following in similar suit to findings on the ProQoL and MBI where Social Inclusion staff were reporting higher scores than Nursing staff, they again descriptively

reported higher levels of depressive symptoms at Time 1, and similarly for levels of anxiety symptoms at both Time 1 and Time 2, than Nursing. However, both Social Inclusion and the group as a whole indicated a significantly lower level of depression as measured by the BDI at Time 2 than at Time 1. On the BDI, for the whole group 16.7% were in the mild range, 10% in the moderate range, and 3.3% in the severe range; at Time 2 this shifted to 11.5% in the mild range and 11.5% in the moderate range. Looking closer at the Social Inclusion staff, at Time 1 there was 21.1% in the mild range for depression, 15.8% in the moderate range, and 5.3% in the severe range; changing to 17.6% in the mild range and 17.6% in the moderate range at Time 2. For Nursing staff, 9.1% scored in the mild range at Time 1, with all participants scoring in the minimal range at Time 2. With respect to the BAI, for the whole group there were 33.3% in the mild range, 10% in the moderate range, and 3.3% in the severe range at Time 1; at Time 2 there were 30.8% in the mild, 15.4% in the moderate, and an increase to 7.7% in the severe range at Time 2. The Social Inclusion group reported 31.6% in the mild, 15.8% moderate, and 5.3% severely anxious at Time 1, shifting to 29.4%, 23.5% and 11.8% at Time 2 respectively, illustrating an increase in anxiety levels. Nursing staff reported a change of 36.4% in the 'mild' range at Time 1 to 33.3% in the 'mild' range for anxiety at Time 2.

In relation to the significant reduction seen with depression scores on the BDI amongst participants, it may be best to view these in the context of changing conditions over time during the pandemic. During the Time 1 interviews, participants were experiencing the roughest measures in relation to government restrictions/lockdowns. As previously outline, these included things like gyms and social-gathering centres being closed, restaurants/pubs closed, limits on how far someone could go from their home, restrictions on social bubbles and how many households could be in contact, work from

home orders, etc. During the second round of interviews, most of these restrictions had been lifted and participants had access to these amenities and social circles again. With there being much past research linking the positive impact of exercise improving depression (eg Otis et al, 2024; Mata et al, 2012) alongside the positive impact of social support on lifestyle changes that benefit depression (Aschbrenner et al, 2013), these results make contextual sense and provide indication as to why this was statistically significant in the current research.

While the issue of the level of overlap and co-morbidity between burnout and depression & anxiety can be debated (eg Hatch et al, 2019; Schonfeld et al, 2019; Maslach & Leiter, 2016), the present study found alongside the previously discussed moderate burnout that around a quarter of the whole group were experiencing at least mild depressive symptoms or greater, with about half of the participants experiencing at least mild anxiety symptoms or more.

Furthermore, while the current study did not find quite the same percentages of high burnout in nurses as Woo et al (2020) did, there were still around one quarter of nurses and two-thirds of Social Inclusion staff found to be experiencing moderate levels of burnout. There was further consensus between this research and that of Merces and colleagues (2017), in that there were frequent mentions during interviews and through the quantitative measures of participants experiencing anxiety, impacted sleep, being exhausted and over-extended, physical issues and issues focusing both at work and during home life. When considering the implications of these phenomena across frontline professions, such as those described previously by Ghannam et al (2019), Simionato et al (2019), and Zubatsky et al (2019), the risks of burnout in frontline staff can have far-reaching affects most importantly on patient care, wellbeing and staff retention.

Compassion Fatigue

While the typical understanding is that burnout occurs following extended periods of stressful circumstances whereas compassion fatigue can occur after even just one encounter (Koenig et al, 2018), what makes the current research unique is that the participants are experiencing both extended periods where several stressful/traumatic incidents are occurring, as well as one single overarching stressful/traumatic experience (the pandemic).

Indeed, while exploring compassion fatigue, a more interpretive approach needs to be applied. In the ProQoL, it is considered that compassion fatigue is the opposite of compassion satisfaction, in this way making it inversely related to their 'compassion satisfaction' subscale. The ProQoL also asserts that compassion fatigue itself is interpreted through their 'burnout' and 'secondary traumatic stress' subscales (Stamm, 2010). Thus we need to consider not just the 'compassion satisfaction' subscale on the ProQoL, but also its other two subscales. This further allows us to incorporate the research findings from the MBI as well as STSS, which will be discussed in more detail in a later section.

Throughout the study, none of the participants reported being in the low range for compassion satisfaction, meaning all participants were experiencing at least a moderate level of compassion satisfaction with their work at both timepoints. However, there was a significant reduction found in the level of reported compassion satisfaction between Time 1 and Time 2 for the whole group as well as Social Inclusion separately. This illustrates that, while there were no scores in the 'low' range, there was still a substantial reduction in participants' compassion satisfaction. For the whole group, at Time 1 there were 50% in the 'moderate' range and 50% in the 'high' range; this changed to 65.4% in the 'moderate'

range and 34.6% in the 'high' range at Time 2. When looking more closely at Social Inclusion, their compassion satisfaction was 42.1% in the 'moderate' range and 57.9% in the 'high' range at Time 1, dropping to 64.7% in the 'moderate' range and 35.3% in the 'high range' at Time 2. Nursing shifted from 62.6% 'moderate' and 36.4% 'high' at Time 1 to 66.7% 'moderate' and 33.3% 'high' at Time 2. Low levels of 'personal accomplishment' reported across timepoints by participants on the MBI may provide insight into contributing factors to this shift.

This trend shown in reducing levels of compassion satisfaction were inversely similar to the previously discussed trends discovered in the 'burnout' subscale scores, where levels of burnout were largely moderate but increasing between Time 1 and 2 (50% at Time 1 and 53.3% at Time 2), with Social Inclusion reporting higher levels of burnout than Nursing. The sustained moderate levels of emotional exhaustion across timepoints being reported on the MBI perhaps provide supportive illustration into these changes, considering Turgoose and Maddox's (2017) assertion connecting both emotional and physical exhaustion to be the manifestation of compassion fatigue.

On the ProQoL's secondary traumatic stress subscale, again significantly greater levels of secondary traumatic stress were reported by Social Inclusion than Nursing at Time 2. There were no participants throughout the study who reported high levels of secondary traumatic stress on the ProQoL. However, 43.3% of the group as a whole placed themselves in the 'moderate' range of secondary traumatic stress symptoms at Time 1, which increased to 61.5% at Time 2. The Social Inclusion group went from 57.9% to 76.5%, and the Nursing group increased from 18.2% to 33.3% having reported being in the moderate range of secondary traumatic stress symptoms between Time's 1 and 2 respectively. We will take a closer look at secondary traumatic stress later in the

discussion when focusing on the STSS psychometric specifically, though there is a noteworthy trend here, particularly amongst the participants working in Social Inclusion.

The current research adds to the growing body of literature across healthcare professions such as those referred to by Ramirez et al (2020), that seek to understand the complexities of compassion fatigue. We can take a look at it through the lens of Pirelli, Formon & Maloney's (2020) parameters to bring more awareness to why the pandemic may be influencing its occurrence, as well as beginning to illustrate the helpfulness of the current research portraying these in the structural model we introduced in the results section (micro/mesa/macro/behavioural/physical/psychological):

Risk factors

High natural empathy (Pirelli et al, 2020)- there were indications throughout the qualitative interviews that portrayed participants as having a high level of natural empathy, shown through their commitment to providing support to their clients and find new ways of developing ways to connect to their clients when the pandemic forced them to not be able to work in the same way, with participant experiences ranging from "*I enjoy knowing I am making a difference to clients without my life revolving around the clients"* (Participant 1C) to feeling they are *"always giving myself to people"* (Participant 1D), influencing high natural empathy as a risk factor for compassion fatigue.

Unresolved personal trauma (Pirelli et al, 2020)- With the range of traumatic experiences reported on the LEC-5, it can be seen that all participants at some point in their lives had experienced some forms of personal trauma. While we did not investigate whether these experiences could be considered 'resolved' or not, many participants spoke about the use of personal counselling and positive coping strategies that they had

learned as part of their personal growth journeys that they were able to transfer to using with managing situations within the work environment, as well as the importance of personal reflection and processing their own traumas.

Heightened drive to alleviate stress in others (Pirelli et al, 2020)- participants spoke about their work as a helper being part of their own identity, and that there is satisfaction on seeing the efforts put in to help someone having positive results for that person. Much of the ruminative thoughts and frustration with the organisational systemic changes that had to be made due to the pandemic was related to how it reduced their felt sense of efficacy in alleviating the stress of their service users; "*it is making it challenging…I think the clients are really feeling that as well. It's very hard for them, to keep them motivated, to keep them engaged, and you kind of feel like you're not able to offer them as much support as you would like to"* (Participant 1A), which itself was then a double-edged sword with the desire to go '*above and beyond*' to help clients even if that meant going outside of their role remit.

Work environment (Pirelli et al, 2020)- While there were several protective factors of the participants' work environment, such as having a supportive team and good quality supervision, there were also many elements of the work environment which increased its risk factor. Indeed, the very structure of work itself was taken away by the pandemic- like with Participant 1B expressing organisationally "*I don't think it was well handled…we felt quite abandoned*"; and with Participant 1D, "*I like to know what's happening and I'm a very structured, routined person. So to wake up and have that taken away from me was initially something that I really struggled with…I'd get quite anxious*". All of this was coupled with lack of access to PPE, increased duties at work with infection prevention and control guidelines, redeployments, language/communication issues, and the increasing

risk levels of compassion fatigue start to make sense on the organisational level of influence.

High caseload (Pirelli et al, 2020)- a common theme throughout the interviews was how even traditionally in their roles they would have worked at capacity in terms of client caseload. Then, once the pandemic hit and caused massive changes in how they could work, it further exacerbated this concern. For example, working with just one person now became more time intensive because there was extra administrative paperwork, phone screenings, infection prevention and control guidelines if seeing face to face, and the routine elements of the work took more time as "*it's harder to gauge necessarily what's going on, or maybe they won't answer the phone then and you kind of don't get to catch up with them, or just even something simple like if you were doing referrals for somebody you need to see them together to get the form signed…And just a lot of services that we would refer people to aren't operating either like just a lot less support for people"* (Participant 1A), resulting in more of the workload resting with that staff member. With no slow down to new referrals, "*It's had a huge knock on effect and will do for the next couple of years in regards to waiting lists*" (Participant 1J). And while staff were being informed about supports they could access and avail of, to quote one participant, "*having supports but not having the time to use those supports is a pointless exercise*" (Participant 2F).

Protective factors

Adaptive coping strategies (Pirelli et al, 2020)- "*I've always felt that the things I enjoy doing outside of work helped me to stay refreshed and ready for the days' work. So I can certainly feel on a Monday, today is a Monday, I've got more energy today than I*

might have by the end of the week" (Participant 2D). Participants demonstrated knowledge of a wide-range of adaptive coping strategies to help balance the impact of their work on them. They reported actively planning and positively reframing issues, enjoying the creativity behind problem solving with their team, as well as being able to use coping strategies across the structural strategies that will be discussed in more detail later. For example on the micro/individual level using personal counselling, exercise and individual supervision; on the mesa/team level using group supervision, team building days, peer support; on the macro/organisational level using interagency sharing of knowledge, networking, influencing policies & procedures where possible. Similarly, on the behavioural level taking a sense of agency over what they could control and opting for more healthy behavioural coping such as taking time for mindfulness, placing boundaries around work, and changing environments; on the physical level utilising exercise like yoga, running, and healthy diets; on the psychological level engaging in counselling when needed, mental health medication, and clinical supervision.

For their references to trait-based emotional intelligence, we can illustrate this with the area of healthy emotional management (eg correlation between mindfulness and lower compassion fatigue) (Pirelli et al, 2020; Turgoose & Maddox, 2017). Largely advocating that the awareness of emotional states and the impact of these on how we react to situations and manage them, these elements can be seen throughout the current research. While not used in the sense of being predictive of work efficacy, the participants were aware of how they felt based on the situations they were in. Even though this included negative reports such as poor sleep, tiredness, frustrated and anxious when seeing inequality, constantly seeing trauma around them, emotional numbness, experiencing transference, existential issues, overthinking, being more guarded, and

feeling incapable of managing clients well enough, with many of these the participants were aware of how they could manage these difficulties as they each tended to have a useful set of self-care strategies that they had amassed throughout their working experience. This ranged from appropriate use of supervision or counselling to escaping to the country for hill-walking to socialising and more. A significant factor which was impactful here was the pandemic restrictions, which often curtailed the ability of the participant to be able to implement a self-care/management strategy (such as when the 5km rule was in place, wherein people were not allowed to travel more than 5km distance from their homes unless with special permission, for example healthcare workers travelling to work).

Barriers to self-care

Using past research to reinforce how much the pandemic exacerbated barriers to self-care, we can utilise Yi et al (2018) who uncovered at risk times such as when trying to build relationships with clients, when experiencing ineffective capacity to support clients, when there is a client bereavement, and while facing organisational barriers. Each of these scenarios occurred to participants in the research, as shown by previous quotes throughout the results and discussion sections in extra strain being put into building relationships due to a changing environment, lower felt sense of efficacy, and bereavements that were occurring due to the virus. While Yi et al (2018) highlighted important ways of managing this- establishing professional boundaries, building career identity, communication in supervision, and engaging in self-care activities; these were also impacted by the pandemic. Participants expressed struggles with maintaining boundaries, as even the boundaries they did have were continuously shifting; the careers

that the participants were carrying out changed, some completely to a line of work they were not used to or did not find as fulfilling; supervision was seen as integral but often felt could have been more frequent; and the ability to engage in self-care activities was severely curtailed because it was against Irish Government restrictions to do so. Indeed, it was not simply the government restrictions which made engaging in self-care activities difficult, as one Nursing staff member elucidated "*nobody wanted to be near us at the start, you know when it was really bad and everybody was terrified, it was like it was nearly like saying you had leprosy, saying you were a nurse. People were just terrified…so I found that really hard."* (Participant 2J).

In one participant's words, "*if you're not looking after yourself outside of your job, your job gets impacted. You can't do your job as good and it just drains the life out of you. And then it impacts on the outside of it, so it just goes back and forth"* (Participant 1H). This spiral can have far-reaching consequences, as another participant elaborated "*when I'm having a good time at work things are great and that has a positive impact on my life but if I'm having a difficult time at work it's very hard for me to draw the line and take a step back. So that can kind of impact on my relationships, on my mental health"* (Participant 1M).

Therapeutic interventions

A frequent subject matter which made an appearance was the professional therapeutic value of clinical supervision as a way of being able to separate personal experience from client experience. As Miller & Sprang (2017) acknowledge, this can make it a protective factor, a preventative factor, management, and support mechanism for postvention.

> "*The type of supervision we were talking about where you're looking at what is actually going on for you and how the work is impacting on your personal life and how your personal life is impacting on work kind of similar to what psychologists do. That kind of supervision I think should be there for everybody, should be part of the work, it should be as valuable as the line management supervision.*"
>
> (Participant 1M)

Indeed, line management supervision was expressed to have been very much needed and supportive, however there was a felt sense that there were areas where it was not the most appropriate place to process certain issues, which would be better served by this other variation of 'clinical supervision'. Several participants spoke about access to external clinical supervision which they paid for themselves, illustrating the value that they placed on its positive benefit for both their work and their own wellbeing.

Turgoose et al (2017) highlight the benefit of access to supportive environments such as peer support, supervision, access to counselling, anxiety management and mindfulness, essentially having space to safely talk about their experiences, they purport that the organisation has a role to play in this. Even though many interventions can be in themselves identified as an individual support mechanism, people working in helping professions perhaps are not the best at implementing their own self-care techniques (Grant et al, 2019). In the current research, it was mentioned about not having the time to practice self-care because there were pressures coming from both work and home life, as well as lack of energy to do more than what was already being asked. Organisationally, some participants felt staff wellness took second place. With the importance of self-care in managing compassion fatigue, and on the other end of the spectrum the impact on ability to perform work if experiencing compassion fatigue, there is the risk of a

downward spiral when self-care is not being prioritised at least at the same level as work productivity given the co-dependant relationship in helping professions.

In the current research, interviews highlighted a plethora of useful therapeutic-aligned approaches which included the cognitive behaviour therapy approaches mentioned by Rohlf (2018), the psychoeducational pieces by Williamson (2019), the self-care through quality of life by Klein & colleagues (2018), social supports by Barr (2017), and mindfulness by Delaney (2018). Though initially the pandemic meant people had to stop these various types of therapeutically beneficial supports for a time, with the quick technological adaptions that globally came into force, many were able to re-engage in these supports at some point on virtual platforms. Given the wide ranging expressions across the board throughout the qualitative interviews, it further supports the current research's assertion that a single approach in mitigating the impact of compassion fatigue is not the answer. If we are to make a serious and committed attempt at providing preventative and postvention support for compassion fatigue, a more flexible and encompassing approach which can create a protective network of wellbeing supports would prove to be more valuable. This structure will be discussed in more detail in a later section.

Secondary traumatic stress

When exploring participants' expression of secondary traumatic stress, we have already made reference to the secondary traumatic stress subscale on the ProQoL, in which 61.1% of the whole group scored in the 'moderate' range at Time 2. Furthermore, over half of the Social Inclusion sample at Time 1 and over three quarters of them at Time 2 were in the 'moderate' range.

The STSS psychometric allowed us to explore secondary traumatic stress a little further, in more nuanced detail. It again highlighted that Social Inclusion staff were reporting their experience of symptoms to be descriptively greater than Nursing across the intrusion, avoidance and arousal subscales as well as on the total secondary traumatic stress scale scores across timepoints. When looking at the Total scale scores for the group as a whole, the biggest shift between Time 1 and Time 2 were in those in the 'mild' range (from 20% down to 7.7%) and the 'moderate' range (increasing from 20% up to 26.9%), whereas the numbers in the 'little or no STS', 'high' and 'severe' appeared relatively stable. However when we split the group, the trends between Nursing and Social Inclusion differ. In Nursing there was initially 27.3% in the 'mild STS' range and 9.1% in the 'severe STS' range, which changed at Time 2 to 22.2% in the 'moderate STS' range but none in the mild or severe (63.6% to 77.8% in the 'little to no STS' range).

Social Inclusion's scores illustrated a slightly differing trend- those in the 'mild STS' range went from 15.8% at Time 1 to 11.8% at Time 2, 'moderate STS' went from 31.6%% to 29.4%; 'high STS' from 10.5% to 17.6%; and 'severe STS' from 10.5% to 11.8%, respectively. While overall there is not a substantial participant sample size to make sweeping generalised arguments as a result of these percentages, it is vital to highlight that the level of secondary traumatic stress being expressed by these proportion of frontline staff teams is still at a magnitude that should be deeply concerning.

The levels of secondary traumatic stress being reported by participants can further be understood by referencing the LEC-5, in tables 1-3 in the Results chapter, which highlight the number of incidents that participants have been exposed to as part of their jobs, witnessing them or learning about them. All of the participants made reference at

some point to the pandemic itself being a significant life event in which they experienced some form of trauma or traumatic response, particularly during the qualitative interviews.

While typified by symptoms that mirror post-traumatic stress disorder, STS is similar to compassion fatigue in that it can occur following a single exposure to somebody else's trauma (Branson, 2019; Turgoose & Maddox, 2017). Indeed, the current research follows the point made by Penix and colleagues (2019) that many frontline staff work in high-risk settings where they are at risk of both direct and indirect trauma exposure, given the very nature of the global crisis that was the Covid19 Pandemic. Alongside being exposed to the typical traumas of their client-base, the participants themselves were contending with an environmental traumatic event which was leaving no one unscathed.

If we delve into what previous research has shown to help mitigate the occurrence of STS, we can begin to understand the prevalence of it within the current research. Diehm et al (2018) write about levels of social support, to create balance with caseload severity. Participants in the current research reported increased sense of social isolation (remember the quote "*nobody wanted to be near us at the start, you know when it was really bad and everybody was terrified, it was like it was nearly like saying you had leprosy, saying you were a nurse"* by Participant 2J?), alongside the aforementioned increases in workload demands ("*It just constantly feels like I'm not getting to sit back, breathe or take any type of rest or like it would be counterproductive for me to take annual leave because I'd be sitting at home thinking about it*" and "*It just constantly just feels like the fire is never extinguished, it just keeps coming"* by Participant 1D).

With the perspectives provided by Strolin-Goltzman et al (2020), it allows us to understand the levels by which the pandemic threw the participants' into higher risk of STS, but also makes sense of the supports that participants request when looking towards

the future. There's the individual/micro level of valuing emotional regulation, perception of professional competence, education of STS. During the interviews in the current research, participants spoke about the struggles associated with not having their usual methods of emotional coping strategies available due to pandemic restrictions, as well as a reduced sense of professional efficacy due to the changing nature of their work roles based on the situation, and at times feeling overwhelmed by the amount of new information coming at them daily. However, simultaneously they spoke about the huge emotional support they received from their teams in being able to help regulate themselves, feeling a sense of accomplishment when they were achieving results following creating new ways of performing their roles, and a desire for more training on trauma-awareness and trauma-informed practice.

> "*I do find group supervision very beneficial and I think it needs to be a clinical type of supervision, it needs to be by somebody who's qualified to facilitate that type of supervision and to be able to work from that kind of seeking safety platform with staff members, for staff members to be better informed for what secondary trauma looks like, for what that vicarious piece looks like.*" (Participant 1D)

Next on the organisational, or mesa level, elements like clear leadership and appropriate supervision were important for Strolin-Goltzman and colleagues (2020). Focusing on the latter first, supervision was presented as a strong supportive factor throughout the current study. While there were suggestions from participants about frequency of supervision, external being potentially more beneficial than internal, and perhaps having more 'clinical' type supervision vs line management supervision would improve things, there was a consistently high approval for the supervision they were receiving. In relation to the former element, with having clear leadership, there was more

of an unbalance. While there was a security expressed when clear decisions were taken by leadership, there were often times that staff felt "*abandoned*" (Participant 1B; Participant 2F) and left to figure out how to adapt roles themselves, even in terms of sourcing PPE, vaccines and the most up-to-date knowledge about the Covid19 virus. There was acknowledgement that the overwhelming nature of the pandemic was across all levels of work, meaning that frontline staff understood that management/leadership were most likely also overwhelmed within their own spheres of work, so it is possible that it was in communication breakdown and disconnect in the language that was being used influenced a lack of clarity in leadership at times.

At the community/macro level, Strolin-Goltzman et al (2020) were advocating for the beneficial effects of being able to work on an interprofessional scale. Our research again shows that there is more complexity here than this sentence conveys. For example, on one level frontline staff were frustrated in that many services closed so that they were unable to work as interprofessional as they would have previously, necessitating them taking on wider remit to provide support for their clients. On the other hand, they also spoke of the pandemic breaking down a lot of bureaucratic barriers and allowing them to work more seamlessly with other services to come up with more client-friendly ways of accessing the different professional services that clients needed. Participants also spoke about the value in sharing knowledge and staying connected with their professional counterparts in the wider-field outside of their own organisation.

Our findings that Social Inclusion reported greater experiences of secondary traumatic stress than Nursing is largely consistent with other research in areas where roles are similar to that of those in Social Inclusion such as social workers (Owens-King, 2019), and further highlights the imperative nature of giving attention to proactive and

coping strategies- particularly given the correlation of wellbeing with staff retention in trauma informed care (Christian-Brandt et al, 2020). Similarly with Nursing, Oginska-Bulik and Michalska (2020) highlighted not just psychological resilience but also the connection between individual resilience for working effectively in a multi-disciplinary team. The phenomena we have been describing of micro, mesa and macro are not mutually exclusive. They are interconnected, as it is hoped that the current research conveys. For example, several participants noted how they found their team made a massive impact on their resilience. If they were having a hard day individually, their team would be able to provide them with needed support or reprieve, which in turn would allow them to focus on their personal wellbeing in order to be able to return to supporting the team at full mental health strength. As one participant said, "*if you choose your team well and wisely and they are experienced people, this collaboration and trust makes the work so so easy*" (Participant 1B).

Vicarious Trauma

While compassion fatigue and secondary traumatic stress can occur following a single exposure, vicarious trauma returns to similarities with burnout in that it occurs over time- in this situation with particular respect to the cumulative empathic relations which initiate changes to cognitions (Branson, 2019). To put it another way, as frontline staff are exposed to the traumas of their service users and work environment, the experience of the interpersonal relations which are developed through use of empathy begin to shift the way in which those staff view the world.

Exploring the participants' experience of vicarious trauma is more reliant on the interviews and qualitative data than on the quantitative data, as vicarious trauma is how

events they have witnessed or learned about, though not directly been a part of, have reshaped their worldview (McCann & Pearlman, 1990; Pirelli et al, 2020; Branson, 2019). However, we can extrapolate some evidence from the qualitative data that there is a greater chance of vicarious trauma occurring, due to the levels of secondary traumatic stress being reported that we have previously discussed (from the ProQoL and STSS), as well as the number of traumatic events that fall into this category from the LEC-5 ('witnessed it', 'learned about it', and 'part of my job'). As one participant elucidates:

> *I've been exposed to more darkness and I think sometimes what I find is I feel like people's experience of the world becomes their world in their mind, and my experience of my world is that 35-40 hours a week I am only hearing negative stories and badness and darkness. So say for example, it's skewed my worldview a bit, so my worldview is like skewed towards nearly everybody experiences sexual assault, nearly everybody experiences domestic violence, nearly everybody is let down by the system in some way, and actually when I assess that that doesn't mean that's not really true, but it's true of my work.* (Participant 1M)

We do not simply have to focus in on the above quote from the current research to illustrate the signs that Pirelli et al (2020) posit that indicate a person may be experiencing vicarious trauma, as examples permeate the research interviews:

For emotional and cognitive alterations (Pirelli et al, 2020)- "*I remember the colleague saying to me 'Jesus you were so calm, you're brilliant throughout that'. And I said to her I actually wasn't brilliant, that calm was actually after scaring me, because I was too calm almost. You know, and had this client have passed away I don't think it would have*

sparked anything in me at that stage, because I had seen so much" (Participant 1I) and "*it just is like something that lives in the back of my head constantly that the world is this really dark horrible place which obviously isn't, you know, a positive thing*" (Participant 1M).

For intrusive thoughts (Pirelli et al, 2020)- "*I do think that I have to acknowledge that I wake up in the middle of the night, not about the [client population] but about operational stuff but I'm sure they're all connected. I haven't got that done or, oh Jesus Christ, I didn't respond to that letter. I'm not waking up going, oh my God, that women's experience of sexual abuse was horrific. It's not unmanageable but it's certainly enough for me to mark it, and definitely I'm a lot more physically tired than I was, and I feel that I am resourcing myself more to manage it"* (Participant 1O).

For mood and self-identity disturbances (Pirelli et al, 2020)- "*When I'm having a good time at work things are great and that has a positive impact on my life but if I'm having a difficult time at work it's very hard for me to draw the line and take a step back. So that can kind of impact on my relationships, on my mental health"* (Participant 1M) and "*somebody is coming to me with a really sensitive thing in my personal life as I said it depends the day, the time, you get me I could be very cut-throat and say this is your problem with this you need to do sort of stop moaning about it, or I could sit down and I could have very in depth conversation but it really varies from one end to the other"* (Participant 1D)

The current research also emphasises the perspective of McCormack and Adams (2016) in that these interpersonal relationships that influence vicarious trauma do not

operate in a vacuum, that the environment in which they occur has to be taken into account. This created increase risk in this area with our research population given the upheaval that occurred due to the pandemic itself, which threw work and home environments globally into disarray. Where this becomes a more important issue is that vicarious trauma itself has been shown to be significantly lower when regulated by greater overall sense of wellness (Foreman, 2018). With the impact of the pandemic on frontline workers ability to engage in selfcare and wellbeing activities, this translates into greater risk as the agency to regulate wellbeing was, for many participants, stunted if not removed entirely from them- "*It just constantly feels like I'm not getting to sit back, breathe or take any type of rest or like it would be counterproductive for me to take annual leave because I'd be sitting at home thinking about it. So I might as well be sitting in work thinking about and that's why it's exhausting"* (Participant 1D)

Our research found further elements of post-traumatic growth within the participant experience, with such examples of "*It brought us closer together and we were a very tight unit*" (Participant 1B); the "*variety in the work makes it incredibly difficult, but rich*" (Participant 1O); "*I enjoy knowing I am making a difference to clients without my life revolving around the clients"* (Participant 1C). Thus, vicarious trauma is not necessarily something which we should tarnish as being a bad thing in and of itself, but rather something which needs to be addressed in order to promote post-traumatic growth.

If we are taking the perspective that vicarious trauma is a natural part of frontline work due to the nature of the work itself, that it's by unacknowledging it that it elevates to an adverse connotation (Boulanger, 2018; McCann & Pearlman, 1990) alongside this aforementioned effect of the environment on being able to regulate it, then this places

more emphasis on the necessity for a systemic structure of psychological wellbeing supports. This would allow frontline staff the best opportunity to mitigate adverse conditions by having accessibility to these supports when they need them, as they need them. As one participant named, "*it's a very subjective nature of how somebody can deal with it, especially in this line of work because its different from person to person. Maybe a subjective approach by management, to evaluate what they think would help that person, for themselves and a subjective individual approach naming the supports for each person*" (Participant 1C).

"I do find group supervision very beneficial and I think it needs to be a clinical type of supervision, it needs to be by somebody who's qualified to facilitate that type of supervision and to be able to work from that kind of seeking safety platform with staff members, for staff members to be better informed for what secondary trauma looks like, for what that vicarious piece looks like." (Participant 1D).

This consequently leads this discussion into the next topic, the qualitative support structures.

Qualitative Support Mechanisms

Having discussed the impact and implications of both participants' frontline work environment and the pandemic on their psychological wellbeing, it is ultimately purposeful to dedicate time on discussing the support mechanisms which were identified throughout the research. Even with the Consortium studies, despite the challenges that the pandemic raised, some health care workers shared accounts of adaptive strategies—such as peer support groups, informal debriefings, and personal resilience practices—that

helped mitigate the impact. However, these coping mechanisms were not uniformly available, underscoring the need for systemic support. A recurring theme was the desire for more robust mental health resources, including counselling services and structured debriefings. Many participants emphasized that institutional support could play a crucial role in managing the long-term consequences of the pandemic on their well-being (McBride et al, 2022a; McBride et al, 2022b; McBride et al, 2021a; McBride et al, 2021b; Spikol et al, 2021; McBride et al, 2020). There was apt representation of these throughout the current research.

Much previous research provides suggestions and recommendations covering some wellbeing supports, or studied the effects of a few of these. As we have previously iterated in the example of burnout, these can be more simplistic interventions like the moderating role of leisure-time activity (Gerber et al, 2020) all the way up to more complex interventions like mindfulness, acceptance and value-based interventions (Kinnunen et al, 2020). Though what happens when some of these interventions become circumstantially no longer viable? What the current research suggests is the need to have an over-arching visual representation, a structure, within which we can place these targeted interventions, and more accessibly seek alternatives when some are not available. This will aid in identifying the most appropriate support for a person or people when the issue or potential issue impacting them has been named. This is following in a similar suit to what Simionato et al (2019) were purporting, in terms of framing it's management in a more wholistic approach- from a professional's initial training, to continuous responsive training, to professional advocacy for workplace wellbeing, to promotion of self-care and of support networks.

In recent years since the advent of the pandemic, many studies sought to investigate the impact of the pandemic on frontline health staff. The current research not only adds significantly to that research, corroborating with much similar results, but also because of the breadth and depth of the current investigation it combines their findings within a single sample. Similar to Petrie et al (2020) higher levels of burnout, anxiety, depression and psychological distress were found due to poor work-life balance, high workloads and distressing patient interactions and long hours, and also with the investigation by Powell et al (2022). To illustrate these with even a few participant quotes from our study- "*I think you'd your normal stress, and you had the adverse stress, and then…had the worry of the team and then me wanting to be a part of that because not expecting them to do something I would never do, and then the worry of your clients as well on top of that. It was definitely very stressful."* (Participant 1D)*;* "*It's had a huge knock on effect and will do for the next couple of years in regards to waiting lists*" (Participant 1J); "*It just constantly just feels like the fire is never extinguished, it just keeps coming"* (Participant 1D); "*it takes twice as long to do half as much"* (Participant 1P)*; "more chaotic, less consistent, less outcome, more frustration on my part at times"* (Participant 1H)*; "It just constantly feels like I'm not getting to sit back, breathe or take any type of rest or like it would be counterproductive for me to take annual leave because I'd be sitting at home thinking about it. So I might as well be sitting in work thinking about and that's why it's exhausting…"* (Participant 1D).

The findings of from the meta-analysis carried out by Parandah et al (2022) of moderate and severe levels across the three scales of the MBI- emotional exhaustion, depersonalisation and reduced personal accomplishment- were similar. Testoni et al

(2023) found greater incidences of depression and burnout as well as PTSD symptoms associated with Covid19 workloads, with associations between mental wellbeing and demographics such as family structure (eg having children at home, for example). With one of our participants expressing:

> "*I felt that by going into work that I could bring something home to my family, and my partner has massive health problems, really immune-compromised, and has all the complications, and maybe I was picking up sometimes on her fear but she was genuinely afraid that if she caught covid that she would die. She genuinely thought that she would die if she caught covid and anytime I went out to work, it just stresses her out so much that I could be bringing something back that could kill her."* (Participant 1M)

Caldas, Ostermeier & Cooper (2021) found increased levels of emotional exhaustion in the workplace which was even greater with an increased sense of prosocial motivation, which could explain how the participants in the current research managed to continue working to their utmost abilities despite feeling depleted themselves- "*it's impacted quite positively. Enjoying my work- I enjoy knowing I am making a difference to clients without my life revolving around the clients"* (Participant 1C)*;* "*They pulled their socks up, including me, we went to do the job. Not one person hide in their in their bedroom at home. They were all frontline, they all did the work. It brought us closer together and we were a very tight unit.*" (Participant 1B)

Like Morina et al (2023), receiving support interventions was beneficial in terms of managing potential risk factors associated with burnout, worry, psychological distress and moral injury- "*The type of supervision we were talking about where you're looking at what*

is actually going on for you and how the work is impacting on your personal life and how your personal life is impacting on work kind of similar to what psychologists do. That kind of supervision I think should be there for everybody, should be part of the work, it should be as valuable as the line management supervision." (Participant 1M).

Berkout and Clair (2022) championed the beneficial effects of Acceptance and Commitment Therapy (ACT) in their research. While not advocating any specific therapeutic approach in particular, receiving personal therapy was a positive coping mechanism that appeared throughout the current research, and was even highlighted as having a negative impact when it was taken away from one participant due to the pandemic restrictions as their therapist stopped seeing them due to the pandemic restrictions, and the use of online technology was not yet an available option in that particular instance.

Utility of the Framework

The structure that the current research is proposing seeks to provide what Caldas, Ostemeier and Cooper (2021) are seeking- something which allows us to identify those most at risk of experiencing negative wellbeing distress, a means to provide adequate and ample resources in these areas, and encourage providing healthcare staff with the supports to recuperate following periods of intensified emotional exhaustion.

It also expands on this showing the need that Rapp, Hughey & Kreiner (2021) identified, in terms of the impact of enmeshed boundaries between work and home life- that support measures need to be advocated for across all settings of a worker's life, not simply in the workplace, if seeking to achieve the best possible outcomes. "*I think my experience so far is that if you're not looking after yourself outside of your job, your job*

gets impacted. You can't do your job as good and it just drains the life out of you. And then it impacts on the outside of it, so it just goes back and forth" (Participant 1H)*; "When I'm having a good time at work things are great and that has a positive impact on my life but if I'm having a difficult time at work it's very hard for me to draw the line and take a step back. So that can kind of impact on my relationships, on my mental health"* (Participant 1M).

This structure then subsequently allows us to focus on the positive. While, for example, Mittel et al (2023) reported similar negative effects of the pandemic as we have already discussed, they also reported positives such as the garnering of a sense of meaning and pride in helping others, suggesting stress-reduction and therapeutic supports to help aid in this. This was consistent with our research "*variety in the work makes it incredibly difficult, but rich*" (Participant 1O); "*It's certainly richer. I'm not sure if it's easier or harder, but it's richer*" (Participant 1O); and "*I enjoy knowing I am making a difference to clients without my life revolving around the clients*" (Participant 1C).

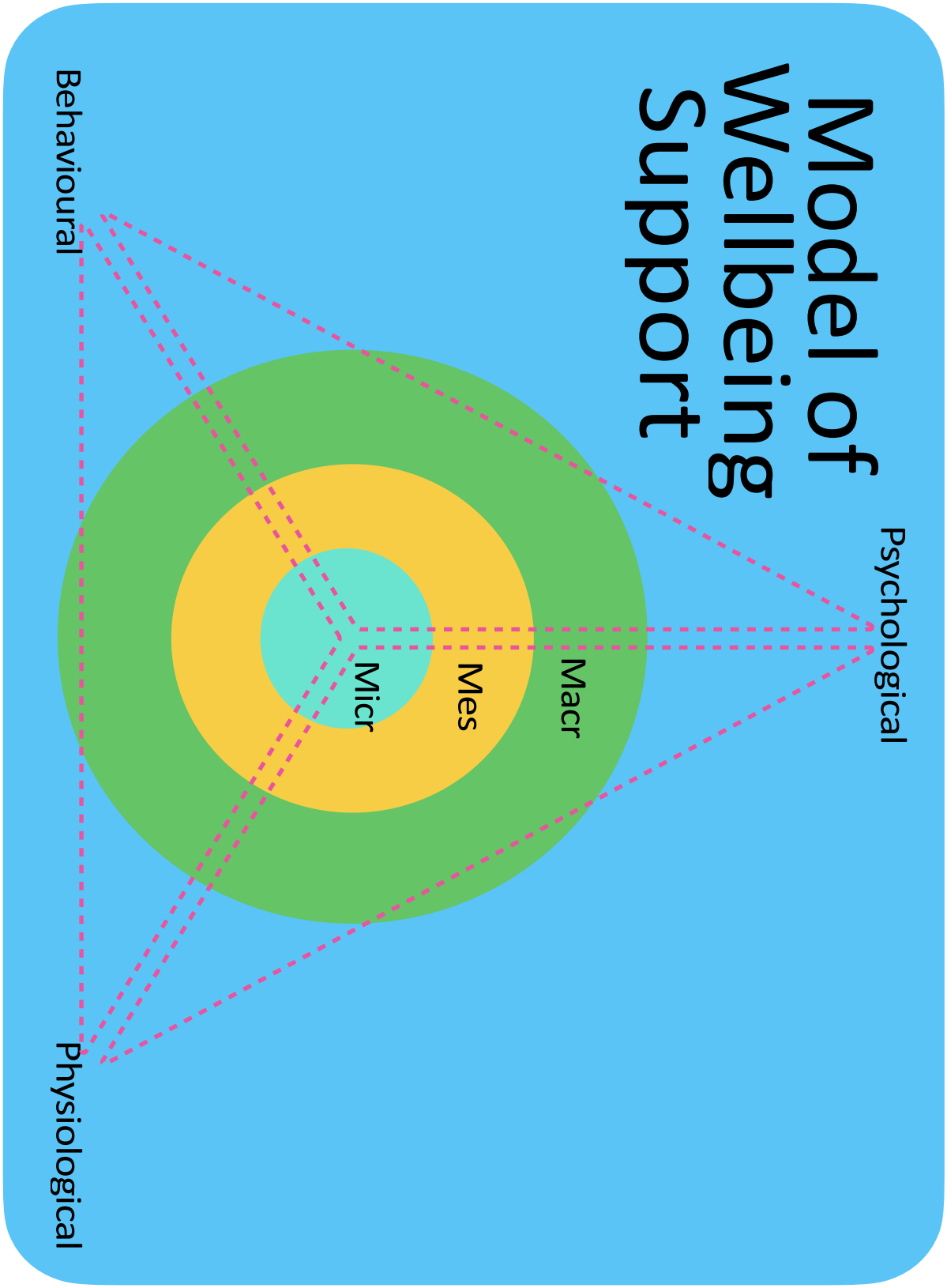
The benefits of providing wellbeing and mental health supports prior, during and after traumatic events was something which our participants reported, and was in line with recommendations from other research (such as Mullen et al, 2021; Rolin, Flis & Davis, 2022; Yeung et al, 2023; Kalaitzaki, Tamiolaki & Tsouvelas, 2022). Ultimately, providing these supports offers not simply increased job satisfaction and longevity/sustainability of work roles, but also translates into better retention of staff, healthier work environments, and better service user care. As such, the following Figure 8 a visual representation of the proposed structure which we recommend is adopted by

organisations in order to best conceptualise the needed support mechanisms for their staff.

The visual in Figure 8 allows us to illustrate how when thinking about support structures, we need to see them in how they connect across the micro, mesa and macro levels systemically, as well as whether they focus on the behavioural, physiological and/or psychological benefits. This is further two-fold, in that it represents the ways in which a potentially traumatic event can impact, as well as how the applicable supportive intervention is beneficial.

Figure 8

Proposed Model of Wellbeing Supports



If we were to create a more 2-dimensional list of examples, we can refer back to Table 4 in the Qualitative results chapter; by allocating examples to each section it may look similar to the Table 31 below:

Table 31

Matrix Formed Following Thematic Analysis of Qualitative Interviews with Examples

	Micro	Mesa	Macro
Psychological	Ways of impact *Eg depression, anxiety, irritable, feeling selfish* Ways of coping *Eg mindfulness, personal therapy, individual supervision*	Ways of impact *Eg feeling disconnected from team and inequitable* Ways of coping *Eg group supervision, peer support, group therapy*	Ways of impact *Eg not feeling valued and/or feeling abandoned by organisation* Ways of coping *Eg organisational recognition; professional networking outside of organisation*
Behavioural	Ways of impact *Eg taking longer to do work, having to do roles outside of remit* Ways of coping *Eg yoga, going for a walk, taking a coffee break*	Ways of impact *Eg school closures and having to homeschool children; teams not being able to meet due to restrictions* Ways of coping *Eg going on team building days, taking coffee breaks together as a team*	Ways of impact *Eg other services closing down/not operating* Ways of coping *Eg attending external CPD courses, professional conferences*
Physiological	Ways of impact *Eg contracting Covid19, cocooning in house due to risk; fatigue due to lack of sleep* Ways of coping *Eg healthy diet, exercise; ergonomic considerations in office*	Ways of impact *Eg passing virus onto team members or family members; team short staffed due resulting in increased workload for staff* Ways of coping *Eg increase staffing resources on team*	Ways of impact *Eg constantly changing infection prevention & control guidelines; government restrictions on working* Ways of coping *Eg improved language in communication, protected time for learning and carrying out IPC measures*

The examples listed in table 6 are not meant to be exhaustive- a few of the ones that were mentioned within the qualitative interviews of the current research were used as food for thought.

Adopting a structure like figure 8 and table 6 is important because, as we have discussed previously, events that are distressing impact people differently. Not everyone will be traumatised by a traumatic event, for example, just as everyone experiences distress in their own way, and everyone has their own methods of coping and emotional regulation which works for them. Not everyone finds yoga or mindfulness beneficial, not everyone likes going for a hike, not everyone finds a work-related conference enjoyable to go to. Furthermore, you may notice in the examples provided in table 6 that they may be applicable across different categories. For example, going for a hike can be a solitary (micro) as well as physiological support, but for another it could be social (mesa) when with friends or psychological if re-connecting with nature is important spiritually for that person, as well as behavioural. With 'impact', other services closing down can have an impact on several levels as it can increase individual workload (micro, behavioural), impact on the team (mesa) level, and on the macro level if an organisation needs to develop new policies to adapt to new roles.

Thus, using this figure and table allows an organisation to conduct a needs analysis and map out where they are currently, identifying what is in place and any potential gaps. It can also be used in real-time when an incident, like the Covid19 pandemic, is occurring to make a plan for ongoing support of staff. Subsequently, it can also be used as a reflective tool post-incident if seeking to gain insight on strengths and weaknesses of what worked or did not work, to learn what may need to be given increased attention in the future.

Strengths & Implications

A strength and major implication from this research is in how it allows us to further conceptualise both the impact of traumatic events, as well as how to provide intervention (whether preventative, during or post-vention), from a three-dimensional structural perspective. This structure is illustrated in figure 8, and contains elements within micro, mesa and macro spheres alongside the behavioural, physical and psychological domains.

A further strength and implication flows alongside what was suggested in the Consortium studies, where participants emphasized that institutional support could play a crucial role in managing the long-term consequences of the pandemic on their well-being (McBride et al, 2022a; McBride et al, 2022b; McBride et al, 2021a; McBride et al, 2021b; Spikol et al, 2021; McBride et al, 2020). The role and opportunities in which the organisation can play in providing support to frontline staff permeated the qualitative data previously described. This provides strength to the matrix framework put forward as discussed in the 'Utility of the Framework' section, as a key element is the inclusion of the Macro section in the matrix as well as how this interplays across the Mesa and Micro thematic domains within it.

Another strength in the matrix framework is in it's versatility. The thematic breakdown was shown to be relevant to the participant as a whole, as well as relevant to the Social Inclusion and Nursing groups separately. This allows potential for the matrix to be implemented for different groups of frontline staff rather than singularly for them all as a homogenous group. Past research findings, such as that by Kirby et al (2011), emphasized the importance of understanding coping strategies- the matrix allows for

developing a more coherent understanding of what level the person or team is being impacted at, and subsequently matching it with an appropriate support intervention. Similarly in this vein, Gibbons et al (2014) emphasized the need for targeted interventions to support mental health, underpinning the beneficial utilisation of the matrix to streamline this process.

Breen et al (2014)'s research underscored the necessity for healthcare organizations to address the emotional well-being of their staff to enhance both provider resilience and patient care. The matrix put forward in the current research provides a template for an organisation to better understand the areas in which support is needed, as well as identifying areas where there is adequate support already or more support potentially required, based on the support needs of their service. Further studies that promote the continued development of this type of approach, such as Penix et al (2019), who assert that health-promoting leadership is crucial in mitigating the effects of trauma on healthcare staff working in challenging environments. Veronese & Pepe (2014) also illustrate the need for interventions that enhance sense of coherence (SOC) among health care staff to improve their resilience and functioning in high-stress environments. The matrix being offered by the current research lends itself to study in each of these areas. It can be utilised by an organisation, a manager or team, or by an individual themselves seeking to understand the varying levels of impact that something is having on them as well as the areas which their support mechanisms may be addressing. If an area becomes highlighted as a cause for concern, or where the support deemed insufficient, then it allows a conduit within which to advocate for those supports.

Recommendations for future research

When considering recommendations for future research, it should be done in tandem with recognising the additional contexts that could be provided through studies such as those by Penix et al (2019), Breen et al (2014), Gibbons et al (2014), Kirby et al (2011), and Veronese & Pepe (2014) as previously iterated. These each were advocates for the importance of both understanding more about what makes the support measures themselves beneficial alongside identifying more tailored approaches of providing much needed wellbeing supports. This is was similarly further developed in other studies, calling for a more coordinated approach to wellbeing, such as those by Yeung et al (2023), Kalaitzaki et al (2022), Rolin et al (2022), Caldas, Ostemeier and Cooper (2021), and Mullen et al (2021).

Going forward, research could involve the implementation of the support structure described within this study, alongside evaluating its effectiveness. It would be useful to investigate it's use in both similar environments to the current study as well as other professional areas. This could potentially validate and reinforce the conceptual model as way of reducing the impact of traumatic events on frontline healthcare staff across a variety of settings.

Further to the point that institutional support plays a crucial role in managing the long-term consequences of the pandemic on their well-being (McBride et al, 2022a; McBride et al, 2022b; McBride et al, 2021a; McBride et al, 2021b; Spikol et al, 2021; McBride et al, 2020), the matrix as presented here also offers opportunity to better define the specific levels that various wellbeing approaches have, such as those investigated by Morina et al (2023), Berkout and Clair (2022), Gerber et al (2020), Petrie et al (2020), and

Simionato et al (2019). Wellbeing initiatives could be studied with respect to where they may lay within the matrix.

While the research is advocating for the model at scale, it's scalability could be researched initially by implementing it for smaller cohorts prior to increasing it in size of the target organisation. The advantage to this would be that with smaller groups it would be easier to integrate the structure into the organisational environment without too much impact from requiring a culture change/cultural shift towards a wellbeing model from both the staff and the system itself. This cultural shift would potentially require a longer timeframe in large organisations and would possibly skew the results of the research if left unaccounted for.

Follow-up research into the experience of the pandemic on frontline staff would also be incredibly useful to compare to the data gathered during the pandemic itself, exploring how the events were processed over time and the longitudinal impact of working on the frontline during that time. Simultaneously aligning this with wellbeing support structures that were accessible and utilised would prove beneficial in comparing it with the model proposed in the current research.

Limitations

Limitations to this research are that as the sample size itself is small, the quantitative results need to be interpreted with caution with regard to their generalisability, even though there is consistency between the results and other research which has been carried out in other fields/locations, as has been previously discussed. Alongside this, there is such a wealth of qualitative data within this research study that it is conversely difficult to fully convey the richness of the data. This necessitated focus on

behalf of the researcher not to stray too far from the research questions. However, it may be worthwhile for the data to be utilised in future research in order to garner more valuable insight into the impact of working with trauma during the Covid19 pandemic on this cohort of frontline health staff.

The study itself was also being undertaken during a once-in-a-lifetime (as of writing this dissertation) global event, the Covid19 pandemic, thus there were few ways to conduct this type of research in a non-exploratory approach. The world's understanding of what was happening was changing constantly during the research period, and factors such as the 'lockdown' levels of society could not be anticipated due to the changing nature of the virus, and were fully dependant on the Irish Government's approach to managing the virus. Thus, there were continuous extraneous variables which would impact the research no matter how much preparation was put in place. These 'lockdown' levels and approaches also varied from country to country, which further impacts to a degree the ability to corroborate too closely the findings from this data to that of other countries.

The original research population was intended to be an organisation that was unknown to the researcher. However, due to the pandemic, this was stymied. The population that was utilised in the end for the research was within the same health service catchment area that the researcher worked as a frontline healthcare worker themselves. While there was no direct report or relationship between the researcher and participants, some participants would have known the researcher through prior professional contacts. This could have impacted their openness. However, based on the consistency of results amongst participants as well as the breadth and depth of the interviews which reflected findings from other research studies, it is felt that this impact was minimal. Contrary to the limitation of participants being more closed-off their

reporting, having awareness that the researcher had knowledge and experience about the environment the participants were working in may have positively contributed to their ability to speak openly as they felt the researcher would have greater understanding of where they were coming from.

In an ideal scenario we would have also been able to gather data pre-pandemic, during, and post-pandemic, in order to be able to fully understand the nuances of what has been discussed throughout this dissertation. However, no one could have anticipated the pandemic itself. Indeed, the first round of data was due to be collected the week the world essentially 'shutdown' due to the Covid19 virus. It was then also impossible to know when the pandemic would end, and the research could not be held completely open-ended until this happened. Thus, two time points 6 months apart were chosen. It was coincidental that the first was during the strictest measures of the Irish Government's lockdown restrictions, with the second occurring during the lightest of these measures at a time when the population felt the pandemic may be ending. Unfortunately the pandemic did not end and further restrictions were later put in place not soon after the second round of interviews were completed. Thus, scheduling a third round of interviews in the hope that the pandemic would have ended would have proven futile. It further would have introduced an entire new level to the current research which would have made the qualitative data set almost unwieldy in its size to be able to extract themes for the research questions- it would have been gathering much more data than necessary for the current investigation, and turning it into a whole new study again entirely (much as the occurrence of the pandemic did to the original investigative intentions of this study in March 2020). These aforementioned limitations were similar to other studies, such as that of Pink et al (2001), who reported similarly a lack of pre-COVID data for comparing current

distress and resiliency levels, the cross-sectional nature being impacted due to somewhat opportunistic samples given the pandemic restrictions in place, and so on.

When we consider the scale that was able to be achieved by larger more collaborative studies such as from the Consortium (McBride et al, 2022a; McBride et al, 2022b; McBride et al, 2021a; McBride et al, 2021b; Spikol et al, 2021; McBride et al, 2020), this highlights another limitation of the current research. Studies like these involved multiple institutions, researchers and dedicated funded time that could be allocated to the investigations, not just in terms of data gathering but also in development, design and implementation, analyses and reflection. Prior to the pandemic, I would have been able to dedicate time during my week to the research and had full support of my organisation that there would be times that focusing on my research took priority. I had scaffolded my work role as a practicing counselling psychologist clinician to be able to allow for this. However, the pandemic impacted this. I was redeployed, as most frontline health staff were, to aid other areas of the frontline that needed more clinical support. We all had to play our part. However, this consequently slowed down the pace at which I was able to redesign my study, reapply for ethics, plan the implementation, roll out the interviews, transcribe interviews and conduct statistical analyses, and so on. As a result, it was harder for the current research to capture specific moments in time, but rather it did capture the overall experience. I do believe that this also sets it apart as a strength from other studies, as it managed to achieve a very richly detailed 'helicopter' view of the experience of frontline staff during the pandemic, within which there is also wealth of detail.

Conclusion

Circling back to the original research questions which this study sought to investigate, what are we left with? First a summary of each of the findings, prior to some final thoughts.

What was the impact of the pandemic on the psychological wellbeing of frontline health workers?

In relation to the first main research question, the impact of the COVID-19 pandemic on frontline health workers, both qualitative interviews and quantitative data was used to provide as comprehensive an analysis as possible. The findings highlighted effects on three levels: micro (individual), mesa (team), and macro (organisational/societal). At the micro level, health workers reported significant personal challenges due to the pandemic, affecting their work styles and emotional states. Participants expressed difficulties in adapting to remote communication, feeling disconnected from clients and colleagues, and experiencing heightened stress and anxiety. Many reported feeling isolated and unable to access self-care resources previously available to them. The thematic analysis revealed feelings of frustration, abandonment, and a lack of support at a personal level, exacerbated by the demands of their roles during the pandemic.

The mesa level focused on team dynamics, revealing that the pandemic altered the nature of workplace relationships. Participants noted a transition from a supportive team environment to one characterized by distance and increased stress. Communication barriers arose, and workflows changed due to health restrictions, leading to frustrations

with colleagues and the impacts on morale. Nevertheless, some found satisfaction in the creativity and resilience displayed by their teams in facing challenges. At the macro level, the broader organisational impacts, including changes in service delivery and the adequacy of information received from management, were reported. Participants expressed concerns about resource limitations and the operational challenges faced due to other services being closed. However, there were also notes of appreciation for how organisations adapted and collaborated effectively in response to the crisis.

These findings were consistent with other research studies that were being carried out in various countries around the globe at the time, such as those by Veronese et al (2022), Rolin et al (2022), Badahdah et al (2021), Blekas et al (2020), and Ornell et al (2020). They were also similar to more longitudinal and large scale quantitative and qualitative studies that were being carried out throughout the pandemic, such as those by the C19PRC Studies (McBride et al, 2022a; McBride et al, 2022b; McBride et al, 2021a; McBride et al, 2021b; Spikol et al, 2021; McBride et al, 2020). With corroboration occurring between a variety of research, this adds strength to the findings here being reported throughout this study.

What impact does the work environment have on the psychological wellbeing of frontline health workers?

The second main research question explored the multifaceted impact of the work environment on the psychological wellbeing of frontline health workers by breaking down the effects again into several thematic domains. At the individual or micro level, participants describe how work-related stress interferes with personal life by eroding work–life boundaries, contributing to burnout, emotional numbness, and a persistent sense of exhaustion. Many highlighted that when they neglect self-care outside work, it

directly diminished their effectiveness on the job, creating a negative feedback loop that affects both their professional performance and personal relationships. These findings followed suit to past research in the area, such as that by Woo et al (2020), Simionato et al (2019), Breen et a (2014), and Kirby et al (2011).

At the team and community (mesa) level, the findings reveal that supportive, well-coordinated teams can buffer against some of the negative effects of the work environment. Positive teamwork fosters a sense of belonging and mutual care, which in turn helped workers manage stress and appreciate their professional roles. Conversely, poor team dynamics—characterized by internal politics, a lack of genuine support, and blurred role boundaries—further intensify feelings of isolation, frustration, and compassion fatigue, both at work and at home. Again Woo et al (2020), Simionato et al (2019), and other studies such as Gibbons et al (2014), Veronese & Pepe (2014) point to similar findings as in the current research, underpinning the strength of this study as a wholistic overview of these areas.

On the broader scale, including the organizational and societal (macro) domains, systemic pressures such as bureaucratic hurdles, funding insecurities, and policy mismatches were significant stressors. These factors not only challenged day-to-day operations but also negatively impacted workers' sense of identity and worth. While some workers found meaning and even personal growth in navigating these challenges, many struggled with the lasting effects of ongoing exposure to traumatic incidents. Additionally, the findings detailed behavioural, physical, and psychological outcomes—including changes in work habits, sleep disruption, and pervasive anxiety—that underscored how deeply the work environment can shape wellbeing. Overall, the

research findings illuminate a complex interplay between workplace conditions and the holistic health of frontline health workers, emphasizing the critical importance of self-care, supportive teams, and robust organizational structures in mitigating adverse effects. Alongside the aforementioned studies in relation to micro and mesa, which included organisational elements to their findings, the work of Penix et al (2019) and Shiri et al (2010) further illustrate the positions put forward by participants of the current study.

What are the perceptions of wellbeing supports amongst frontline healthcare workers?

With the third main research question, the perceptions of wellbeing supports among frontline healthcare workers, revealed again a multifaceted approach to both accessing and desired support for participants' psychological health. Participants highlighted various individual, team, and organizational supports that are currently in place or that they would like to see implemented. Many of these mirrored the findings and recommendations which emerged from the C19PRC Studies (McBride et al, 2022a; McBride et al, 2022b; McBride et al, 2021a; McBride et al, 2021b; Spikol et al, 2021; McBride et al, 2020), also carried out longitudinally during the pandemic.

At the individual level, healthcare workers accessed supports such as supervision (both individual and group), employee assistance programs (EAP), personal counselling, and informal peer support. Many emphasized the preference for in-person supervision over virtual formats, noting that flexibility in work arrangements, especially concerning childcare, was beneficial. Personal self-care activities like exercise, meditation, and hobbies were also regarded as essential for managing stress. Participants expressed a desire for more robust supervision focused on the emotional impact of their roles and

more peer support, especially in stressful times. Recognition of their efforts and the need for additional training in trauma-informed care were also highlighted. Other studies which supported similar findings were those of Morina et al (2023), Berkout & Clair (2022), Gerber et al (2020), and Gibbons et al (2014).

On a team level, participants valued group supervision and multidisciplinary teamwork, noting that strong collaboration among experienced colleagues eased work-related challenges. They expressed a need for more informal peer support and consistent team meetings to foster a supportive environment. Team-building activities and external professional development opportunities were seen as positive additions that could help alleviate feelings of isolation and improve morale. At the organizational level, participants perceived support from senior management as crucial, with effective communication and recognition from leadership being highly valued. They underscored the need for adequate funding and staffing in their organizations to reduce bureaucracy and improve service delivery. Participants called for better organizational policies that prioritize staff wellness and a trauma-informed approach to work. There was a consensus on the importance of feeling valued within the workplace, with requests for increased transparency and acknowledgment of their emotional labour. Highlights from the research previously discussed by Testoni et al (2023), Parandah et al (2022) Caldas et al (2021), and Simionato et al (2019) are each reiterated here within the contexts of the participants' experiences.

Behavioural supports included engaging in self-care activities like holidays, outdoor activities, and mindfulness practices. Participants expressed a desire for more opportunities to pursue additional training and workshops that cater to their individual needs, as well as reduced paperwork to allow for greater focus on direct client support. Physical supports focused on maintaining a healthy lifestyle through exercise and proper

use of personal protective equipment (PPE). Participants acknowledged the importance of self-care and physical space in their roles. On the psychological front, they emphasized the need for boundaries between work and personal life, alongside access to emotional supports like counselling and peer support. Wellness programs and additional mental health resources were deemed necessary by participants to help alleviate the psychological toll of their work (eg Berkout & Clair, 2022; Kirby et al, 2011).

Final Thoughts

Overall, the current study underscored the profound psychological toll the pandemic had taken on health workers, manifesting through increased stress, anxiety, and feelings of being undervalued, yet also highlighting moments of teamwork and resilience amidst adversity. The findings emphasized the importance of addressing the ongoing psychological needs of frontline workers as the pandemic continued to evolve. Frontline healthcare workers expressed a profound need for comprehensive wellbeing supports that encompass individual, team, and organizational dimensions. Their feedback highlights the necessity for tailored interventions that address the unique challenges faced in the healthcare environment, particularly in the wake of the pandemic.

In conclusion, the study reveals that the psychological wellbeing of frontline staff during the pandemic was influenced by a complex interplay of individual, team-based, and systemic factors. The integration of both qualitative and quantitative findings illustrated that while many participants reported moderate levels of burnout, compassion fatigue, secondary traumatic stress, and vicarious trauma, supportive mechanisms—ranging from effective team dynamics and accessible supervision to broader

organizational interventions—played a pivotal role in mitigating these effects. This multifaceted framework underscores the importance of adopting comprehensive wellbeing supports that address the micro, mesa, and macro levels, thereby ensuring that staff can manage the rigors of their work without compromising their personal lives. Ultimately, this research advocates for continued development of targeted interventions and system-level strategies, paving the way for improved staff resilience, enhanced patient care, and sustainable health service delivery.

References

Aafjes-van Doorn, K., Békés, V., Prout, T. A., & Hoffman, L. (2020). Psychotherapists' vicarious traumatization during the COVID-19 pandemic. *Psychological Trauma: Theory, Research, Practice, and Policy*, *12*(S1), S148–S150. https://doi.org/10.1037/tra0000868

Agbaria, Q., & Bdier, D. (2021). The role of social support and subjective well-being as predictors of internet addiction among Israeli-Palestinian college students in Israel. *International Journal of Mental Health and Addiction*, *19*(5), 1889–1902. https://doi.org/10.1007/s11469-020-00282-4

Aggar, C., Samios, C., Penman, O., Whiteing, N., Massey, D., Rafferty, R., Bowen, K., & Stephens, A. (2022). The impact of COVID-19 pandemic-related stress experienced by Australian nurses. *International Journal of Mental Health Nursing*, *31*(1), 91–103. https://doi.org/10.1111/inm.12938

Aknin, L. B., De Neve, J.-E., Dunn, E. W., Fancourt, D. E., Goldberg, E., Helliwell, J. F., Jones, S. P., Karam, E., Layard, R., Lyubomirsky, S., Rzepa, A., Saxena, S., Thornton, E. M., VanderWeele, T. J., Whillans, A. V., Zaki, J., Karadag, O., & Ben Amor, Y. (2022). Mental Health During the First Year of the COVID-19 Pandemic: A Review and Recommendations for Moving Forward. *Perspectives on Psychological Science*, *17*(4), 915-936. https://doi.org/10.1177/17456916211029964

Alexander, J. C. (2004). Toward a theory of cultural trauma. In J. C. Alexander, R. Eyerman, B. Giesen, N. J. Smelser, & P. Sztompka (Eds.), *Cultural trauma and collective identity* (pp. 1–27). Berkeley, CA: University of California Press. http://dx.doi.org/10.1525/california/9780520235946.003.0001

American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.).

American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev.).

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.).

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Retrieved August 29, 2013, from http://www.dsm5.org/Documents/PTSD%20Fact%20Sheet.pdf . https://doi.org/10.1176/appi.books.9780890425596

Arcaya, M. C., Tucker-Seeley, R. D., Kim, R., Schnake-Mahl, A., So, M., & Subramanian, S. V. (2016). Research on neighborhood effects on health in the United States: A systematic review of study characteristics. Social Science & Medicine, 168, 16–29. https://doi.org/10.1016/j.socscimed.2016.08.047

Arnold, E. (2022, June 23). *Anxiety DSM-5 Diagnostic Criteria and Treatment Overview*. Health Central. https://www.medcentral.com/behavioral-mental/anxiety/assessment-diagnosis-adherence-anxiety

Aschbrenner, K. A., Mueser, K. T., Bartels, S. J., & Pratt, S. I. (2013). Perceived social support for diet and exercise among persons with serious mental illness enrolled in a healthy lifestyle intervention. *Psychiatric Rehabilitation Journal*, *36*(2), 65–71. https://doi-org.elib.tcd.ie/10.1037/h0094973

Ashley-Binge, S. & Cousins, C. (2019). Individual and Organisational Practices Addressing Social Workers' Experiences of Vicarious Trauma, Practice, DOI: 10.1080/09503153.2019.1620201

Badahdah, A., Khamis, F., Al Mahyijari, N., Al Balushi, M., Al Hatmi, H., Al Salmi, I., Albulushi, Z., & Al Noomani, J. (2021). The mental health of health care workers in Oman during the COVID-19 pandemic. *The International Journal of Social Psychiatry*, *67*(1), 90–95. https://doi.org/10.1177/0020764020939596

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior, 1,* 389 – 411. DOI:10.1146/annurev-orgpsych-031413-091235

Barbarin, O., Khoury, B., Klicperová-Baker, M., Gutiérrez, G., Thompson, A., Padakannaya, P., & Crowe, S. (2021). Psychological science and COVID-19: An agenda for social action.*American Journal of Orthopsychiatry, 91*(3), 412–422. https://doi.org/10.1037/ort0000549

Barr, P. (2017). Compassion fatigue and compassion satisfaction in neonatal intensive care unit nurses: Relationships with work stress and perceived social support. *Traumatology, 23*(2), 214–222. https://doi.org/10.1037/trm0000115

Beck, A. T., & Steer, R. A. (1993). *BAI: Beck Anxiety Inventory Manual*. San Antonio, TX: The Psychological Corporation. https://ia601500.us.archive.org/30/items/BAIManual/BAI%20Manual.pdf

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *BDI-II: Beck Depression Inventory 2nd Ed. Manual*. San Antonio, TX: The Psychological Corporation. https://doi.org/10.1037/t00742-000

Benjamin, A., & Carolissen, R. (2015). “They just block it out”: Community counselors’ narratives of trauma in a low-income community. *Peace and Conflict: Journal of Peace Psychology, 21*(3), 414–431. https://doi.org/10.1037/pac0000099

Benuto, L. T., Yang, Y., Ahrendt, A., & Cummings, C. (2021). The Secondary Traumatic Stress Scale: Confirmatory Factor Analyses With a National Sample of Victim Advocates. *Journal of Interpersonal Violence*, *36*(5-6), 2572-2591. https://doi.org/10.1177/0886260518759657

Berkout, O. V., & Clair, S. R. (2022). Facing pandemic challenges: Helping health care professionals cope. *Behavior Analysis: Research and Practice, 22*(1), 100–113. https://doi.org/10.1037/bar0000235

Berliner, L., & Kolko, D. J. (2016). Trauma informed care: A commentary and critique. Child Maltreatment, 21(2), 168–172. https://doi.org/10 .1177/1077559516643785

Blekas, A., Voitsidis, P., Athanasiadou, M., Parlapani, E., Chatzigeorgiou, A. F., Skoupra, M., Syngelakis, M., Holeva, V., & Diakogiannis, I. (2020). COVID-19: PTSD symptoms in Greek health care professionals. *Psychological Trauma: Theory, Research, Practice, and Policy*, *12*(7), 812–819. https://doi.org/10.1037/tra0000914

Bloom, S. L. (1996). Every time history repeats itself the price goes up: The social reenactment of trau- ma. *Sexual Addiction & Compulsivity, 3,* 161–194. http://dx.doi.org/10.1080/10720169608400111

Boulanger, G. (2018). When is vicarious trauma a necessary therapeutic tool? *Psychoanalytic Psychology, 35*(1), 60–69. https://doi.org/10.1037/pap0000089

Branson, D. C. (2019). Vicarious trauma, themes in research, and terminology: A review of literature. *Traumatology, 25*(1), 2–10. https://doi.org/10.1037/trm0000161

Brave Heart, M. Y. H. (2003). The historical trauma response among natives and its relationship with substance abuse: A Lakota illustration. *Journal of Psychoactive Drugs, 35,* 7–13. http://dx.doi.org/10.1080/02791072.2003.10399988

Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology, 9*(1), 3–26. https://doi.org/10.1037/qup0000196

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*(4), 589–597. https://doi.org/10.1080/2159676X.2019.1628806

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Breen, L. J., O'Connor, M., Hewitt, L. Y., & Lobb, E. A. (2014). The "specter" of cancer: Exploring secondary trauma for health professionals providing cancer support and counseling. *Psychological Services, 11*(1), 60–67. https://doi.org/10.1037/a0034451

Bride BE, Robinson MM, Yegidis B, Figley CR. Development and validation of the secondary traumatic stress scale. Res Soc Work Pract. (2004) 14:27–35. https://doi.org/10.1177/1049731503254106

Burruss, G.W., Holt, T.J. & Wall-Parker, A. (2018). The Hazards of Investigating Internet Crimes Against Children: Digital Evidence Handlers' Experiences with Vicarious Trauma and Coping Behaviors. *Am J Crim Just* 43, 433–447. DOI:10.1007/s12103-017-9417-3

Caldas, M. P., Ostermeier, K., & Cooper, D. (2021). When helping hurts: COVID-19 critical incident involvement and resource depletion in health care workers. *Journal of Applied Psychology, 106*(1), 29–47. https://doi.org/10.1037/apl0000850

Carey, S. A., Roden-Foreman, J. W., Felius, J., Tecson, K. M., Shelley, J., Hall, S. A., & Warren, A. M. (2019). Secondary traumatic stress in multi-disciplinary teams caring for heart and lung transplant patients. *Traumatology, 25*(4), 275–281. https://doi.org/10.1037/trm0000188

Casey, C., Doyle, O., Kenny, D., and Lyons, D. (2021). *Ireland's Emergency Powers During the Covid-19 Pandemic*. The Irish Human Rights and Equality Commission by The Covid-19 Law and Human Rights Observatory. https://www.ihrec.ie/documents/irelands-emergency-powers-during-the-covid-19-pandemic/

Cavanagh, N., Cockett, G., Heinrich, C., Doig, L., Fiest, K., Guichon, J. R., . . . Doig, C. J. (2020). Compassion fatigue in healthcare providers: A systematic review and meta-analysis. *Nursing Ethics*, *27*(3), 639–665. https://doi.org/10.1177/0969733019889400

Chen, J., Li, W., An, Y., Zhang, Y., Du, J., & Xu, W. (2019). Perceived Social Support Mediates the Relationships of Dispositional Mindfulness to Job Burnout and Posttraumatic Stress Disorder Among Chinese Firefighters. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. DOI: 10.1037/tra0000534

Christian-Brandt, A. S., Santacrose, D. E. & Barnett, M. L. (2020). Child Abuse & Neglect, In the trauma-informed care trenches: Teacher compassion satisfaction, secondary traumatic stress, burnout, and intent to leave education within underserved elementary schools. https://doi.org/10.1016/j.chiabu.2020.104437

Cloitre, M., Stolbach, B. C., Herman, J. L., van der Kolk, B., Pynoos, R., Wang, J., & Petkova, E. (2009). A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity. *Journal of Traumatic Stress, 22,* 399–408. http://dx.doi.org/10.1002/jts.20444

Deacon, S. H., Rodriguez, L. M., Elgendi, M., King, F. E., Nogueira-Arjona, R., Sherry, S. B., & Stewart, S. H. (2021). Parenting through a pandemic: Mental health and substance use consequences of mandated homeschooling.*Couple and Family Psychology: Research and Practice, 10*(4), 281–293. https://doi.org/10.1037/cfp0000171

Delaney, M. C. (2018) Caring for the caregivers: Evaluation of the effect of an eight-week pilot mindful self-compassion (MSC) training program on nurses' compassion fatigue and resilience. *PLoS ONE* 13(11): e0207261. DOI:10.1371/journal.pone.0207261

Denne, E., Stevenson, M. & and Petty, T. (2019). Understanding how social worker compassion fatigue and years of experience shape custodial decisions. *Child Abuse & Neglect* 95: 104036. DOI: 10.1016/j.chiabu.2019.104036

Dewar, M., Paradis, A., & Brillon, P. (2023). Posttraumatic stress symptom profiles of aid workers: Identifying risk and protective factors. *Psychological Trauma: Theory, Research, Practice, and Policy, 15*(Suppl 2), S418–S426. https://doi.org/10.1037/tra0001512

Diehm, R. M., Mankowitz, N. N., & King, R. M. (2019). Secondary traumatic stress in Australian psychologists: Individual risk and protective factors. *Traumatology, 25*(3), 196–202. https://doi.org/10.1037/trm0000181

Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, *97*(2), 143–156. https://doi.org/10.1007/s11205-009-9493-y

Duane, A. M., Stokes, K. L., DeAngelis, C. L., & Bocknek, E. L. (2020). Collective trauma and community support: Lessons from Detroit.*Psychological Trauma: Theory, Research, Practice, and Policy, 12*(5), 452–454. https://doi.org/10.1037/tra0000791

Dublin City Council. (2022). *Dublin City Development Plan 2022-2028: Chapter 13.12 Strategic Development Regeneration Areas 10 North East Inner City*. https://www.dublincity.ie/dublin-city-development-plan-2022-2028/written-statement/chapter-13-strategic-development-regeneration-areas/1312-sdra-10-north-east-inner-city

Duran, F., & Woodhams, J. (2023). Impact of the current pandemic on intelligence and analytical professionals working in police and law enforcement organizations. *Psychological Trauma: Theory, Research, Practice, and Policy, 15*(2), 359–365. https://doi.org/10.1037/tra0001221

Elbaz, S., Richards, J. B., & Provost Savard, Y. (2022). Teleworking and work–life balance during the COVID-19 pandemic: A scoping review.*Canadian Psychology / Psychologie canadienne.* Advance online publication. https://doi.org/10.1037/cap0000330

Elliott, R., Fischer, C.T. and Rennie, D.L. (1999), Evolving guidelines for publication of qualitative research studies in psychology and related fields. British Journal of Clinical Psychology, 38: 215-229. https://doi.org/10.1348/014466599162782

Ernst, M., Niederer, D., Werner, A. M., Czaja, S. J., Mikton, C., Ong, A. D., Rosen, T., Brähler, E., & Beutel, M. E. (2022). Loneliness before and during the COVID-19 pandemic: A systematic review with meta-analysis.*American Psychologist, 77*(5), 660–677. https://doi.org/10.1037/amp0001005

Felitti, Vincent. (2009). Adverse Childhood Experiences and Adult Health. Academic pediatrics. 9. 131-2. 10.1016/j.acap.2009.03.001. https://doi.org/10.1016/j.acap.2009.03.001

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. American Journal of Preventive Medicine, 14(4), 245-258. 10.1016/S0749-3797(98)00017-8 https://doi.org/10.1016/S0749-3797(98)00017-8

Figley, C. R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self-care. *Journal of Clinical Psychology in Session: Psychotherapy in Practice, 58*(11), 1433-1441. DOI:10.1002/jclp.10090

Figley, C. R. (Ed.), (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. New York, NY: Brummer/Mazel. https://doi.org/10.4324/9780203777381

Figley, C. R., & Burnette, C. E. (2017). Building bridges: Connecting systemic trauma and family resilience in the study and treatment of diverse traumatized families. *Traumatology, 23*(1), 95–101. https://doi.org/10.1037/trm0000089

Foreman, T. (2018). Wellness, Exposure to Trauma, and Vicarious Traumatization: A Pilot Study. *Journal of Mental Health Counseling*, 40(2), 142+. *Gale Academic OneFile*, Accessed 20 Apr. 2020. DOI:10.17744/mehc.40.2.04

Freudenberger, H. J., (1974). Staff burn-out. *J Soc. Iss.* 30 (1), 159–165

Fugard, A. J. B., & Potts, H. W. W. (2015). Supporting thinking on sample sizes for thematic analyses: a quantitative tool. *International Journal of Social Research Methodology*, *18*(6), 669–684. https://doi.org/10.1080/13645579.2015.1005453

Gallardo, R. & Rohde, D. (2018). Personality Predictors of Compassion Fatigue in Long-term Care Environments. *North American Journal of Psychology*, 20(3), 481-494. DOI: 10.1111/jnu.12162

Gerber, M., Schilling, R., Colledge, F., Ludyga, S., Pühse, U., & Brand, S. (2020). More than a simple pastime? The potential of physical activity to moderate the relationship between occupational stress and burnout symptoms. *International Journal of Stress Management, 27*(1), 53–64. https://doi.org/10.1037/str0000129

Ghannam, J., Afana, A., Ho, E. Y., Al-Khal, A., & Bylund, C. L. (2020). The impact of a stress management intervention on medical residents' stress and burnout. *International Journal of Stress Management, 27*(1), 65–73. https://doi.org/10.1037/str0000125

Gibbons, S. W., Shafer, M., Aramanda, L., Hickling, E. J., & Benedek, D. M. (2014). Combat health care providers and resiliency: Adaptive coping mechanisms during and after deployment. *Psychological Services, 11*(2), 192–199. https://doi.org/10.1037/a0033165

Gibson, B., Schneider, J., Talamonti, D., & Forshaw, M. (2021). The impact of inequality on mental health outcomes during the COVID-19 pandemic: A systematic review.*Canadian Psychology / Psychologie canadienne, 62*(1), 101–126. https://doi.org/10.1037/cap0000272

Glaser, Barney & Strauss, Anselm. (2017). Discovery of grounded theory: Strategies for qualitative research. https://doi:10.4324/9780203793206

Gómez-Urquiza, J. L., Aneas-López, A. B., Fuente-Solana, E. I., Albendín-García, L., Díaz- Rodríguez, L., Fuente, G. A., 2016. Prevalence, risk factors, and levels of burnout among oncology nurses: a systematic review. *Oncol. Nurs. Forum* 43 (3), E104–E120. DOI: 10.1188/16.ONF.E104-E120

Gordon, J. L., & Presseau, J. (2023). Effects of parenthood and gender on well-being and work productivity among Canadian academic research faculty amidst the COVID-19 pandemic. *Canadian Psychology / Psychologie canadienne, 64*(2), 144–153. https://doi.org/10.1037/cap0000327

Grandbois, D. M., & Sanders, G. F. (2009). The resilience of Native American elders. *Issues in Mental Health Nursing, 30,* 569–580. http://dx.doi.org/10.1080/01612840902916151

Grant, H. B., Lavery, C. F., and Decarlo, J. (2019). An Exploratory Study of Police Officers: Low Compassion Satisfaction and Compassion Fatigue. *Front. Psychol.* 9:2793

Gray, M., Litz, B., Hsu, J., & Lombardo, T. (2004). Psychometric properties of the Life Events Checklist. (PDF) *Assessment, 11*, 330-341. doi: https://doi.org/10.1177/1073191104269954 PILOTS ID: 26825

Greene, T., Harju-Seppänen, J., Billings, J., Brewin, C. R., Murphy, D., & Bloomfield, M. A. P. (2024). Exposure to potentially morally injurious events in U.K. health and social care workers during COVID-19: Associations with PTSD and complex PTSD.*Psychological Trauma:*

Theory, Research, Practice, and Policy, 16(7), 1189–1197. https://doi.org/10.1037/tra0001519

Griffin, G. (2020). Defining trauma and a trauma-informed COVID-19 response.*Psychological Trauma: Theory, Research, Practice, and Policy, 12*(S1), S279–S280. https://doi.org/10.1037/tra0000828

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods*, *18*, 59–82. https://doi:10.1177/1525822X05279903

Grzanka, P. R., & Moradi, B. (2021). The qualitative imagination in counseling psychology: Enhancing methodological rigor across methods.*Journal of Counseling Psychology, 68*(3), 247–258. https://doi.org/10.1037/cou0000560

Gustafsson, P. E., San Sebastian, M., Janlert, U., Theorell, T., Westerlund, H., & Hammarström, A. (2014). Life-course accumula- tion of neighborhood disadvantage and allostatic load: Empirical integration of three social determinants of health frameworks. Ameri- can Journal of Public Health, 104(5), 904–910. https://doi.org/10 .2105/AJPH.2013.301707

Harris, M., & Fallot, R. D. (Eds.). (2001). *Using trauma theory to design service systems.* Jossey-Bass/Wiley. https://psycnet.apa.org/record/2001-00826-000

Hatch, D. J., Potter, G. G., Martus, P., Rose, U., & Freude, G. (2019). Lagged Versus Concurrent Changes Between Burnout and Depression Symptoms and Unique Contributions From Job Demands and Job Resources. *Journal of Occupational Health Psychology*. Advance online publication. DOI: 10.1037/ocp0000170

Hayes, J. P., VanElzakker, M. B., Shin, L. M. (2012). Emotion and cognition interactions in PTSD: a review of neurocognitive and neuroimaging studies. *Frontiers in Integrative Neuroscience*, 6 (89), 1-14. https://doi.org/10.3389/fnint.2012.00089

Helliwell, J. F., Huang, H., Wang, S., & Norton, M. (2020). Social environments for world happiness. *World Happiness Report 2020*, 13–45. https://worldhappiness.report/ed/2020/social-environments-for-world-happiness/

Herman, J. (1992). *Trauma and recovery*. London, UK: Pandora.

Hill, E. M., LaLonde, C. M., & Reese, L. A. (2020). Compassion fatigue in animal care workers. *Traumatology, 26*(1), 96–108

Ho K.H.M., Chiang V.C.L. & Leung D. (2017) Hermeneutic phenomenological analysis: the 'possibility' beyond 'actuality' in thematic analysis. *Journal of Advanced Nursing* 73(7), 1757–1766. doi: 10.1111/jan.13255

Holman, E. A., Jones, N. M., Garfin, D. R., & Silver, R. C. (2023). Distortions in time perception during collective trauma: Insights from a national longitudinal study during the COVID-19 pandemic.*Psychological Trauma: Theory, Research, Practice, and Policy, 15*(5), 800–807. https://doi.org/10.1037/tra0001326

HSE. (n. d.) *Vision for the PHN Service*. HSE. Retrieved March 11th, 2025, from https://www.hse.ie/eng/services/list/2/primarycare/national-phn-service/

HSE Health Protection Surveillance Centre. (2022). *COVID-19 Annual Report 2020*. Dublin: HSE HPSC. https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/surveillance/covid-19annualreports/First%20year%20of%20the%20COVID-19%20pandemic%20in%20Ireland.pdf

HSE National Social Inclusion Office. (n. d.). *About National Social Inclusion Office*. Retrieved March 11th, 2025, from https://www.hse.ie/eng/about/who/primarycare/socialinclusion/about-social-inclusion/

Huang, J. Z., Han, M. F., Luo, T. D., Ren, A. K., & Zhou, X. P. (2020). Mental health survey of medical staff in a tertiary infectious disease hospital for COVID-19. *Zhonghua Lao Dong Wei Sheng Zhi Ye Bing Za Zhi*, *38*(3), Article E001–E001. https://doi.org/10.3760/cma.j.cn121094-20200219-00063

Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *The Lancet. Public health*, *2*(8), e356–e366. https://doi.org/10.1016/S2468-2667(17)30118-4

Huremović, D. (2019). Brief history of pandemics (pandemics throughout history). In *Psychiatry of pandemics* (Vol. *16*, pp. 7–35). Springer. https://doi.org/10.1007/978-3-030-15346-5_2

Hyland, P., Shevlin, M., McBride, O., Murphy, J., Karatzias, T., Bentall, R. P., Martinez, A., & Vallières, F. (2020). Anxiety and depression in the Republic of Ireland during the COVID-19 pandemic. *Acta Psychiatrica Scandinavica*, *142*, 249–256. https://doi.org/10.1111/acps.13219

Inner City Organisations Network. (2024). *The NEIC: What are we talking about?* https://www.iconnetwork.ie/about/north-inner-city/

Jaques, E. (1955). Social systems as a defense against persecutory and depressive anxiety. In M. Klein, P. Herman, & R. Money-Kryle (Eds.), *New direc- tions in psycho-analysis: The significance of infant conflicts in the patterns of adult behaviour* (pp. 478–498). London, UK: Tavistock. eBook ISBN 9780429477546

Kalaitzaki, A., Tamiolaki, A., & Tsouvelas, G. (2022). From secondary traumatic stress to vicarious posttraumatic growth amid COVID-19 lockdown in Greece: The role of health care workers' coping strategies.*Psychological Trauma: Theory, Research, Practice, and Policy, 14*(2), 273–280. https://doi.org/10.1037/tra0001078

Kaminer, D., & Eagle, G. (2010). *Traumatic stress in South Africa*. Johannesburg, South Africa: Wits University Press. DOI:10.26530/OAPEN_626383

Kaminer, D., Eagle, G., Stevens, G., & Higson- Smith, C. (2013). Continuous traumatic stress [Special Issue]. *Peace and Conflict: Journal of Peace Psychology, 19*(2). https://doi.org/10.1037/a0032484

Kendall-Tackett, K. (2023). Recent research on secondary trauma.*Psychological Trauma: Theory, Research, Practice, and Policy, 15*(Suppl 2), S201–S202. https://doi.org/10.1037/tra0001588

Kessler, R. C., Galea, S., Jones, R. T., & Parker, H. A. (2006). Mental illness and suicidality after Hurricane Katrina. *Bulletin of the World Health Organization*, *84*, 930–939. https://doi.org/10.2471/BLT.06.033019

Keynan, I. (2018). The memory of the holocaust and Israel's attitude toward war trauma, 1948–1973: The collective vs. the individual. *Israel Studies*, *23*, 95–117. https://doi.org/10.2979/israelstudies.23.2.05

Kim, L. E., & Burić, I. (2019, October 10). Teacher Self-Efficacy and Burnout: Determining the Directions of Prediction Through an Autoregressive Cross-Lagged Panel Model. *Journal of Educational Psychology*. Advance online publication. DOI:10.1037/edu0000424

Kinnunen, S. M., Puolakanaho, A., Mäkikangas, A., Tolvanen, A., & Lappalainen, R. (2020). Does a mindfulness-, acceptance-, and value-based intervention for burnout have long-term effects on different levels of subjective well-being? *International Journal of Stress Management, 27*(1), 82–87. https://doi.org/10.1037/str0000132

Kira, I. A. (2022). Taxonomy of stressors and traumas: An update of the development-based trauma framework (DBTF): A life-course perspective on stress and trauma. *Traumatology, 28*(1), 84–97. https://doi.org/10.1037/trm0000305

Kirby, R., Shakespeare-Finch, J., & Palk, G. (2011). Adaptive and Maladaptive Coping Strategies Predict Posttrauma Outcomes in Ambulance Personnel. Traumatology, 17(4), 25-34. https://doi.org/10.1177/1534765610395623 (Original work published 2011)

Klein, C. J., Riggenbach-Hays, J. J., Sollenberger, L. M., Harney, D. M., & McGarvey, J. S. (2018). Quality of Life and Compassion Satisfaction in Clinicians: A Pilot Intervention Study for Reducing Compassion Fatigue. *American Journal of Hospice and Palliative Medicine®*, *35*(6), 882–888. DOI: 10.1177/1049909117740848

Knoll, M., Hall, R. J., & Weigelt, O. (2019). A longitudinal study of the relationships between four differentially motivated forms of employee silence and burnout. *Journal of Occupational Health Psychology, 24*(5), 572–589. https://doi.org/10.1037/ocp0000143

Koenig, A., Rodger, S., & Specht, J. (2018). Educator Burnout and Compassion Fatigue: A Pilot Study. *Canadian Journal of School Psychology*, *33*(4), 259–278. https://doi.org/10.1177/0829573516685017

Koh, D., Lim, M. K., Chia, S. E., Ko, S. M., Qian, F., Ng, V., Tan, B. H., Wong, K. S., Chew, W. M., Tang, H. K., Ng, W., Muttakin, Z., Emmanuel, S., Fong, N. P., Koh, G., Kwa, C. T., Tan, K. B., & Fones, C. (2005). Risk perception and impact of severe acute respiratory syndrome (SARS) on work and personal lives of healthcare workers in Singapore what can we learn?*Medical Care*, *43*(7), 676–682. DOI: 10.1097/01.mlr.0000167181.36730.cc

Kopacz, M. S., Ames, D., & Koenig, H. G. (2019). It's time to talk about physician burnout and moral injury. *The Lancet. Psychiatry*, *6*(11), Article e28. https://www.thelancet.com/pdfs/journals/lanpsy/PIIS2215-0366(19)30385-2.pdf. https://doi.org/10.1016/S2215-0366(19)30385-2

Lee, J. J., Gottfried, R., & Bride, B. E. (2018). Exposure to client trauma, secondary traumatic stress, and the health of clinical social workers: A mediation analysis. *Clinical Social Work Journal, 46*(3), 228–235. https://doi.org/10.1007/s10615-017-0638-1

Leiter, M. P., & Maslach, C. (2016). Latent burnout profiles: A new approach to understanding the burnout experience. *Burnout Research, 3,* 89–100. https://doi.org/10.1016/j.burn.2016.09.001

Lewis, M. L. & King, D. M. (2019). Teaching self-care: The utilization of self-care in social work practicum to prevent compassion fatigue, burnout, and vicarious trauma. *Journal of Human Behavior in the Social Environment*, 29:1, 96-106. https://doi.org/10.1080/10911359.2018.1482482

Levitt, H. M., Motulsky, S. L., Wertz, F. J., Morrow, S. L., & Ponterotto, J. G. (2017). Recommendations for designing and reviewing qualitative research in psychology: Promoting methodological integrity. *Qualitative Psychology, 4*(1), 2–22. https://doi.org/10.1037/qup0000082

Litam, S. D. A., & Balkin, R. S. (2021). Moral injury in health-care workers during COVID-19 pandemic. *Traumatology, 27*(1), 14–19. https://doi.org/10.1037/trm0000290

Long, S. (2020). Supervisors' Perception of Vicarious Trauma and Growth in Australian Refugee Trauma Counsellors. *Australian Social Work*, 73:1, 105-117. https://doi.org/10.1080/0312407X.2018.1501587

Lowe, C., Keown-Gerrard, J., Ng, C. F., Gilbert, T. H., & Ross, K. M. (2023). COVID-19 pandemic mental health trajectories: Patterns from a sample of Canadians primarily recruited from Alberta and Ontario.*Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement, 55*(2), 113–129. https://doi.org/10.1037/cbs0000313

Malterud K, Siersma VD, Guassora AD. Sample Size in Qualitative Interview Studies: Guided by Information Power. *Qualitative Health Research*. 2015;26(13):1753-1760. doi:10.1177/1049732315617444

Martin-Cuellar, A., Lardier, D. T., Atencio, D. J. *et al.* (2019). Vitality as a Moderator of Clinician History of Trauma and Compassion Fatigue. *Contemp Fam Ther,* 41, 408–419. DOI:10.1007/s10591-019-09508-7

Maslach, C., Jackson, S.E. (1981). The measurement of experienced burnout. *J. Organ. Behav*, 2 (2), 99–113. https://doi.org/10.1002/job.4030020205

Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry, 15,* 103–111. doi: 10.1002/wps.20311

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. Annual Review Psychology, 52, 397–422. https://doi.org/10.1146/annurev.psych.52.1.397

Mason, M (2010). Sample Size and Saturation in PhD Studies Using Qualitative Interviews [63 paragraphs]. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 11(3), Art. 8, http://nbn-resolving.de/urn:nbn:de:0114-fqs100387

Mata, J., Thompson, R. J., Jaeggi, S. M., Buschkuehl, M., Jonides, J., & Gotlib, I. H. (2012). Walk on the bright side: Physical activity and affect in major depressive disorder. *Journal of Abnormal Psychology*, *121*(2), 297–308. https://doi-org.elib.tcd.ie/10.1037/a0023533

Maunder, R. (2004). The experience of the 2003 SARS outbreak as a traumatic stress among frontline healthcare workers in Toronto: Lessons learned. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, *359*(1447), 1117–1125. https://doi.org/10.1098/rstb.2004.1483

May, C. L., & Wisco, B. E. (2016). Defining trauma: How level of exposure and proximity affect risk for posttraumatic stress disorder. *Psychological Trauma: Theory, Research, Practice, and Policy, 8*(2), 233–240. https://doi.org/10.1037/tra0000077

McBride, O., Butter, S., Martinez, A. P., Shevlin, M., Murphy, J., Hartman, T. K., McKay, R., Hyland, P., Bennett, K. M., Stocks, T. V. A., Gibson-Miller, J., Levita, L., Mason, L., & Bentall, R. P. (2023). An 18-month follow-up of the Covid-19 psychology research consortium study panel: Survey design and fieldwork procedures for Wave 6. *International Journal of Methods in Psychiatric Research*, 32(2), e1949. https://doi.org/10.1002/mpr.1949

McBride, O., Butter, S., Murphy, J., Hartman, T. K., McKay, R., Hyland, P., Shevlin, M., Bennett, K. M., Stocks, T. V. A., Lloyd, A., Gibson-Miller, J., Levita, L., Mason, L., Martinez, A. P., Vallières, F., Karatzias, T., & Bentall, R. P. (2022). Tracking the psychological and socio-economic impact of the COVID-19 pandemic in the UK: A methodological report from Wave 5 of the Covid-19 Psychological Research Consortium (C19PRC) Study. *International Journal of Methods in Psychiatric Research*, 31(4), e1928. https://doi.org/10.1002/mpr.1928

McBride, O., Murphy, J., Shevlin, M., Gibson-Miller, J., Hartman, T.K., Hyland, P., Levita, L., Mason, L., Martinez, A.P., McKay, R., Stocks, T.V., Bennett, K.M., Vallières, F., Karatzias, T., Valiente, C., Vazquez, C. and Bentall, R.P. (2021), Monitoring the psychological, social, and economic impact of the COVID-19 pandemic in the population: Context, design and conduct of the longitudinal COVID-19 psychological research consortium (C19PRC) study. Int J Methods Psychiatr Res, 30: e1861. https://doi.org/10.1002/mpr.1861

McBride, O., Butter, S., Murphy, J., Shevlin, M., Hartman, T. K., Bennett, K. M., Stocks, T. V. A., Lloyd, A., McKay, R., Gibson-Miller, J., Levita, L., Mason, L., Martinez, A. P., Hyland, P., Vallières, F., Karatzias, T., Valiente, C., Vazquez, C., & Bentall, R. P. (2022). Design, content,

and fieldwork procedures of the COVID-19 Psychological Research Consortium (C19PRC) Study – Wave 4. *International Journal of Methods in Psychiatric Research*, 31(1), e1899. https://doi.org/10.1002/mpr.1899

McBride, O., Butter, S., Murphy, J., Shevlin, M., Hartman, T. K., Hyland, P., McKay, R., Bennett, K. M., Gibson-Miller, J., Levita, L., Mason, L., Martinez, A. P., Stocks, T. V. A., Vallières, F., Karatzias, T., Valiente, C., Vazquez, C., & Bentall, R. P. (2021). Context, design and conduct of the longitudinal COVID-19 psychological research consortium study–wave 3. *International Journal of Methods in Psychiatric Research*, 30(3), e1880. https://doi.org/10.1002/mpr.1880

McCann, L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress, 3,* 131–149. https://doi.org/10.1007/BF00975140

McCormack, L., & Adams, E. L. (2016). Therapists, complex trauma, and the medical model: Making meaning of vicarious distress from complex trauma in the inpatient setting. *Traumatology, 22*(3), 192–202. DOI:10.1037/trm0000024

McCullen, J. R., Counts, C. J., & John-Henderson, N. A. (2023). Childhood adversity and emotion regulation strategies as predictors of psychological stress and mental health in American Indian adults during the COVID-19 pandemic.*Emotion, 23*(3), 805–813. https://doi.org/10.1037/emo0001106

McEwen, B. S. , & Stellar, E. (1993). Stress and the individual: Mechanisms leading to disease. *Archives of Internal Medicine*, *153*(18), 2093–2101. https://doi.org/10.1001/archinte.1993.00410180039004

McHugh, M. D., Kutney-Lee, A., Cimiotti, J. P., Sloane, D. M., Aiken, L. H. (2011). Nurses' widespread job dissatisfaction, burnout, and frustration with health benefits signal problems for patient care. *Health Aff,* 30 (2), 202–210. doi: 10.1377/hlthaff.2010.0100

McKee, G. B., Knopp, K., Morland, L. A., Glynn, S. M., Connolly, S. L., & McDonald, S. D. (2022). Use of telemental health for VA family services before and during the COVID-19 pandemic.*Psychological Services.* Advance online publication. https://doi.org/10.1037/ser0000704

Menzies Lyth, I. (1959). The functions of social systems as a defense against anxiety: A report on a study of the nursing service of a general hospital. *Human Relations, 13,* 95–121. http://dx.doi.org/10.1177/001872676001300201

Merces, M. C.d., Lopes, R. A., Silva, D.d. S.e., Oliveira, D. S., Lua, I., Mattos, A. I. S., Júnior, A.D. (2017). Prevalência da Síndrome de Burnout em profissionais de enfermagem da atenção básica à saúde Prevalence of Burnout Syndrome in nursing professionals of basic health care. *J. Res.: Fundam. Care*, Online 9 (1), 208. DOI:10.9789/2175-5361.2017.v9i1.208-214

Mersky, J. P., Topitzes, J., Langlieb, J., & Dodge, K. A. (2021). Increasing mental health treatment access and equity through trauma-responsive care. *American Journal of Orthopsychiatry, 91*(6), 703–713. https://doi.org/10.1037/ort0000572

Mitchell, K. J., Banyard, V., Ybarra, M. L., & Dunsiger, S. (2023). Impact of the COVID-19 pandemic for youth with a history of exposure to self-directed violence.*Psychological Trauma: Theory, Research, Practice, and Policy, 15*(3), 415–421. https://doi.org/10.1037/tra0001318

Mittal, M., Morgan, A. A., Du, J., Jiang, J., Boekeloo, B., & Fish, J. N. (2023). “Each week feels like a mountain”: The impact of COVID-19 on mental health providers’ well-being and clinical

work.*Professional Psychology: Research and Practice, 54*(1), 103–113. https://doi.org/10.1037/pro0000501

Miller, B., & Sprang, G. (2017). A components-based practice and supervision model for reducing compassion fatigue by affecting clinician experience. *Traumatology, 23*(2), 153–164. https://doi.org/10.1037/trm0000058

Moallef, P., Lueke, N. A., Gardner, P. J., & Patcai, J. (2021). Chronic PTSD and other psychological sequelae in a group of frontline healthcare workers who contracted and survived SARS. *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement, 53*(3), 342–352. https://doi.org/10.1037/cbs0000252

Morina, N., Weilenmann, S., Dawson, K. S., Möckli, U., Ernst, J., Zanitti, Z., von Känel, R., Schick, M., Spiller, T. R., & Bryant, R. A. (2023). Efficacy of a brief psychological intervention to reduce distress in healthcare workers during the COVID-19 pandemic: A randomized controlled trial.*Psychological Trauma: Theory, Research, Practice, and Policy, 15*(Suppl 2), S371–S383. https://doi.org/10.1037/tra0001524

Morse, JM. The Significance of Saturation. *Qualitative Health Research*. 1995;5(2):147-149. doi:10.1177/104973239500500201

Mullin, D. J., Pearson, S., Eisdorfer, E., Mullarkey, J., & Dykhouse, E. (2021). Prevention of psychological trauma among health care providers during the COVID-19 pandemic.*Families, Systems, & Health, 39*(3), 518–525. https://doi.org/10.1037/fsh0000646

Ogińska-Bulik, N., & Michalska, P. (2020). Psychological Resilience and Secondary Traumatic Stress in Nurses Working With Terminally Ill Patients—The Mediating Role of Job Burnout. *Psychological Services*, Advance online publication. DOI: 10.1037/ser0000421

Oh, D.L., Jerman, P., Silvério Marques, S., Koita, K., Purewal Boparai, S. K., Burke Harris, N., & Bucci, M. (2018). Systematic review of pediatric health outcomes associated with childhood adversity. *BMC Pediatrics 18(*1), Article 83. https://doi.org/10.1186/s12887-018-1037-7

Ornell, F., Schuch, J. B., Sordi, A. O., & Kessler, F. H. P. (2020). "Pandemic fear" and COVID-19: Mental health burden and strategies. *The British Journal of Psychiatry*, *42*(3), 232–235. https://doi.org/10.1590/1516-4446-2020-0008

Otis, N. P., Walter, K. H., Glassman, L. H., Ray, T. N., Kobayashi Elliott, K. T., & Michalewicz-Kragh, B. (2024). Comorbidity of depression and posttraumatic stress disorder: Outcomes from a randomized controlled trial of surf and hike therapies among service members. *Psychological Trauma: Theory, Research, Practice, and Policy*, *16*(Suppl 3), S688–S697. https://doi-org.elib.tcd.ie/10.1037/tra0001673

Owens-King, A. P. (2019). Secondary traumatic stress and self-care inextricably linked. *Journal of Human Behavior in the Social Environment*, 29:1, 37-47. https://doi.org/10.1080/10911359.2018.1472703

Pachter, L. M., Lieberman, L., Bloom, S. L., & Fein, J. A. (2017). Developing a community-wide initiative to address childhood adversity and toxic stress: A case study of the Philadelphia ACE Task Force. Academic Pediatrics, 17(7, 7S), S130–S135. https://doi.org/10.1016/j.acap.2017.04.012

Parandeh, A., Ashtari, S., Rahimi-Bashar, F., Gohari-Moghadam, K., & Vahedian-Azimi, A. (2022). Prevalence of burnout among health care workers during coronavirus disease (COVID-19) pandemic: A systematic review and meta-analysis.*Professional Psychology: Research and Practice, 53*(6), 564–573. https://doi.org/10.1037/pro0000483

Park, H. I. (2019). Three-dimensional relationships between demands–abilities fit and burnout among Koreans. *International Journal of Stress Management, 26*(4), 389–400. https://doi.org/10.1037/str0000123

Penix, E. A., Kim, P. Y., Wilk, J. E., & Adler, A. B. (2019). Secondary traumatic stress in deployed healthcare staff. *Psychological Trauma: Theory, Research, Practice, and Policy, 11*(1), 1–9. https://doi.org/10.1037/tra0000401

Petitta, L., & Jiang, L. (2020). How emotional contagion relates to burnout: A moderated mediation model of job insecurity and group member prototypicality. *International Journal of Stress Management, 27*(1), 12–22. https://doi.org/10.1037/str0000134

Petrie, K., Crawford, J., LaMontagne, A. D., Milner, A., Dean, J., Veness, B. G., Christensen, H., & Harvey, S. B. (2020). Working hours, common mental disorder and suicidal ideation among junior doctors in Australia: A cross-sectional survey. *BMJ Open*, *10*(1), Article Article e033525. https://doi.org/10.1136/bmjopen-2019-033525

Pink, J., Gray, N.S., O'Connor, C., Knowles, J.R., Simkiss, N.J. and Snowden, R.J. (2021), Psychological distress and resilience in first responders and health care workers during the COVID-19 pandemic. J Occup Organ Psychol, 94: 789-807. https://doi.org/10.1111/joop.12364

Pirelli, G., Formon, D. L., & Maloney, K. (2020). Preventing Vicarious Trauma (VT), Compassion Fatigue (CF), and Burnout (BO) in Forensic Mental Health: Forensic Psychology as Exemplar. *Professional Psychology: Research and Practice*, Advance online publication. https://doi.org/10.1037/pro0000293

Powell, T., Billiot, S., Muller, J., Elzey, K., & Brandon, A. (2022). The cost of caring: Psychological adjustment of health-care volunteers during the COVID-19 pandemic.*Traumatology, 28*(3), 383–392. https://doi.org/10.1037/trm0000387

Price, J., Becker-Haimes, E. M., & Benjamin Wolk, C. (2021). Matched emotional supports in health care (MESH) framework: A stepped care model for health care workers.*Families, Systems, & Health, 39*(3), 493–498. https://doi.org/10.1037/fsh0000600

Qureshi, S. U., Long, M. E., Bradshaw, M. R., Pyne, J. M., Magruder, K. M., Kimbrell, T., Hudson, T. J., Jawaid, A., Schulz, P. E., Kunik, M. E., (2011). Does PTSD impair cognitive beyond the effect of trauma. *Journal of Neuropsychiatry and Clinical Neurosciences*, 23(1), 16-28. DOI: 10.1176/jnp.23.1.jnp16

Radomski, A., Cloutier, P., Polihronis, C., Gardner, W., Pajer, K., Sheridan, N., Sundar, P., & Cappelli, M. (2022). Parenting during the COVID-19 pandemic: The sociodemographic and mental health factors associated with maternal caregiver strain. *Families, Systems, & Health, 40*(1), 79–86. https://doi.org/10.1037/fsh0000638

Ramirez, J., Gordon, M., Reissinger, M., Shah, A., Coverdale, J., & Nguyen, P. T. (2020). The Importance of Maintaining Medical Professionalism While Experiencing Vicarious Trauma When Working With Human Trafficking Victims. *Traumatology*. Advance online publication. DOI:10.1037/trm0000248

Rapp, D. J., Hughey, J. M., & Kreiner, G. E. (2021). Boundary work as a buffer against burnout: Evidence from healthcare workers during the COVID-19 pandemic.*Journal of Applied Psychology, 106*(8), 1169–1187. https://doi.org/10.1037/apl0000951

Rayburn, N. R., Wenzel, S. L., Elliott, M. N., Hambarsoomians, K., Marshall, G. N., & Tucker, J. S. (2005). Trauma, depression, coping, and mental health service seeking among impoverished women. *Journal of consulting and clinical psychology*, *73*(4), 667–677. https://doi.org/10.1037/0022-006X.73.4.667

Rene, R., Cunningham, A., Pando, O., Silverio, A., Marschilok, C., & Sifri, R. (2021). Development and evaluation of employee wellness sessions in response to COVID-19. *Families, Systems, & Health, 39*(3), 505–517. https://doi.org/10.1037/fsh0000615

Rettie, H., & Daniels, J. (2021). Coping and tolerance of uncertainty: Predictors and mediators of mental health during the COVID-19 pandemic.*American Psychologist, 76*(3), 427–437. https://doi.org/10.1037/amp0000710

Rhodes, J., Chan, C., Paxson, C., Rouse, C. E., Waters, M., & Fussell, E. (2010). The impact of hurricane Katrina on the mental and physical health of low-income parents in New Orleans. *American Journal of Orthopsychiatry*, *80*, 237–247. https://doi.org/10.1111/j.1939-0025.2010.01027.x

Rice, K. G., & Liu, Y. (2019). Perfectionism and Burnout in R&D Teams. *Journal of Counseling Psychology*. Advance online publication. DOI: 10.1037/cou0000402

Rohlf, V. I. (2018). Interventions for occupational stress and compassion fatigue in animal care professionals—A systematic review. *Traumatology, 24*(3), 186–192. https://doi.org/10.1037/trm0000144

Rolin, S. N., Flis, A., & Davis, J. J. (2022). Work coping, stress appraisal, and psychological resilience: Reaction to the COVID-19 pandemic among health care providers.*Psychology & Neuroscience, 15*(2), 131–146. https://doi.org/10.1037/pne0000257

Rossi, R., Socci, V., Pacitti, F., Di Lorenzo, G., Di Marco, A., Siracusano, A., & Rossi, A. (2020). Mental health outcomes among frontline and second-line health care workers during the coronavirus disease 2019 (COVID-19) pandemic in Italy. *JAMA Network Open*, *3*(5), Article Article e2010185. https://doi.org/10.1001/jamanetworkopen.2020.10185

Rubin, J. D., Bell, S., & McClelland, S. I. (2017). Graduate education in qualitative methods in U.S. psychology: current trends and recommendations for the future. *Qualitative Research in Psychology*, *15*(1), 29–50. https://doi.org/10.1080/14780887.2017.1392668

Runkle, J. D., Sugg, M. M., Yadav, S., Harden, S., Weiser, J., & Michael, K. (2023). Real-time mental health crisis response in the United States to COVID-19: Insights from a national text-based platform. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 44*(1), 29–40. https://doi.org/10.1027/0227-5910/a000826

Salmon, K. (2021). The ecology of youth psychological wellbeing in the COVID-19 pandemic.*Journal of Applied Research in Memory and Cognition, 10*(4), 564–576. https://doi.org/10.1016/j.jarmac.2021.11.002

Schonfeld, I. S., Verkuilen, J., & Bianchi, R. (2019). Inquiry Into the Correlation Between Burnout and Depression. *Journal of Occupational Health Psychology*, Advance online publication. DOI: 10.1037/ocp0000151

Shanafelt, T. D., Balch, C. M., Bechamps, G., Russell, T., Dyrbye, L., Satele, D., Collicott, P., Novotny, P. J., Sloan, J., & Freischlag, J. (2010). Burnout and medical errors among American surgeons. *Annals of Surgery*, *251*(6), 995–1000. https://doi.org/10.1097/SLA.0b013e3181bfdab3

Shanafelt, T., Ripp, J., & Trockel, M. (2020). Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic. *Journal of the American Medical Association*, *323*(21), 2133–2134. https://doi.org/10.1001/jama.2020.5893

Shields, J., Erdal, K., Skrinjaric, J., & Majic, G. (1999). Post-traumatic stress symptomatology among health care professionals in Croatia. *American Journal of Orthopsychiatry, 69*(4), 529–535. https://doi.org/10.1037/h0080400

Shiri, S., Wexler, I. D., & Kreitler, S. (2010). Cognitive orientation is predictive of posttraumatic growth after secondary exposure to trauma. *Traumatology, 16*(1), 42–48. https://doi.org/10.1177/1534765609348243

Sim, J., Saunders, B., Waterfield, J., & Kingstone, T. (2018). Can sample size in qualitative research be determined a priori? *International Journal of Social Research Methodology*, *21*(5), 619–634. https://doi.org/10.1080/13645579.2018.1454643

Simionato, G., Simpson, S., & Reid, C. (2019). Burnout as an ethical issue in psychotherapy. *Psychotherapy, 56*(4), 470–482. DOI: 10.1037/pst0000261

Skiendzielewski, K., Forke, C. M., Sarwer, D. B., Noll, J. G., Wheeler, D. C., Henry, K. A., & Schroeder, K. (2022). The intersection of adverse childhood experiences and neighborhood determinants of health: An exploratory spatial analysis. *Psychological Trauma: Theory, Research, Practice, and Policy.* Advance online publication. https://doi.org/10.1037/tra0001320

Spikol, E., McBride, O., Vallières, F., Butter, S., & Hyland, P. (2021). Tracking the Irish adult population during the first year of the COVID-19 pandemic: A methodological report of the COVID-19 psychological research consortium (C19PRC) study in Ireland. *Acta psychologica*, *220*, 103416. https://doi.org/10.1016/j.actpsy.2021.103416

Sprang, G., Ford, J., Kerig, P., & Bride, B. (2019). Defining secondary traumatic stress and developing targeted assessments and interventions: Lessons learned from research and leading experts. *Traumatology, 25*(2), 72–81. https://doi.org/10.1037/trm0000180

Straker, G. (1987). The continuous traumatic stress syndrome: The single therapeutic interview. *Psy- chology in Society, 8,* 48–79.

Stamm, B.H. (2010). The Concise ProQOL Manual, 2nd Ed. Pocatello, ID: ProQOL.org. https://proqol.org/proqol-manual

Strolin-Goltzman, J., Breslend, N., Hemenway Deaver, A., Wood, V., Woodside-Jiron, H., & Krompf, A. (2020). Moving Beyond Self-Care: Exploring the Protective Influence of Interprofessional Collaboration, Leadership, and Competency on Secondary Traumatic Stress. *Traumatology*, Advance online publication. http://dx.doi.org/10.1037/trm0000244

Substance Abuse and Mental Health Services Administration (SAMHSA). (2014). SAMHSA's concept of trauma and guidance for a trauma- informed approach. HHS Publication No. (SMA) 14-4884. https://library.samhsa.gov/sites/default/files/sma14-4884.pdf

Taylor, S., Arenson, M., Kalinowski, L., Schwob, N., & Shin, K. E. (2022). Psychology and the pandemic: Introduction to the special issue.*Translational Issues in Psychological Science, 8*(3), 295–299. https://doi.org/10.1037/tps0000339

Testoni, I., Brondolo, E., Ronconi, L., Petrini, F., Navalesi, P., Antonellini, M., Biancalani, G., Crupi, R., & Capozza, D. (2023). Burnout following moral injury and dehumanization: A study of distress among Italian medical staff during the first COVID-19 pandemic period.*Psychological Trauma: Theory, Research, Practice, and Policy, 15*(Suppl 2), S357–S370. https://doi.org/10.1037/tra0001346

Truschel, J. (2022, August 26). *Depression Definition and DSM-5 Diagnostic Criteria.* Health Central. https://www.healthcentral.com/condition/depression/dsm-5-depression-criteria

Turgoose, D., Glover, N., Barker, C., & Maddox, L. (2017). Empathy, compassion fatigue, and burnout in police officers working with rape victims. *Traumatology, 23*(2), 205–213. ttps://doi.org/10.1037/trm0000118

Turgoose, D., & Maddox, L. (2017). Predictors of compassion fatigue in mental health professionals: A narrative review. *Traumatology, 23*(2), 172–185. https://doi.org/10.1037/trm0000116

Umil, M. D., Meneses, M. E., Sioson†, C. A., & Teng-Calleja, M. (2023). Facing the frontline—An interpretative phenomenological analysis of the Filipino rural doctors' mental health amid COVID-19. *International Perspectives in Psychology: Research, Practice, Consultation, 12*(3), 189–200. https://doi.org/10.1027/2157-3891/a000080

Vagni, M., Maiorano, T., Giostra, V., & Pajardi, D. (2020). Hardiness, stress and secondary trauma in Italian healthcare and emergency workers during the COVID-19 pandemic. *Sustainability*, *12*(14), Article Article 5592. https://doi.org/10.3390/su12145592

Vella Fondacaro, D., Vella Fondacaro, F., & Camilleri, N. (2023). The impact of the COVID-19 pandemic on physical activity and anxiety levels of young mental health patients and their parents. *Sports Psychiatry: Journal of Sports and Exercise Psychiatry, 2*(2), 57–64. https://doi.org/10.1024/2674-0052/a000044

Veronese, G., Mahamid, F. A., & Bdier, D. (2022). Subjective well-being, sense of coherence, and posttraumatic growth mediate the association between COVID-19 stress, trauma, and burnout among Palestinian health-care providers.*American Journal of Orthopsychiatry, 92*(3), 291–301. https://doi.org/10.1037/ort0000606

Veronese, G., & Pepe, A. (2014). Sense of coherence mediates the effect of trauma on the social and emotional functioning of Palestinian health providers. *American Journal of Orthopsychiatry, 84*(5), 597–606. https://doi.org/10.1037/ort0000025

Vizheh, M., Qorbani, M., Arzaghi, S. M., Muhidin, S., Javanmard, Z., & Esmaeili, M. (2020). The mental health of healthcare workers in the COVID-19 pandemic: A systematic review. *Journal of Diabetes and Metabolic Disorders*, *19*(2), 1–12. https://doi.org/10.1007/s40200-020-00643-9

Volkan, V. D. (2000). Traumatized societies and psychological care: Expanding the concept of preventive medicine. *Mind and Human Interaction, 11,* 177–194.

https://www.researchgate.net/publication/242185879_Traumatized_Societies_and_Psychological_Care_Expanding_the_Concept_of_Preventive_Medicine

Wade, R., Jr., Cronholm, P. F., Fein, J. A., Forke, C. M., Davis, M. B., Harkins-Schwarz, M., Pachter, L. M., & Bair-Merritt, M. H. (2016). Household and community-level adverse childhood experiences and adult health outcomes in a diverse urban population. Child Abuse & Neglect, 52, 135–145. https://doi.org/10.1016/j.chiabu.2015.11.021

Wang, Z., Koenig, H. G., Tong, Y., Wen, J., Sui, M., Liu, H., Zaben, F. A., & Liu, G. (2022). Moral injury in Chinese health professionals during the COVID-19 pandemic.*Psychological Trauma: Theory, Research, Practice, and Policy, 14*(2), 250–257. https://doi.org/10.1037/tra0001026

Weathers, F.W., Litz, B.T., Keane, T.M., Palmieri, P.A., Marx, B.P., & Schnurr, P.P. (2013). The PTSD Checklist for *DSM-5* (PCL-5). Scale available from the National Center for PTSD at www.ptsd.va.gov.

Williamson, D. (2019) Effectiveness of Providing Education About Alcohol Use Disorders and Compassion Fatigue for Emergency Department Nurses. *J Addict Nurs.,* 30(1):32-39. DOI: 10.1097/JAN.0000000000000263

Wirkner, J., Christiansen, H., Knaevelsrud, C., Lüken, U., Wurm, S., Schneider, S., & Brakemeier, E.-L. (2021). Mental health in times of the COVID-19 pandemic: Current knowledge and implications from a European perspective.*European Psychologist, 26*(4), 310–322. https://doi.org/10.1027/1016-9040/a000465

Woo, T., Ho, R., Tang, A., & Tam, W. (2020). Global prevalence of burnout symptoms among nurses: A systematic review and meta-analysis. *Journal of Psychiatric Research*, *123*, 9–20. https://doi.org/10.1016/j.jpsychires.2019.12.015

World Health Organization. (2020, April3). *Rolling updates on coronavirus disease (COVID-19)*. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen.

World Health Organisation. (2019). Burn-out an "occupational phenomenon": international classification of Diseases. Retrieved from. https://www.who.int/mental_health/evidence/burn-out/en/

Wright, A. C., Kritikos, K., Bhiku, K., LeFeber, L., Skiest, H., Whitman, A., Browne, J., Arntz, D., Fortuna, K. L., Mueser, K. T., & Cather, C. (2022). The impact of the COVID-19 pandemic on peer specialists.*Psychiatric Rehabilitation Journal, 45*(3), 201–211. https://doi.org/10.1037/prj0000517

Yardley, L. (2016). Demonstrating the validity of qualitative research. *The Journal of Positive Psychology*, *12*(3), 295–296. https://doi.org/10.1080/17439760.2016.1262624

Yeung, N. C. Y., Tang, J. L. T., Hui, K. H., Lau, S. T. Y., Cheung, A. W. L., & Wong, E. L. Y. (2023). "The light after the storm": Psychosocial correlates of adversarial growth among nurses in Hong Kong amid the fifth wave of the COVID-19 pandemic.*Psychological Trauma: Theory, Research, Practice, and Policy.* Advance online publication. https://doi.org/10.1037/tra0001535

Yi, J., Kim, M. A., Choi, K., Kim, S., & O'Connor, A. (2018). When does compassion fatigue hit social workers? Caring for oncology patients in Korea. *Qualitative Social Work*, *17*(3), 337–354. https://doi.org/10.1177/1473325016670484

Zerach, G., & Levi-Belz, Y. (2022). Moral injury, PTSD, and complex PTSD among Israeli health and social care workers during the COVID-19 pandemic: The moderating role of self-criticism. *Psychological Trauma: Theory, Research, Practice, and Policy, 14*(8), 1314–1323. https://doi.org/10.1037/tra0001210

Zubatsky, M., Runyan, C., Gulotta, S., Knight, J. R., & Pettinelli, J. D. (2019). Burnout Among Behavioral Health Providers in Integrated Care Settings. *Families, Systems, & Health*, Advance online publication. DOI:10.1037/fsh0000456

Appendix A- Professional Quality of Life Scale

Professional Quality of Life Scale (ProQOL)

Compassion Satisfaction and Compassion Fatigue
(ProQOL) Version 5 (2009)

When you *[help]* people you have direct contact with their lives. As you may have found, your compassion for those you *[help]* can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a *[helper]*. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the *last 30 days*.

1=Never 2=Rarely 3=Sometimes 4=Often 5=Very Often

_____ 1. I am happy.
_____ 2. I am preoccupied with more than one person I *[help]*.
_____ 3. I get satisfaction from being able to *[help]* people.
_____ 4. I feel connected to others.
_____ 5. I jump or am startled by unexpected sounds.
_____ 6. I feel invigorated after working with those I *[help]*.
_____ 7. I find it difficult to separate my personal life from my life as a *[helper]*.
_____ 8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I *[help]*.
_____ 9. I think that I might have been affected by the traumatic stress of those I *[help]*.
_____ 10. I feel trapped by my job as a *[helper]*.
_____ 11. Because of my *[helping]*, I have felt "on edge" about various things.
_____ 12. I like my work as a *[helper]*.
_____ 13. I feel depressed because of the traumatic experiences of the people I *[help]*.
_____ 14. I feel as though I am experiencing the trauma of someone I have *[helped]*.
_____ 15. I have beliefs that sustain me.
_____ 16. I am pleased with how I am able to keep up with *[helping]* techniques and protocols.
_____ 17. I am the person I always wanted to be.
_____ 18. My work makes me feel satisfied.
_____ 19. I feel worn out because of my work as a *[helper]*.
_____ 20. I have happy thoughts and feelings about those I *[help]* and how I could help them.
_____ 21. I feel overwhelmed because my case [work] load seems endless.
_____ 22. I believe I can make a difference through my work.
_____ 23. I avoid certain activities or situations because they remind me of frightening experiences of the people I *[help]*.
_____ 24. I am proud of what I can do to *[help]*.
_____ 25. As a result of my *[helping]*, I have intrusive, frightening thoughts.
_____ 26. I feel "bogged down" by the system.
_____ 27. I have thoughts that I am a "success" as a *[helper]*.
_____ 28. I can't recall important parts of my work with trauma victims.
_____ 29. I am a very caring person.
_____ 30. I am happy that I chose to do this work.

Appendix B- Beck Depression Inventory-II

BDI-II

Date:

Name: _____ Marital Status: _____ Age: _____ Sex: _____

Occupation: _____ Education: _____

Instructions: This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the **one statement** in each group that best describes the way you have been feeling during the **past two weeks, including today.** Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

1. Sadness
- 0 I do not feel sad.
- 1 I feel sad much of the time.
- 2 I am sad all the time.
- 3 I am so sad or unhappy that I can't stand it.

2. Pessimism
- 0 I am not discouraged about my future.
- 1 I feel more discouraged about my future than I used to be.
- 2 I do not expect things to work out for me.
- 3 I feel my future is hopeless and will only get worse.

3. Past Failure
- 0 I do not feel like a failure.
- 1 I have failed more than I should have.
- 2 As I look back, I see a lot of failures.
- 3 I feel I am a total failure as a person.

4. Loss of Pleasure
- 0 I get as much pleasure as I ever did from the things I enjoy.
- 1 I don't enjoy things as much as I used to.
- 2 I get very little pleasure from the things I used to enjoy.
- 3 I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings
- 0 I don't feel particularly guilty.
- 1 I feel guilty over many things I have done or should have done.
- 2 I feel quite guilty most of the time.
- 3 I feel guilty all of the time.

6. Punishment Feelings
- 0 I don't feel I am being punished.
- 1 I feel I may be punished.
- 2 I expect to be punished.
- 3 I feel I am being punished.

7. Self-Dislike
- 0 I feel the same about myself as ever.
- 1 I have lost confidence in myself.
- 2 I am disappointed in myself.
- 3 I dislike myself.

8. Self-Criticalness
- 0 I don't criticize or blame myself more than usual.
- 1 I am more critical of myself than I used to be.
- 2 I criticize myself for all of my faults.
- 3 I blame myself for everything bad that happens.

9. Suicidal Thoughts or Wishes
- 0 I don't have any thoughts of killing myself.
- 1 I have thoughts of killing myself, but I would not carry them out.
- 2 I would like to kill myself.
- 3 I would kill myself if I had the chance.

10. Crying
- 0 I don't cry any more than I used to.
- 1 I cry more than I used to.
- 2 I cry over every little thing.
- 3 I feel like crying, but I can't.

_____ Subtotal Page 1

Continued on Back

11. Agitation

0 I am no more restless or wound up than usual.
1 I feel more restless or wound up than usual.
2 I am so restless or agitated that it's hard to stay still.
3 I am so restless or agitated that I have to keep moving or doing something.

12. Loss of Interest

0 I have not lost interest in other people or activities.
1 I am less interested in other people or things than before.
2 I have lost most of my interest in other people or things.
3 It's hard to get interested in anything.

13. Indecisiveness

0 I make decisions about as well as ever.
1 I find it more difficult to make decisions than usual.
2 I have much greater difficulty in making decisions than I used to.
3 I have trouble making any decisions.

14. Worthlessness

0 I do not feel I am worthless.
1 I don't consider myself as worthwhile and useful as I used to.
2 I feel more worthless as compared to other people.
3 I feel utterly worthless.

15. Loss of Energy

0 I have as much energy as ever.
1 I have less energy than I used to have.
2 I don't have enough energy to do very much.
3 I don't have enough energy to do anything.

16. Changes in Sleeping Pattern

0 I have not experienced any change in my sleeping pattern.

1a I sleep somewhat more than usual.
1b I sleep somewhat less than usual.

2a I sleep a lot more than usual.
2b I sleep a lot less than usual.

3a I sleep most of the day.
3b I wake up 1–2 hours early and can't get back to sleep.

17. Irritability

0 I am no more irritable than usual.
1 I am more irritable than usual.
2 I am much more irritable than usual.
3 I am irritable all the time.

18. Changes in Appetite

0 I have not experienced any change in my appetite.

1a My appetite is somewhat less than usual.
1b My appetite is somewhat greater than usual.

2a My appetite is much less than before.
2b My appetite is much greater than usual.

3a I have no appetite at all.
3b I crave food all the time.

19. Concentration Difficulty

0 I can concentrate as well as ever.
1 I can't concentrate as well as usual.
2 It's hard to keep my mind on anything for very long.
3 I find I can't concentrate on anything.

20. Tiredness or Fatigue

0 I am no more tired or fatigued than usual.
1 I get more tired or fatigued more easily than usual.
2 I am too tired or fatigued to do a lot of the things I used to do.
3 I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex

0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

_____ Subtotal Page 2

_____ Subtotal Page 1

_____ Total Score

281283-2 9876

Appendix C- Beck Anxiety Inventory

NAME _____ **DATE** _____

Below is a list of common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by each symptom during the PAST WEEK, INCLUDING TODAY, by placing an X in the corresponding space in the column next to each symptom.

	NOT AT ALL	MILDLY It did not bother me much.	MODERATELY It was very unpleasant, but I could stand it.	SEVERELY I could barely stand it.
1. Numbness or tingling.				
2. Feeling hot.				
3. Wobbliness in legs.				
4. Unable to relax.				
5. Fear of the worst happening.				
6. Dizzy or lightheaded.				
7. Heart pounding or racing.				
8. Unsteady.				
9. Terrified.				
10. Nervous.				
11. Feelings of choking.				
12. Hands trembling.				
13. Shaky.				
14. Fear of losing control.				
15. Difficulty breathing.				
16. Fear of dying.				
17. Scared.				
18. Indigestion or discomfort in abdomen.				
19. Faint.				
20. Face flushed.				
21. Sweating (not due to heat).				

Appendix D- Life Events Checklist for the DSM 5

LEC-5 Standard

Instructions: Listed below are a number of difficult or stressful things that sometimes happen to people. For each event check one or more of the boxes to the right to indicate that: (a) it happened to you personally; (b) you witnessed it happen to someone else; (c) you learned about it happening to a close family member or close friend; (d) you were exposed to it as part of your job (for example, paramedic, police, military, or other first responder); (e) you're not sure if it fits; or (f) it doesn't apply to you.

Be sure to consider your *entire life* (growing up as well as adulthood) as you go through the list of events.

Event	Happened to me	Witnessed it	Learned about it	Part of my job	Not sure	Doesn't apply
1. Natural disaster (for example, flood, hurricane, tornado, earthquake)						
2. Fire or explosion						
3. Transportation accident (for example, car accident, boat accident, train wreck, plane crash)						
4. Serious accident at work, home, or during recreational activity						
5. Exposure to toxic substance (for example, dangerous chemicals, radiation)						
6. Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)						
7. Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)						
8. Sexual assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm)						
9. Other unwanted or uncomfortable sexual experience						
10. Combat or exposure to a war-zone (in the military or as a civilian)						
11. Captivity (for example, being kidnapped, abducted, held hostage, prisoner of war)						
12. Life-threatening illness or injury						
13. Severe human suffering						
14. Sudden violent death (for example, homicide, suicide)						
15. Sudden accidental death						
16. Serious injury, harm, or death you caused to someone else						
17. Any other very stressful event or experience						

Appendix E- Secondary Traumatic Stress Scale

SECONDARY TRAUMATIC STRESS SCALE

The following is a list of statements made by persons who have been impacted by their work with traumatized clients. Read each statement then indicate how frequently the statement was true for you in the past **seven (7) days** by circling the corresponding number next to the statement.

NOTE: *"Client" is used to indicate persons with whom you have been engaged in a helping relationship. You may substitute another noun that better represents your work such as consumer, patient, recipient, etc.*

	Never	Rarely	Occasionally	Often	Very Often
1. I felt emotionally numb	1	2	3	4	5
2. My heart started pounding when I thought about my work with clients	1	2	3	4	5
3. It seemed as if I was reliving the trauma(s) experienced by my client(s)	1	2	3	4	5
4. I had trouble sleeping	1	2	3	4	5
5. I felt discouraged about the future	1	2	3	4	5
6. Reminders of my work with clients upset me	1	2	3	4	5
7. I had little interest in being around others	1	2	3	4	5
8. I felt jumpy	1	2	3	4	5
9. I was less active than usual	1	2	3	4	5
10. I thought about my work with clients when I didn't intend to	1	2	3	4	5
11. I had trouble concentrating	1	2	3	4	5
12. I avoided people, places, or things that reminded me of my work with clients	1	2	3	4	5
13. I had disturbing dreams about my work with clients	1	2	3	4	5
14. I wanted to avoid working with some clients	1	2	3	4	5
15. I was easily annoyed	1	2	3	4	5
16. I expected something bad to happen	1	2	3	4	5
17. I noticed gaps in my memory about client sessions	1	2	3	4	5

Intrusion Subscale (add items 2, 3, 6, 10, 13)	Intrusion Score _____
Avoidance Subscale (add items 1, 5, 7, 9, 12, 14, 17)	Avoidance Score _____
Arousal Subscale (add items 4, 8, 11, 15, 16)	Arousal Score _____
TOTAL (add Intrusion, Arousal, and Avoidance Scores)	Total Score _____

Bride, B.E., Robinson, M.R., Yegidis, B., & Figley, C.R. (2004). Development and validation of the Secondary Traumatic Stress Scale. *Research on Social Work Practice, 14,* 27-35.

Appendix F- Maslach Burnout Inventory

mind garden

www.mindgarden.com

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Maslach Burnout Inventory forms: Human Services Survey, Human Services Survey for Medical Personnel, Educators Survey, General Survey, or General Survey for Students.

The three sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument form may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below.
Sample Items:

MBI - Human Services Survey - MBI-HSS:
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some recipients.

Copyright ©1981 Christina Maslach & Susan E. Jackson. All rights reserved in all media. Published by Mind Garden, Inc., www.mindgarden.com

MBI - Human Services Survey for Medical Personnel - MBI-HSS (MP):
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some patients.

Copyright ©1981, 2016 by Christina Maslach & Susan E. Jackson. All rights reserved in all media. Published by Mind Garden, Inc., www.mindgarden.com

MBI - Educators Survey - MBI-ES:
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some students.

Copyright ©1986 Christina Maslach, Susan E. Jackson & Richard L. Schwab. All rights reserved in all media. Published by Mind Garden, Inc., www.mindgarden.com

Cont'd on next page

MBI - General Survey - MBI-GS:

I feel emotionally drained from my work.
In my opinion, I am good at my job.
I doubt the significance of my work.

MBI - General Survey for Students - MBI-GS (S):

I feel emotionally drained by my studies.
In my opinion, I am a good student.
I doubt the significance of my studies.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

Appendix G- Pandemic Experiences and Perceptions Survey

mind garden

www.mindgarden.com

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Pandemic Experiences and Perceptions Survey (PEPS)

The seven sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Sample Items:

- To what extent has the pandemic affected the work of your organization?
- Please rate the adequacy of support staff availability.
- Please indicate to what extent did your training, equipment, and support provide you with control over your contact with the virus?
- How dangerous to you personally was the virus during the pandemic period?
- I felt a sense of social support with my work group.
- My immediate supervisor identified specific actions that would improve our capabilities.
- What would help you do your job right now?

Citation of the instrument must include the applicable copyright statement listed below.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

Appendix H- Information and Consent Forms

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Information Sheet & Informed Consent Form

Lead Researcher: Kevin Murphy, Chartered Psychol PsSI

Background to research:

To better develop supports for those engaged in high stress and potentially traumatic roles, it is important for us to first understand what the impacts of these experiences are on our cognitions, on how we perceive and interpret the world around us, and the way in which our emotions influence engagement with it. It is hoped that this research would identify if working in an environment that exposes us to trauma on a regular basis has an effect on our mental resilience, well-being, and on how we perceive the world around us. Through this, insight may arise into how to best support people working in these professions.

Procedures of this study:

This study involves meeting twice individually with the researcher for approximately 45 minutes each occasion. During this time, you will be asked to provide responses to self-report questionnaires. Following this, there will also be an opportunity to talk with the researcher about your own experiences. Please note that while the research is being supported by your organisation, the information you provide is confidential as outlined in the Consent Form.

The initial meeting will be scheduled with you for the near future, with the second meeting being scheduled approximately three months from that date.

Between these two individual meetings, you will be invited to attend a 1-hour group workshop entitled 'Minding Ourselves during the Pandemic'. This workshop is educational and reflective in nature, where you will hear about the impact that trauma can have on staff during a crisis and ways of coping with this. It is being rolled out across the health services for frontline staff already, so you may have already heard of it.

The study will not focus on any particular negative or stressful events, instead looking at a more general sense of well-being. However, it is possible that memories or emotions may be triggered during the interview. If there is emotional stress experienced as a result of something coming up, please let the researcher know and access to supports will be provided through your organisation's employee support structures.

Following completion of the research, you will be given the opportunity to meet with the researcher for a debriefing to receive feedback on the results of the study and your participation.

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

TITLE OF STUDY:
Psychological well-being and impact of traumatic events on frontline health service staff amid the COVID19 pandemic
There are 4 sections in this form. Each section contains a number of statements. You are asked to write your initials in the box beside the statement if you agree. If you do not agree with a statement, please leave the box blank. The end of this form is for the researchers to complete. **Please ask the researchers <u>any</u> questions you may have when reading each of the statements. Thank you for participating.**

GENERAL	**Participant Initials**
I confirm I have read and understood the **Information Leaflet** for the above-named study. The information has been fully explained to me and I have been able to ask questions, all of which have been answered to my satisfaction.	
I understand that participation in this study **is entirely voluntary, and if I decide that I do not want to take part, I can stop taking part in this study at any time without giving a reason**.	
I understand that I **will not be paid for taking part in this study**.	
I know how to contact the research team if I need to.	
I agree to being contacted by researchers by email/phone as part of this research study.	
I agree to take part in this research study having been fully informed of the **risks, benefits and alternatives** which are set out in full in the information leaflet which I have been provided with.	

DATA PROCESSING	**Participant Initials**
I give my permission for my data to be processed in line with the aims of the research study, as outlined in the information leaflet.	
I understand that there are **no direct benefits to me** from participating in this study.	
I understand that **results from analysis of my personal information will not be given to me**.	
I understand that under data protection legislation I can have access to personal data which the study team stores about me, if requested.	
I understand that the personal information collected in the study will be kept strictly confidential and will only be made available to qualified scientists who are part of the study team.	
I understand that **I can withdraw my permission to take part in this study** at any time **up until the data are anonymised and combined for analysis (30/11/2021)** without giving a reason. I understand that in this case, the researchers will delete all information related to me and I will be removed from the study. I understand that after **[30/11/2021]**, I will no longer be able to withdraw or access my study information, as all links between the study data and my identity will be destroyed.	
I understand that personal (identifying) information about me, including the transfer of this personal information about me outside of the EU, will be protected in accordance with the Data Protection Acts 1988 – 2018 and the EU General Data Protection Regulation (GDPR).	
I understand that confidentiality may be breached in circumstances in which; 1. The research team has a strong belief or evidence exists that there is a serious risk of harm or danger to either the participant or another individual. This may relate to issues surrounding physical, emotional and/or sexual abuse, concerns for child protection, rape, self-harm, suicidal intent or criminal activity. 2. Disclosure is required as part of a legal process or Garda investigation. In such instances, information may be disclosed to significant others or appropriate third parties without permission being sought. Where possible, a full explanation will be given to the participant regarding the necessary procedures and also the intended actions that may need to be taken.	
RETENTION OF RESEARCH SAMPLES FOR FUTURE RESEARCH	**Participant Initials**
I understand that **fully anonymised data** (which has had all identifying information about me removed) will be retained for a period of 8 years by the study team.	

SHARING OF INFORMATION	**Participant Initials**
I give permission for my data to be shared with the scientific community and the general public via a fully open database on the internet. ***I understand that my data will be fully anonymised before sharing - no personally identifying data will be shared***. I understand that data shared in this way will be accessible to researchers and members of the public anywhere in the world, not just the EU. I understand that by sharing data in this way, my data might be used for other, future research projects in addition to the study I am currently participating in. Those future projects can focus on any topic and might be completely unrelated to the goals of this study. I understand that once the data are shared, ***they cannot be destroyed, withdrawn, or recalled, because they can no longer be linked with me.*** I understand that it is possible that some of the research conducted using my shared information eventually could lead to the development of new research methods, new diagnostic tests, new drugs, or other commercial products. I understand that should this occur, there is no plan to provide me, the study team, or TCD with any part of the profits generated from such products, nor will I, the study team, or TCD have any ownership rights in the products.	

Participant Name (Block Capitals) Participant Signature Date

Witness Name (Block Capitals) Witness Signature Date

To be completed by the Principal Investigator or nominee:

I, the undersigned, have taken the time to fully explain to the above participant the nature and purpose of this study in a way that they could understand. I have explained the risks and possible benefits involved. I have invited them to ask questions on any aspect of the study that concerned them.

I have given a copy of the information leaflet and consent form to the participant with contacts of the study team

Researcher name: Kevin Murphy
Title and qualifications: Senior Psychologist, Chartered Psychol PsSI, MSc Couns Psych

Signature:
Date:
Copies to be made: 1 for participant, 1 for PI

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Debriefing Sheet

Lead Researcher: Kevin Murphy, Chartered Psychol PsSI

Thank you for taking part in this study, your time and input is greatly appreciated.

To better develop supports for those engaged in high stress and potentially traumatic roles, it is important for us to first understand what the impacts of these experiences are on our cognitions, on how we perceive and interpret the world around us, and the way in which our emotions influence engagement with it. It is hoped that this research can identify if working in an environment that exposes us to trauma on a regular basis has an effect on our mental resilience, well-being, and on how we perceive the world around us. Through this, insight may arise into how to best support people working in these professions.

If anything has arisen for you during the course of your participation in this study that is causing distress, please contact either the researcher (contact details below) or get in contact with the Health Service Executive's employee assistance programme to access supports.

Please note that you have the right to withdraw your consent and have your data removed from the study at any point up until it is submitted to fulfil PhD requirements.

If you have any further questions about the study, please contact:

Researcher's contact details:
Kevin Murphy
Chartered Psychol PSI
School of Psychology
Aras An Phiarsaigh
Trinity College Dublin
Murphk11@tcd.ie

Supervisor's contact details:
Prof Tim Trimble
C Psychol, Junior Dean
School of Psychology
Aras an Phiarsaigh
Trinity College Dublin
Trimblt@tcd.ie

Appendix I- Qualitative prompt questions

Qualitative Questions:

Participant Identifier: _____
Highest level of education: _____
Gender: _____
Length of time in current role: _____

1. What has been your experience so far of how the work itself impacts on your life?

2. What was your experience of the COVID19 pandemic on your work?

3. What kind of supports are you aware of that can help with managing the impact of your work on you?

4. Which of these, if any, have you availed of?

5. What has been your impression of them?

6. Would you have any suggestions that you think might help reduce the impact of this type of work?

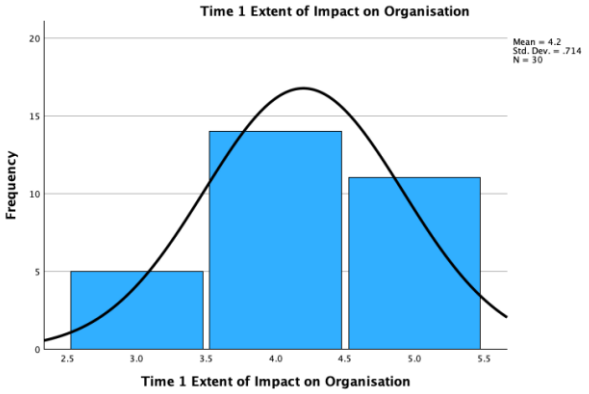
7. Is there anything else you think is important to add to the research?

Appendix J- PEPS Histograms

Histograms of PEPS responses for the whole group:

Figure J1

Extent of Impact of the Pandemic on the Organisation at Time 1 vs Time 2



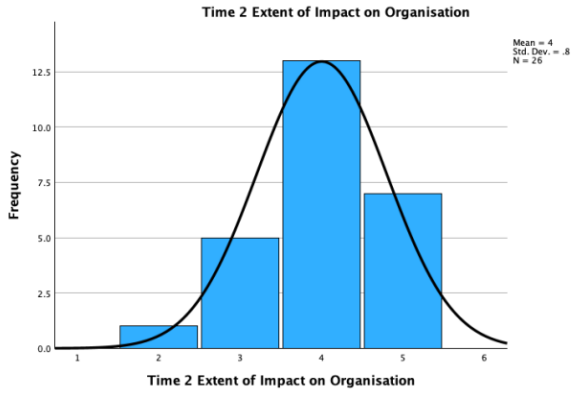
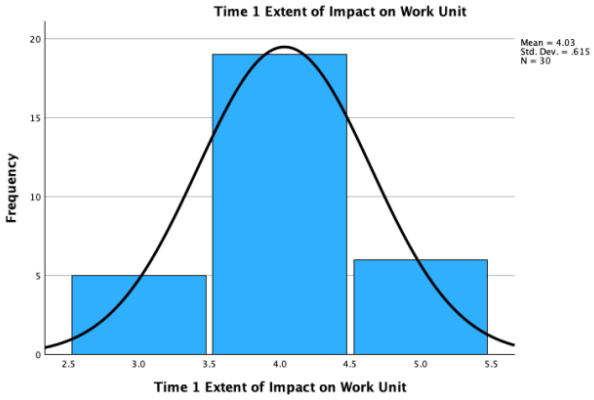


Figure J2

Extent of Impact of the Pandemic on the Work Unit at Time 1 vs Time 2



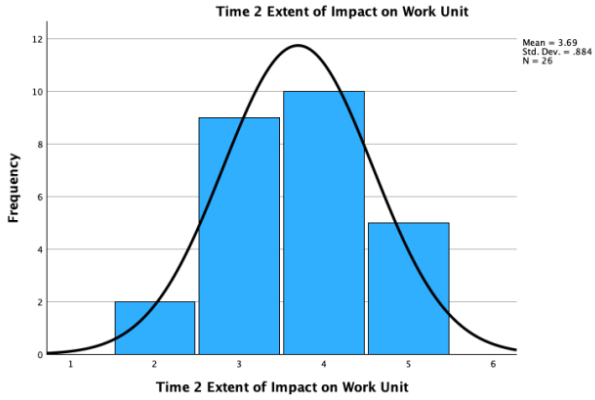
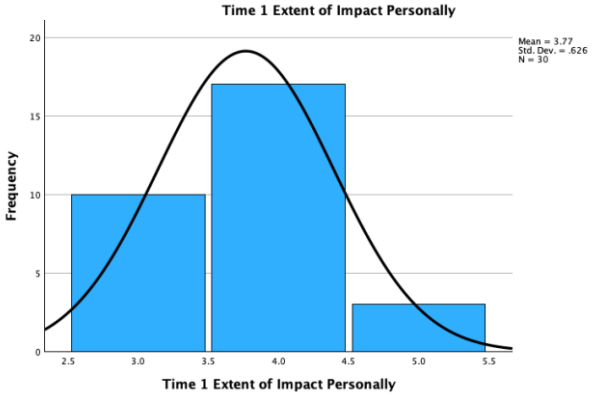


Figure J3

Extent of Impact of the Pandemic on the Participant Personally at Time 1 vs Time 2



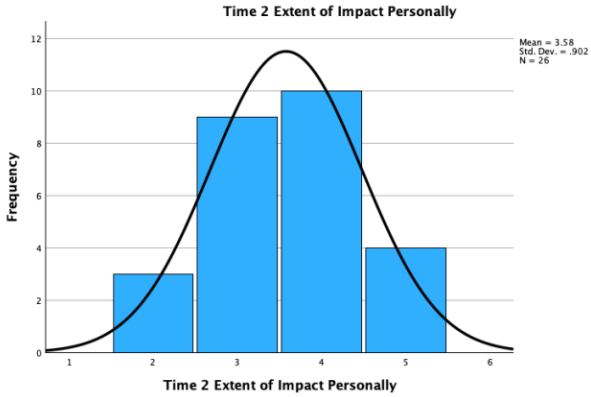


Figure J4

Adequacy of Protective Equipment Resources at Time 1 vs Time 2

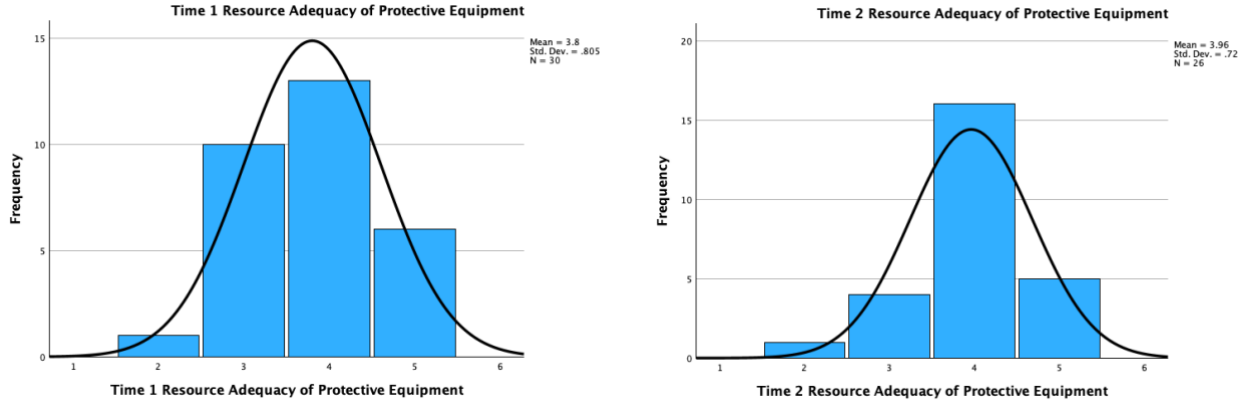


Figure J5

Adequacy of Treatment Equipment Resources at Time 1 vs Time 2

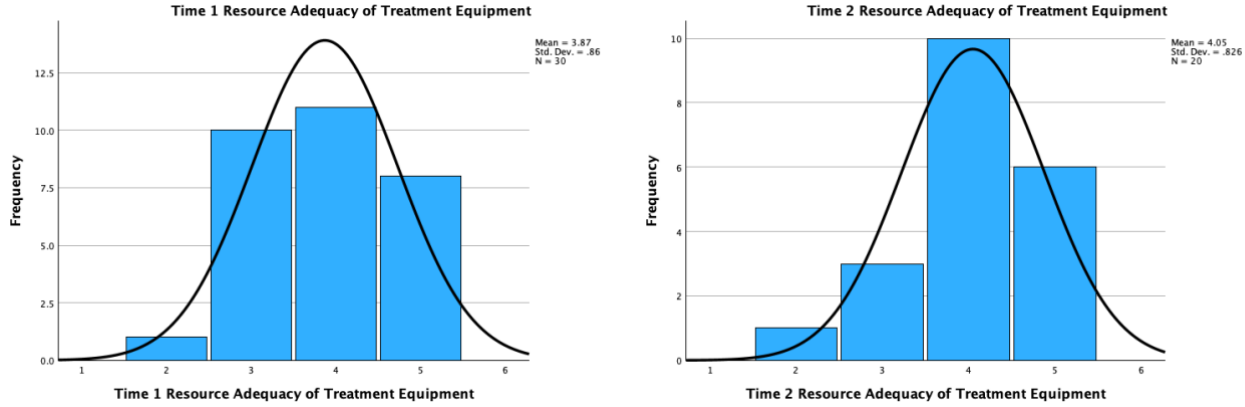


Figure J6

Felt Availability of Support Staff at Time 1 vs Time 2

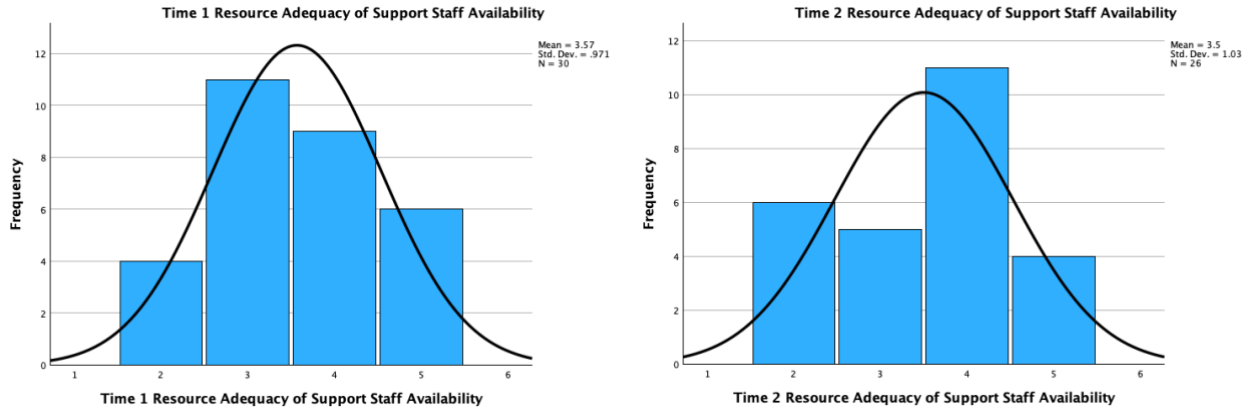


Figure J7

Felt Competence of Support Staff at Time 1 vs Time 2

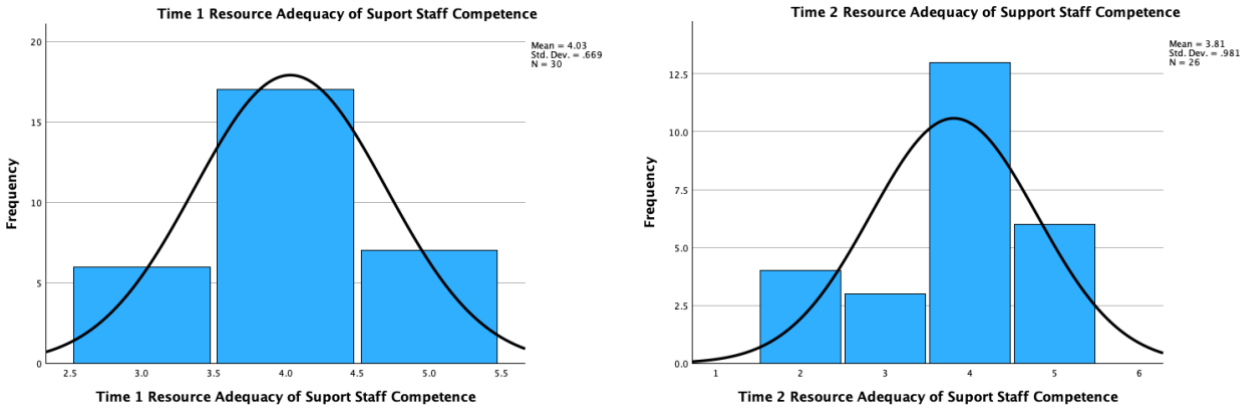


Figure J8

Adequacy of Information Resources from Management at Time 1 vs Time 2

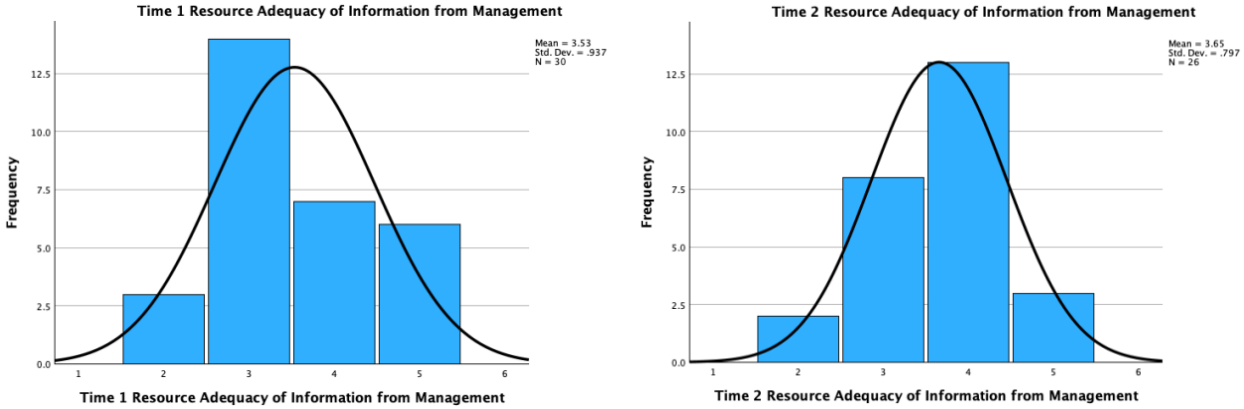


Figure J9

Risk Perception of Virus to Self at Time 1 vs Time 2

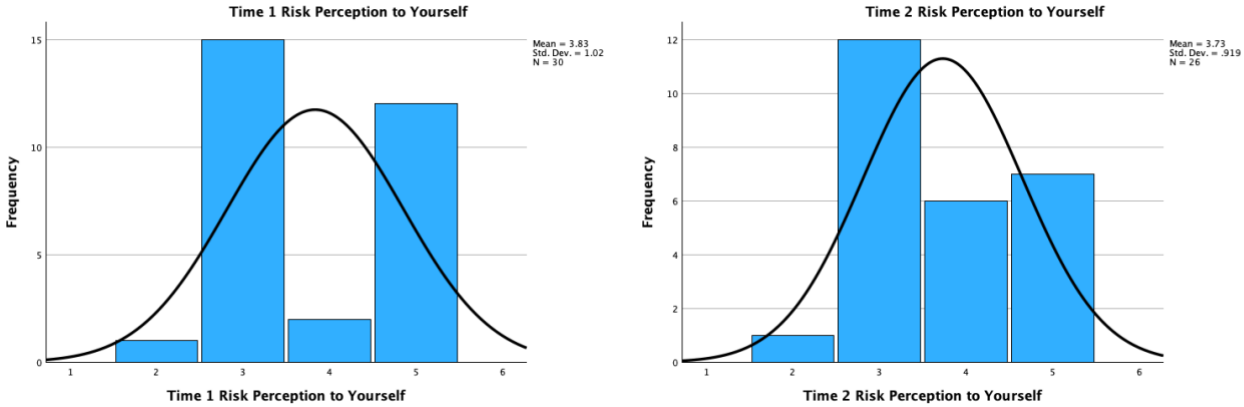


Figure J10

Risk Perception of Virus to Family at Time 1 vs Time 2

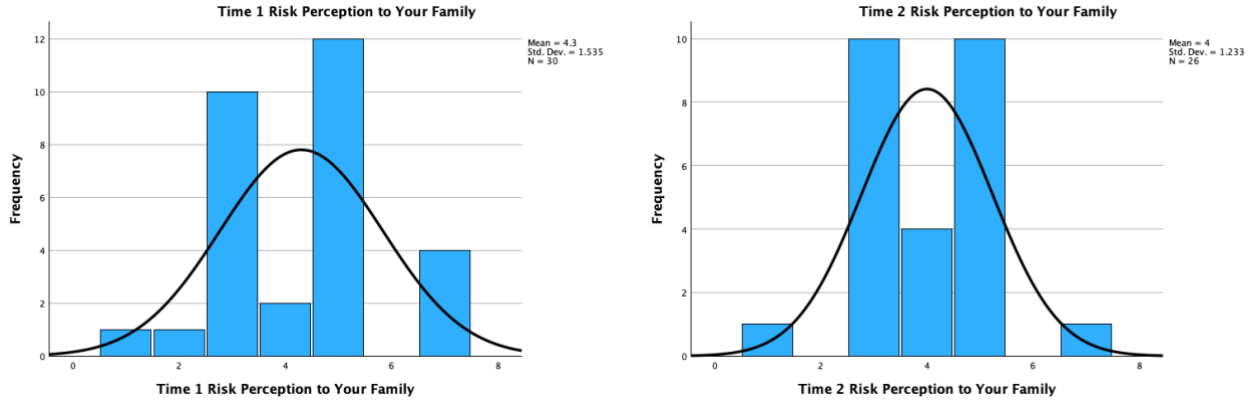


Figure J11

Risk Perception of Virus to Patients at Time 1 vs Time 2

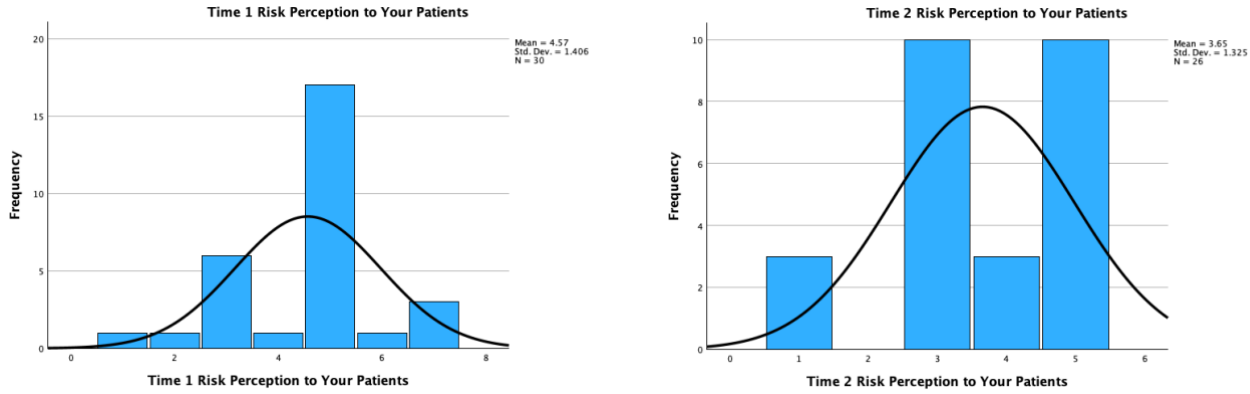


Figure J12

Risk Perception of Virus to Colleagues at Time 1 vs Time 2

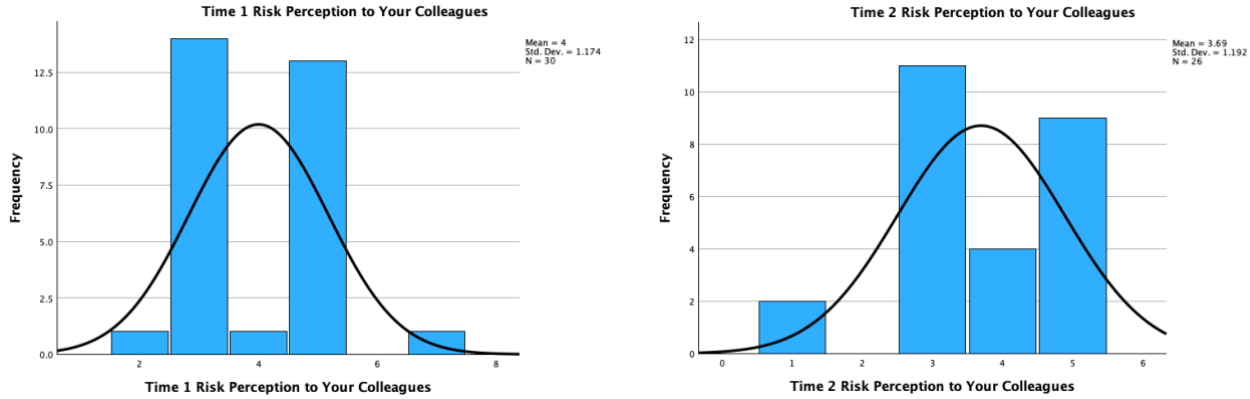


Figure J13

Felt Frequency of Contact with Virus at Time 1 vs Time 2

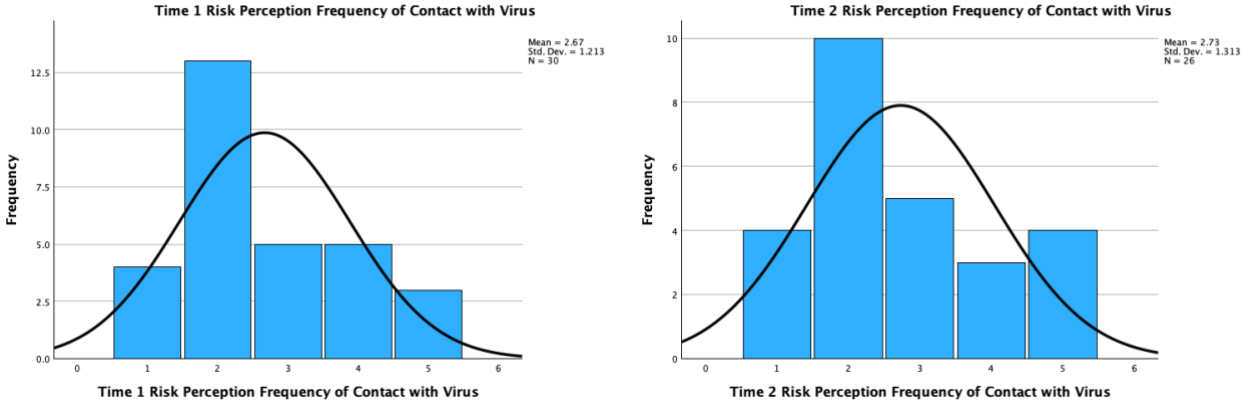


Figure J14

Perception of Professional Control Over Virus at Time 1 vs Time 2

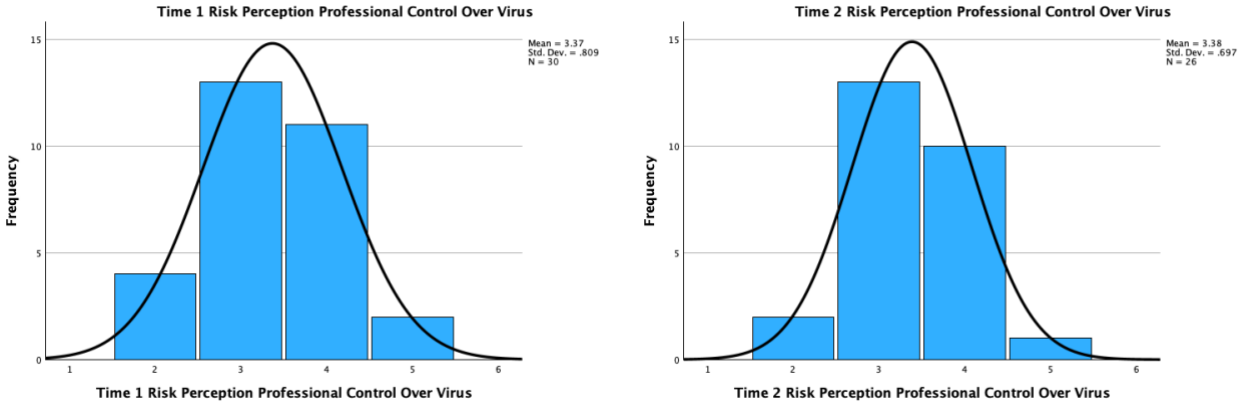


Figure J15

Perception of Dangerous Risk from Virus Personally at Time 1 vs Time 2

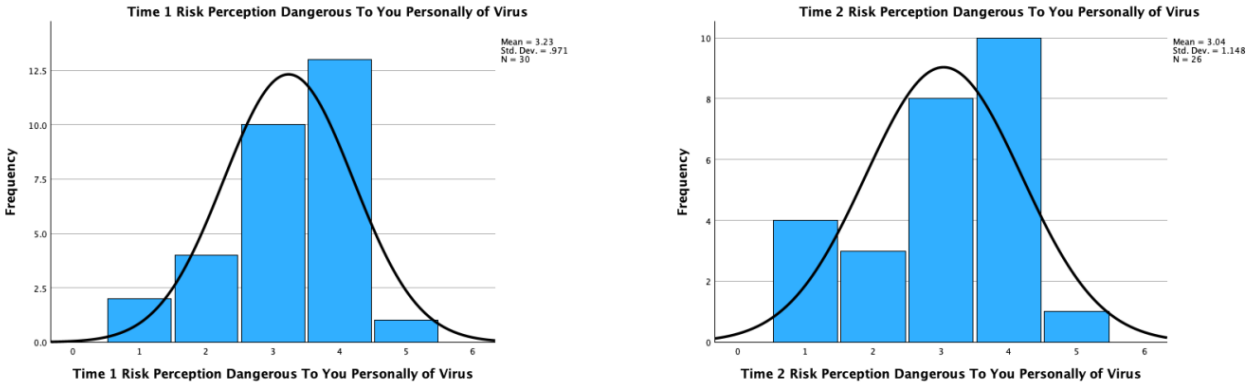


Figure J16

Manageability of Working Hours at Time 1 vs Time 2

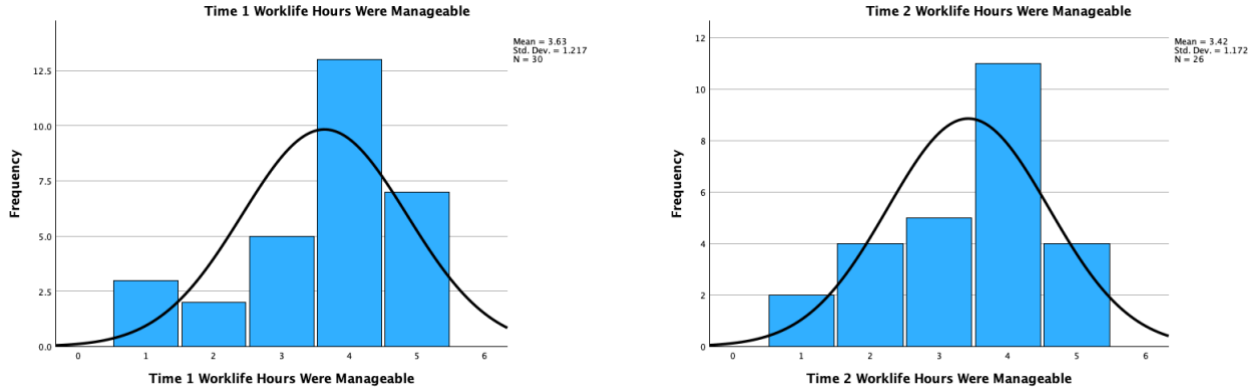


Figure J17

Felt Sense of Working Within Area of Competency at Time 1 vs Time 2

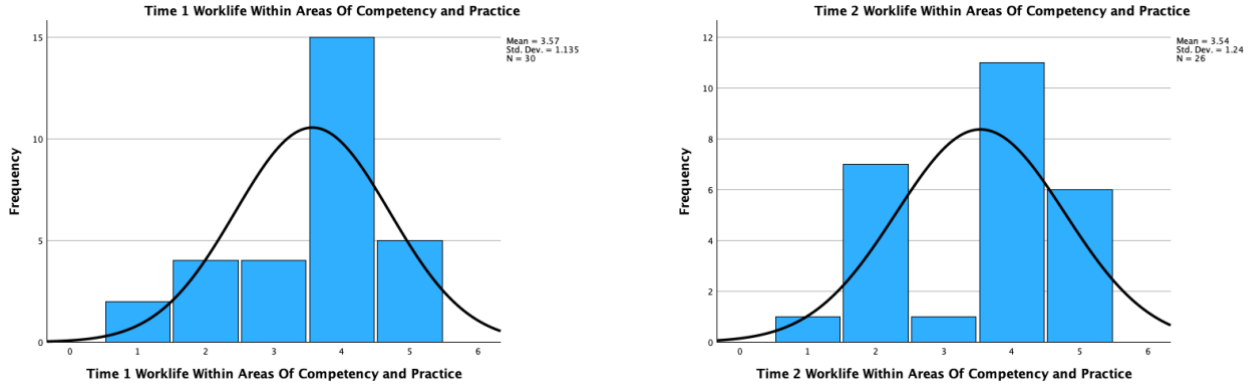


Figure J18

Felt Sense that Decisions were Supported by Management at Time 1 vs Time 2

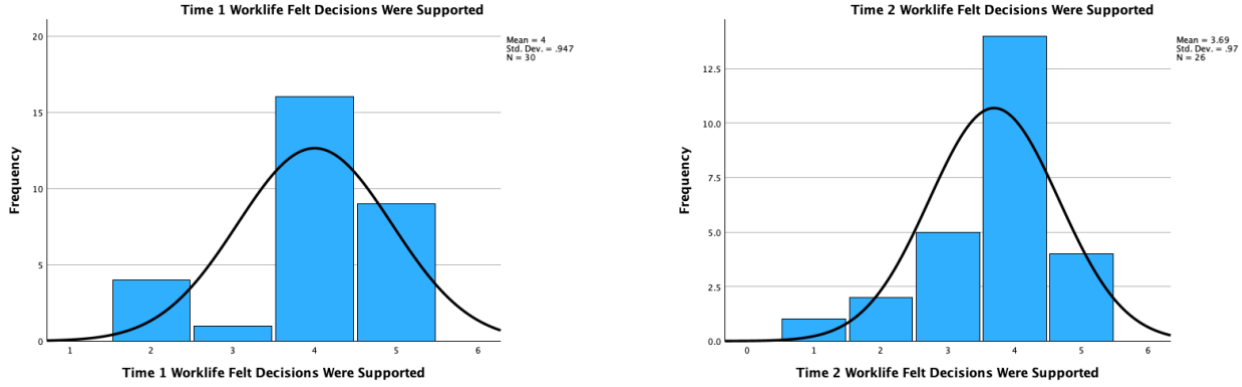


Figure J19

Felt Sense that Efforts were Appreciated at Work at Time 1 vs Time 2

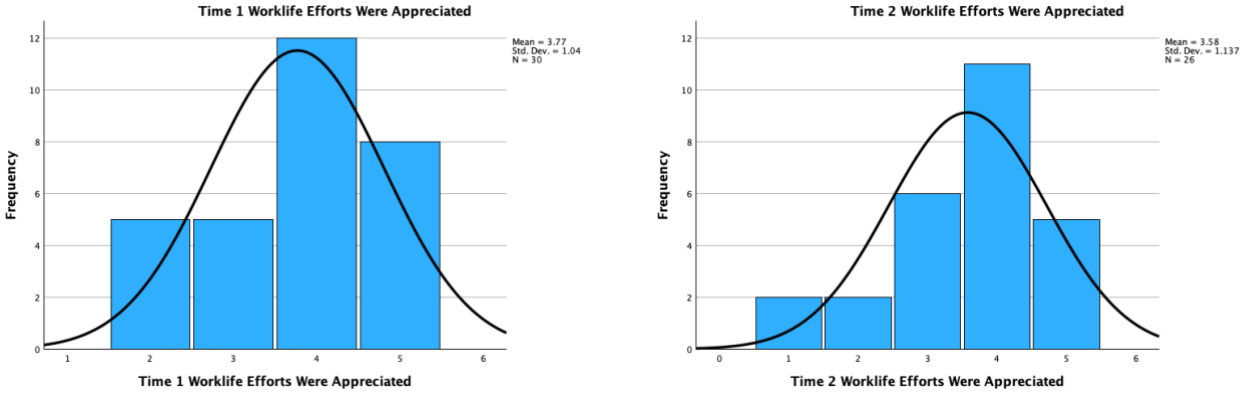


Figure J20

Felt Sense of Social Support in Work Team at Time 1 vs Time 2

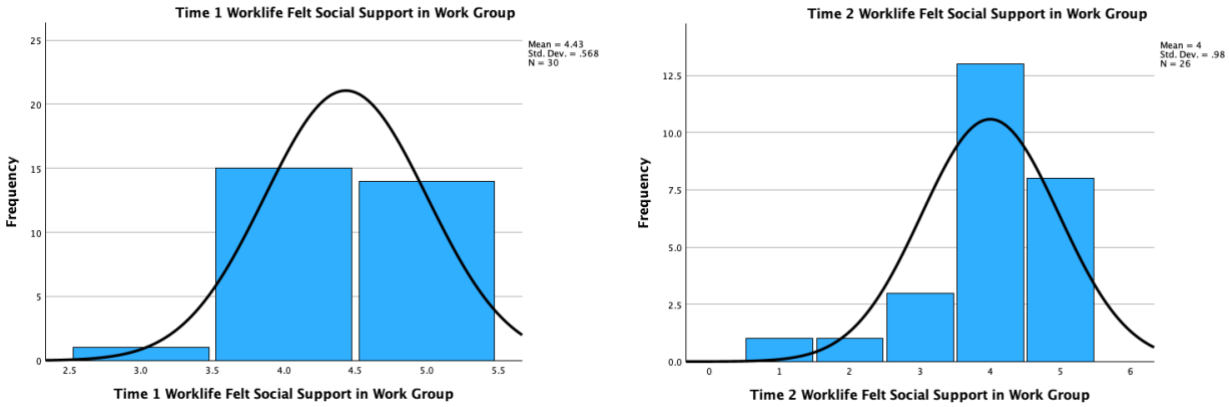


Figure J21

Felt Sense that Work was Assigned Fairly at Time 1 vs Time 2

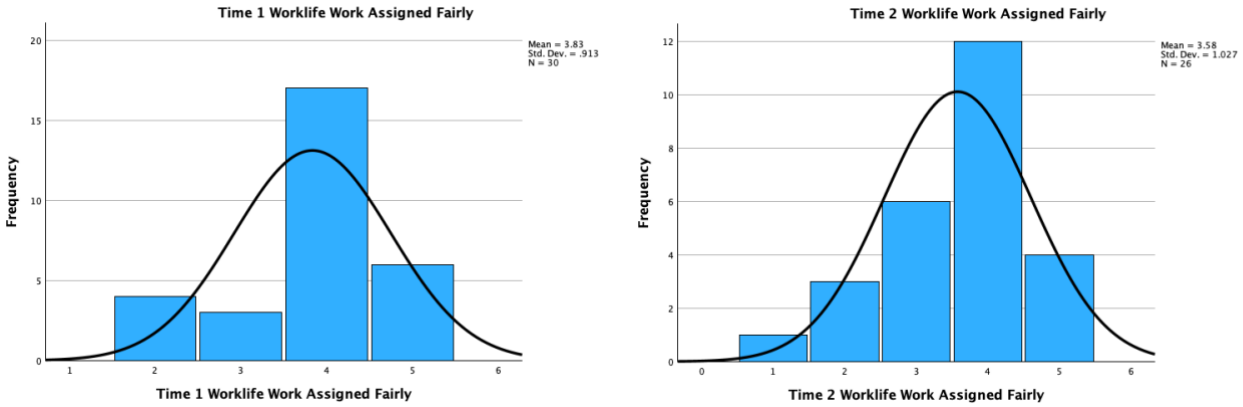


Figure J22

Perception of Organisational Values be Consistent with Own Values at Time 1 vs Time 2

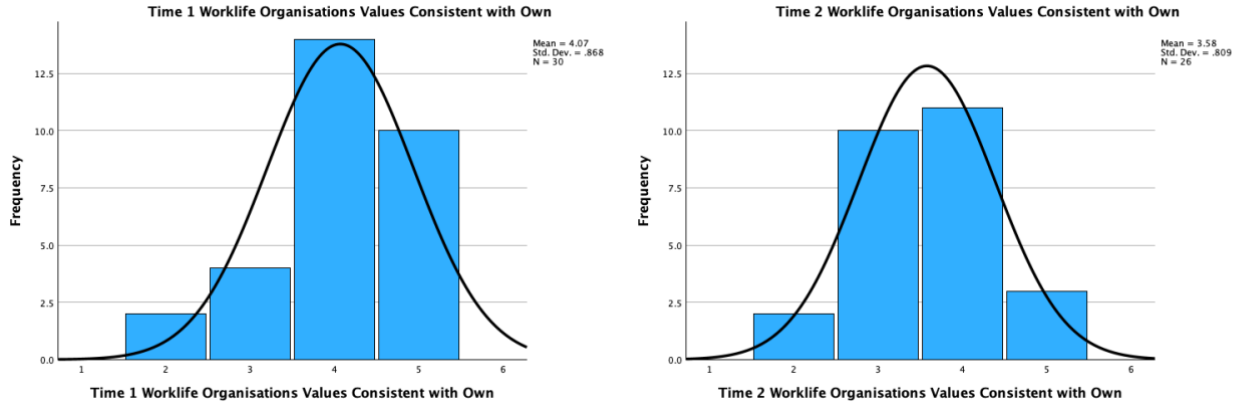


Figure J23

Perception that Leadership Expressed Hope for Success at Time 1 vs Time 2

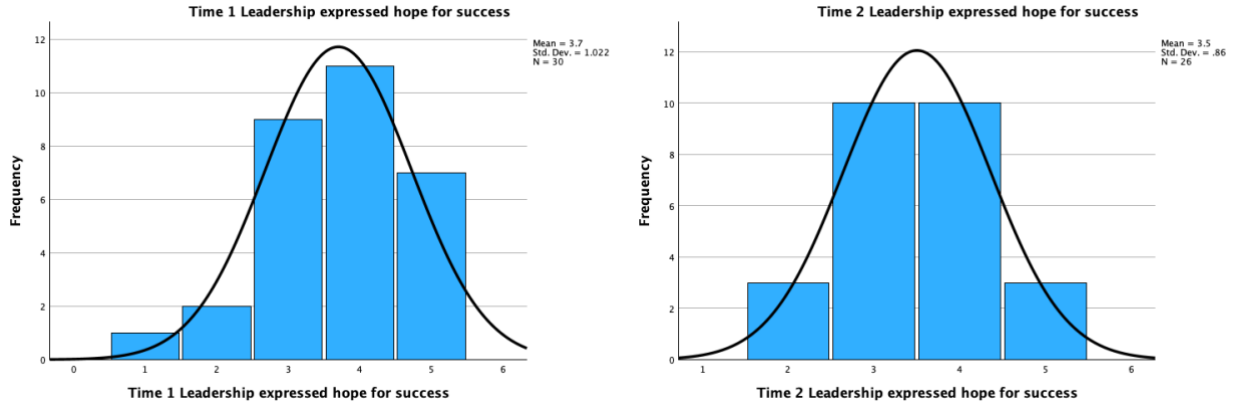


Figure J24

Perception that Leadership Identified Actions to Improve Capabilities at Time 1 vs Time 2

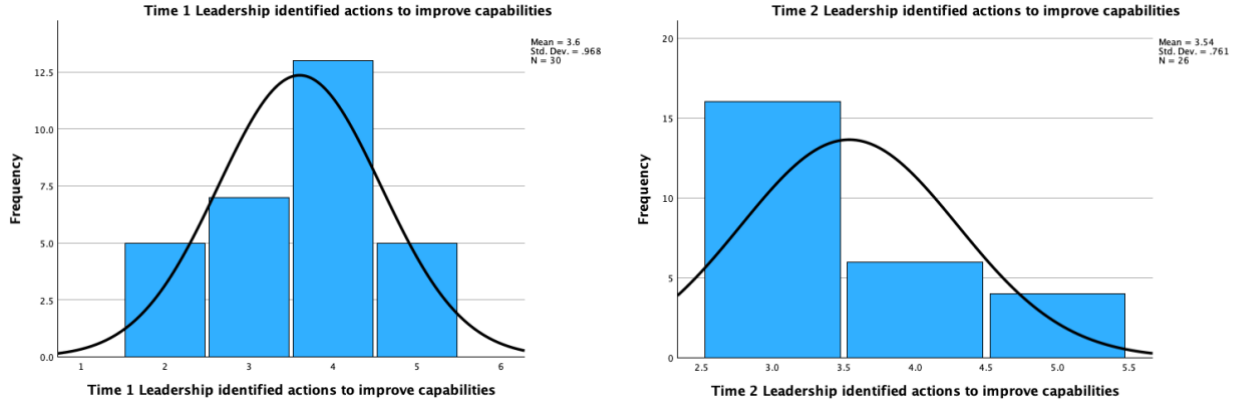


Figure J25

Perception that Leadership Expressed Confidence in Capacity to Take Effective Action at Time 1 vs Time 2

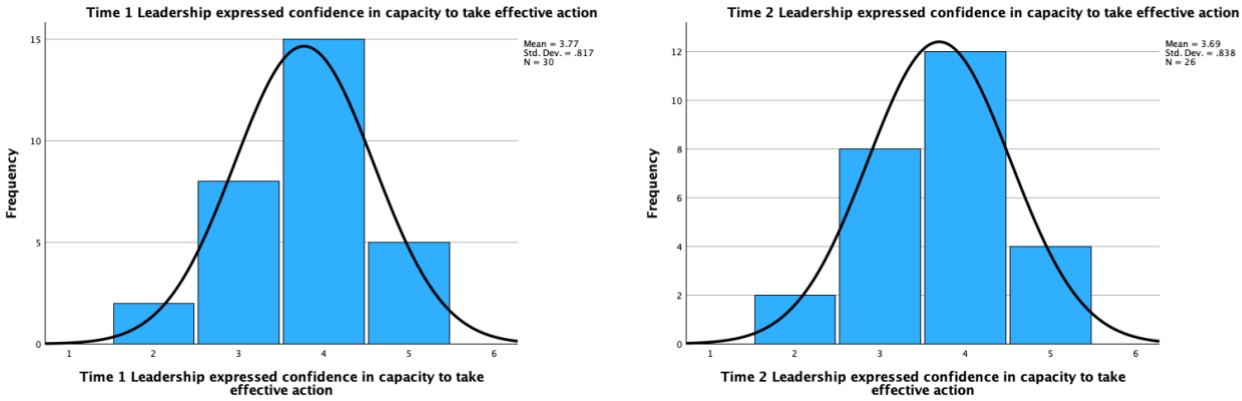


Figure J26

Perception that Leadership Helped Staff Feel Safe at Time 1 vs Time 2

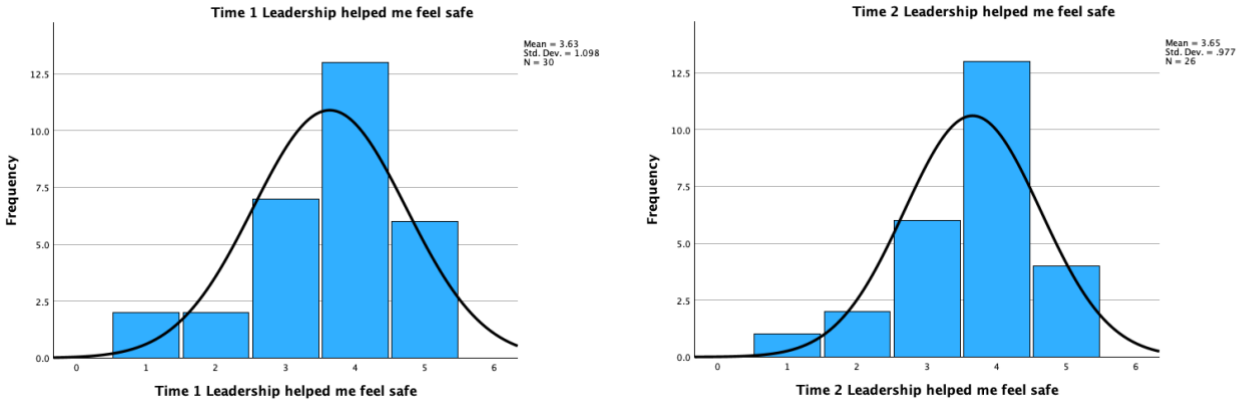


Figure J27

Perception that Leadership Gave an Honest Assessment of Situation at Time 1 vs Time 2

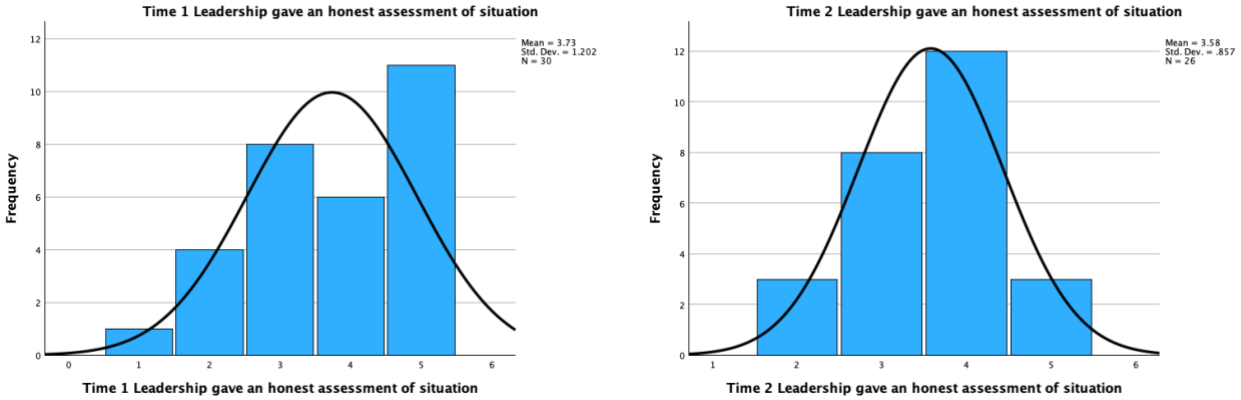


Figure J28

Perception that Supervisor Expressed Hope for Success at Time 1 vs Time 2

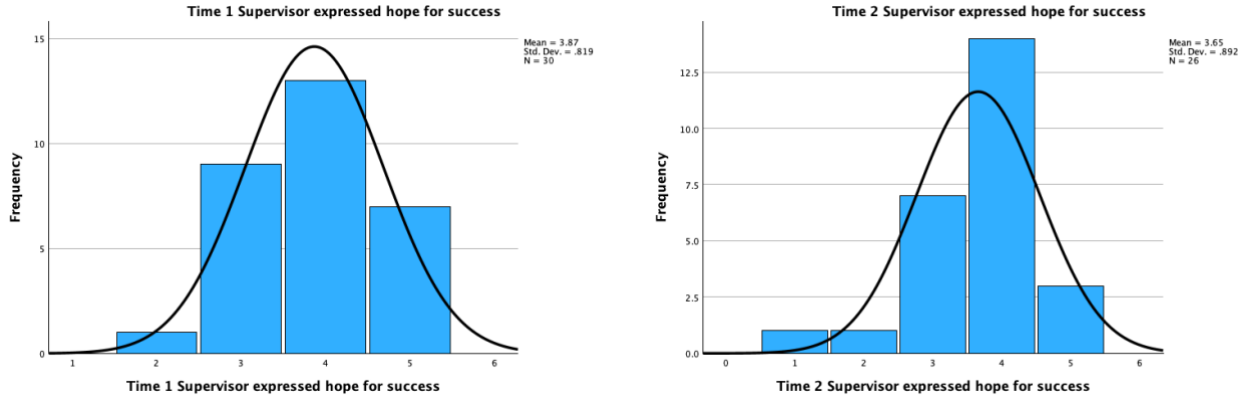


Figure J29

Perception that Supervisor Identified Actions to Improve Capabilities at Time 1 vs Time 2

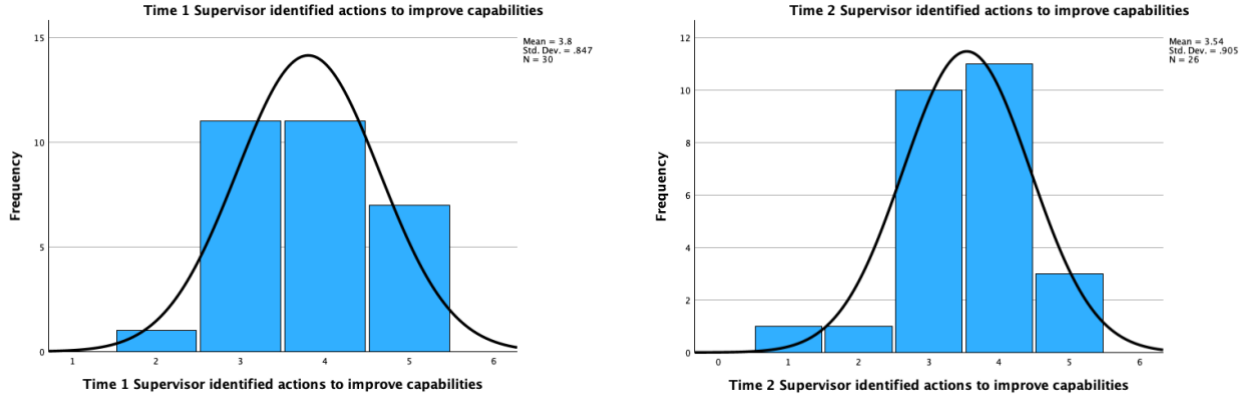


Figure J30

Perception that Supervisor Expressed Confidence in Capacity to Take Effective Action at Time 1 vs Time 2

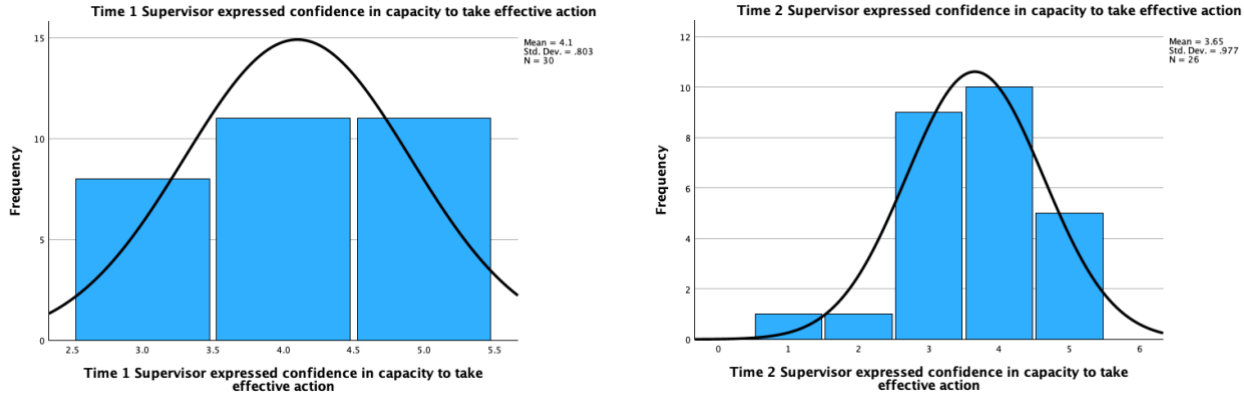


Figure J31

Perception that Supervisor Helped Staff Feel Safe at Time 1 vs Time 2

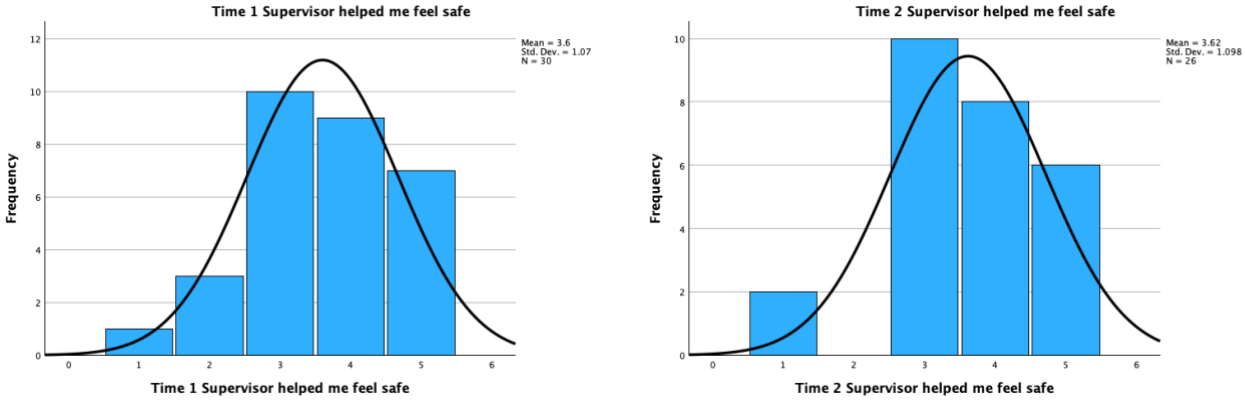
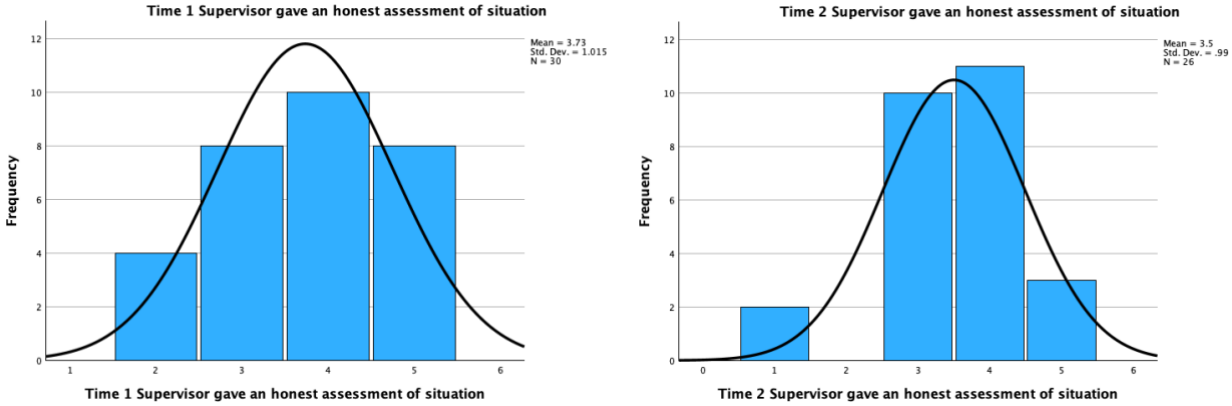


Figure J32

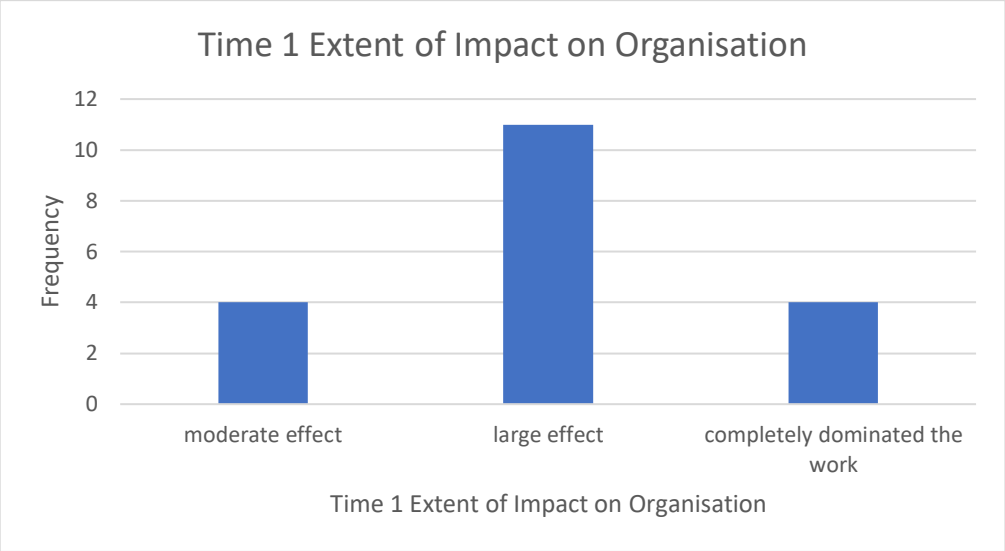
Perception that Supervisor Gave an Honest Assessment of Situation at Time 1 vs Time 2



Appendix K- PEPS Bar Charts for Social Inclusion

Figure K1

Extent of Impact of the Pandemic on the Organisation at Time 1 vs Time 2



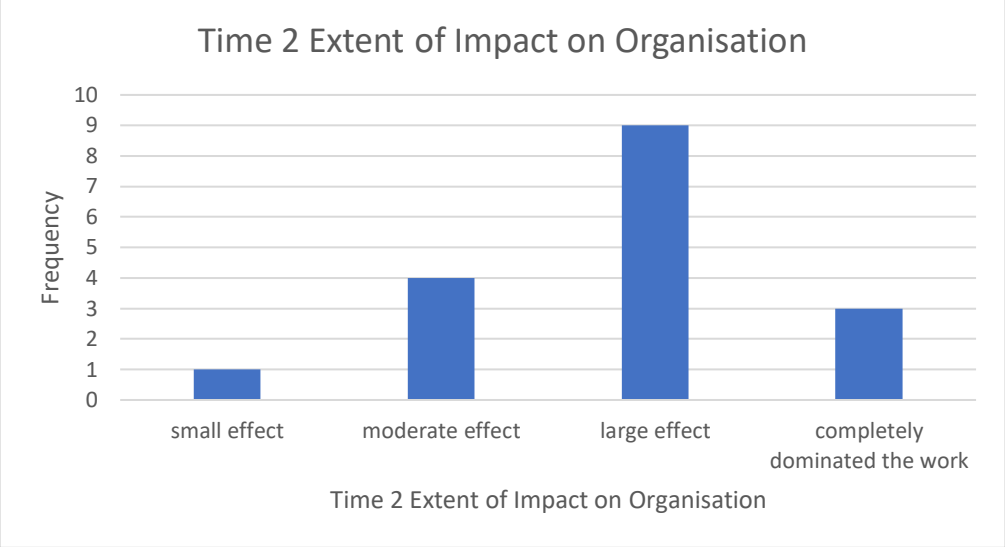
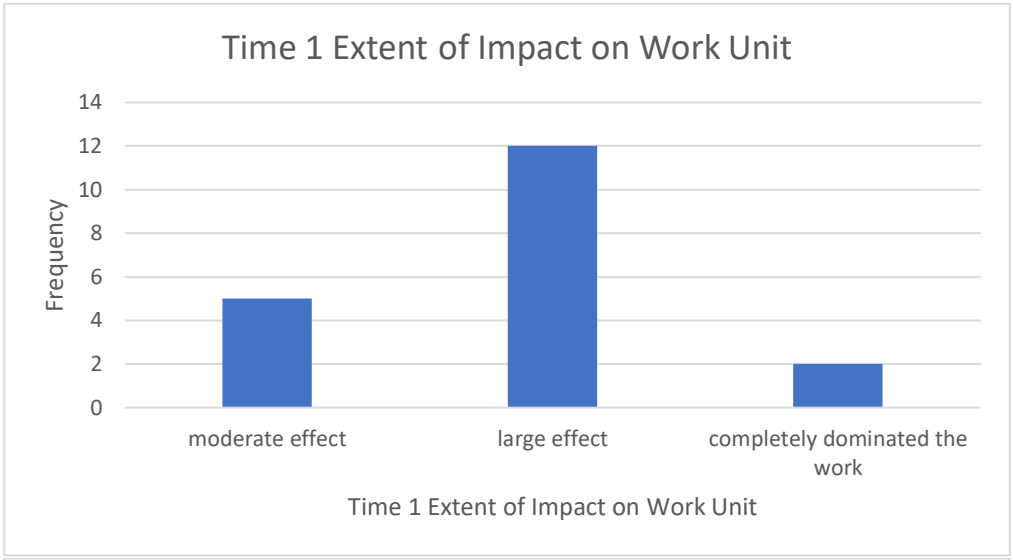


Figure K2

Extent of Impact of the Pandemic on the Work Unit at Time 1 vs Time 2



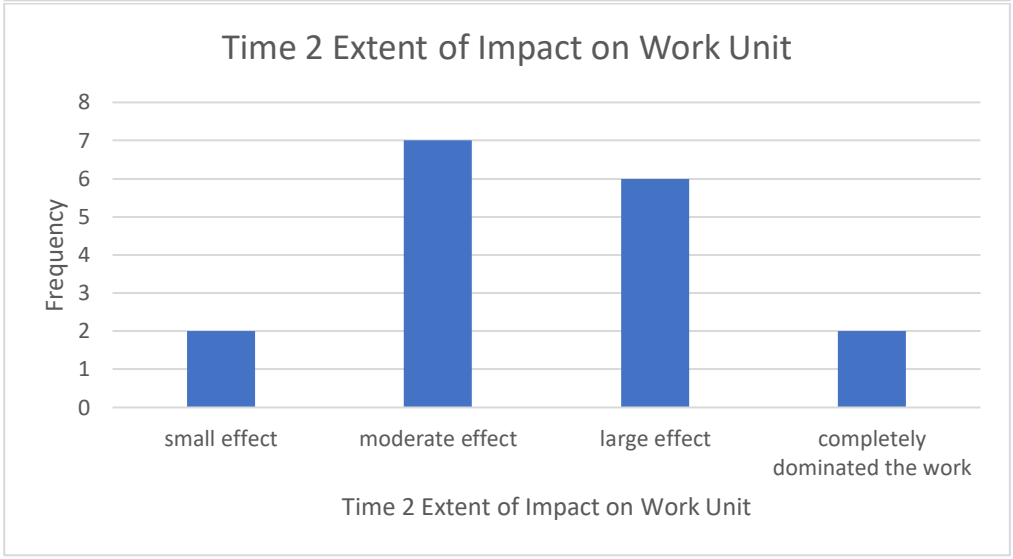


Figure K3

Extent of Impact of the Pandemic on the Participant Personally at Time 1 vs Time 2

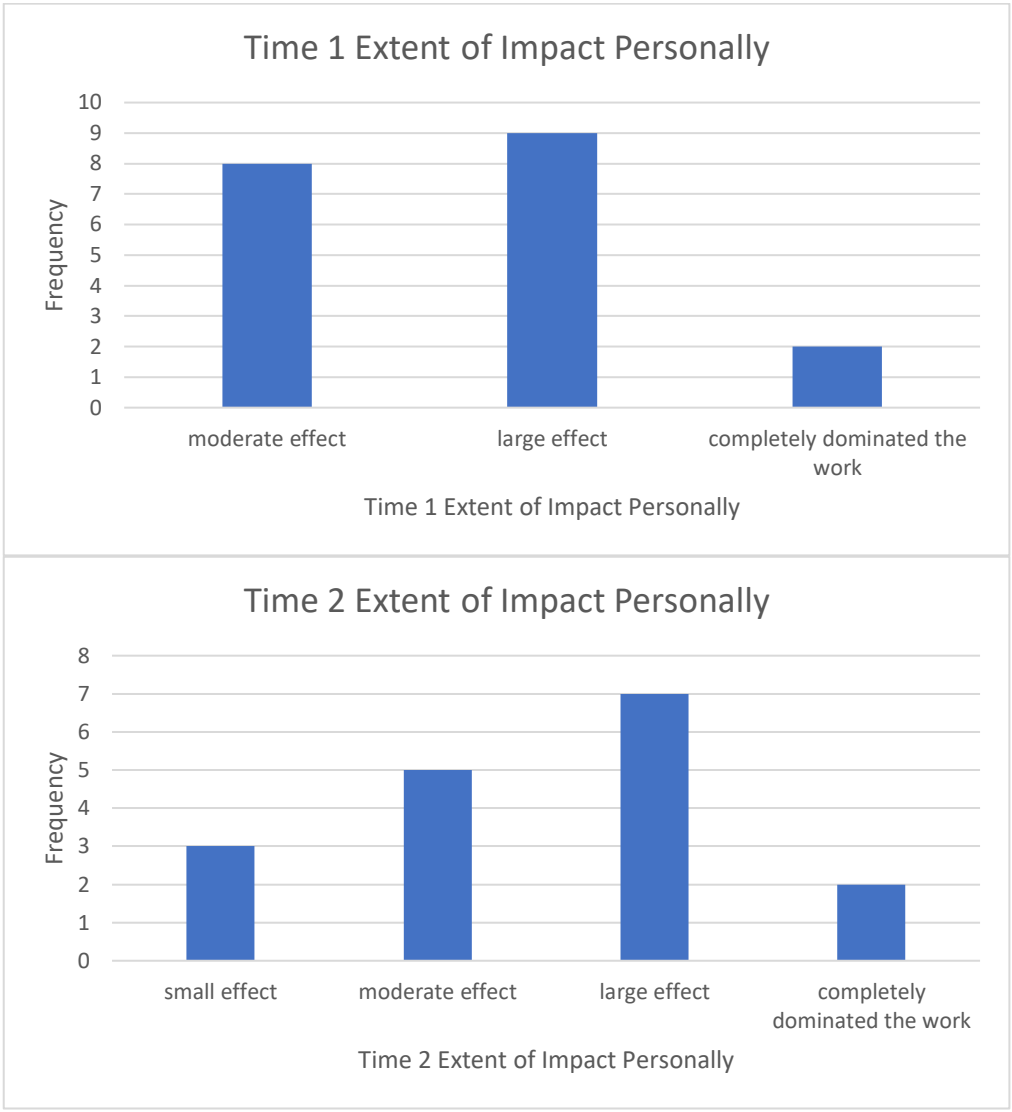
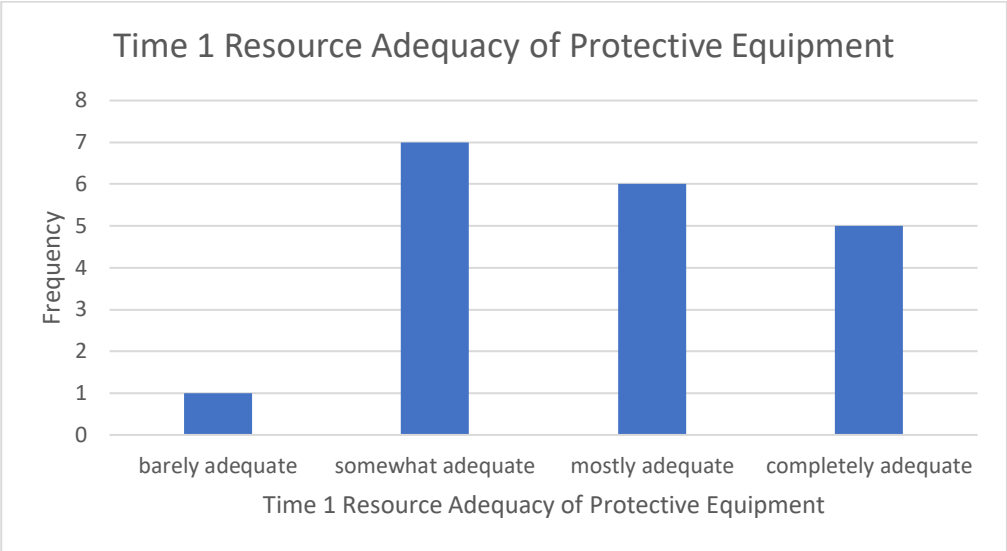


Figure K4

Adequacy of Protective Equipment Resources at Time 1 vs Time 2



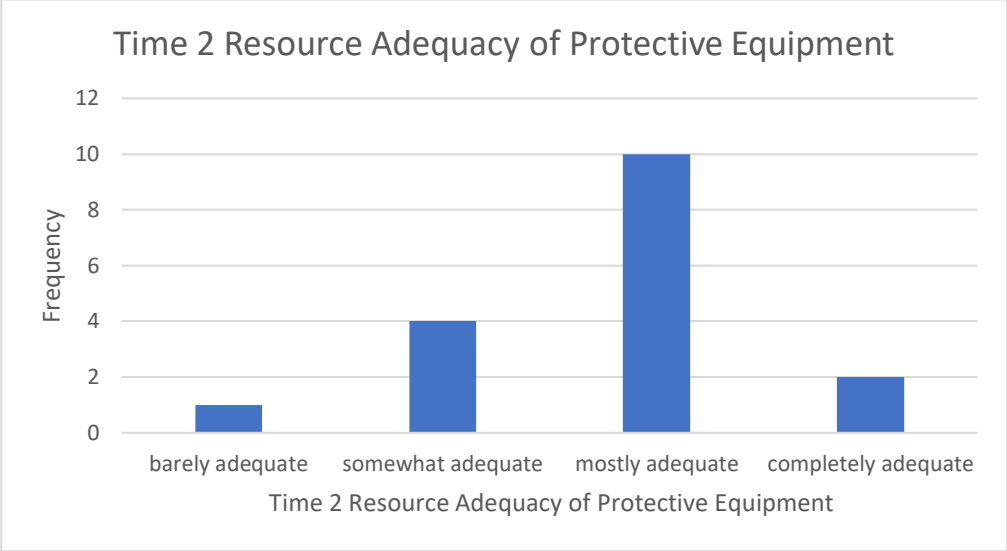
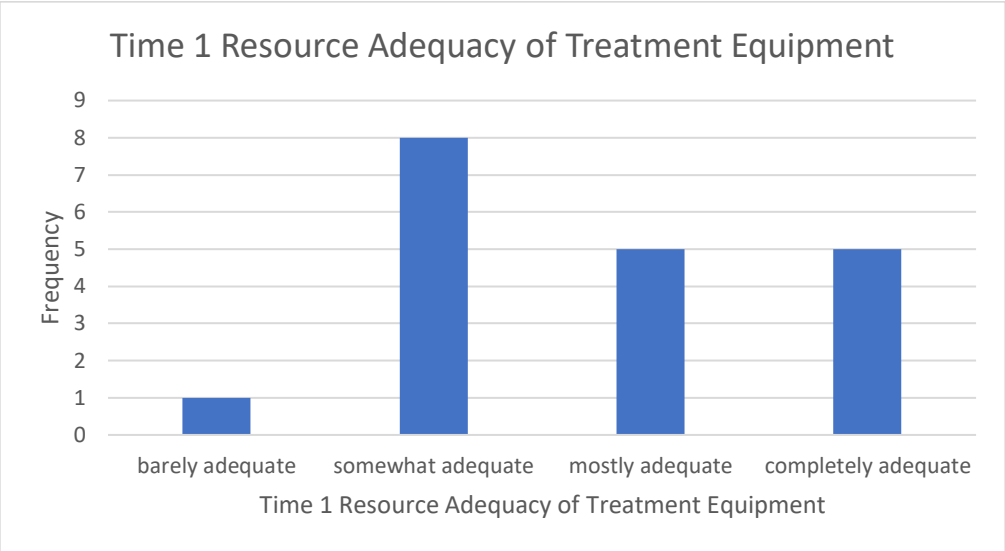


Figure K5

Adequacy of Treatment Equipment Resources at Time 1 vs Time 2



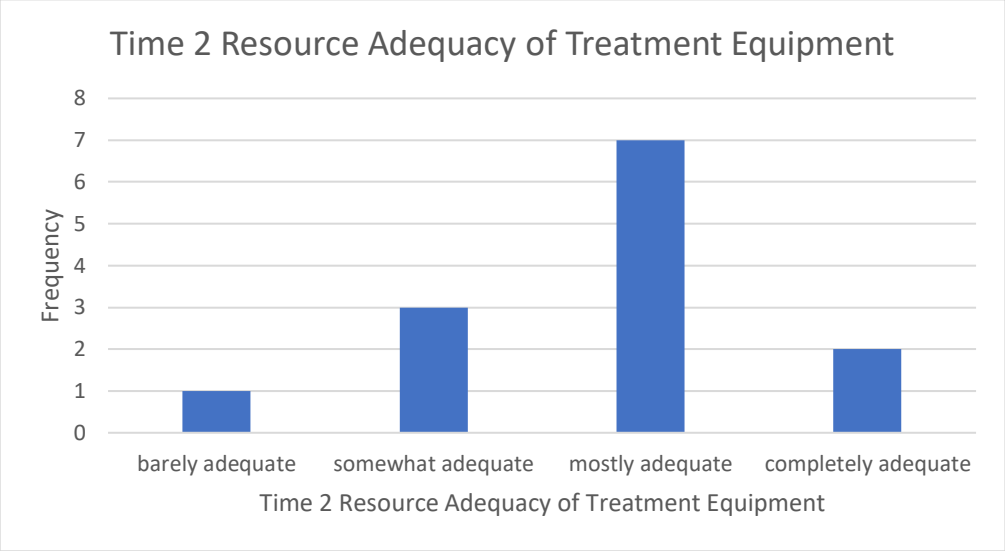
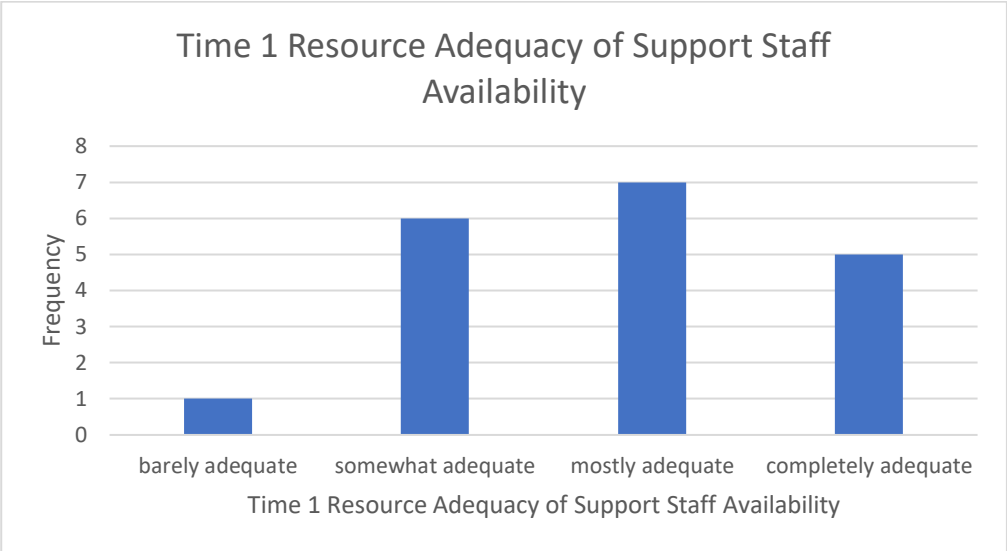


Figure K6

Felt Availability of Support Staff at Time 1 vs Time 2



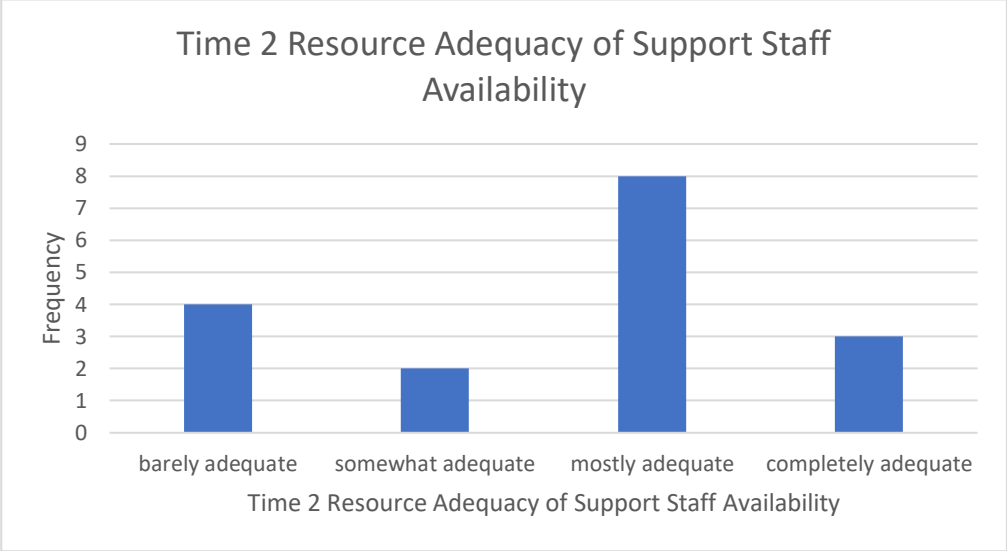
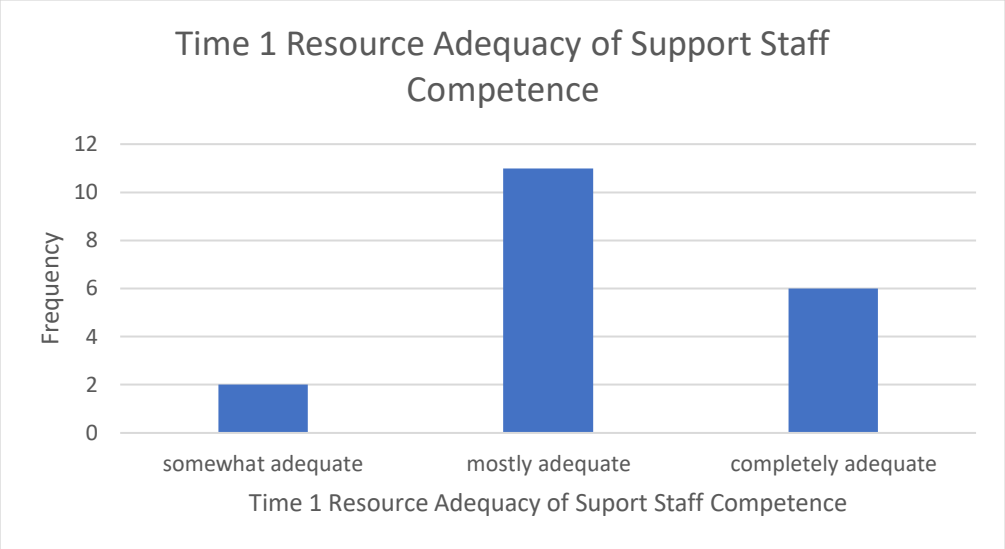


Figure K7

Felt Competence of Support Staff at Time 1 vs Time 2



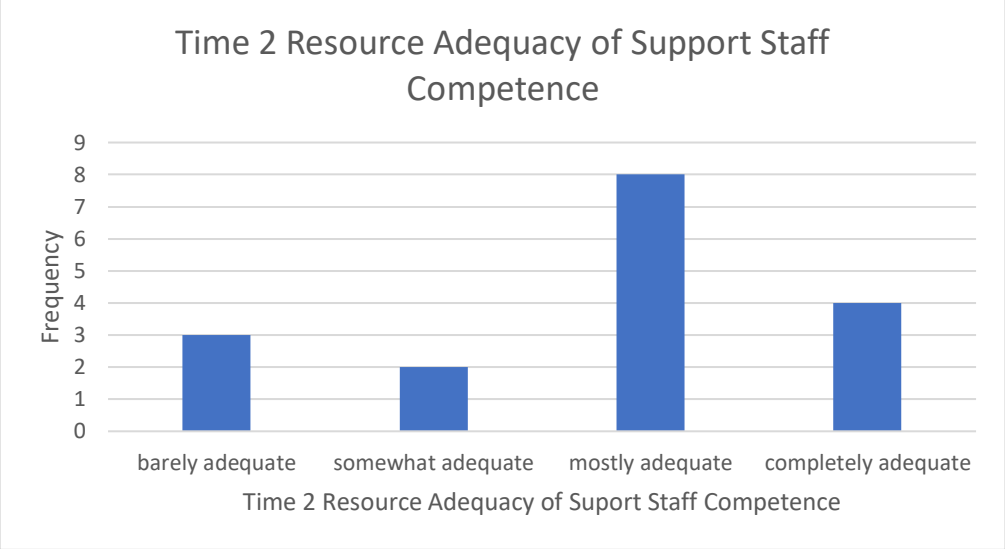
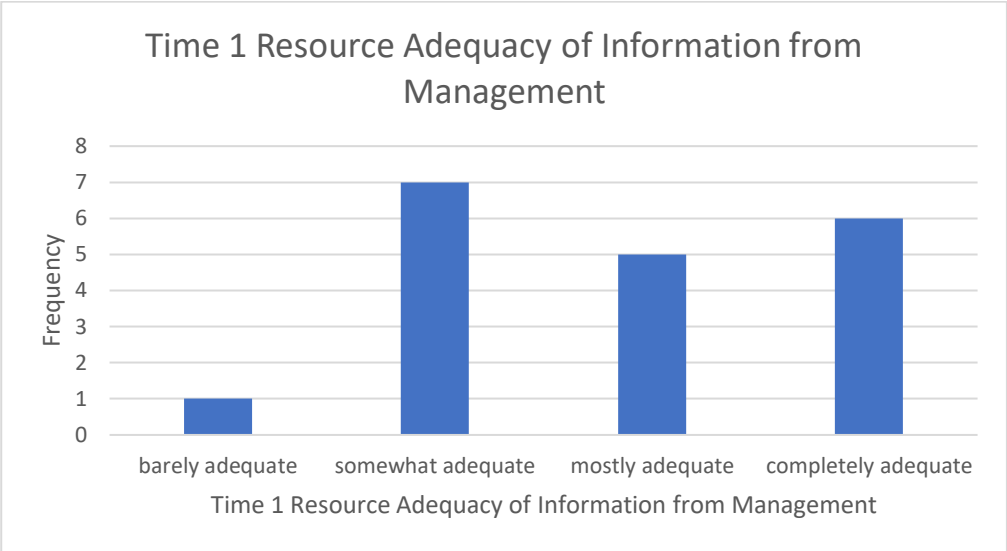


Figure K8

Adequacy of Information Resources from Management at Time 1 vs Time 2



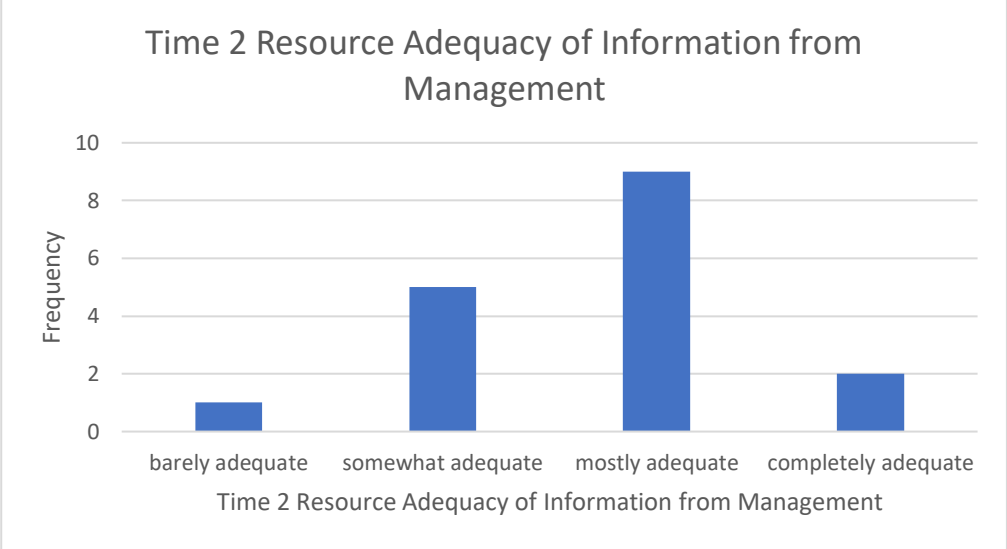
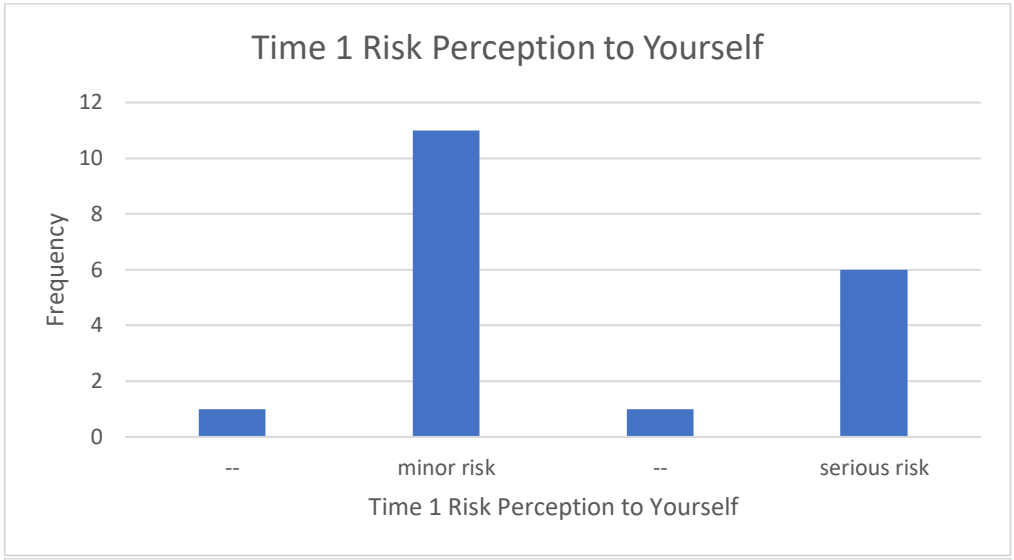


Figure K9

Risk Perception of Virus to Self at Time 1 vs Time 2



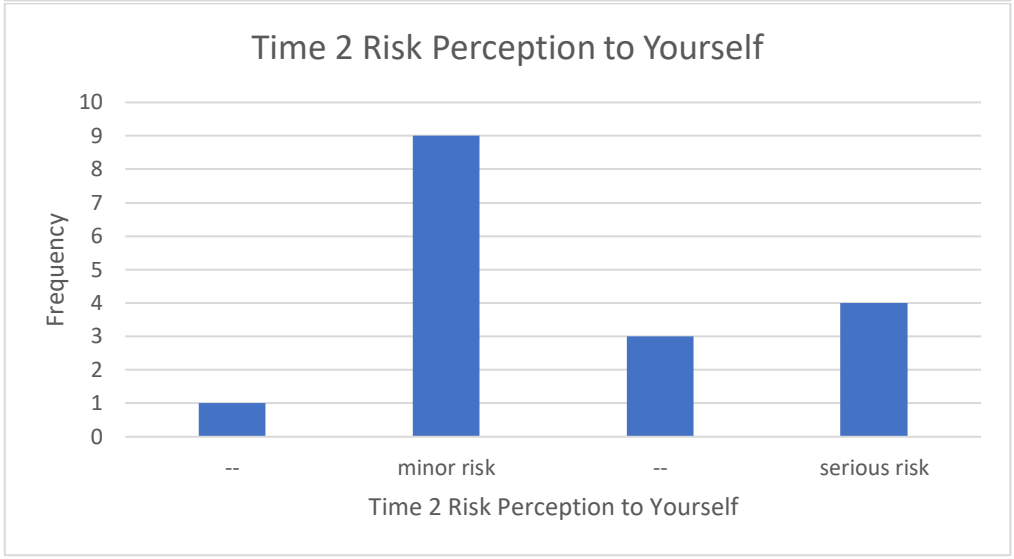


Figure K10

Risk Perception of Virus to Family at Time 1 vs Time 2

Figure K11

Risk Perception of Virus to Patients at Time 1 vs Time 2

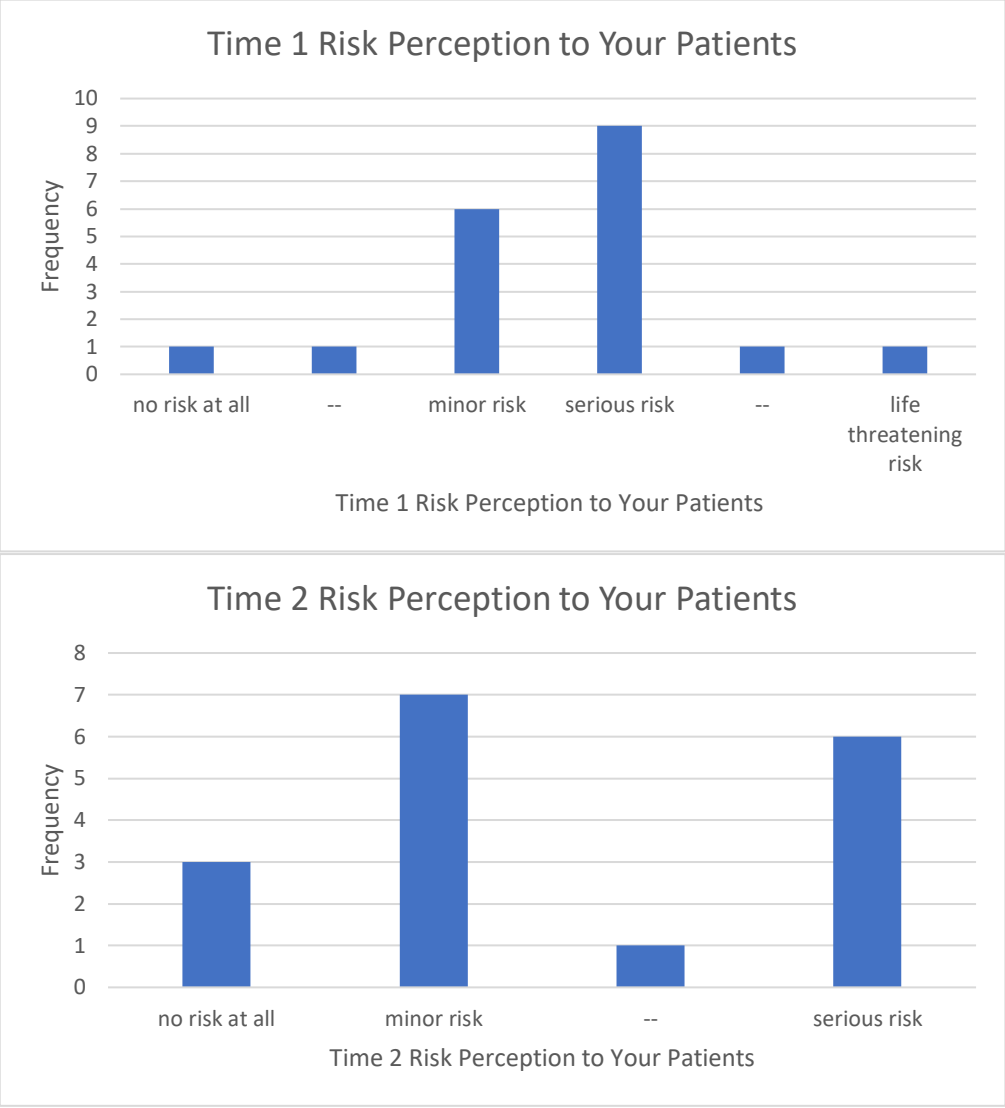
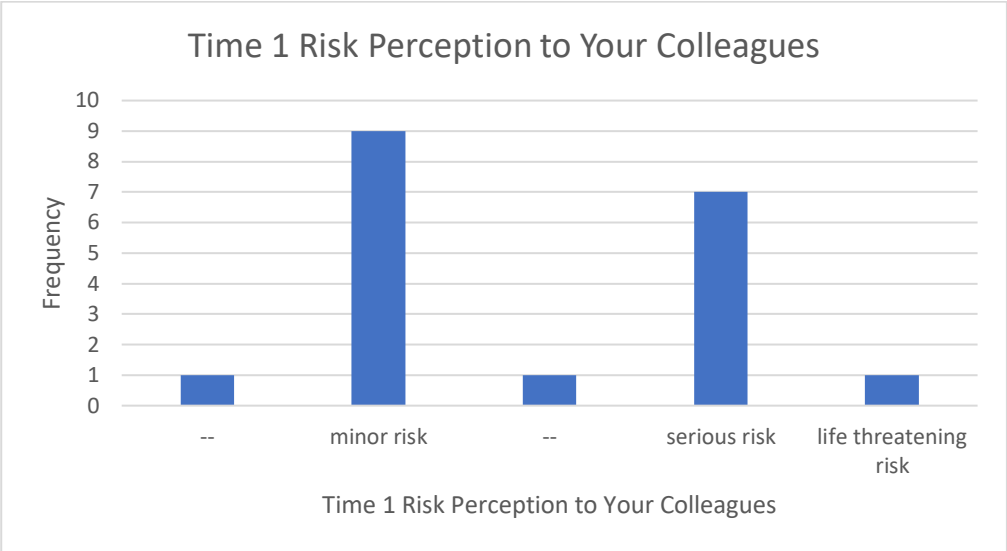


Figure K12

Risk Perception of Virus to Colleagues at Time 1 vs Time 2



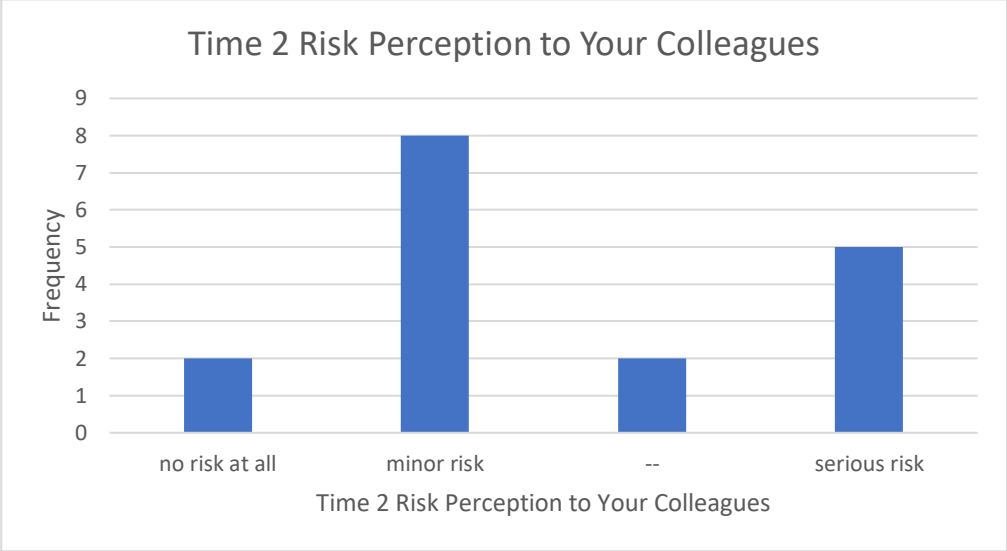


Figure K13

Felt Frequency of Contact with Virus at Time 1 vs Time 2

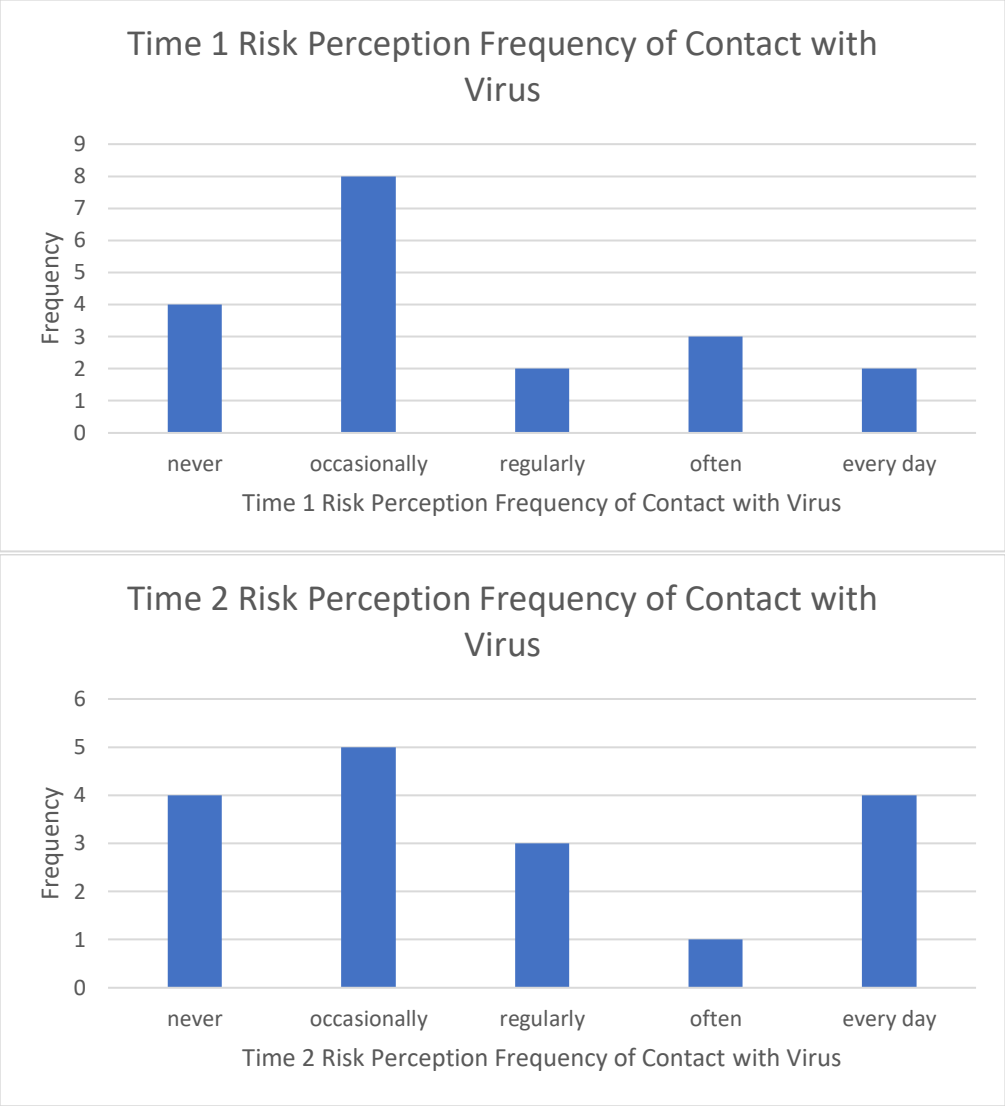
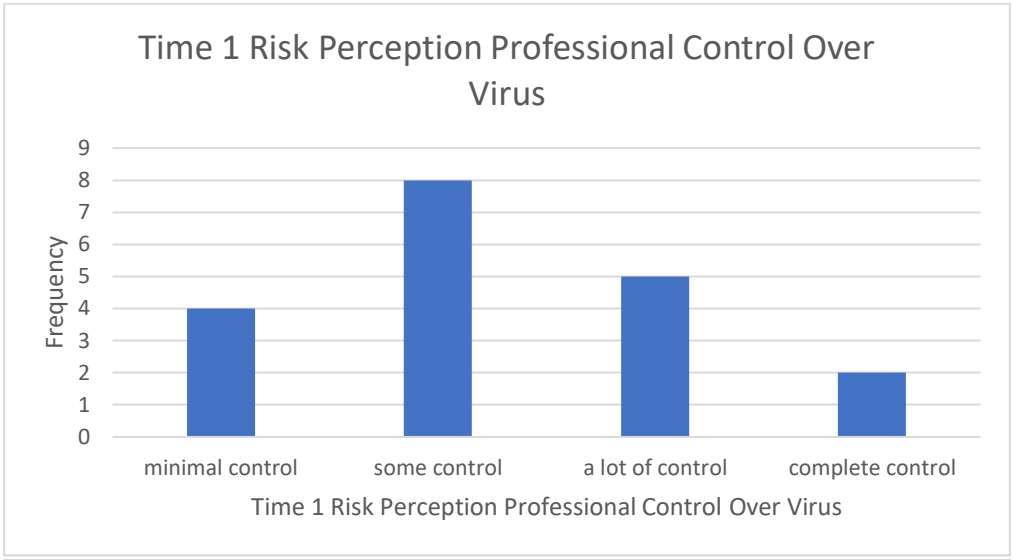


Figure K14

Perception of Professional Control Over Virus at Time 1 vs Time 2



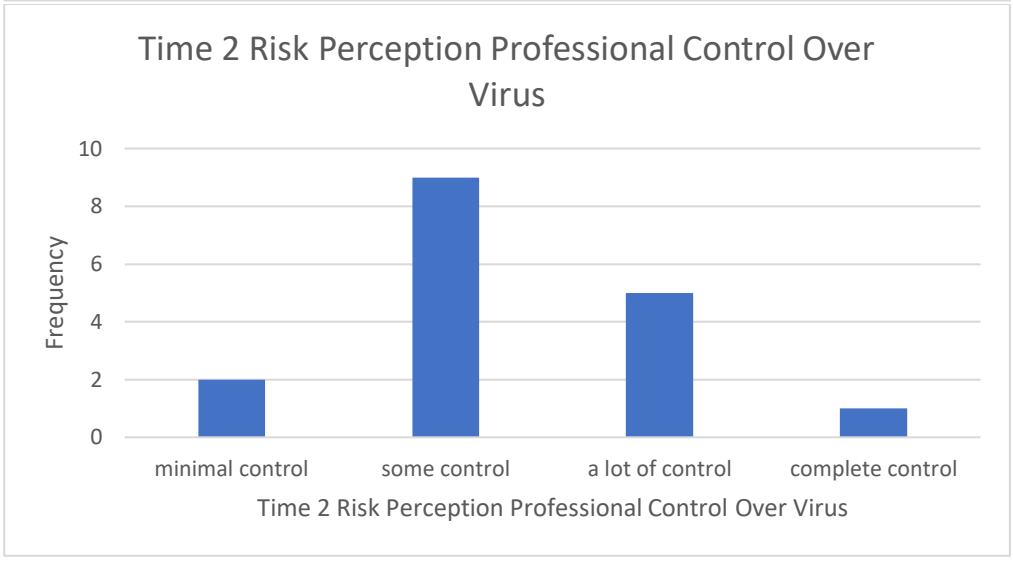
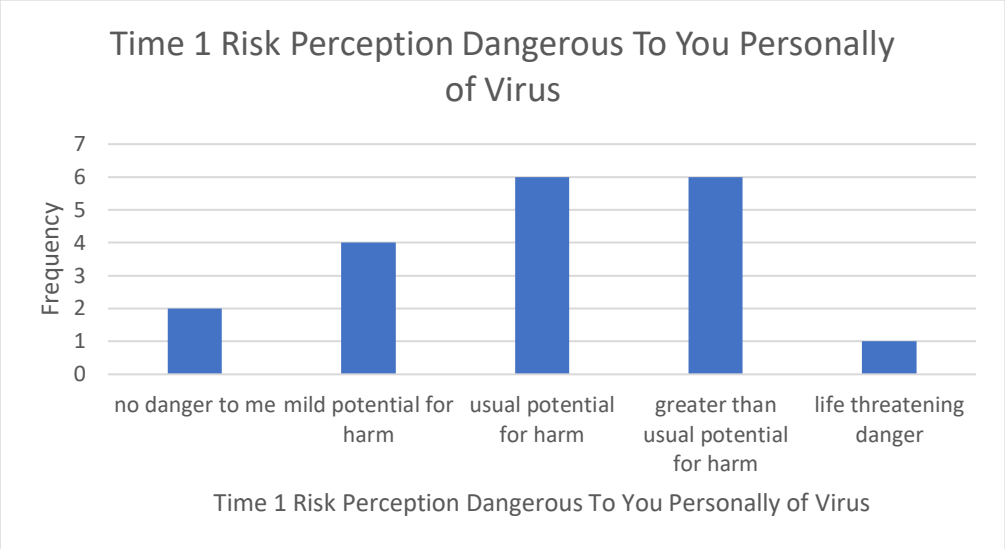


Figure K15

Perception of Dangerous Risk from Virus Personally at Time 1 vs Time 2



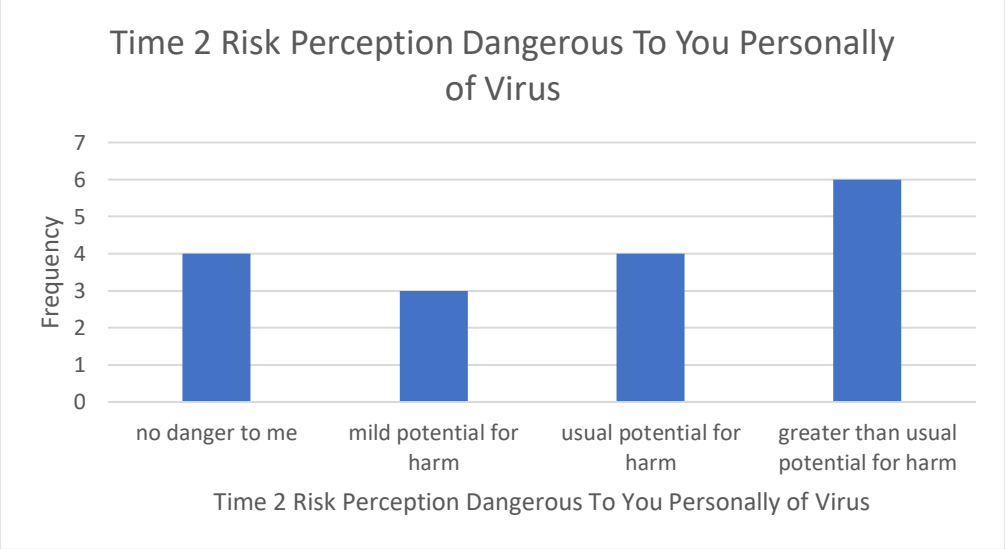
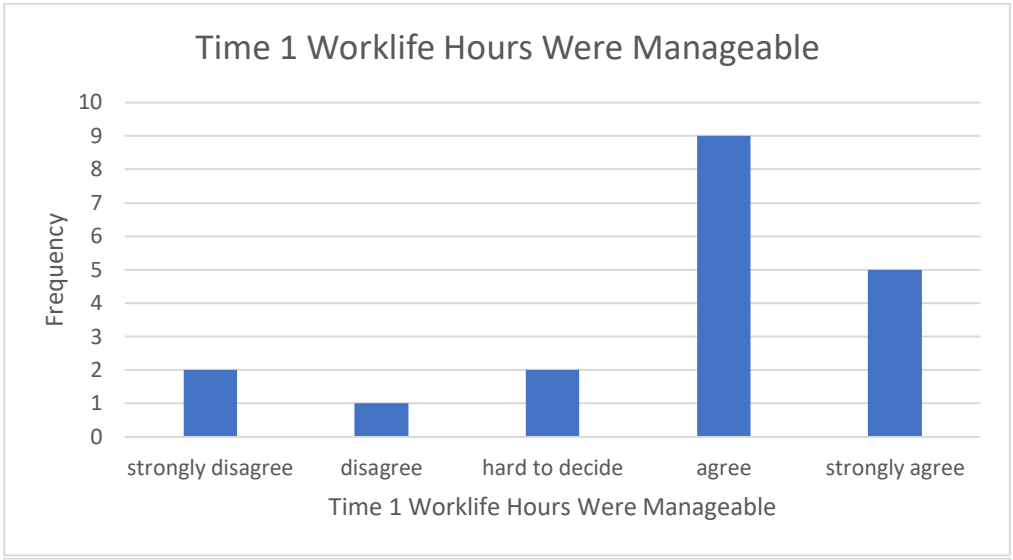


Figure K16

Manageability of Working Hours at Time 1 vs Time 2



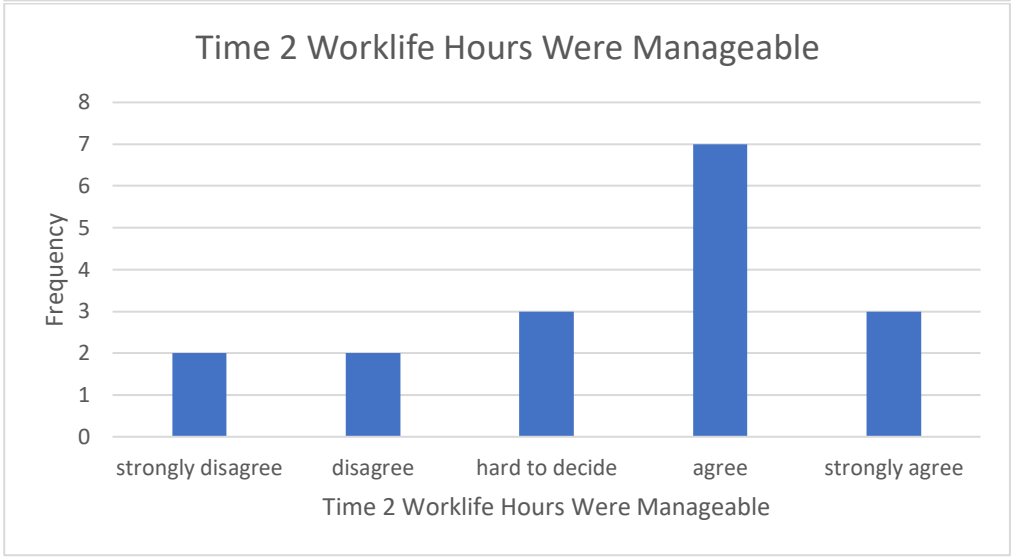


Figure K17

Felt Sense of Working Within Area of Competency at Time 1 vs Time 2

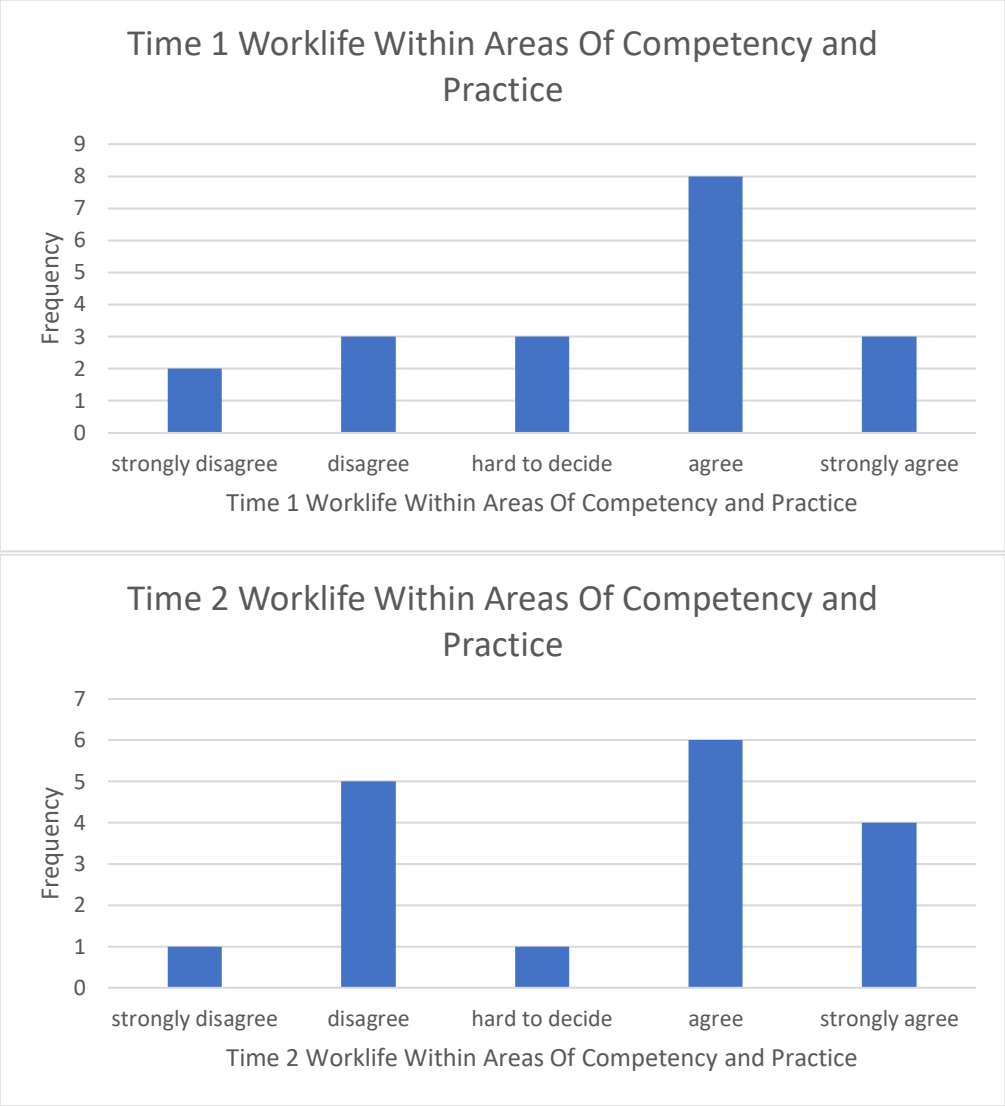
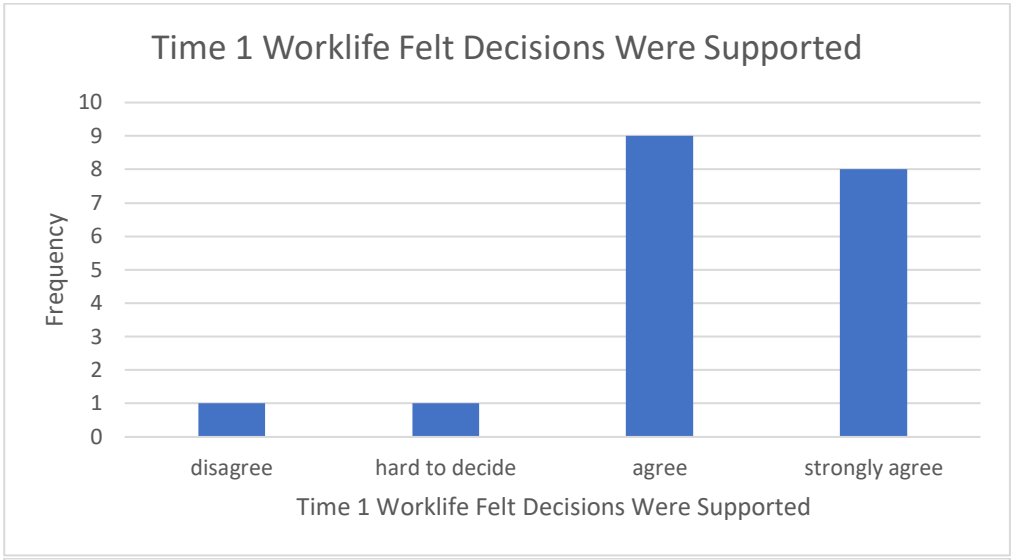


Figure K18

Felt Sense that Decisions were Supported by Management at Time 1 vs Time 2



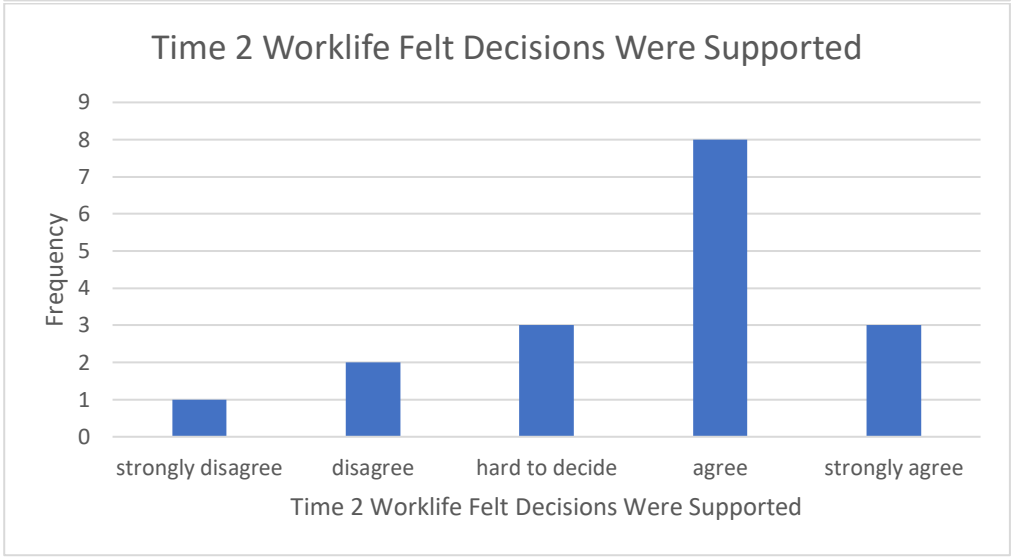


Figure K19

Felt Sense that Efforts were Appreciated at Work at Time 1 vs Time 2

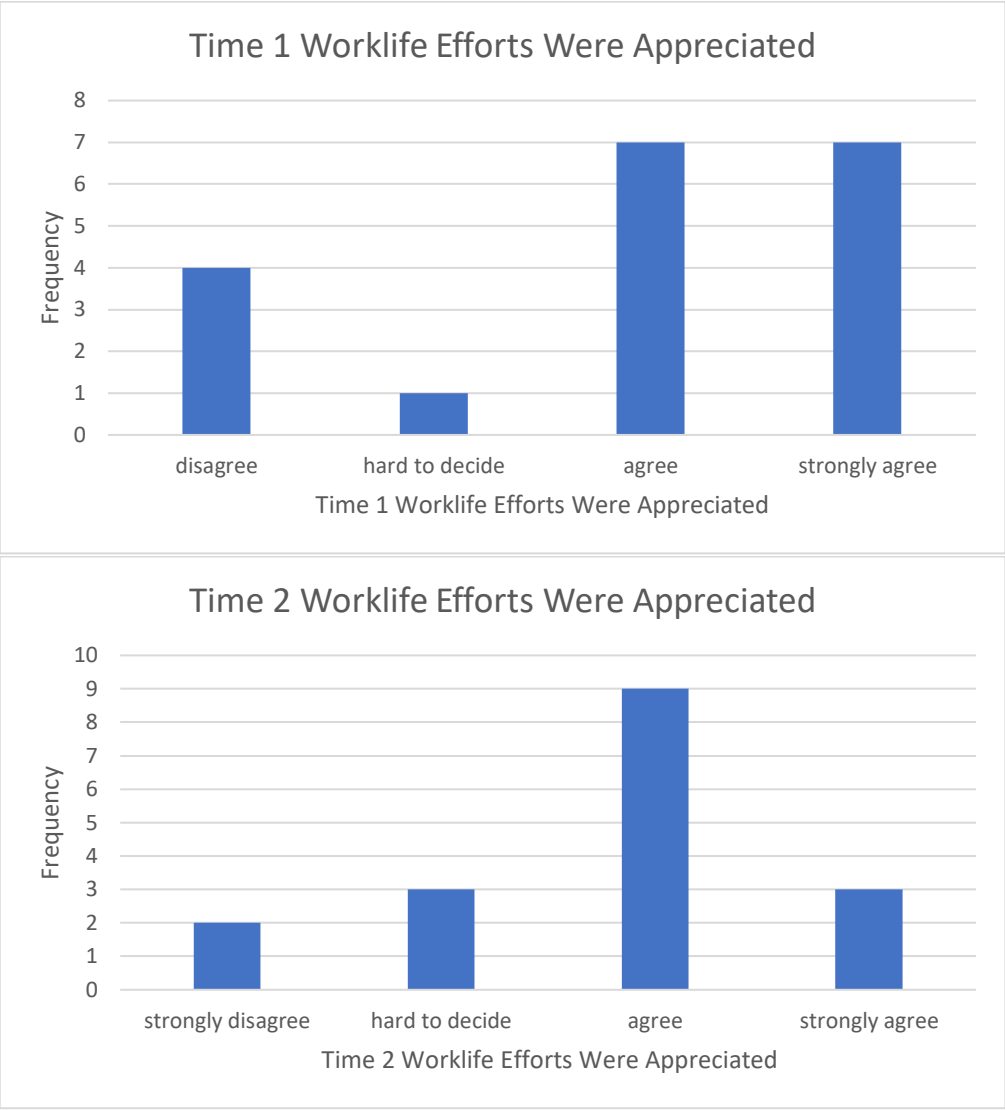
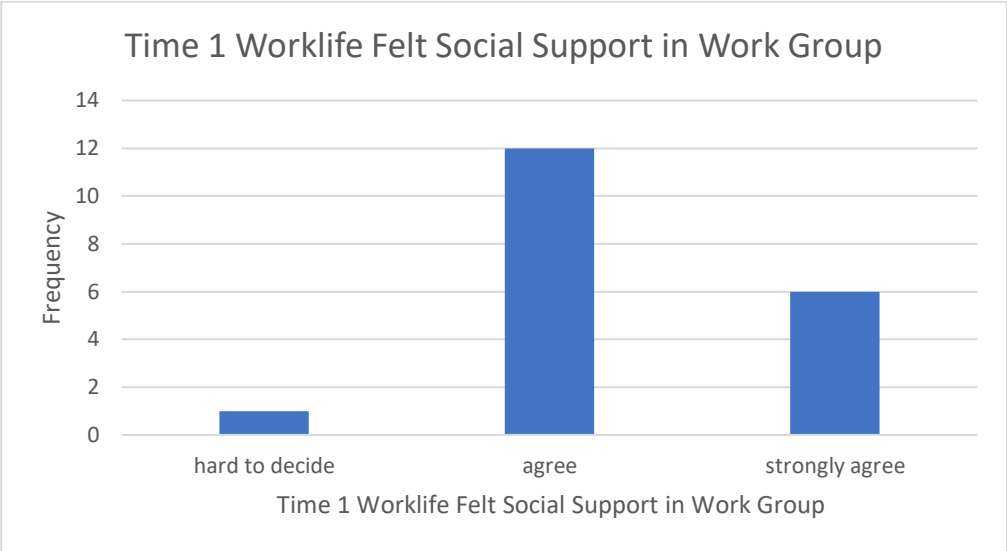


Figure K20

Felt Sense of Social Support in Work Team at Time 1 vs Time 2



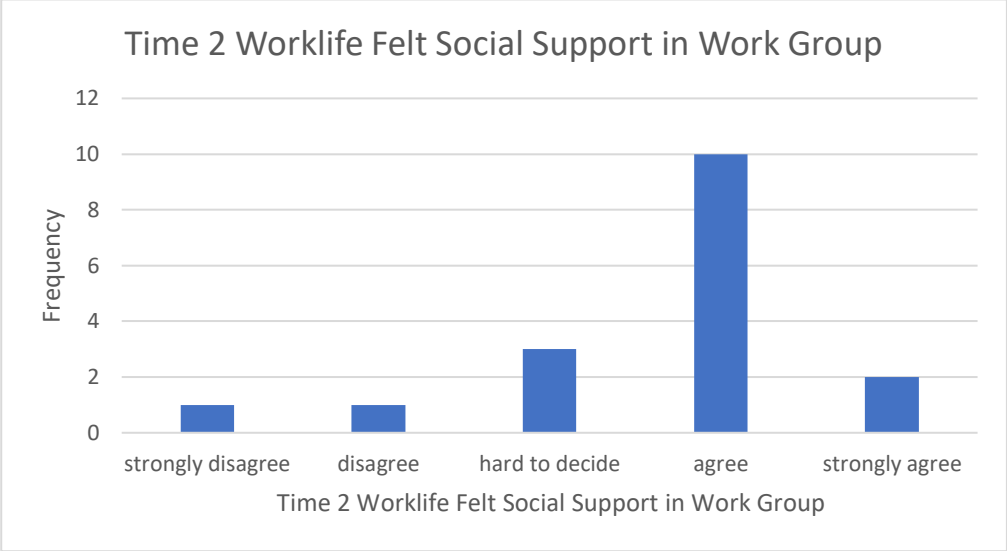


Figure K21

Felt Sense that Work was Assigned Fairly at Time 1 vs Time 2

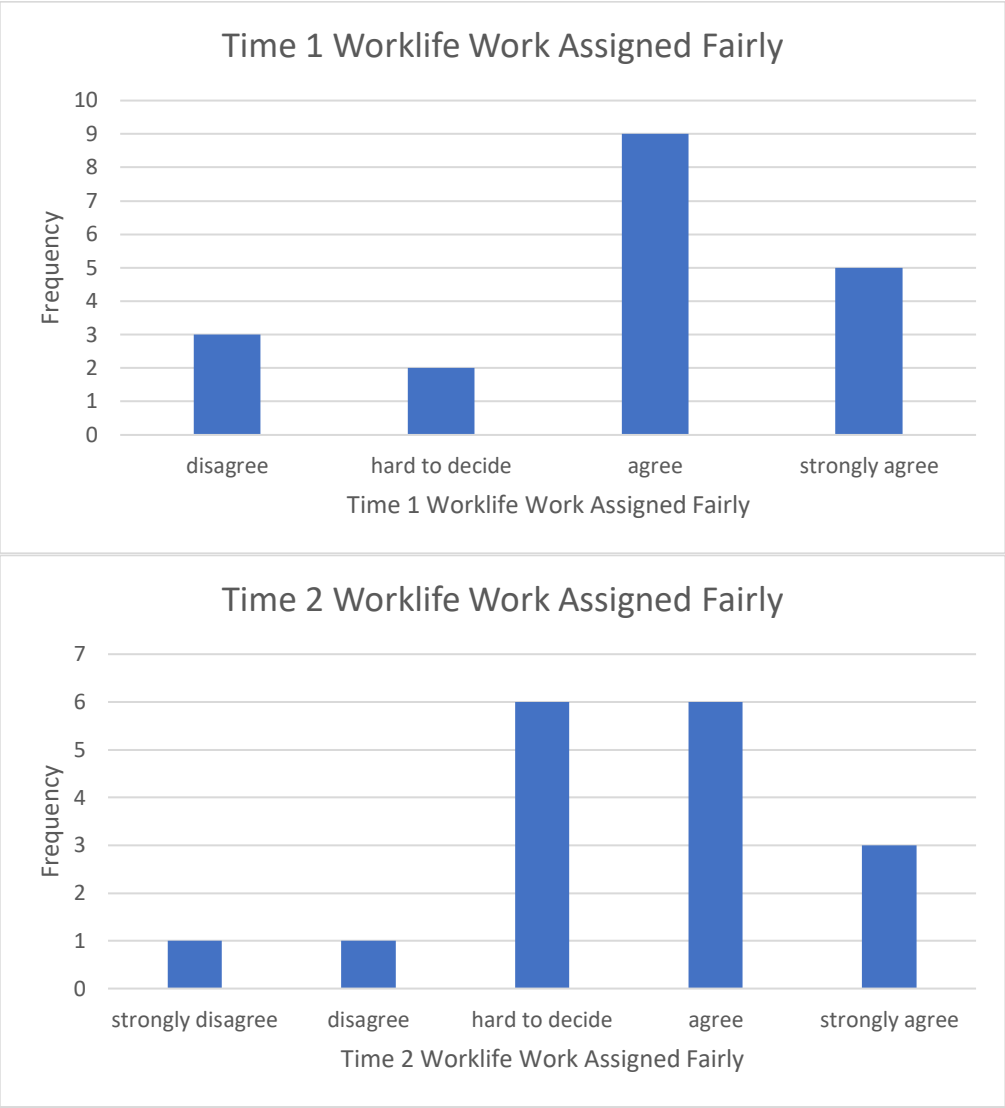
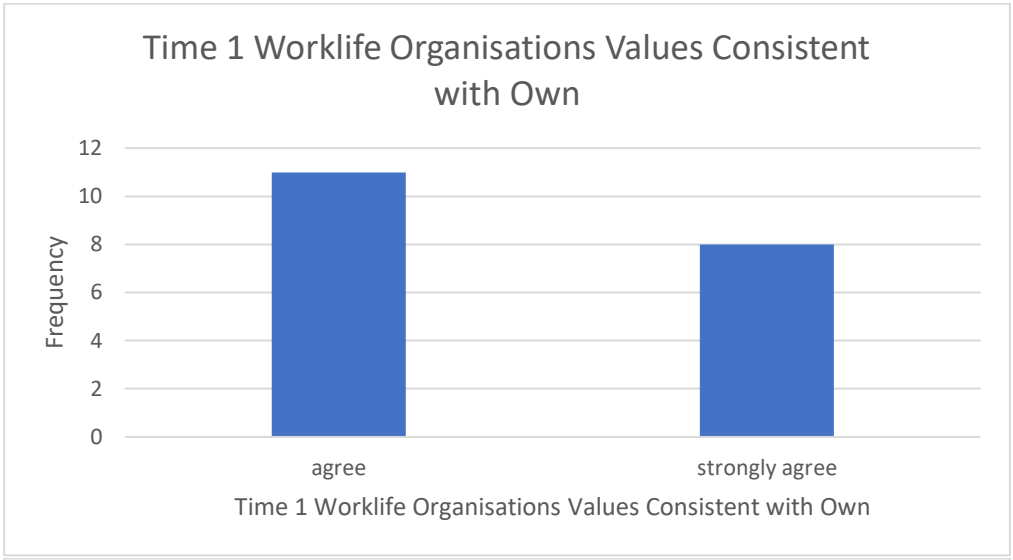


Figure K22

Perception of Organisational Values be Consistent with Own Values at Time 1 vs Time 2



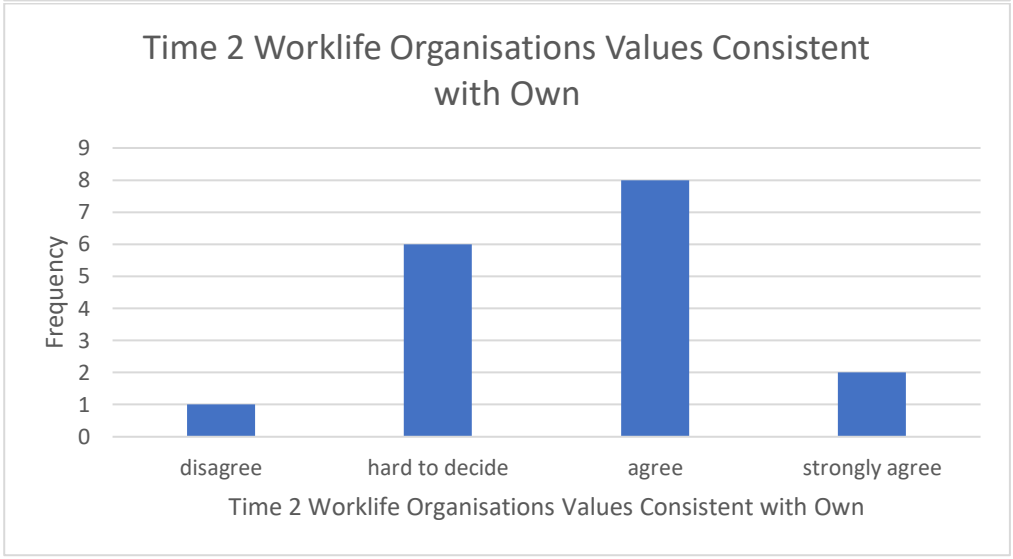


Figure K23

Perception that Leadership Expressed Hope for Success at Time 1 vs Time 2

Figure K24

Perception that Leadership Identified Actions to Improve Capabilities at Time 1 vs Time 2

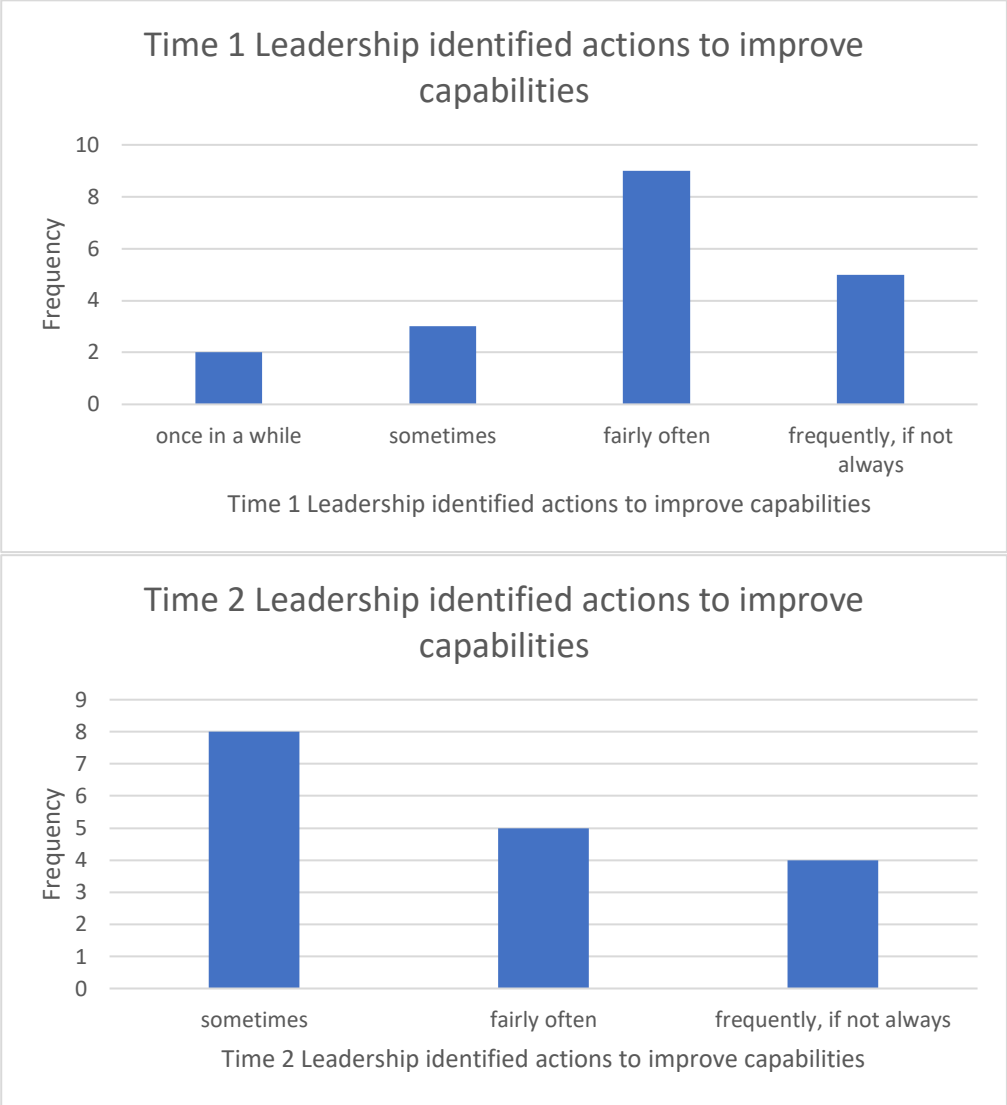


Figure K25

Perception that Leadership Expressed Confidence in Capacity to Take Effective Action at Time 1 vs Time 2

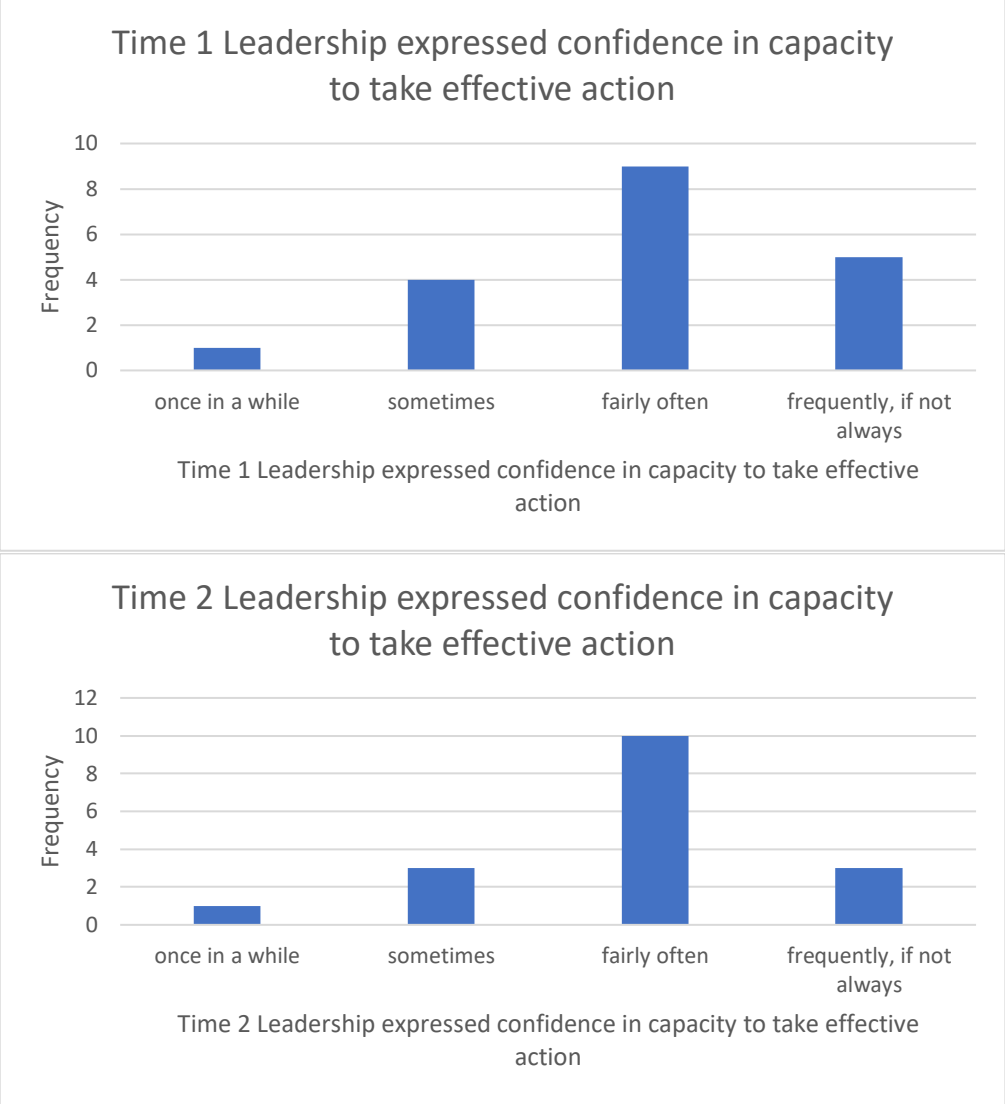


Figure K26

Perception that Leadership Helped Staff Feel Safe at Time 1 vs Time 2

Figure K27

Perception that Leadership Gave an Honest Assessment of Situation at Time 1 vs Time 2

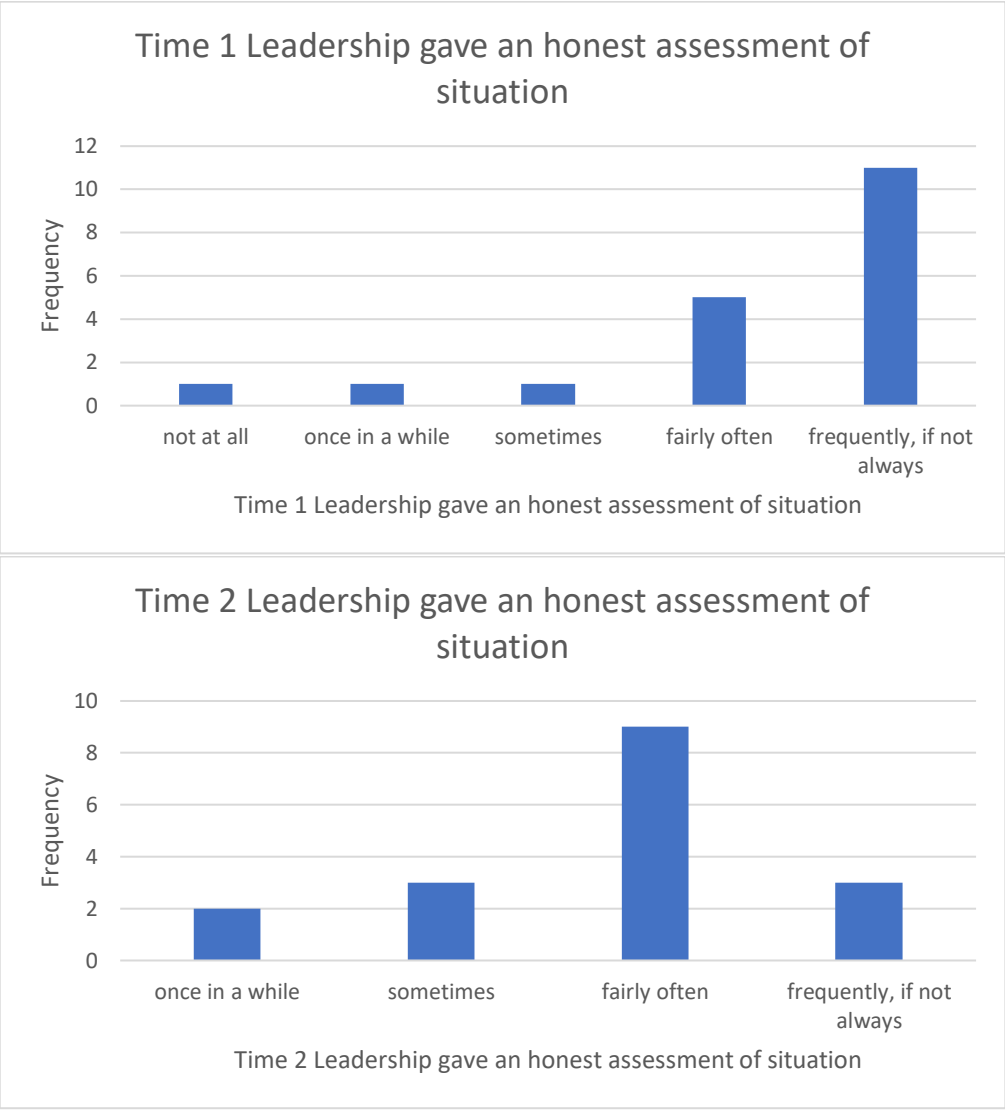
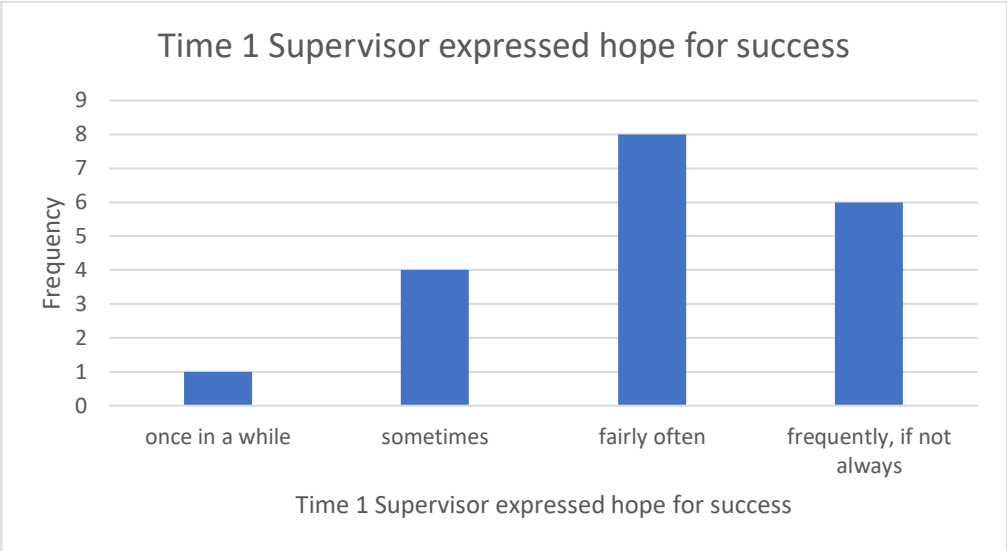


Figure K28

Perception that Supervisor Expressed Hope for Success at Time 1 vs Time 2



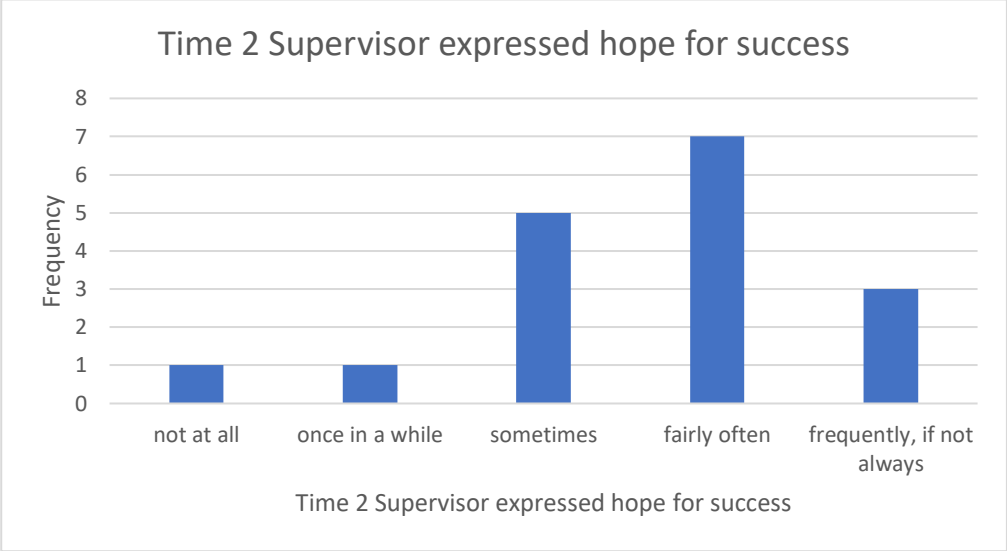
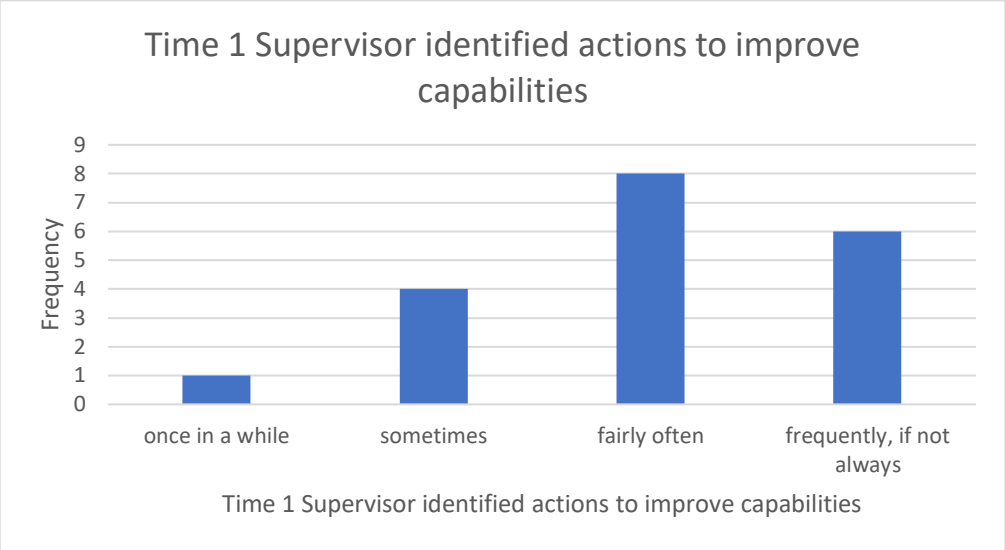


Figure K29

Perception that Supervisor Identified Actions to Improve Capabilities at Time 1 vs Time 2



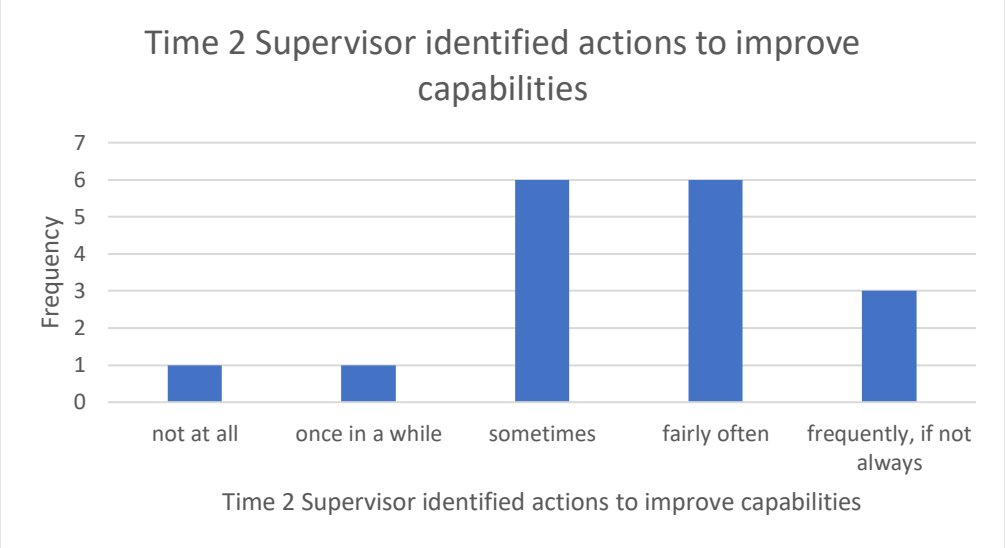
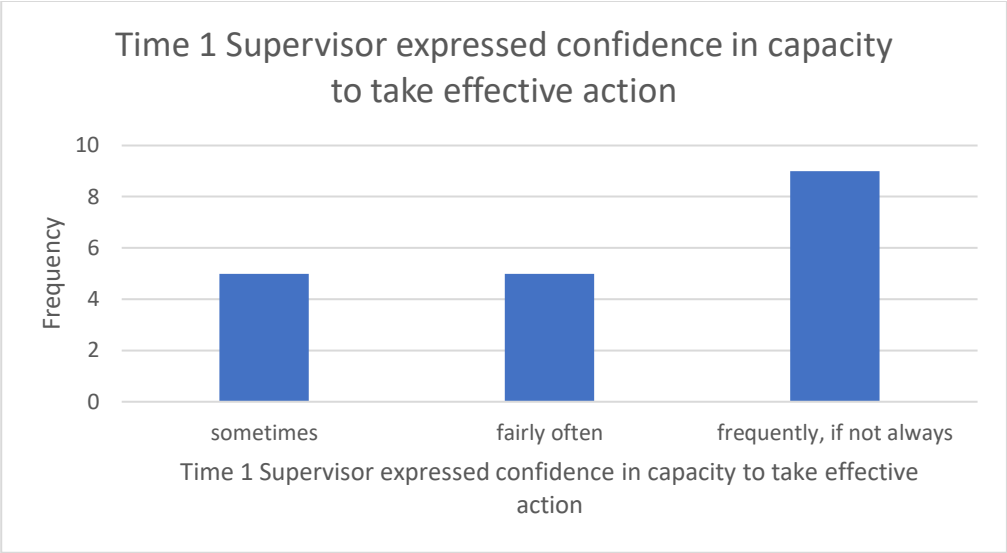


Figure K30

Perception that Supervisor Expressed Confidence in Capacity to Take Effective Action at Time 1 vs Time 2



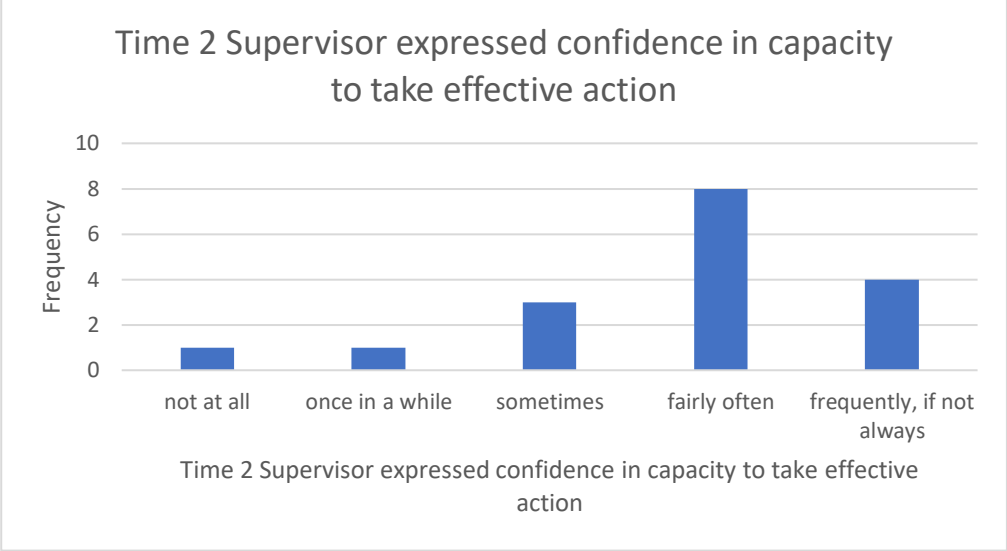


Figure K31

Perception that Supervisor Helped Staff Feel Safe at Time 1 vs Time 2

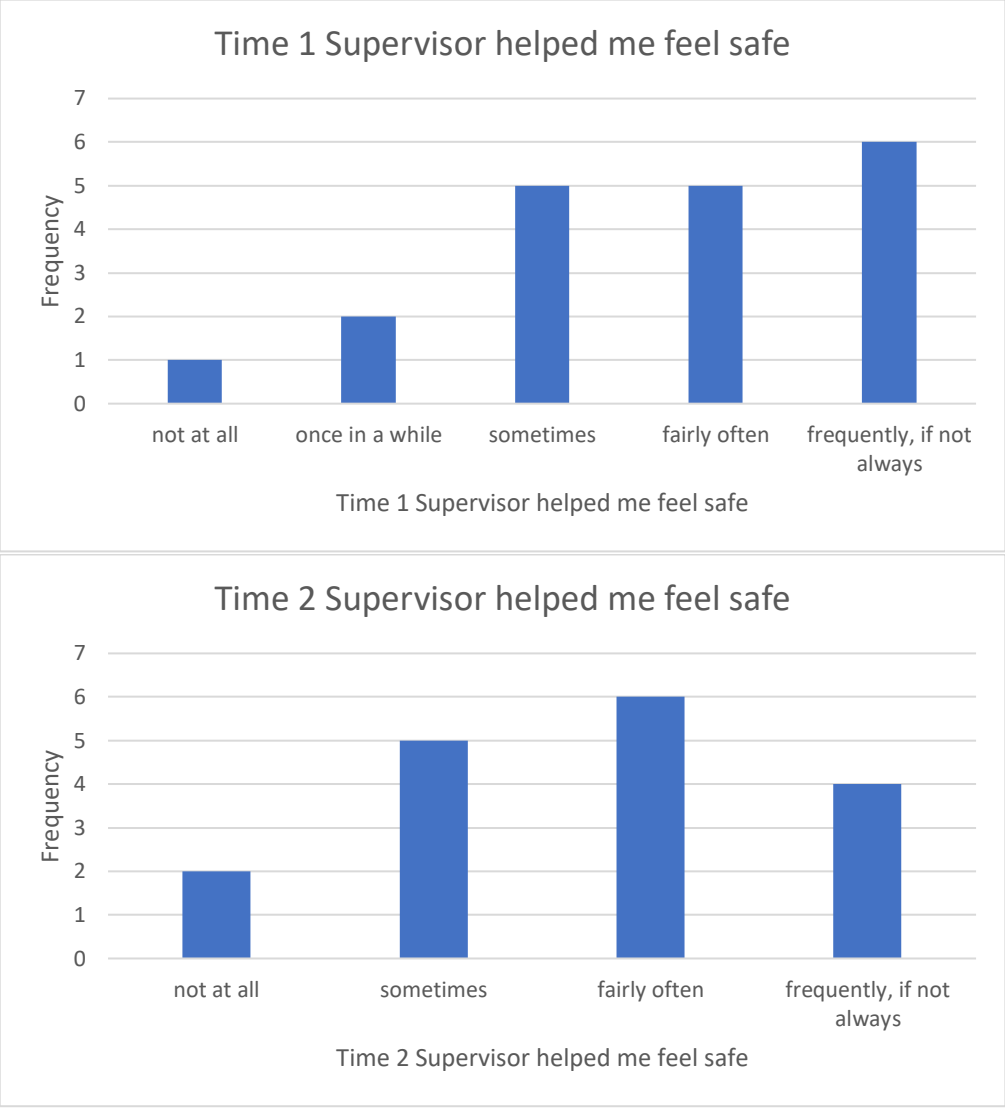
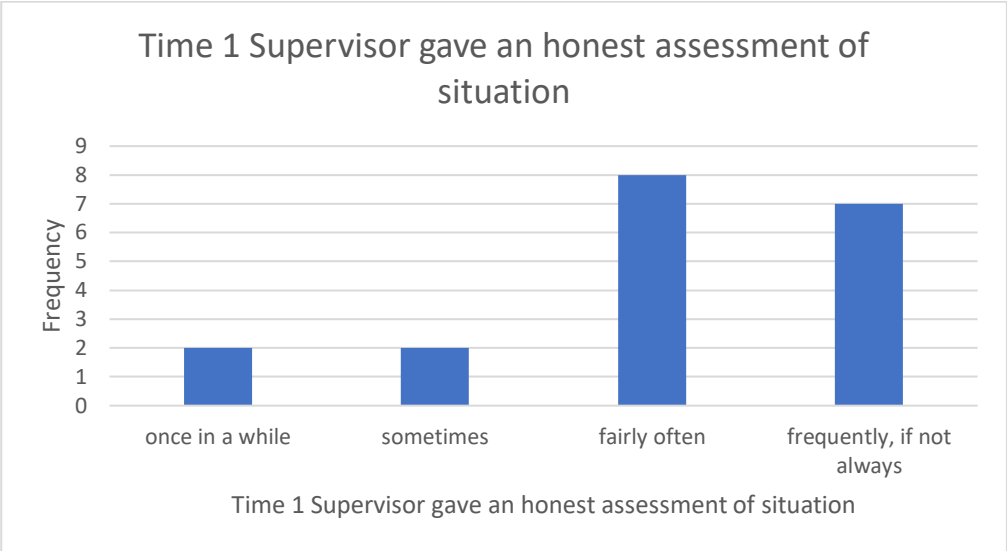
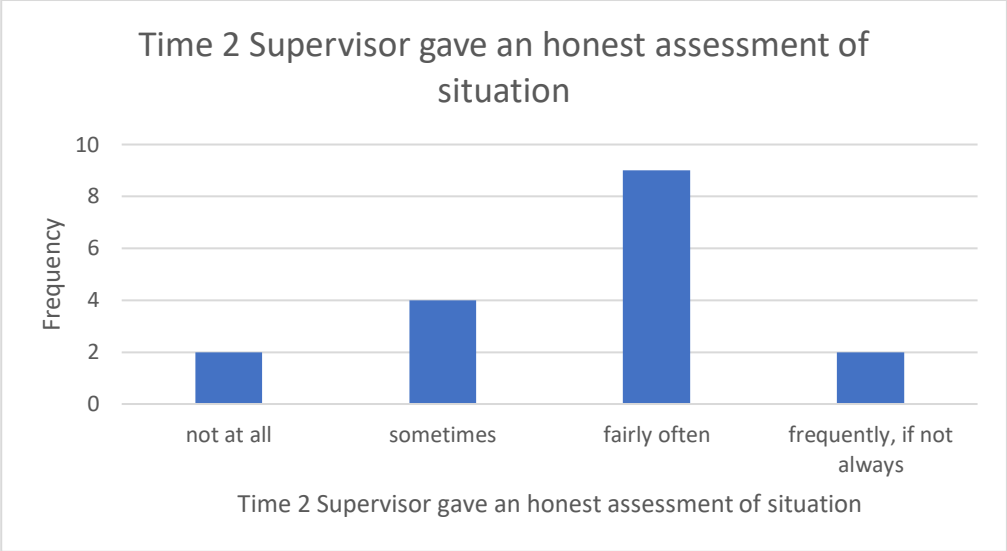


Figure K32

Perception that Supervisor Gave an Honest Assessment of Situation at Time 1 vs Time 2

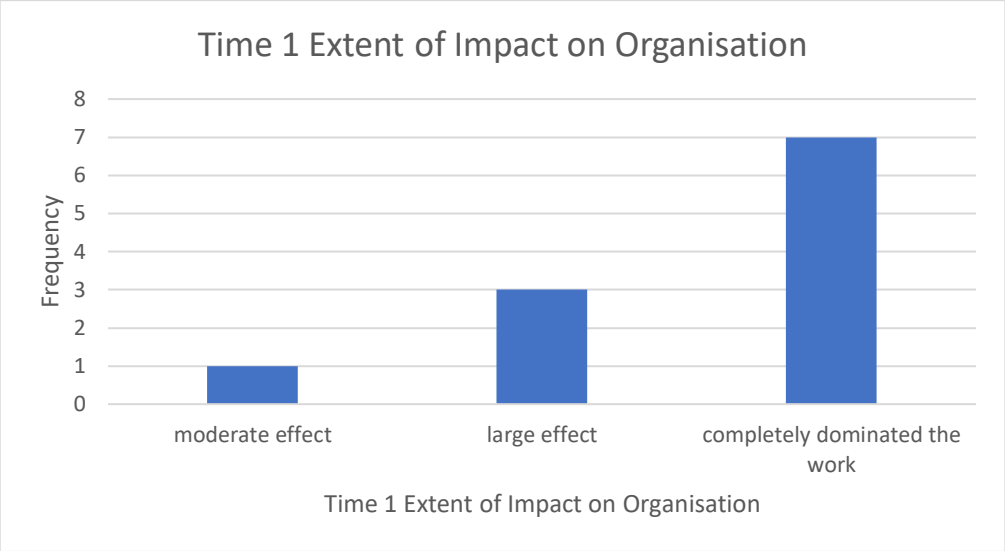




Appendix L: PEPS Bar Charts for Nursing

Figure L1

Extent of Impact of the Pandemic on the Organisation at Time 1 vs Time 2



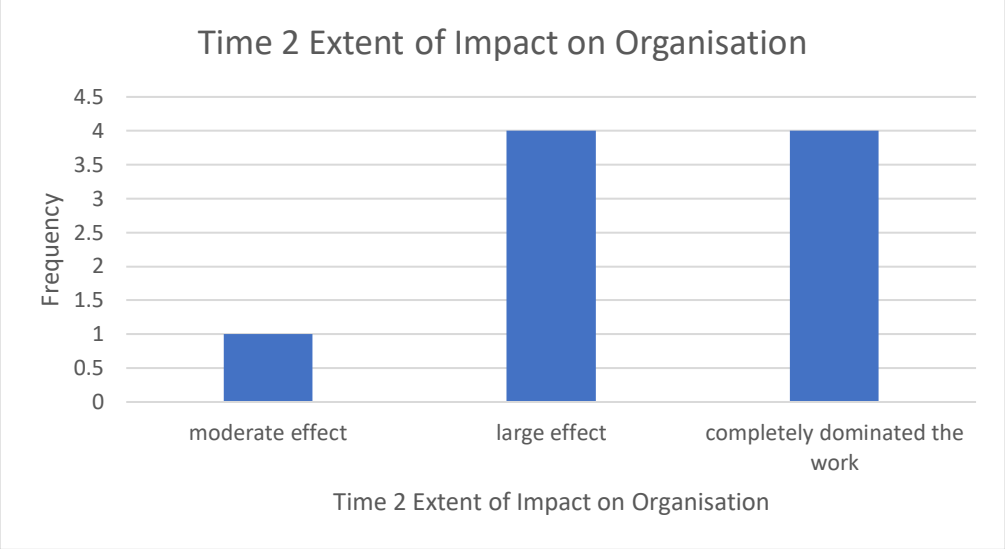


Figure L2

Extent of Impact of the Pandemic on the Work Unit at Time 1 vs Time 2

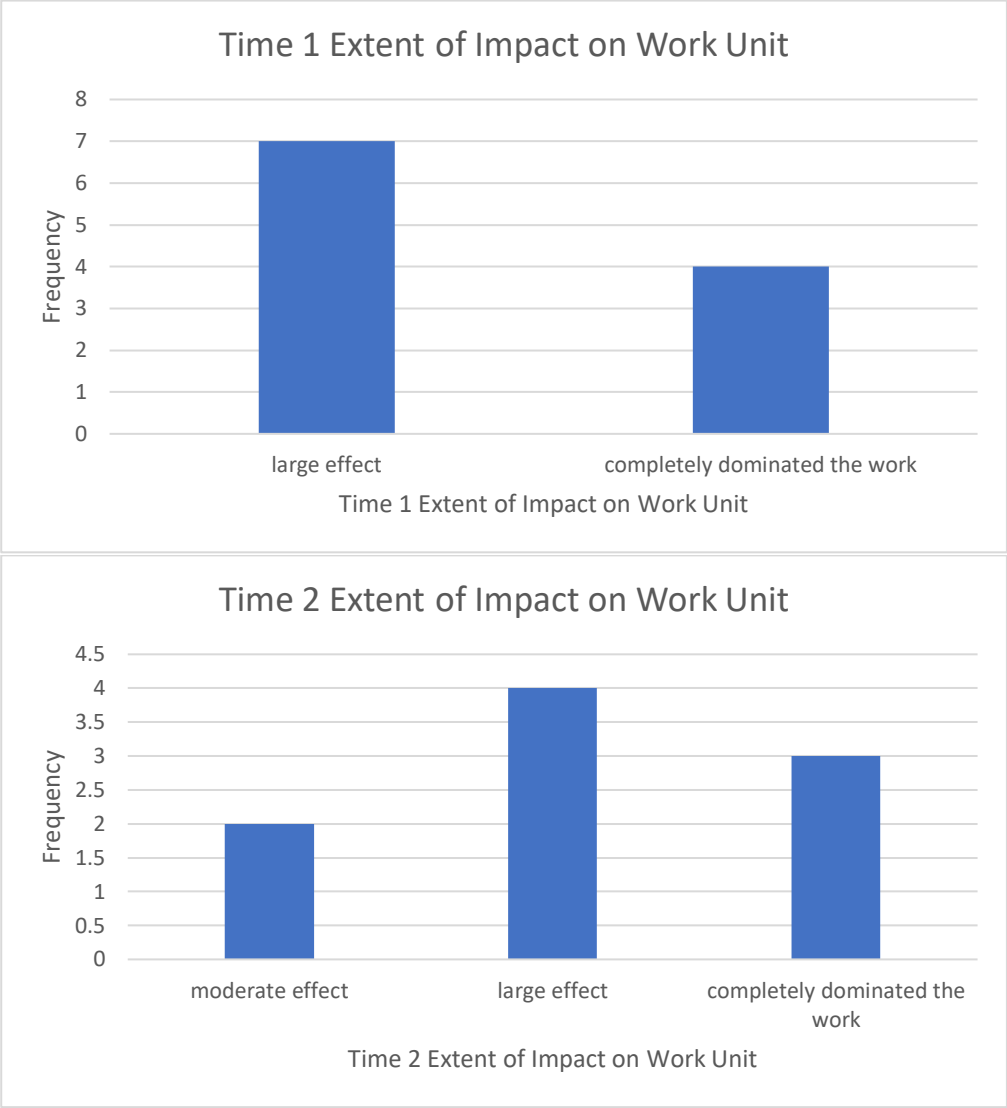
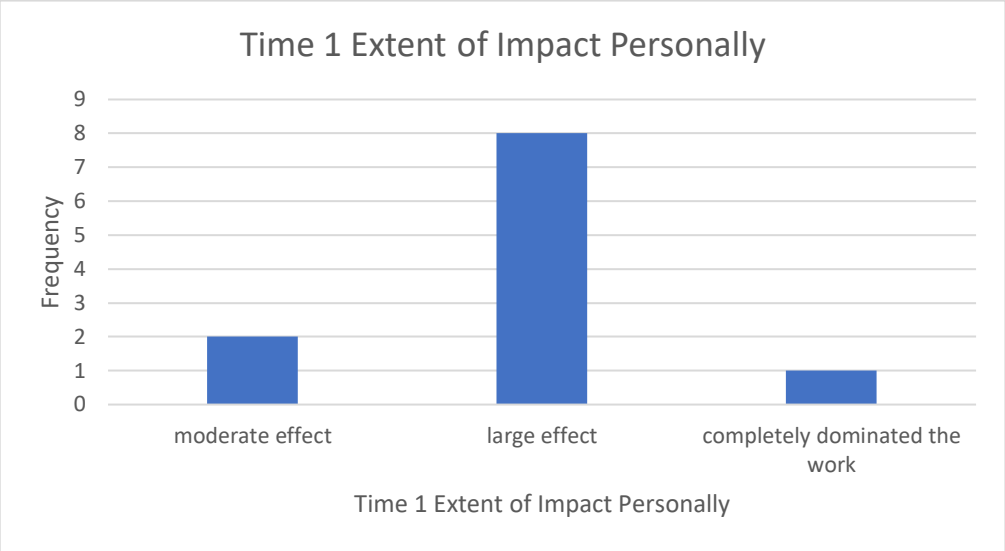


Figure L3

Extent of Impact of the Pandemic on the Participant Personally at Time 1 vs Time 2



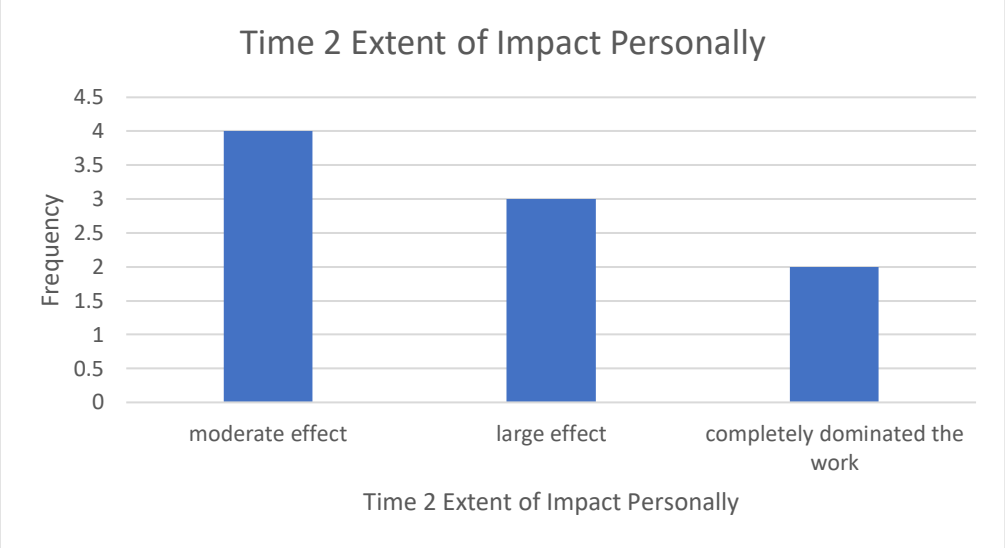
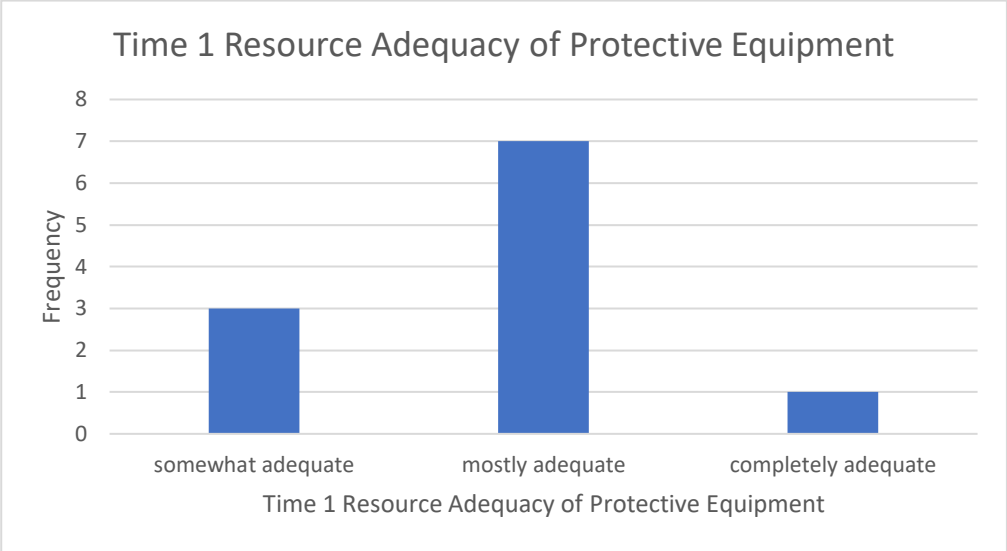


Figure L4

Adequacy of Protective Equipment Resources at Time 1 vs Time 2



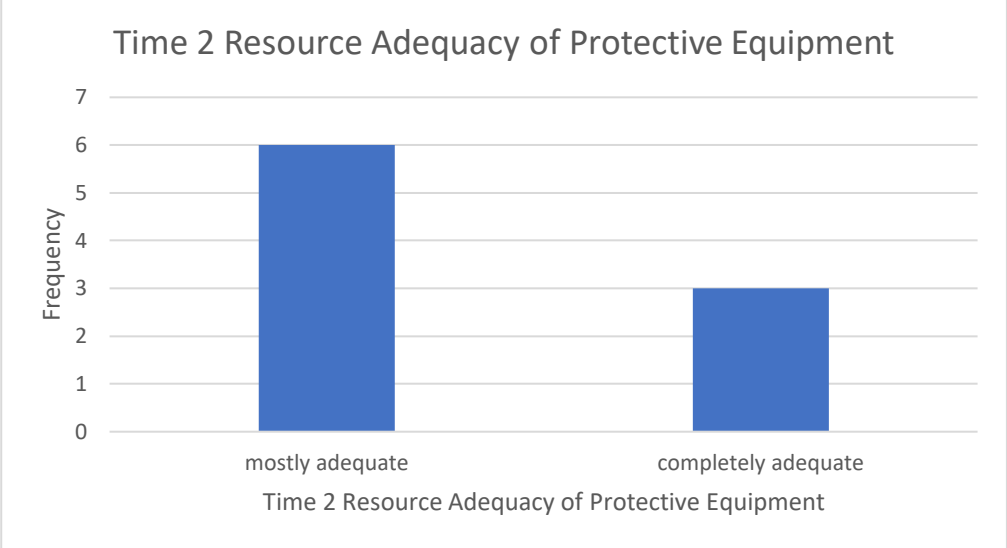
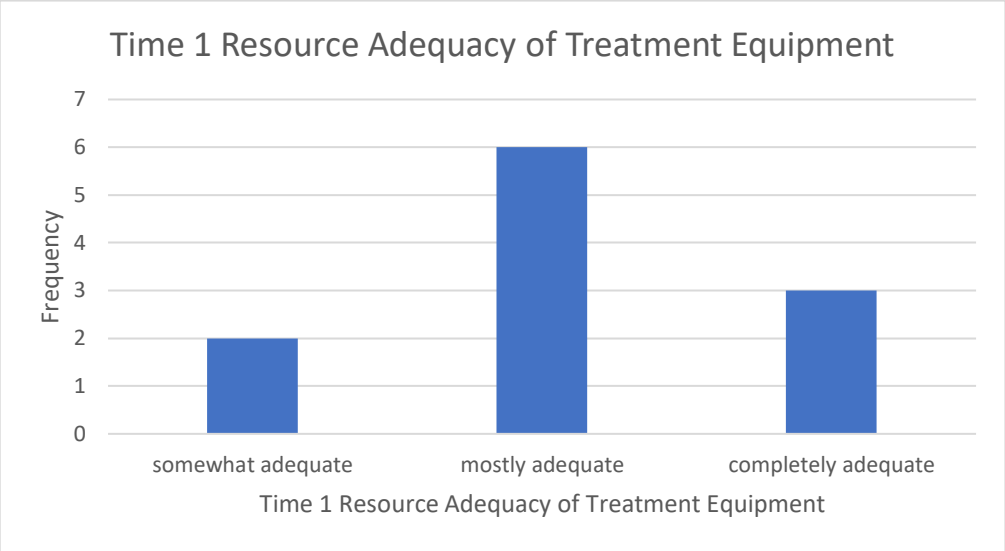


Figure L5

Adequacy of Treatment Equipment Resources at Time 1 vs Time 2



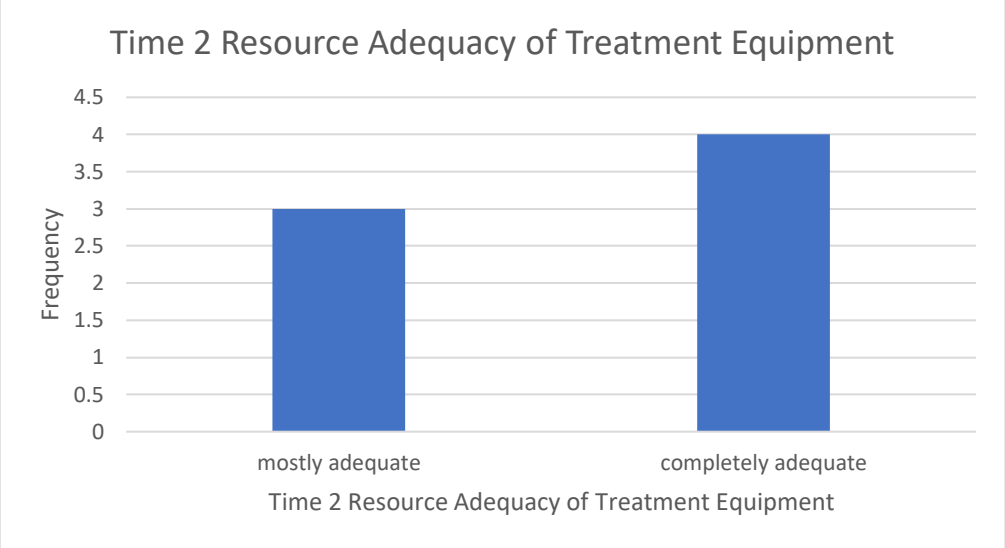
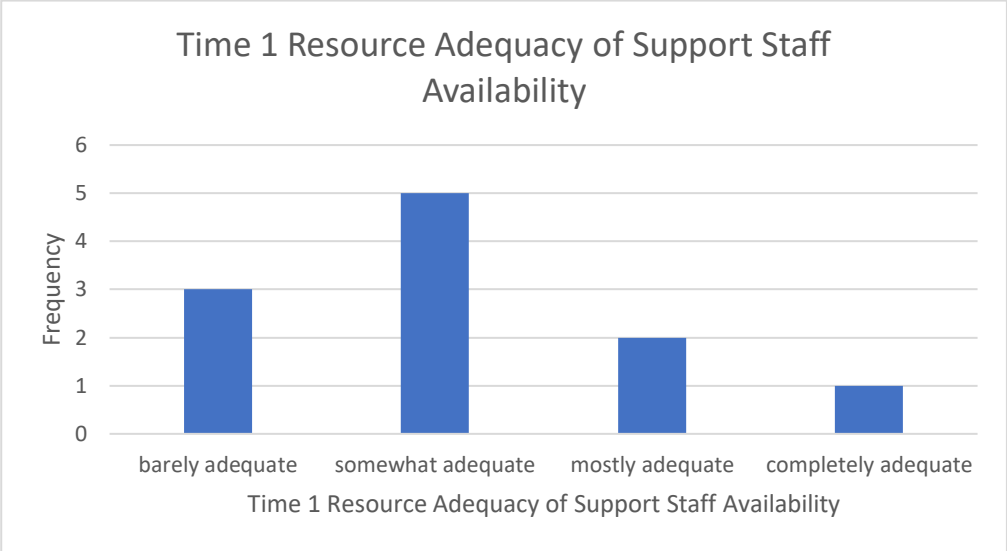


Figure L6

Felt Availability of Support Staff at Time 1 vs Time 2



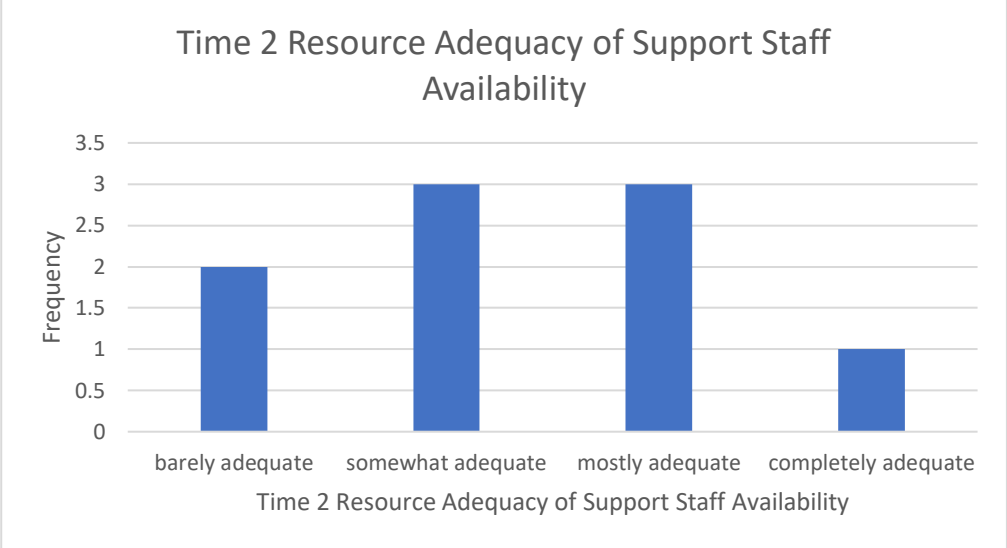


Figure L7

Felt Competence of Support Staff at Time 1 vs Time 2

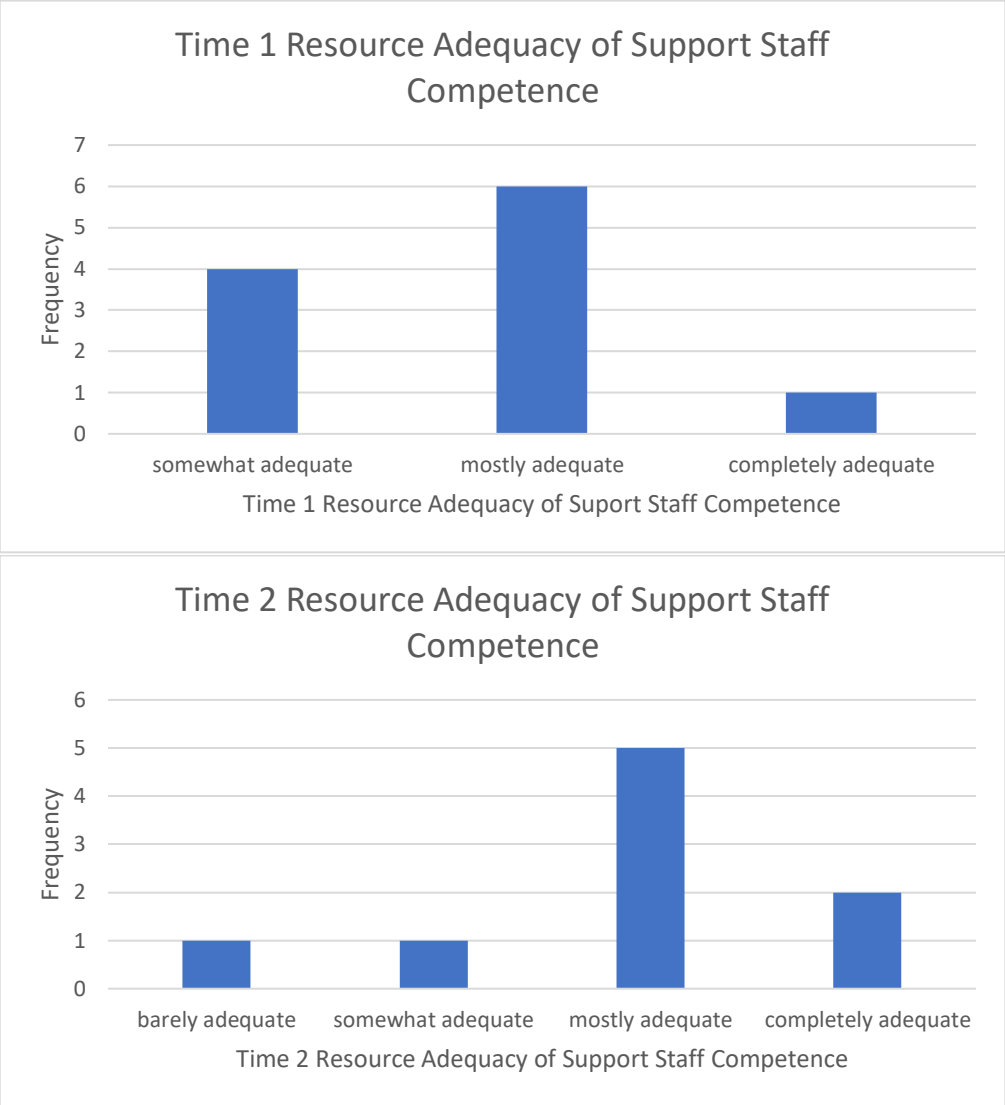
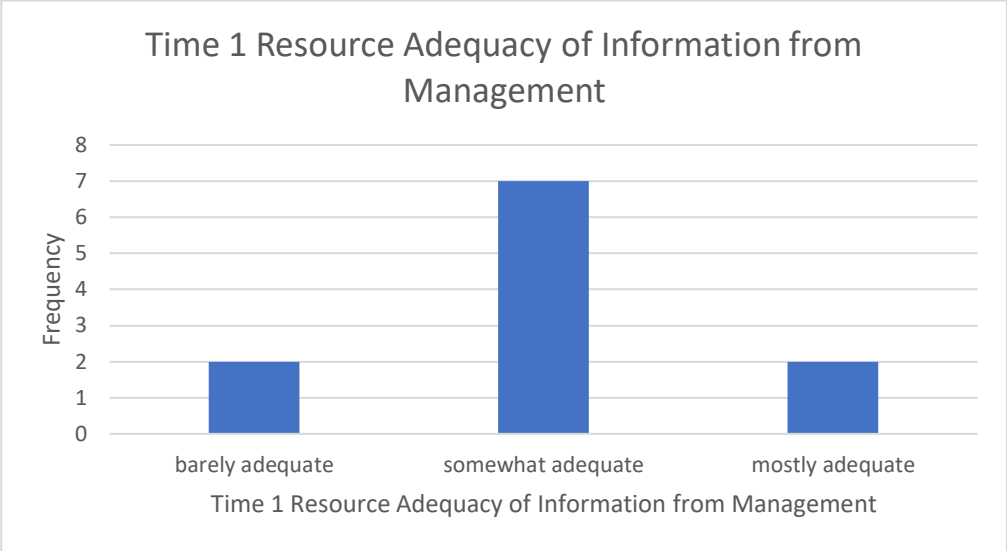


Figure L8

Adequacy of Information Resources from Management at Time 1 vs Time 2



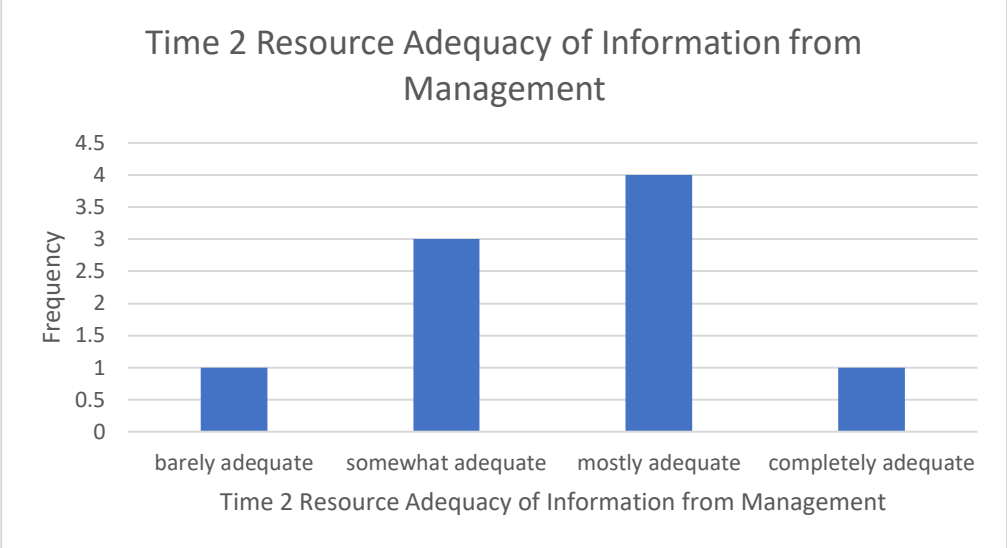


Figure L9

Risk Perception of Virus to Self at Time 1 vs Time 2

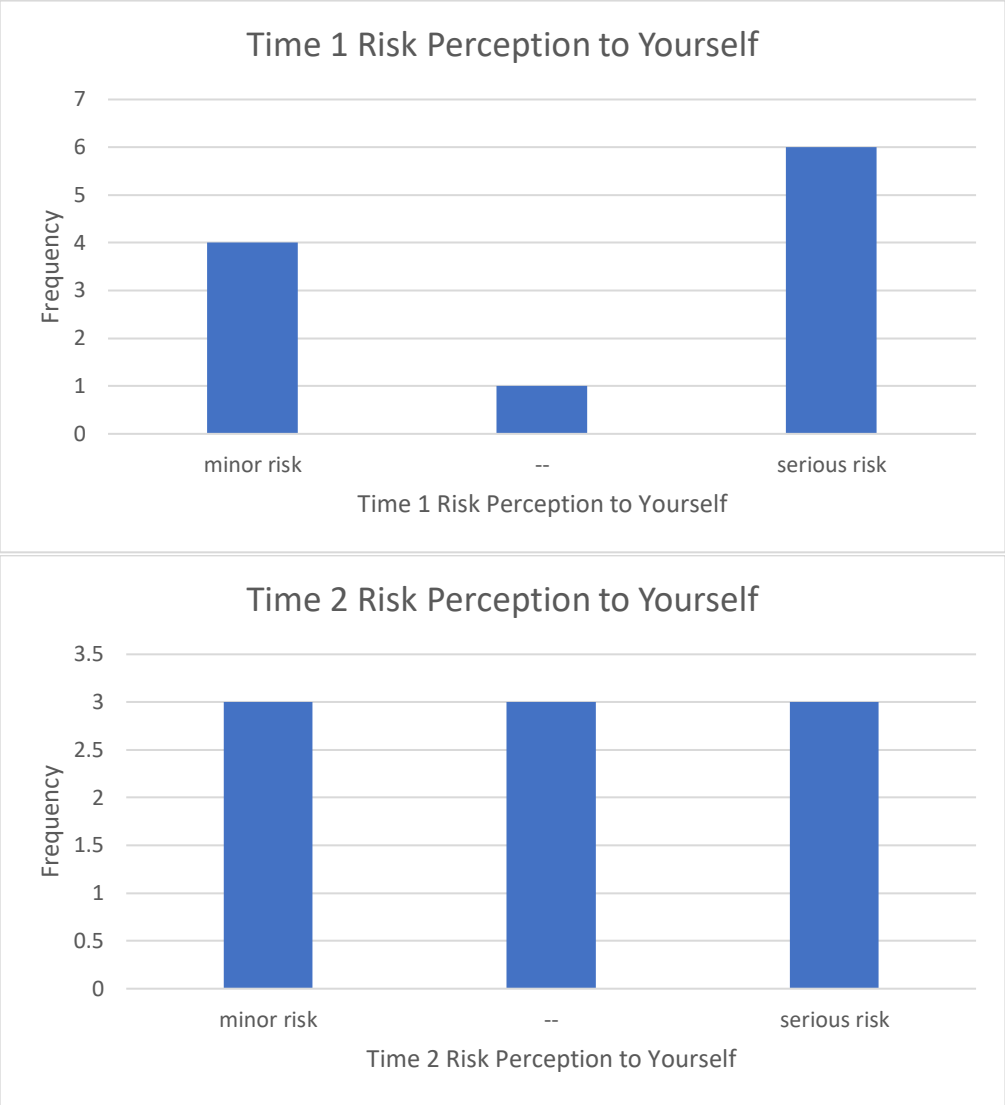


Figure L10

Risk Perception of Virus to Family at Time 1 vs Time 2

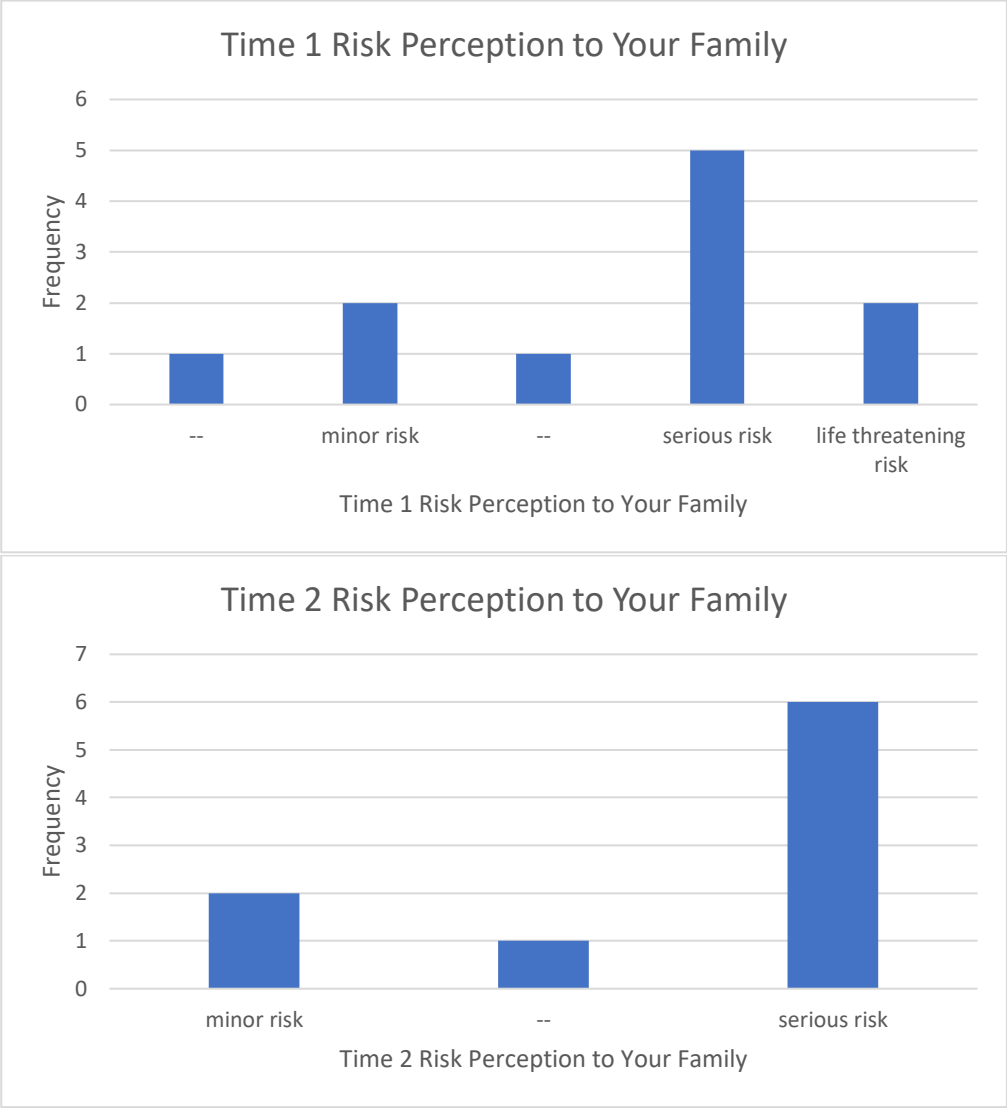


Figure L11

Risk Perception of Virus to Patients at Time 1 vs Time 2

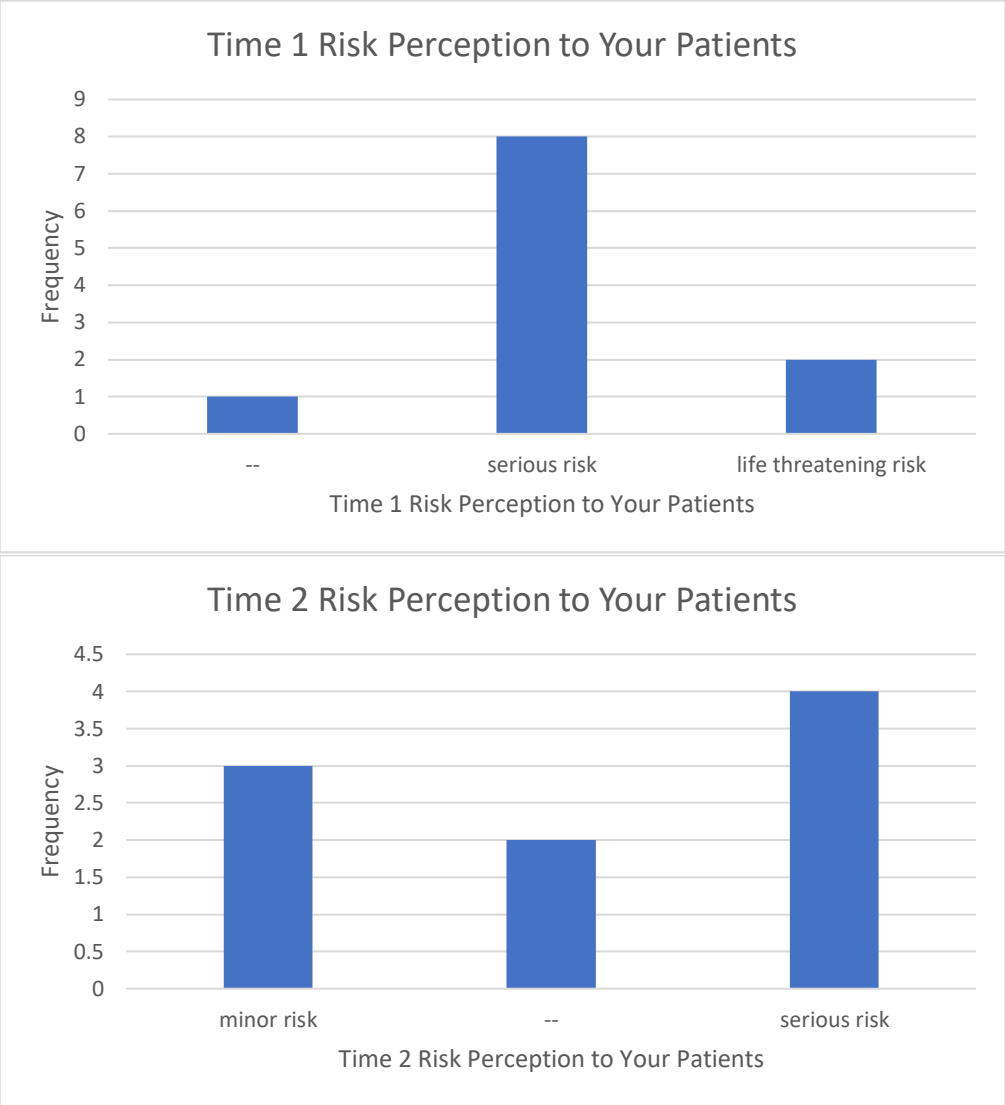
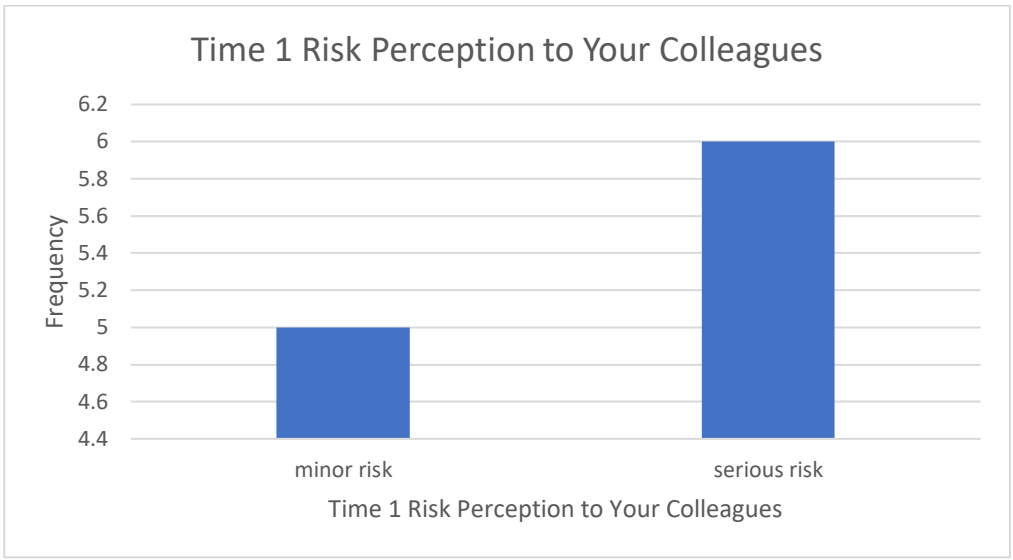


Figure L12

Risk Perception of Virus to Colleagues at Time 1 vs Time 2



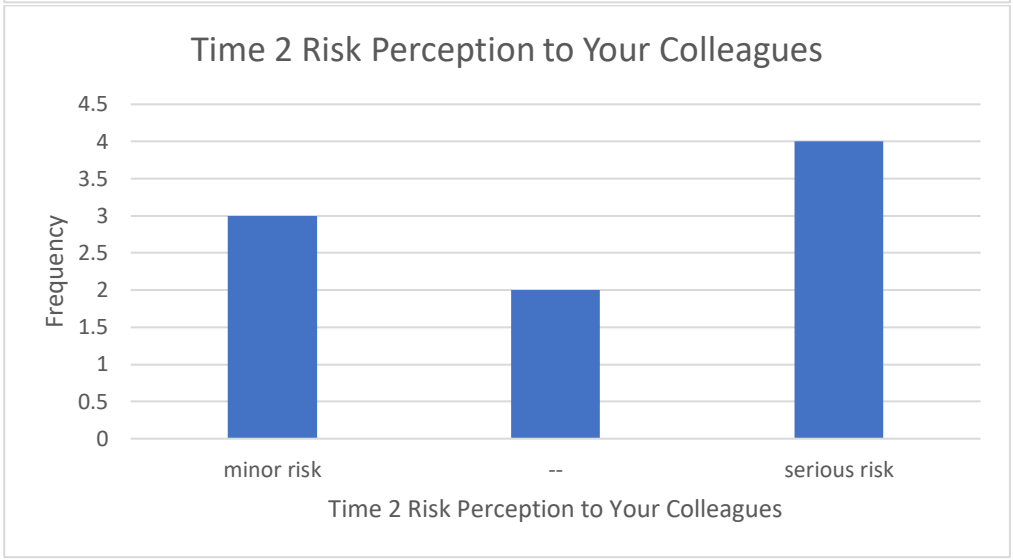


Figure L13

Felt Frequency of Contact with Virus at Time 1 vs Time 2

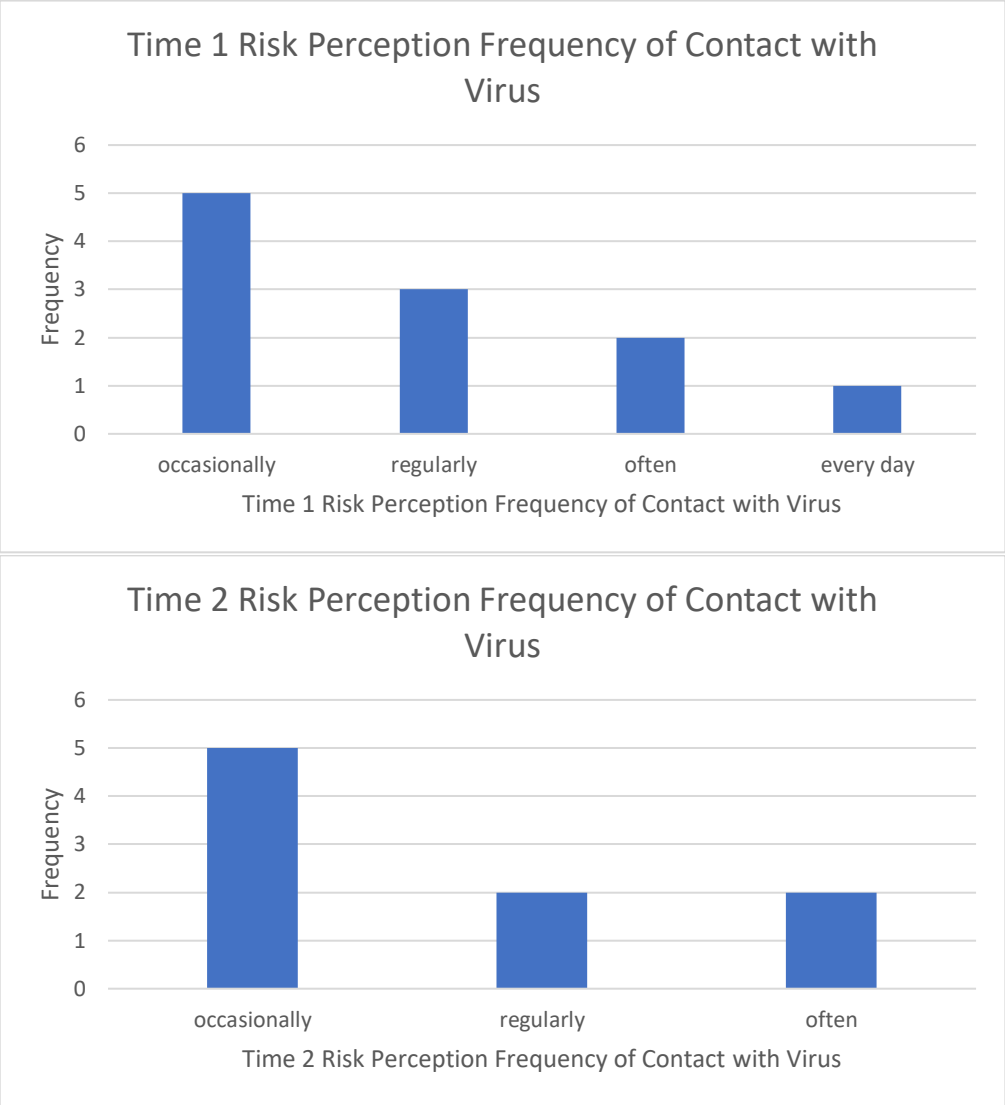
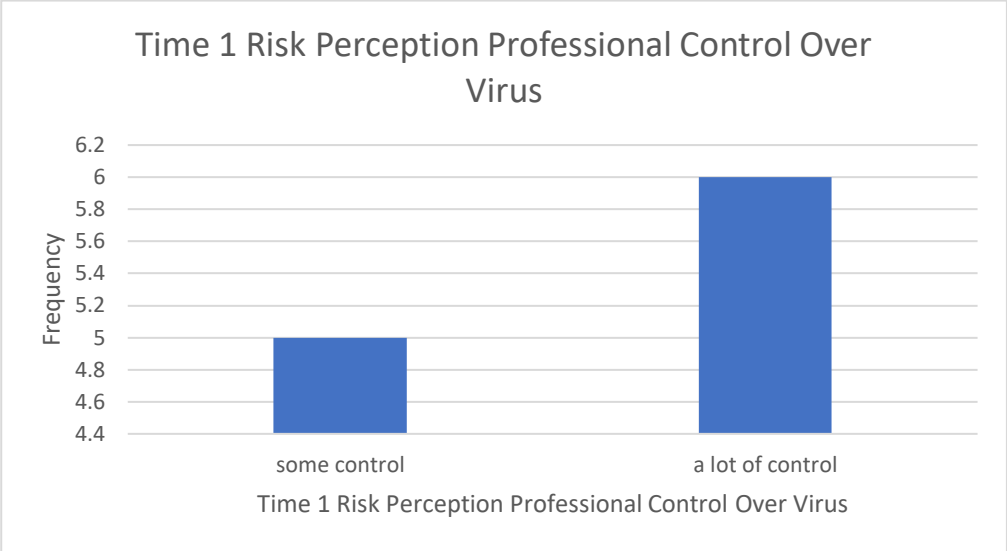


Figure L14

Perception of Professional Control Over Virus at Time 1 vs Time 2



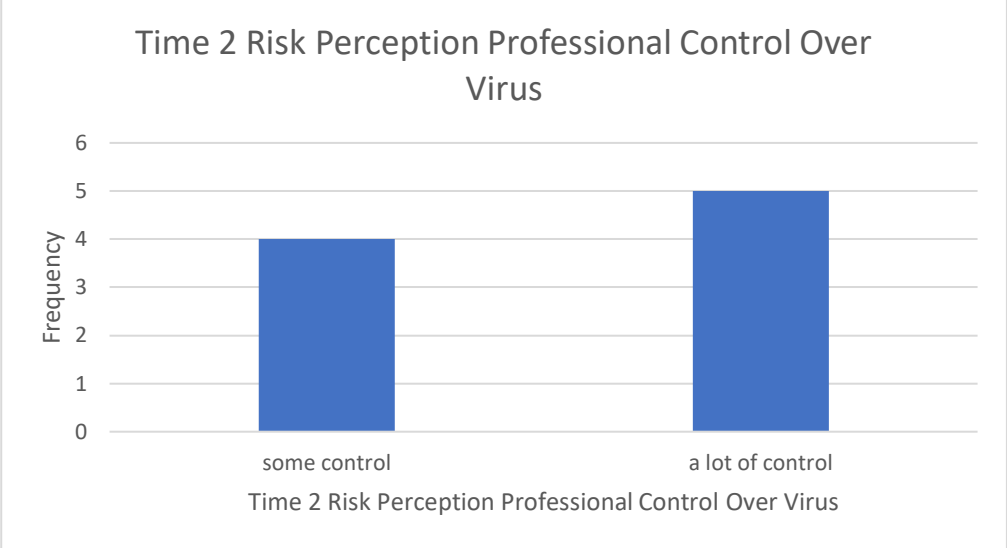
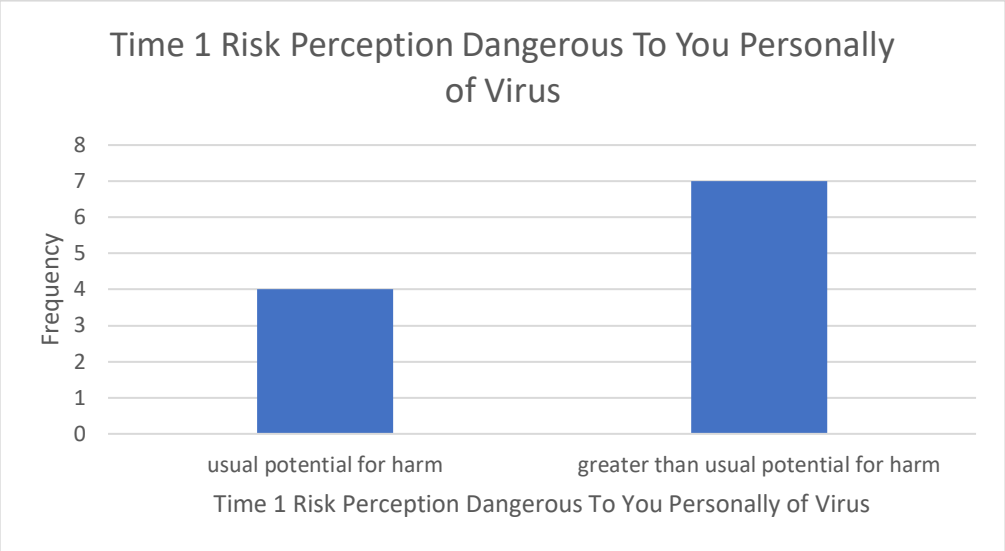


Figure L15

Perception of Dangerous Risk from Virus Personally at Time 1 vs Time 2



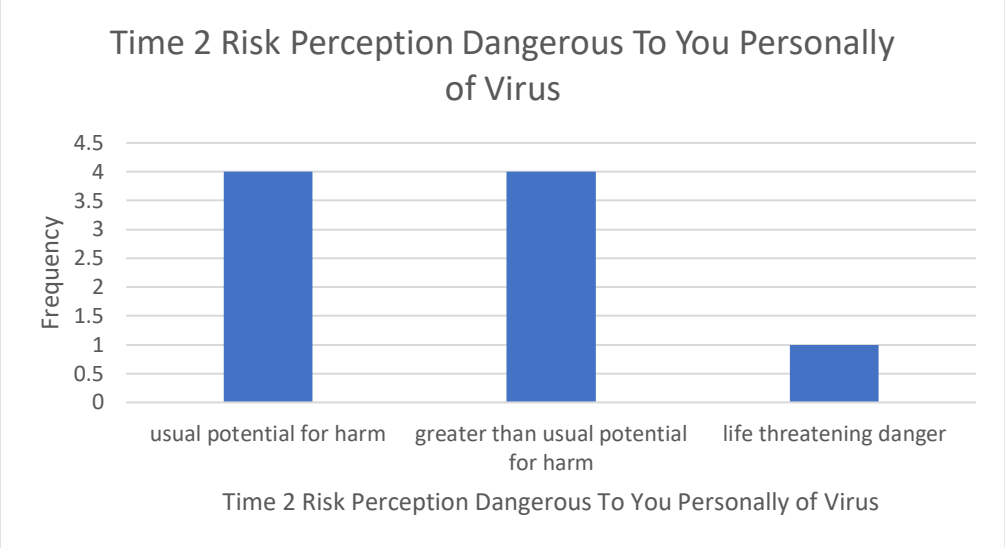


Figure L16

Manageability of Working Hours at Time 1 vs Time 2

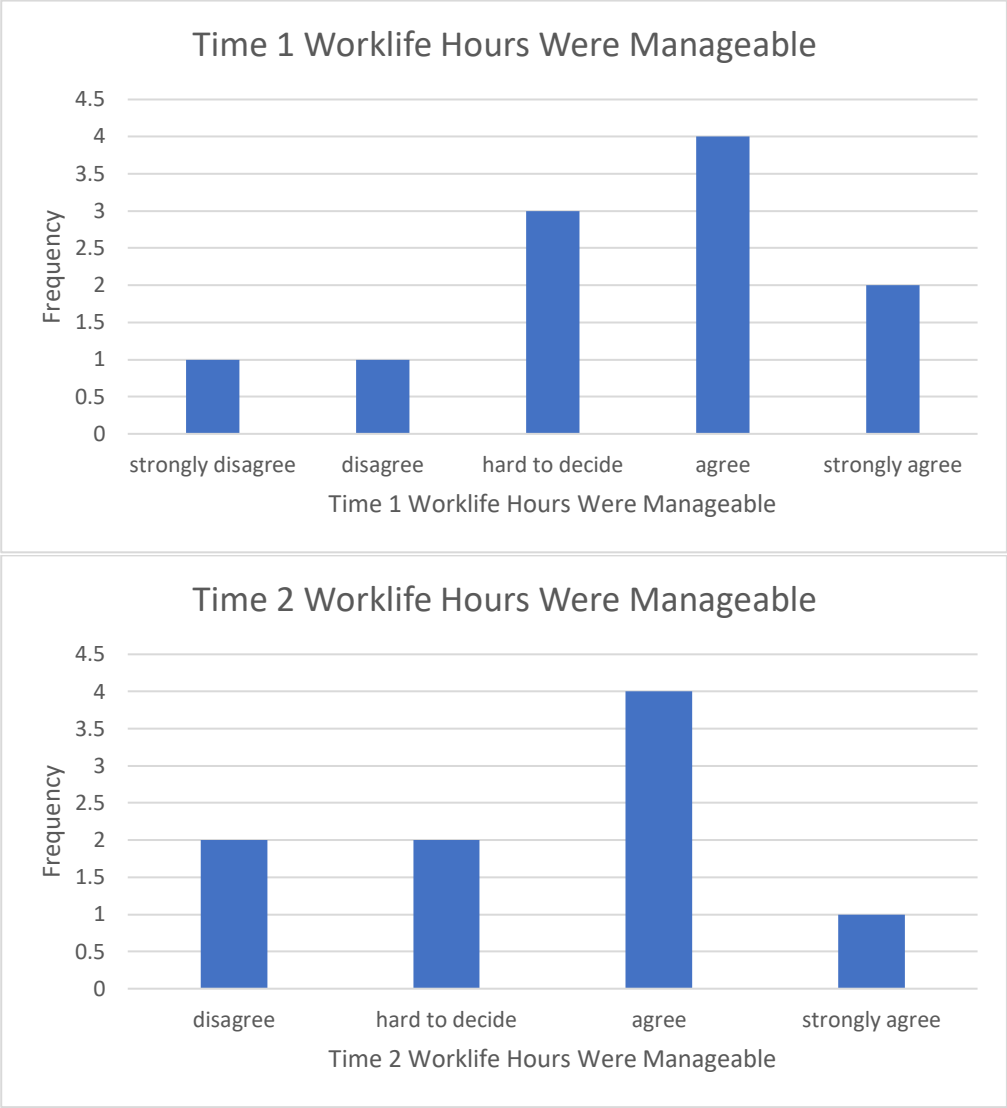
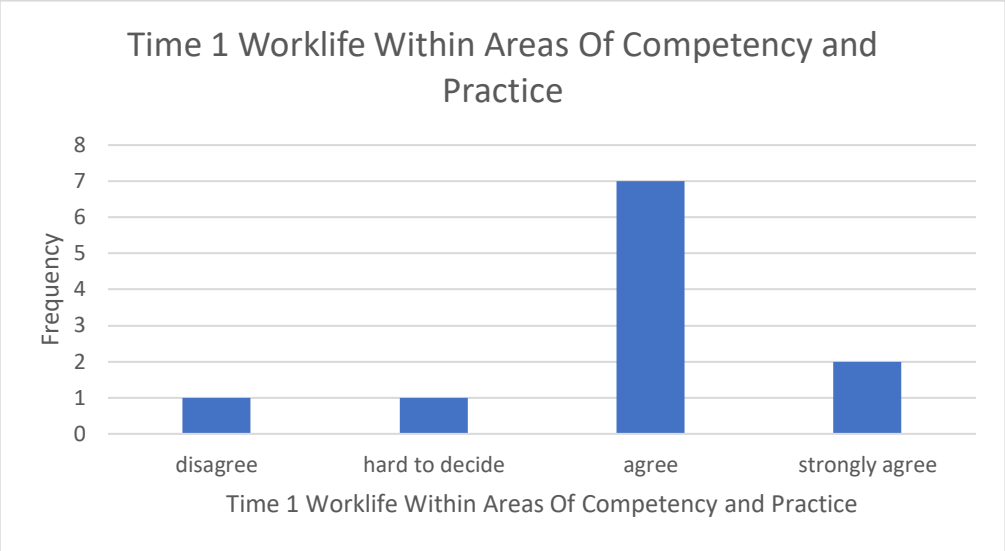


Figure L17

Felt Sense of Working Within Area of Competency at Time 1 vs Time 2



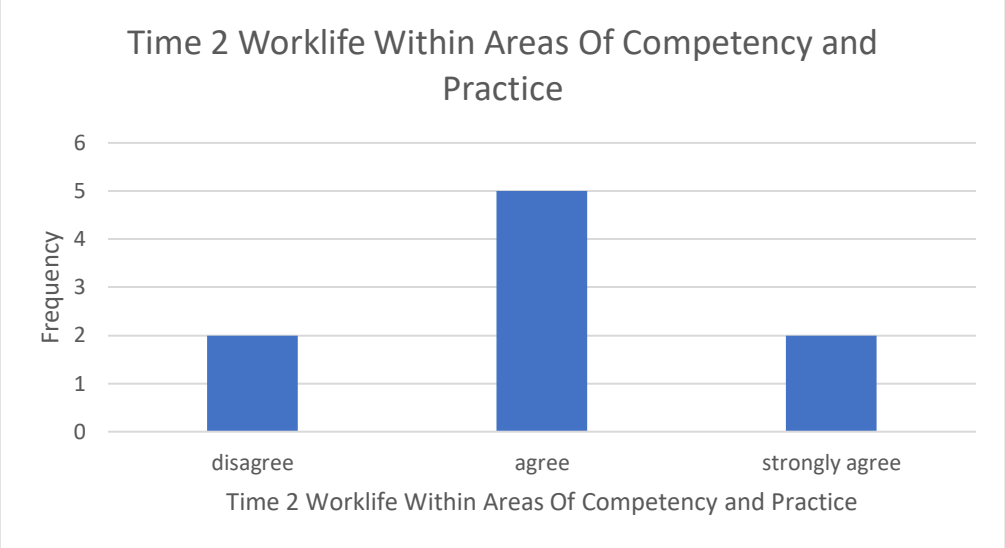
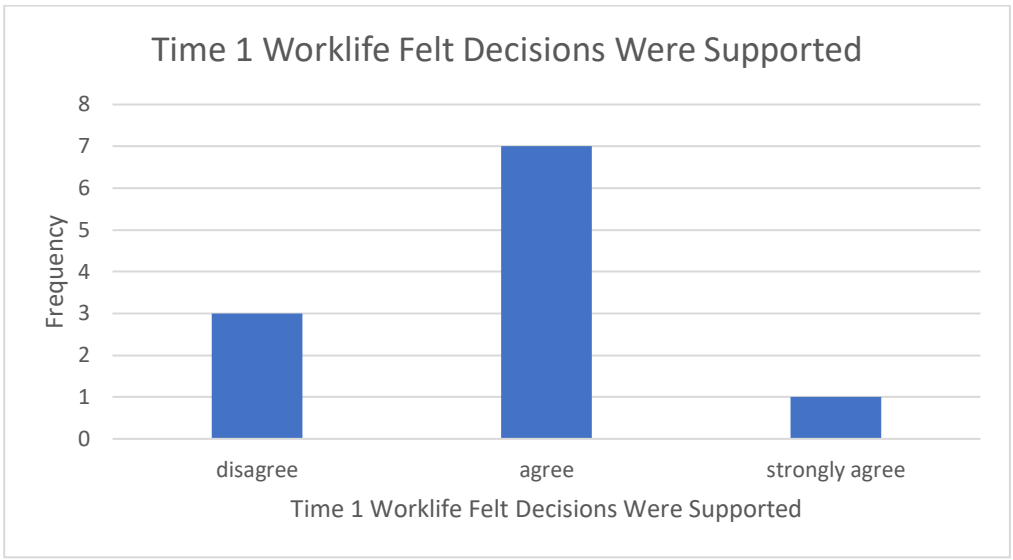


Figure L18

Felt Sense that Decisions were Supported by Management at Time 1 vs Time 2



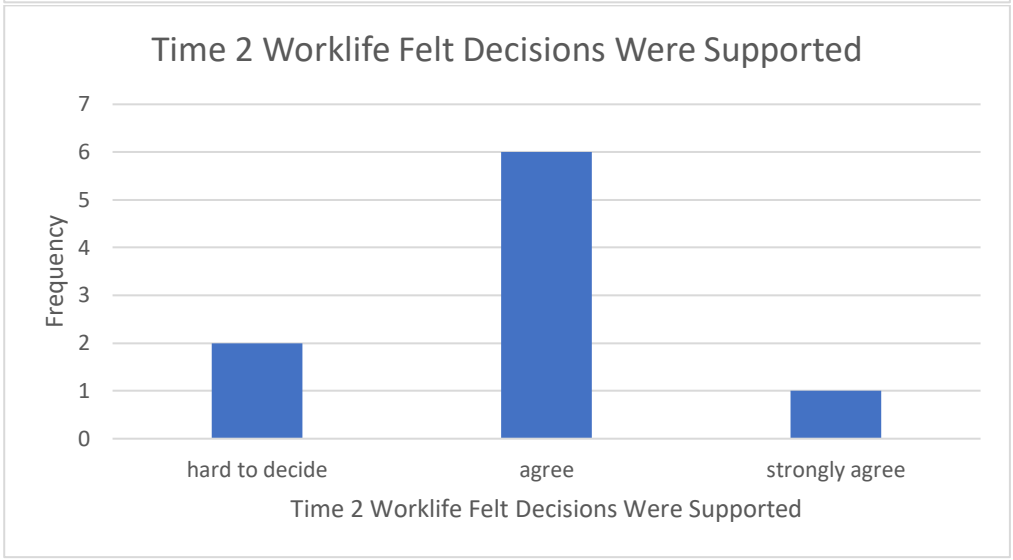


Figure L19

Felt Sense that Efforts were Appreciated at Work at Time 1 vs Time 2

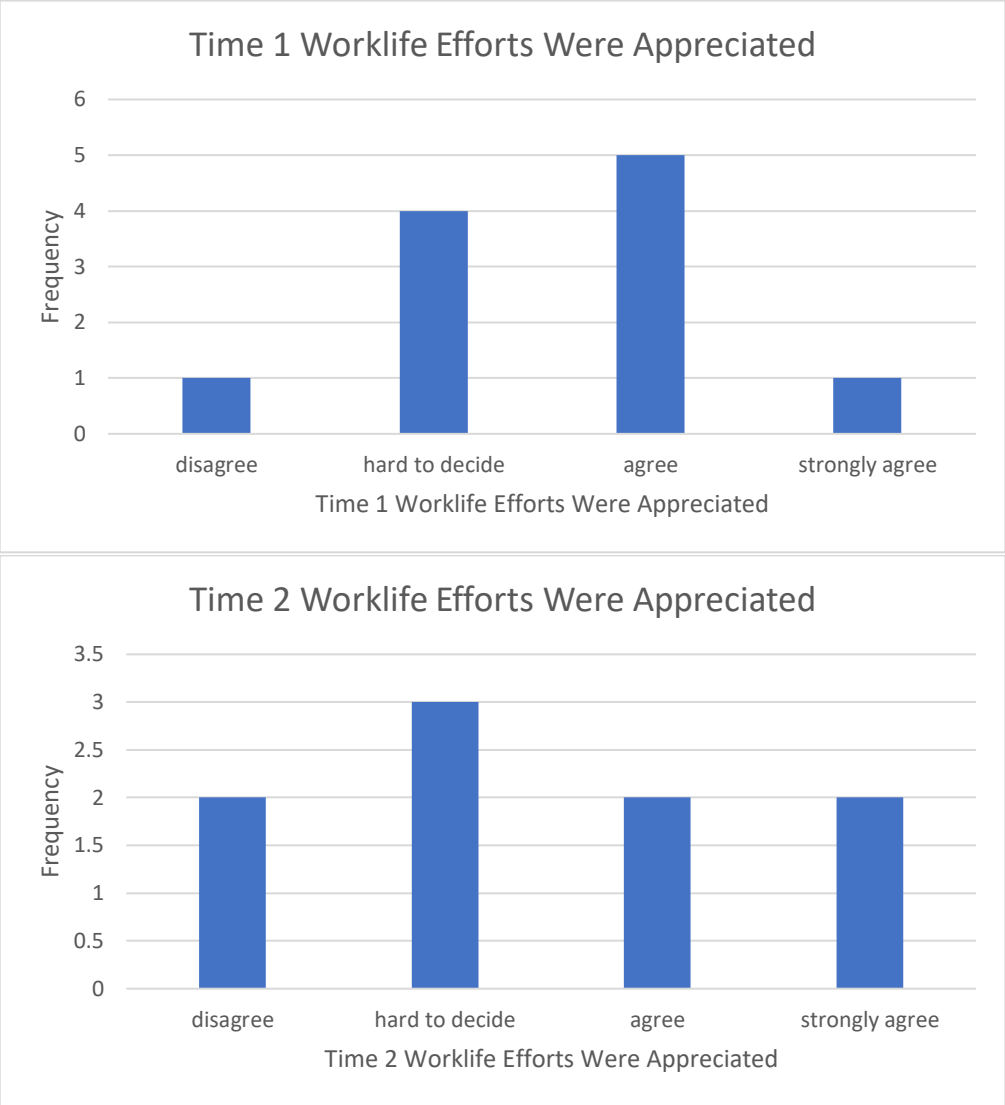


Figure L20

Felt Sense of Social Support in Work Team at Time 1 vs Time 2

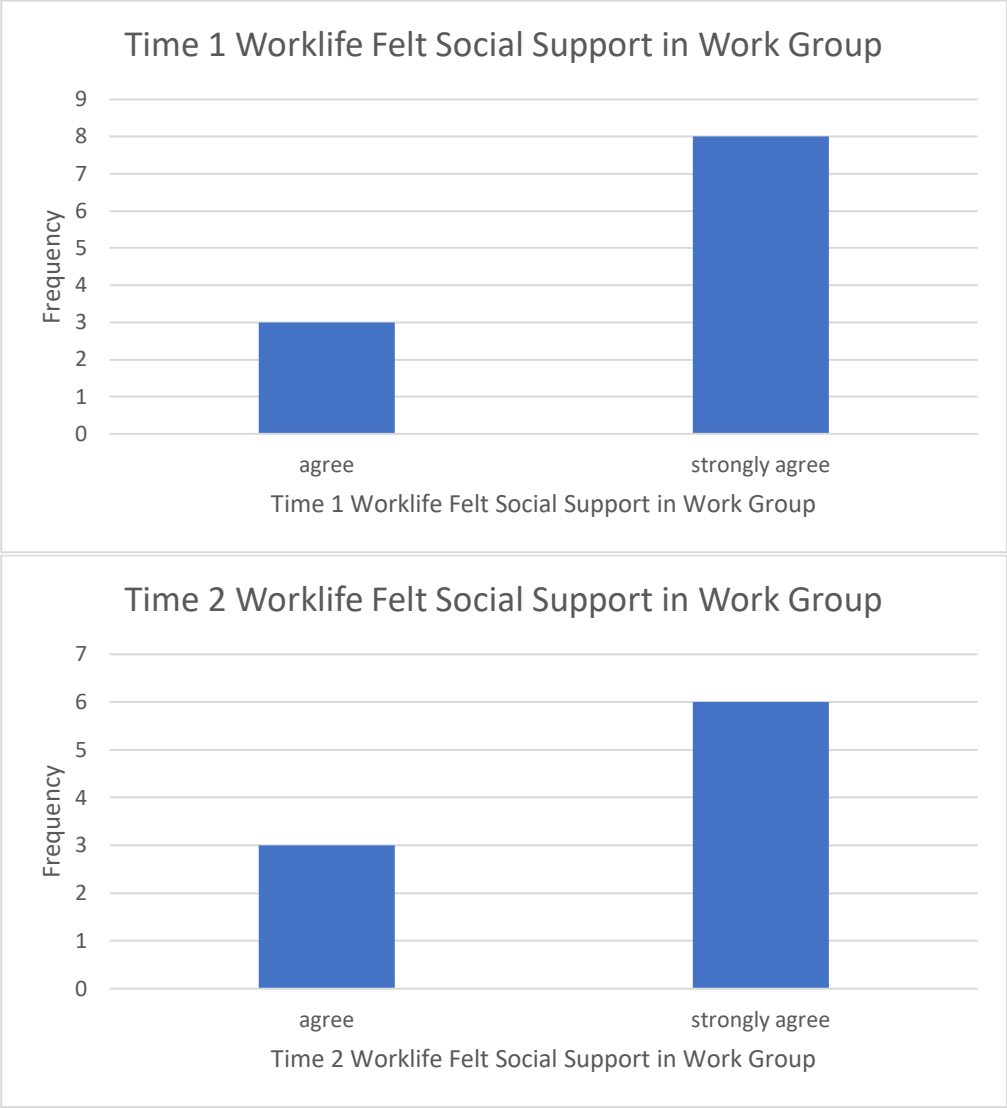


Figure L21

Felt Sense that Work was Assigned Fairly at Time 1 vs Time 2

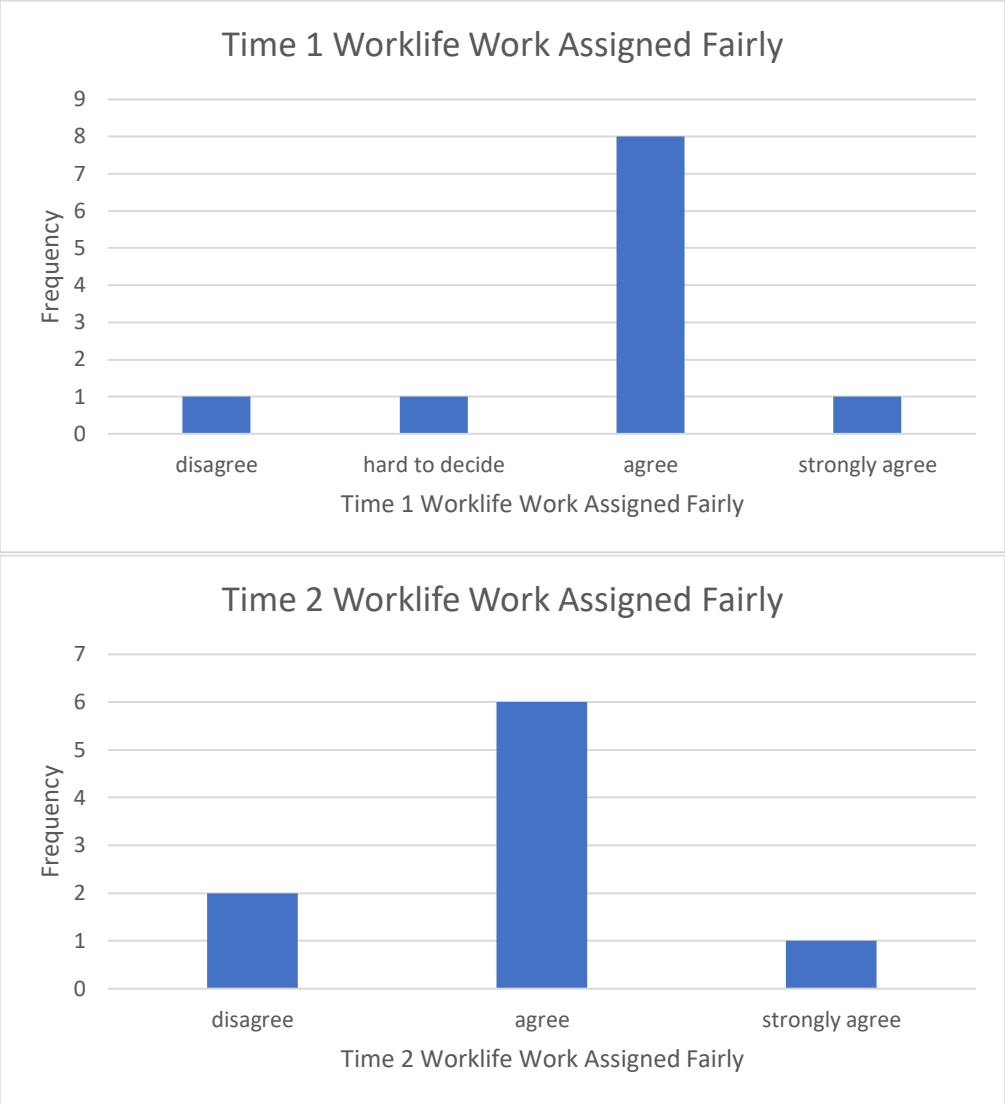
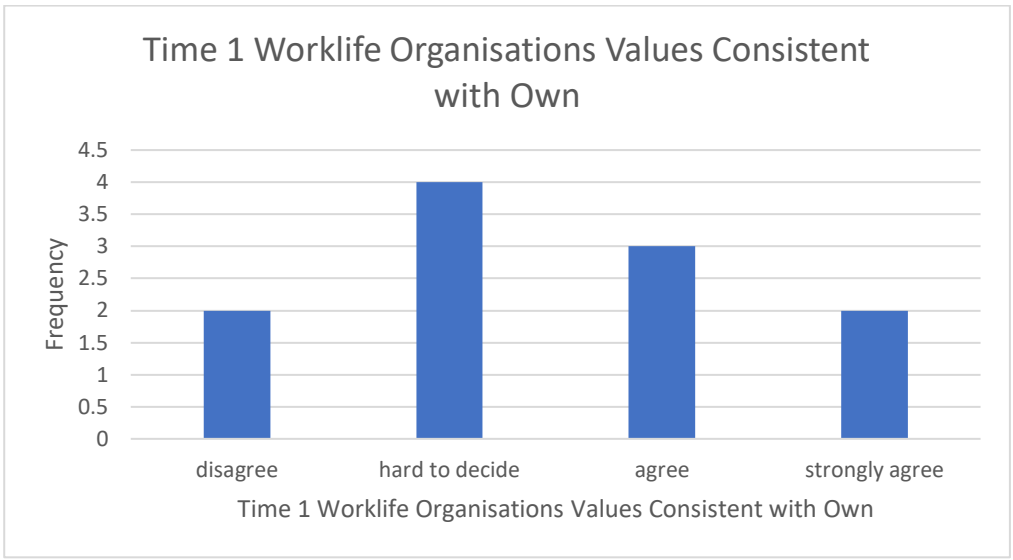


Figure L22

Perception of Organisational Values be Consistent with Own Values at Time 1 vs Time 2



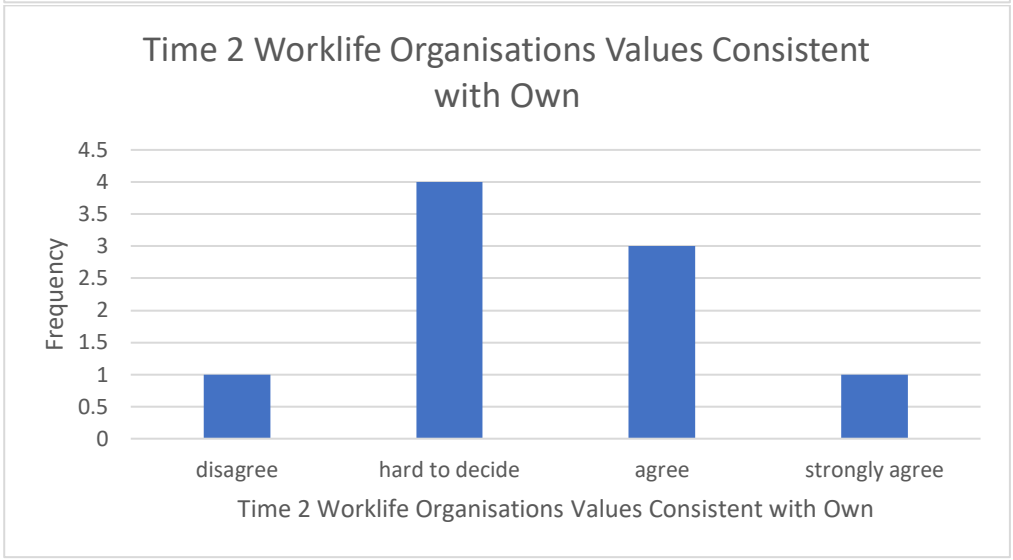


Figure L23

Perception that Leadership Expressed Hope for Success at Time 1 vs Time 2

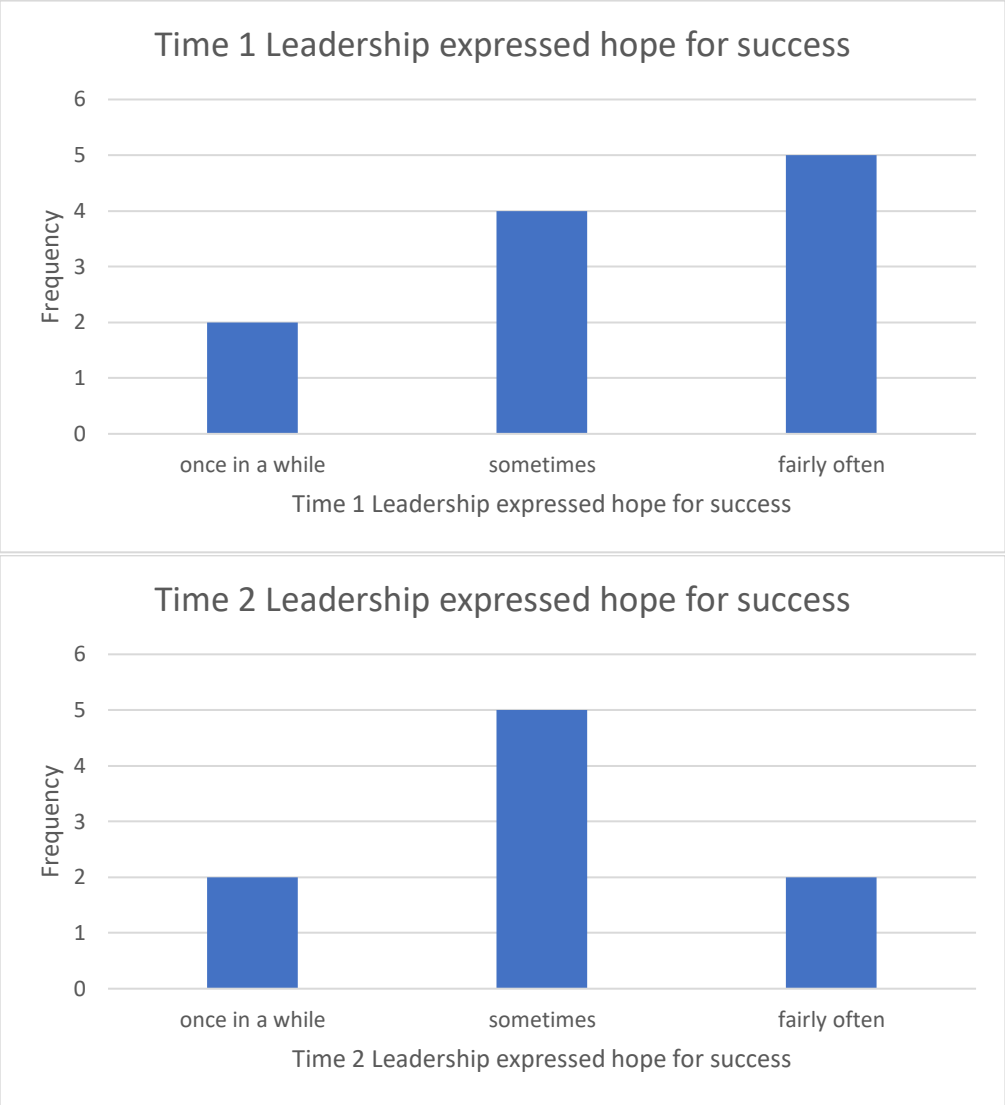


Figure L24

Perception that Leadership Identified Actions to Improve Capabilities at Time 1 vs Time 2

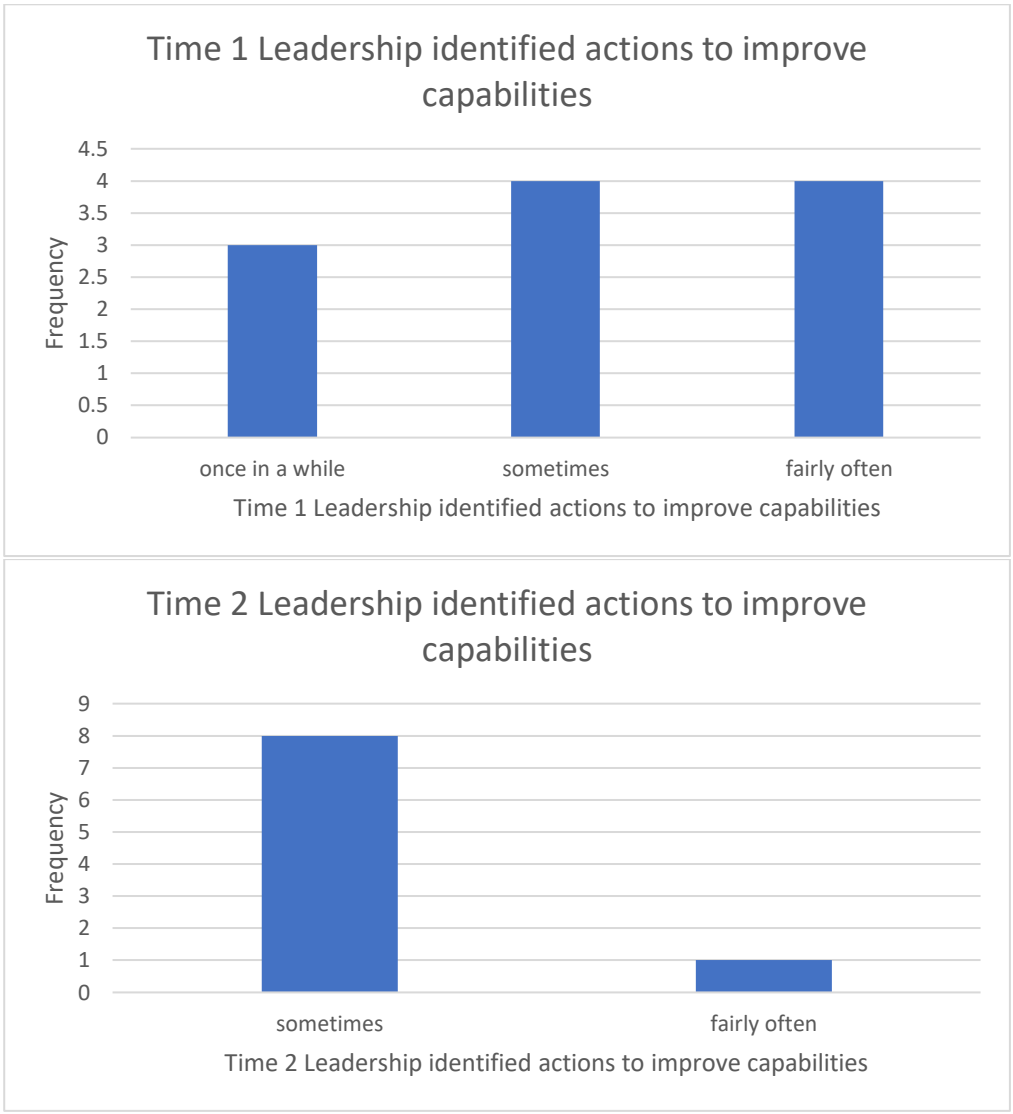


Figure L25

Perception that Leadership Expressed Confidence in Capacity to Take Effective Action at Time 1 vs Time 2

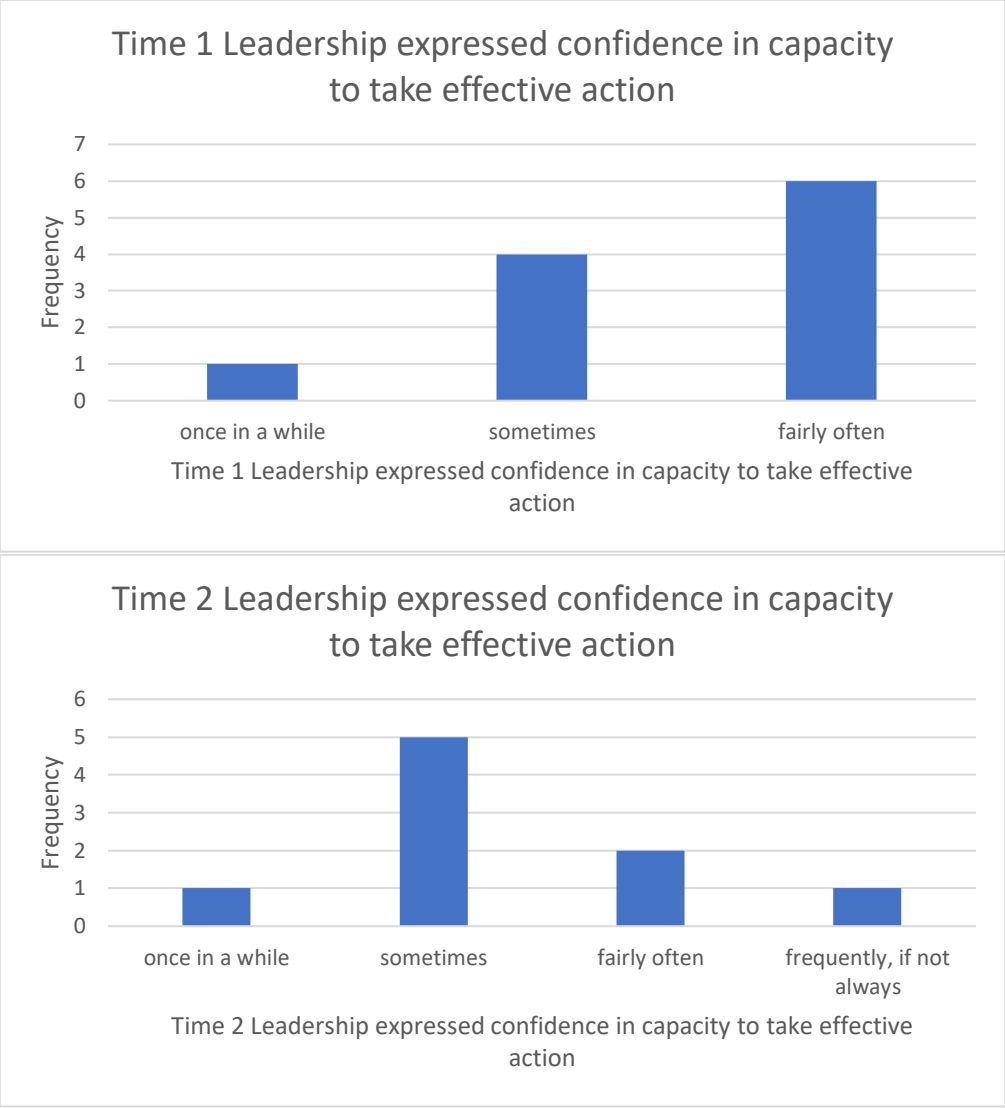


Figure L26

Perception that Leadership Helped Staff Feel Safe at Time 1 vs Time 2

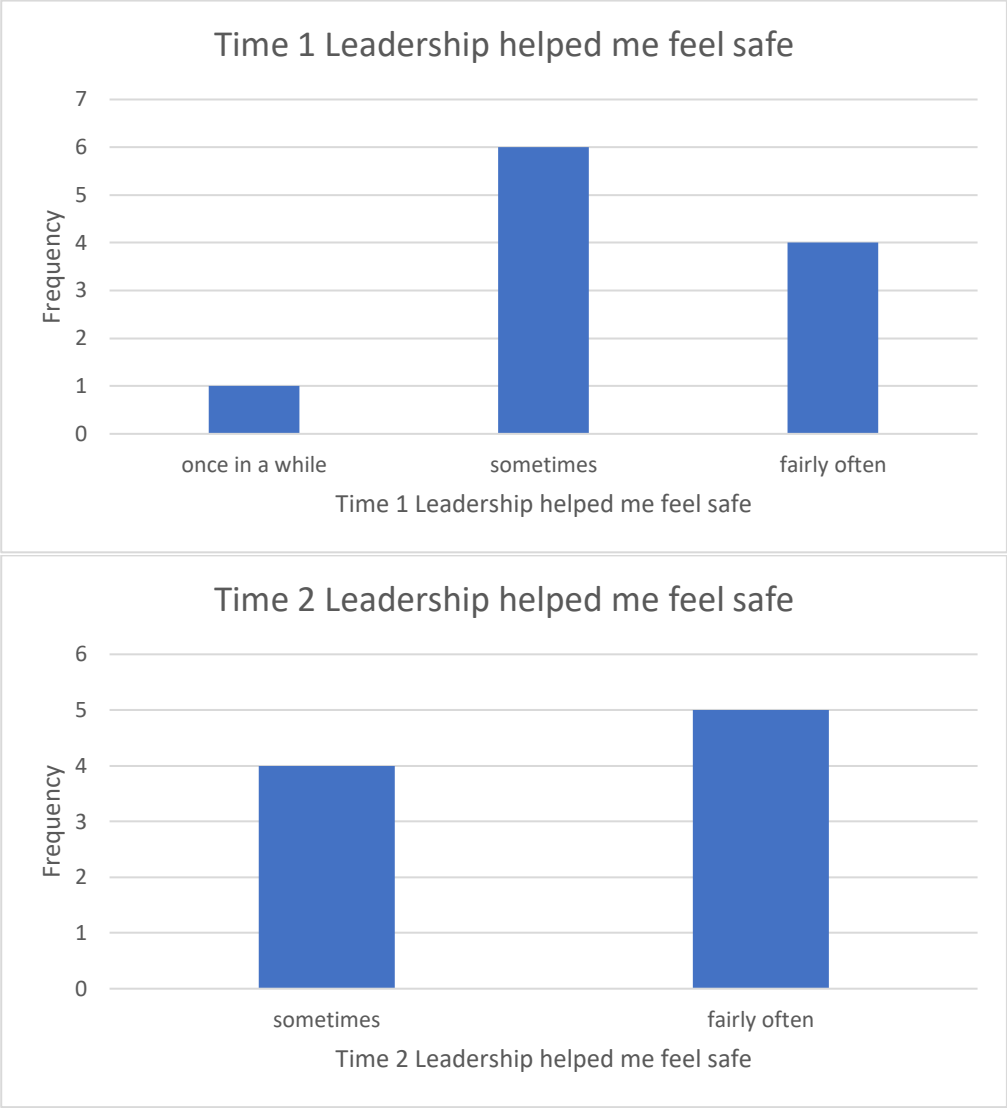


Figure L27

Perception that Leadership Gave an Honest Assessment of Situation at Time 1 vs Time 2

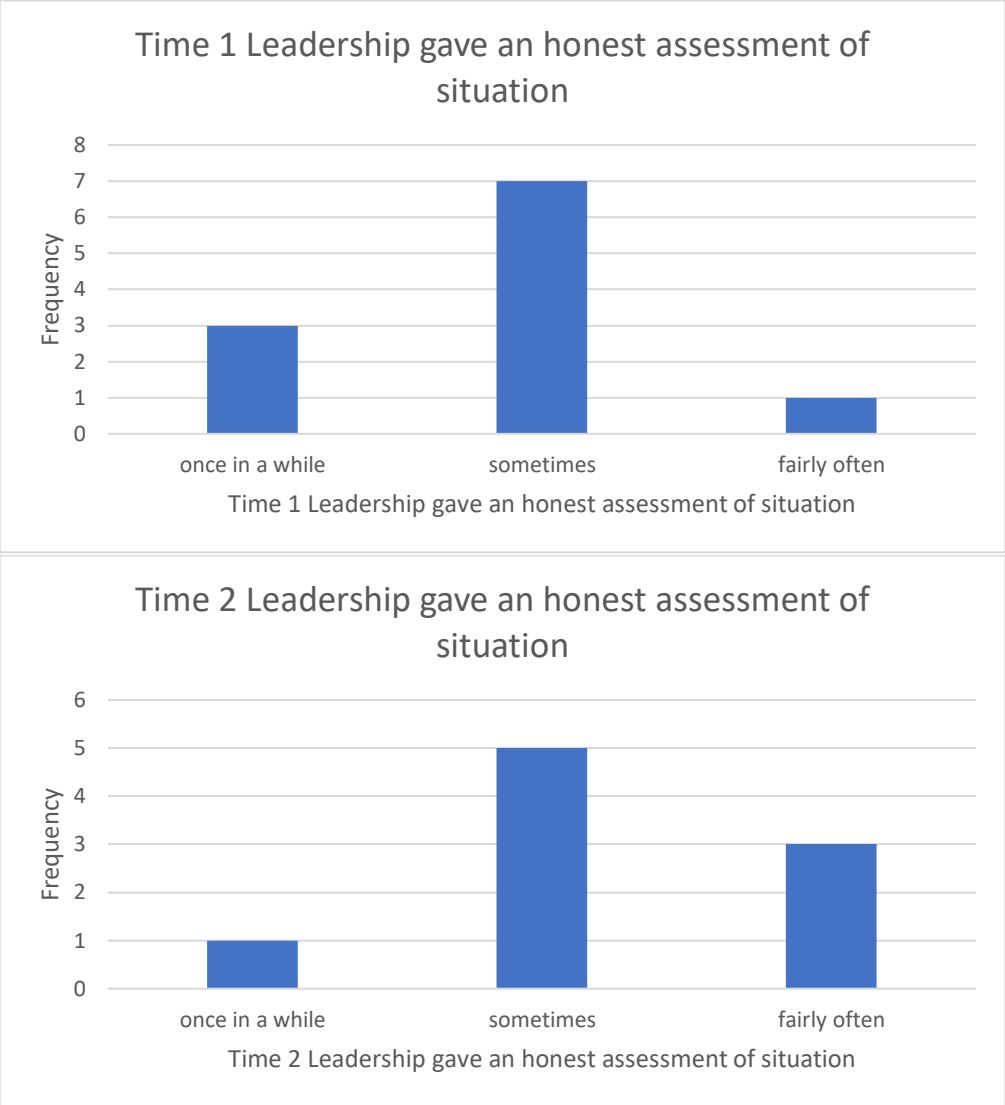
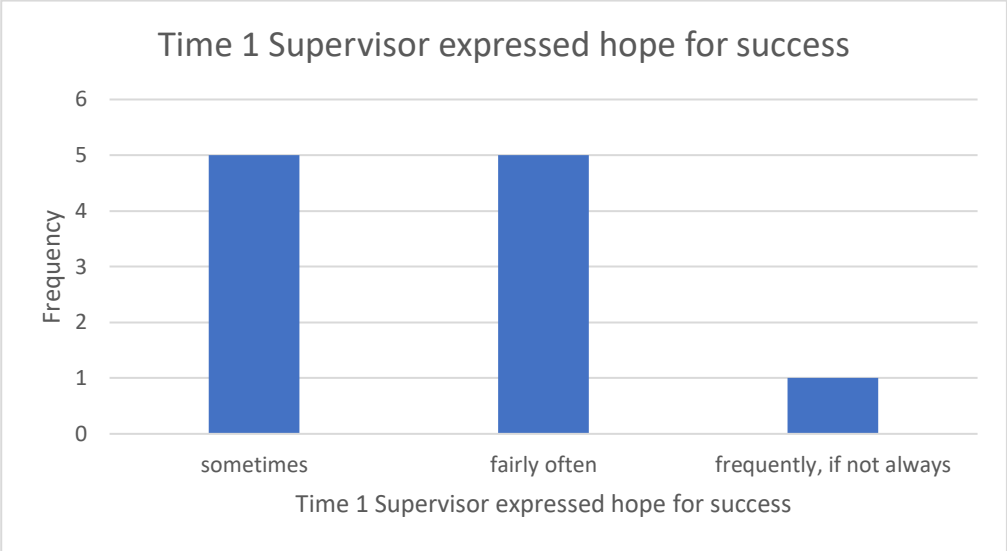


Figure L28

Perception that Supervisor Expressed Hope for Success at Time 1 vs Time 2



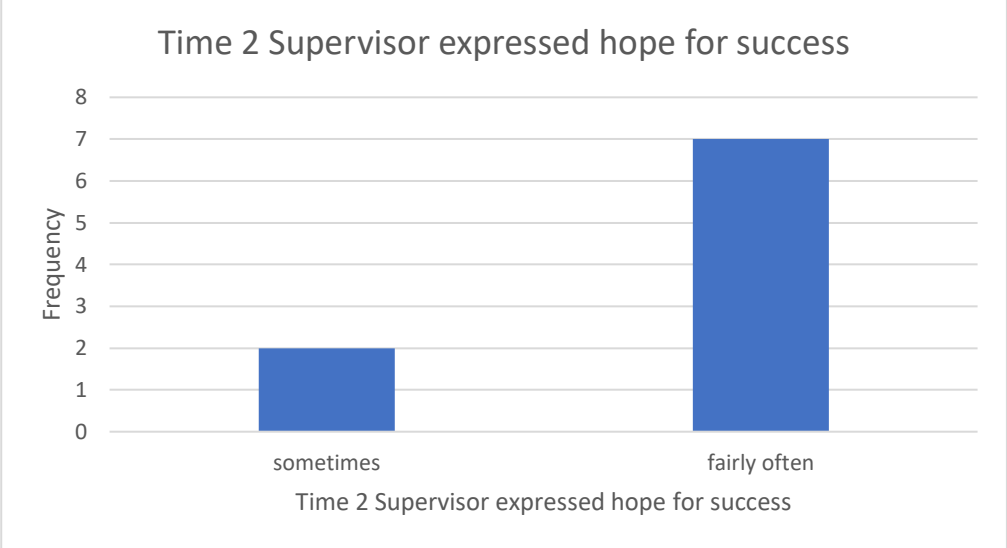
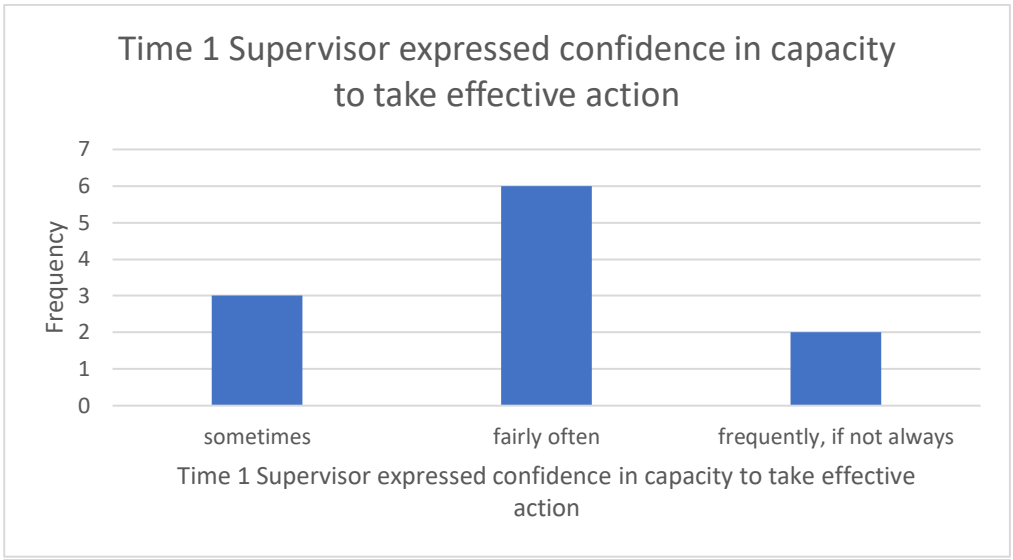


Figure L29

Perception that Supervisor Identified Actions to Improve Capabilities at Time 1 vs Time 2

Figure L30

Perception that Supervisor Expressed Confidence in Capacity to Take Effective Action at Time 1 vs Time 2



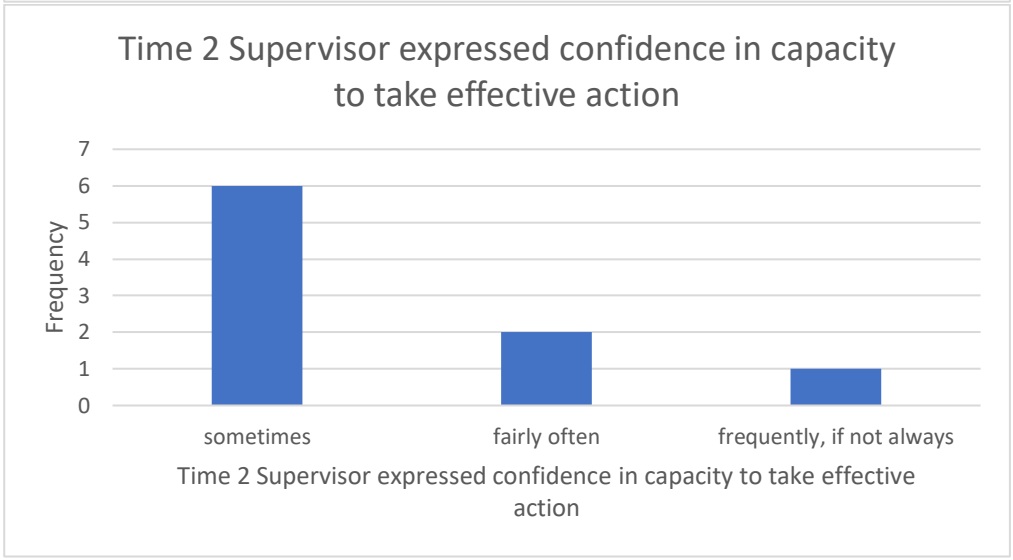


Figure L31

Perception that Supervisor Helped Staff Feel Safe at Time 1 vs Time 2

Figure L32

Perception that Supervisor Gave an Honest Assessment of Situation at Time 1 vs Time 2