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PANDEMIC PARADOX: A MIXED METHODS STUDY UNMASKING THE IMPACT OF COVID-19 ON AUSTRALIA'S NURSING AND MIDWIFERY WORKFORCE JOB SATISFACTION AND RETENTION

Laura Lillian Hynes

BSN | RN | MN

Submitted in fulfilment of the requirements for the degree of

Doctor of Philosophy (Nursing)

School of Nursing and Midwifery

Fremantle Campus

February 2024

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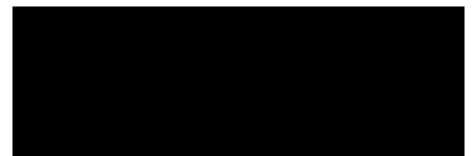

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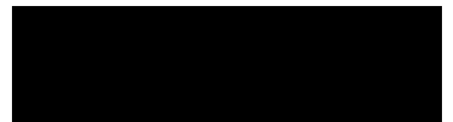

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DEDICATION

This thesis is dedicated to my family.

To my husband Nathan, there are not enough of words to express how truly grateful I am to have your unwavering support and patience throughout this journey. You have made numerous sacrifices throughout this time and have always been there to support and reassure me when I doubted myself and my ability to keep going. This dream of obtaining a doctoral degree would have remained just that a dream without you.

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I would also like to sincerely thank the participants, who generously and graciously gave up their time to participate in my research. Beyond their contribution to this study, their dedication to their profession, even under the formidable circumstances of the COVID-19 pandemic, is deeply admirable and inspirational. Their stories and experiences, shared with such candour, will forever resonate and not be forgotten. I would like to express my gratitude for their willingness to share their personal experiences of navigating through the COVID-19 pandemic. Their insights have been invaluable to this study, shedding light on important lessons learned from their experiences. As we move forward, we can use these stories as a guide to enhance working conditions and ensure better job satisfaction and retention rates in the nursing and midwifery profession in Australia.

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ABSTRACT

Background: The COVID-19 pandemic has seen an outpouring of attention focusing on the global nursing and midwifery shortage and its damaging impact on healthcare systems worldwide. However, there is limited research, both globally and in Australia, on its impact on nurses' and midwives' job satisfaction and their associated intentions to stay or leave their job and/or profession, as a result. The lack of extensive research in this area highlights the importance of this Doctoral thesis. My research aimed to fill this gap by conducting a detailed study of the personal experiences of nurses and midwives who worked during the pandemic in Australia and examined how COVID-19 affected their job satisfaction.

Aim: The aim of my research study was to investigate Australian Registered Nurses and Registered Midwives' lived experiences of working through the COVID-19 pandemic, whilst examining how the pandemic has affected their intention to stay, or leave, their job or profession.

Methods: In this convergent parallel mix method research study, 306 Registered Nurses, 42 Dual Practicing Registered Nurses and Midwives, and 16 Registered Midwives from across Australia completed an online validated quantitative questionnaire named the Nursing Workplace Satisfaction Questionnaire (developed by Fairbrother and Jones and used with permission). This tool measures three key domains of job satisfaction: intrinsic job satisfaction, extrinsic job satisfaction and relational job satisfaction. Concurrently, further in-depth qualitative data was obtained via 11 semi-structured, online interviews with six Registered Nurses and five Registered Midwives who worked in various facilities across four states and territories, using an Interpretive Phenomenological approach. Furthermore, my study was underpinned by the Postpositivist Theoretical Framework.

Results: Participants experienced significant isolation from the community, family, and friends, feeling like 'lepers in the eyes of the public'. Participants also reported being bullied and labelled 'troublemakers' for questioning unsafe policy changes. Nurses and midwives felt undervalued and expendable, due to the rationing of personal protective equipment that favoured physicians. It was revealed that nurses and midwives working in both public and private sectors reported lower levels of extrinsic and relational job satisfaction compared to those employed in just one sector. This variation was confirmed as statistically significant. Midwives showed higher relational job satisfaction, yet lower extrinsic job satisfaction compared their nursing

counterparts. While participants dual practicing as nurses and midwives reported higher job satisfaction in all categories. Specifically, their relational job satisfaction was statistically significant. The study's midwifery participants likened pandemic healthcare protocol changes, such as limited pain relief and birthing partner restrictions, to a loss of women's rights. Participants relied on personal resilience to cope with organisational failures and shortcomings. Poor organisational resilience led to participants having feelings of helplessness and anxiety. Nurses and midwives in Western Australia had job satisfaction levels remarkably similar to those in other states and territories, with only a 0.01% difference. Profound emotional distress was evident among participants regarding redeployment. In some cases, redeployment anxiety surpassed the fear of the pandemic itself. The participants reported severe mental health deterioration during the pandemic, including burnout, anxiety, depression, post-traumatic stress disorders, suicidal ideation, and disrupted sleep patterns with nightmares akin to wartime experiences.

Conclusion and Implications: In my study it was found that challenges like isolation, workplace bullying, and societal perceptions negatively impacted nurses and midwives intrinsic job satisfaction, with individual resilience being crucial in mitigating these effects. Extrinsic job satisfaction was severely affected by hierarchical bullying, often forcing nurses and midwives to choose between unsafe practices and professional repercussions. Relational job satisfaction varied, with midwives generally having higher relational job satisfaction, but were more adversely affected by strict pandemic guidelines that affected the relational aspect of their profession. Despite being calculated independently, each individual job satisfaction (intrinsic, extrinsic, and relational) score was found to be statistically correlated.

Regardless of the case numbers or mortality rates, nurses and midwives are inherently prone to psychological distress due to the inherent nature and demands of their professional role, identity, and sense of duty. Involvement in pre-pandemic preparedness and informed awareness about potential redeployment may reduce the shock of sudden redeployment during a pandemic. My study highlights the need for organisational adaptability and proactive risk management, shifting the focus from individual resilience to organisational responsibility.

ABBREVIATIONS

Abbreviation	Definition
%	Percentage
AHPRA	Australian Health Practitioner Regulation Agency
AIDS	Acquired Immunodeficiency Syndrome
AIM	Assistant in Midwifery
AIN	Assistant in Nursing
ANOVA	Analysis of Variance
APN	Advanced Practicing Nurse
BSN	Bachelor of Science in Nursing
CAQDAS	Computer-Assisted Qualitative Data Analysis Software
CCU	Critical Care Unit
CDC	Centers for Disease Control and Prevention
CEO	Chief Executive Officer
CFR	Case Fatality Rate
CINAHL	Cumulative Index of Nursing and Allied Health Literature
COVID-19	Coronavirus disease
CSA	Certified Surgical Assistant
DON	Director of Nursing
EAP	Employee Assistance Program
EBA	Enterprise Bargaining Agreement
ED	Emergency Department
EFT	Equivalent Full Time
EN	Enrolled Nurse
EOLC	End-of-Life Care
EVD	Ebola Virus Disease
F	F Distribution in Analysis of Variance
FTE	Full Time Equivalent
H1N1	Swine Flu
HCW	Health Care Worker
HDU	High Dependency Unit
HIV	Human Immunodeficiency Virus

Abbreviation	Definition
HREC	Human Research Ethics Committee
HSD	(Tukey) Honestly Significant Difference
ICU	Intensive Care Unit
IPA	Interpretive Phenomenology Analysis
IPC	Infection Prevention and Control
IQN	Internationally Qualified Nurse
IVF	In Vitro Fertilisation
JBI	Joanna Briggs Institute
LGBTIQA+	Lesbian, Gay, Bisexual, Transgender, Intersex, Queer/Questioning, Asexual
MERS-CoV	Middle East Respiratory Syndrome Coronavirus
MeSH	Medical Subject Headings
MSN	Master of Science in Nursing
N	Total Number of Cases (Sample Size)
n	Number of Cases
NHS	National Health Service
NMBA	Nursing and Midwifery Board of Australia
NPI	Non-Pharmaceutical Interventions
NSW	New South Wales
NT	Northern Territory
NWSQ	Nursing Workplace Satisfaction Questionnaire
NZ	New Zealand
OECD	Organisation for Economic Co-operation and Development
OSH	Occupational Safety and Health
p	P Score, which is the probability of the NULL hypothesis being true
PCA	Patient Care Assistant
PCC	Population Concept Context
PhD	Doctor of Philosophy
PHEIC	Public Health Emergency of International Concern
PPE	Personal Protective Equipment
PRISMA-ScR	Preferred Reporting Items for Systematic Reviews and Meta-analyses extension for Scoping Review

Abbreviation	Definition
PTSD	Post Traumatic Stress Disorder
RM	Registered Midwife
RN	Registered Nurse
RNA	Ribonucleic Acid
r_s	The Spearman's Rank Correlation Coefficient
SAC	Severity Assessment Code
SARS	Severe Acute Respiratory Syndrome
SARS-CoV-1	Severe Acute Respiratory Syndrome Coronavirus 1
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
SDN	Staff Development Nurse
SPSS	Statistical Package for Social Science
Tukey's HSD	Tukey Honestly Significant Difference
UK	United Kingdom
USA	United States of America
VIC	Victoria
WA	Western Australia
WHO	World Health Organization
YONM	Year of the Nurse and Midwife
ZFH	Zagazig Fever Hospital
ZGH	Zagazig General Hospital
η^2	Eta Squared
ω^2	Omega Squared

CHAPTER 1 INTRODUCTION

The COVID-19 pandemic has drawn significant attention to the longstanding and well-documented issue of the global nursing and midwifery shortage, and the catastrophic implications of this on healthcare systems worldwide. Existing research has primarily focused on exploring the physical and psychological implications of the COVID-19 pandemic on the well-being of nurses and midwives. However, a notable research gap exists, both at the international level and specifically within Australia, regarding the identification of intrinsic, extrinsic, and relational factors associated with COVID-19 that influence nurses' and midwives' intentions to either remain in or exit the profession. Consequently, there is an imperative need for further investigation into the collective impact of these multifaceted factors on the decision-making process of nurses and midwives during this ongoing pandemic.

This chapter commences with a brief background of my interest in the research topic, including the motivations behind it and emphasising its significance. Following the background, the chapter provides an overview of the various mutations of Severe Acute Respiratory Syndrome (SARS) and emphasises the differences between SARS-CoV-2 (the virus that causes COVID-19) and its previous strains. The chapter then examines the impact of past pandemics on the nursing and midwifery workforce, emphasising the importance of understanding these historical events. Building on this foundational information, the chapter proceeds to introduce the problem, research aims, objectives and overarching research question. This includes an explanation of the study's significance, highlighting the potential contributions and implications of the research. Finally, the chapter concludes with an overview of the thesis structure, giving the readers a roadmap of what to expect in the subsequent chapters.

1.1 The Researchers Background

Over the course of my career as a registered nurse and university academic, I have become increasingly passionate about not only supporting the wellbeing of the emerging generations of nurses and midwives, but also those who have been working tirelessly and selflessly in the profession for extended periods of time. I completed my Bachelor of Science (Nursing) before going on to complete several postgraduate certificates, culminating in a Master of Nursing Degree. I trained in a range of acute and critical care nursing units throughout Perth, Western Australia (WA) specialising in paediatric, intensive care, emergency, among others.

In the early period of my career as a graduate registered nurse working in a tertiary Intensive Care Unit (ICU). I noted a lack of formal training, support, and standardised practices for the initiation of the discussion and act of withdrawal or withholding of life sustaining treatments in the ICU setting. Often, I saw nurses left feeling disempowered and distressed at the level of care and support they were able to give to the patient, and their families once these decisions had been made to withdraw or withhold life sustaining treatment.

That was the start of my endeavour to improve the wellbeing of the nurses caring for critically ill patients. As there was limited research available highlighting and providing insight into the provision of End-of-Life Care (EOLC) in the ICU setting at that time in Australia, I began researching what the first-hand challenges, issues and obstacles nurses faced daily when it came to EOLC in the ICU setting. My master's research highlighted the effect of the perceived negative EOLC experiences on nurses' psychological and physical wellbeing, as well as how these experiences affected their overall job satisfaction. This study inspired me to look at how we retain the existing workforce and safeguard patient care. Two months after I finished this research project, COVID-19 was declared a pandemic worldwide.

At the start of the pandemic there was a lot of concern in the health profession about how we were going to cope. There were a lot of unknowns and uncertainties around the disease process and management, and how health professionals were going to be protected from contracting the virus. Despite the trying circumstances, the healthcare community demonstrated remarkable unity and selflessness by willingly placing themselves at risk to safeguard and provide comprehensive care for the broader community. They exhibited extraordinary commitment, often working extended 18-hour shifts as a routine, voluntarily stepping forward to care for COVID-19 positive patients and undertaking various additional responsibilities to ensure effective management of the pandemic.

I noticed that as the pandemic progressed over months then years, nurses in my unit and hospital were starting to struggle as the realisation that the pandemic was not going to pass quickly became apparent. Nurses and midwives were fatigued and exhausted, and heightened tension and emotional distress were being witnessed on shifts regularly. I started to think about the potential short to long term implications of COVID-19 on the nursing and midwifery workforce.

Given the lack of existing research on this subject matter in Australia, I recognised the need for further exploration of this phenomenon. Driven by personal experiences and careful observations, I embarked on a research endeavour to explore the underlying factors contributing to workplace dissatisfaction and distress amongst nurses and midwives in Australia, since the emersion of the pandemic. This resulted in my presented PhD thesis.

1.2 Overview

The COVID-19 pandemic has been one of the most significant pandemics in modern history due to its global impact and the substantial number of individuals infected. The World Health Organization (WHO) defines a pandemic as "an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people" (World Health Organization, 2020b). Whereas Dr Doshi, who published in the Lancet, also raised the point that the traditional definition of a pandemic does not encompass population immunity, virology, or the severity of the disease (Doshi, 2011). On March 11th 2020, WHO declared the novel coronavirus disease (COVID-19) an infectious disease caused by the SARS-CoV-2 virus, a global pandemic as it had already spread to 113 countries (World Health Organization, 2020b). Within a few months of COVID-19 being identified as a pandemic, it had rapidly spread around the world, resulting in over 74 million confirmed cases and more than 1.6 million deaths worldwide (Piret & Boivin, 2021; World Health Organization, 2020i). In contrast, the annual seasonal epidemics of the influenza virus resulted in a comparatively lower number of severe illness cases with an estimated 3 to 5 million people critically ill, and approximately 500,000 fatalities globally (Luliano et al., 2018). By the end of May 2020, due to the Australian strict international and national boarder security, Australia managed to record a relatively low number of cases, with a total of 107 confirmed cases and 114 confirmed deaths Australia wide by the end of May 2020 (Piret & Boivin, 2021; World Health Organization, 2020i). The COVID-19 virus is the third recorded occurrence of a coronavirus outbreak, following the 2002 Sudden Acute Respiratory Syndrome (SARS-CoV-1) and the 2012 Middle East Respiratory Syndrome (MERS-CoV) epidemics. Whilst the virology of SARS-CoV-1 and MERS-CoV is most readily comparable, they did not reach the global scale of the COVID-19 variant (Petersen et al., 2020; Piret & Boivin, 2021).

The epidemic of SARS-CoV-1 in 2002 serves as the most proximate coronavirus predecessor to the COVID-19 pandemic, particularly when examining transmissibility. Nonetheless, the intensity of the SARS-CoV-1 outbreak was considerably reduced due to an

expedient and highly coordinated global health response, thereby containing the case numbers to a small number across several countries (Khanna et al., 2020). In contrast, the early phase of the COVID-19 pandemic witnessed an exceptional transmission rate, largely attributable to the accelerated rate of urbanisation and a significant increase in international travel over the two decades following SARS-CoV-1 (Khanna et al., 2020). This societal change, has led to the infection control measures, once effective during the SARS-CoV-1 outbreak, becoming ill-suited to meet the unique challenges posed by the current pandemic (Khanna et al., 2020). Additionally, the viral shedding pattern of COVID-19 has been identified as being vastly different to SARS-CoV-1 (Wilder-Smith et al., 2005) with COVID-19 transmission occurring in the early phase of the illness, when patients are often asymptomatic (Wilder-Smith et al., 2020). As a result, isolation after symptom onset was later found to be considered ineffective in preventing COVID-19 virus transmission (Wilder-Smith et al., 2020).

While it is undeniable that pandemics like the Black Death (1347-1351) and the Spanish Flu (1918-1920) had significantly higher fatality rates than the COVID-19 pandemic, this should not be surprising given that humanity has gained numerous advantages in the fight against diseases over time (Knobler et al., 2005; Morens & Taubenberger, 2018). These include experience in dealing with three well-characterised pandemics in 1918 (Spanish flu), 1957 (Asian influenza H2N2), and 1968 (Hong Kong influenza H3N2), along with increased knowledge of influenza viruses and the ability to design and manufacture vaccines and antiviral drugs to prevent or mitigate infection (Piret & Boivin, 2021). Furthermore, advances in molecular technology offer the possibility of identifying specific viral components that contribute to virulence, which lead to the development of more effective vaccines and drugs (Piret & Boivin, 2021).

The H1N1 pandemic, colloquially known as 'Swine Flu', was the most recent pandemic prior to COVID-19, occurring between 2009-2010. The H1N1 virus outbreak, infected an estimated 700 million to 1.4 billion individuals, equivalent to approximately 11-21% of the global population, causing the same level of initial concern globally as the COVID-19 pandemic has (Fineberg, 2014). However, in contrast to both the Spanish Flu and the COVID-19 pandemic, the overall Case Fatality Rate (CFR) for H1N1 was relatively lower, with an estimated 284,000 fatalities occurring by the end of the pandemic (2010) in proportion to the number of individuals infected, highlighting the importance of context when comparing pandemics and lessons learnt (Fineberg, 2014). When considering the aforementioned factors, it is suggested that COVID-19

is a distinct and unprecedented type of pandemic, with a global death toll of 6.9 million recorded thus far, three years since its inception, with no foreseeable end in sight (World Health Organization, 2023c). This is because COVID-19 has managed to affect a greater portion of the global population due to its highly infectious nature, the rapid urbanisation of the population, and the ease of global travel today (Petersen et al., 2020).

Initial assessments indicate that the Spanish Flu pandemic affected fewer than half of the countries globally and was limited to a population that constituted only 28% of the current population today (Knobler et al., 2005; Liang et al., 2021). It primarily targeted healthy adults aged between 25 and 40 years old, with a mortality rate of 2.5% (Barry, 2020; Knobler et al., 2005; Liang et al., 2021). In contrast, COVID-19 has spread to almost all countries, predominantly affecting individuals over 65 years of age with comorbidities as well as those who were vulnerable (Liang et al., 2021).

One of the primary objectives associated with the pursuit of herd immunity through vaccination is to safeguard vulnerable populations who are unable to receive vaccinations, often due to underlying health conditions such as allergic reactions to the vaccine, thus protecting them from the detrimental effects of the disease (Lytras & Tsiodras, 2021; World Health Organization, 2020a). In the realm of public health, certain subgroups consistently emerge as being particularly vulnerable. These subpopulations can be identified as being susceptible to health disparities, encompassing, though not exhaustive to, racial and ethnic minorities, juveniles, the geriatric population, immigrants and refugees, socioeconomically marginalised individuals, individuals with disabilities, underinsured individuals, residents of rural areas, incarcerated individuals, victims of domestic violence, LGBTQIA+ individuals, and individuals affected by specific medical conditions (Waisel, 2013). Achieving effective herd immunity against COVID-19 requires a considerable proportion of the population to be vaccinated, effectively reducing overall transmission of the virus within the entire community (Lytras & Tsiodras, 2021; World Health Organization, 2020a).

In an effort to control the spread of COVID-19 in vulnerable populations, widespread implementation of stringent physical distancing measures and movement restrictions, commonly known as lockdowns, were enforced in many countries (World Health Organization, 2020a). These measures aimed to limit interpersonal contact, thereby slowing down the spread of the virus until the vaccine could be made and distributed (World Health Organization, 2020a).

However, it is important to acknowledge that such interventions can have significant adverse consequences on individuals, communities, and societies, as they effectively halt social and economic activities (Burki, 2021; Simon et al., 2021; Sugawara et al., 2022).

According to recent estimates, the fatality rate of COVID-19 varies from 1% to 16%, with most fatalities resulting from multi-organ failure (Barry, 2020; Liang et al., 2021; Silveira et al., 2022). It is important to acknowledge that there is a variance in the CFR among different countries (Sorci et al., 2020). Some nations have reported a CFR lower than 1%, whereas others, especially those underprivileged countries with overwhelmed healthcare systems, having a CFR as high as 25% (Sorci et al., 2020).

It should be noted that discrepancies in data collection, coupled with reporting delays amongst health jurisdictions, can result in COVID-19 fatality underreporting (Ledesma et al., 2023; Whittaker et al., 2021). The varying methodologies for testing and death certification across nations further obscure an accurate toll the pandemic has had on the world (Whittaker et al., 2021). Notably, a recent global assessment by the World Health Organization reveals that nearly 40% of deaths globally, irrespective of pandemic circumstances, remain unregistered (Liu et al., 2021). Moreover, instances of political or economic pressures may drive some countries to diminish the perceived severity of the pandemic, potentially prompting an intentional underreporting of COVID-19-induced fatalities (Whittaker et al., 2021). While the nuances of global data reporting may lead to discrepancies in the perceived severity of the pandemic, it's undeniable that, at the ground level, healthcare professionals, especially in unstable regions, grapple with the tangible and often dire consequences of these crises.

In fragile and often conflict-ridden environments, nurses and midwives face numerous personal and professional challenges, such as potential abduction, coping with colleagues' fatalities (Catton, 2020), concerns for their own safety (Rees et al., 2018), increased and complex workloads like caring for victims of domestic violence and trauma injuries (Ali et al., 2022; McVicar, 2003), and occasional decline in ethical and professional standards (Witter et al., 2017; World Health Organization, 2020j). Recognised as the backbone of healthcare delivery, nurses and midwives showcased their adaptability and flexibility in embracing new working systems, especially during the first wave of the COVID-19 pandemic (Ryder et al., 2022). Despite these adversities, nurses and midwives routinely display remarkable resilience and unwavering dedication. They continue to deliver essential services in challenging environments, honouring

their professional duties and providing care to those in need (Labrague, 2021; World Health Organization, 2020j). Their enduring commitment to their patients and communities is a testament to their strength and the critical role they play in healthcare systems (Labrague, 2021; World Health Organization, 2020j).

1.3 Historical Perspectives on Job Satisfaction, Retention and Shortages

Through a comprehensive examination of the nursing and midwifery workforce spanning several decades, this section of the introduction aims to explore the understanding of the multifaceted challenges associated with nurses and midwives' workforce retention on both national and international scales. By examining the historical evolution of this workforce, the complex factors and dynamics that have influenced the retention of these healthcare professionals over time can be identified.

As integral members of the healthcare workforce, nurses and midwives contribute significantly to the global healthcare landscape, constituting 60% of the workforce and providing approximately 90% of primary healthcare services (International Council of Nurses, 2020b; World Health Organization, 2020c). Nurses and midwives usually serve as the initial and primary contact between patients/women and the healthcare system and play a central role in advocating for patients/women and the nursing and midwifery professions (Browne et al., 2012; International Council of Nurses, 2020b; Richard et al., 2016). Furthermore, nurses and midwives actively participate in the multidisciplinary approach necessary for delivering comprehensive, patient/woman centred care (Browne et al., 2012; Richard et al., 2016; World Health Organization, 2016a). Their efforts are crucial in achieving optimal health outcomes for marginalised and vulnerable patient populations (Browne et al., 2012; Richard et al., 2016). Acting as steadfast advocates for patient/women's rights, they facilitate the making of informed health care decisions, providing an essential link in the healthcare chain (Kwame & Petrucka, 2021). The relationships they forge with patients/women rest on a foundation of trust and mutual respect, integral to the care process (Kwame & Petrucka, 2021). This bond promotes care practices that are attuned to the needs, concerns, and preferences of both patients/women and caregivers, ensuring every interaction is empathetic, thoughtful, and patient-centric (World Health Organization, 2016a, 2020g). The nursing and midwifery professions are considered to be two of the most noble globally, offering a unique opportunity to merge compassion and humanistic skills with scientific expertise (International Council of Nurses, 2020b; van der Cingel & Brouwer, 2021).

The nursing workforce in the National Health Service (NHS) in England faced significant challenges in October 2018, with an estimated 41,000 unfilled positions (NHS Employers, 2020). Applications and acceptances for pre-registration nursing programs had declined for two consecutive years (NHS Employers, 2020). The issue of an insufficient nursing workforce was a primary focus of a report entitled 'NHS Nursing Workforce' that was published by the House of Commons Health and Social Care Select Committee in early 2018. The report highlighted that the nursing workforce was overwhelmed and faced challenges in meeting the increasing demands placed upon it (Buchan et al., 2019; NHS Employers, 2020). The report emphasised the lack of focus on strategies to retain the current nursing workforce, as the number of nurses leaving their professional register exceeded the number of new nurses joining it (Buchan et al., 2019; NHS Employers, 2020). At the time of publication, the establishment of a nursing degree apprenticeship program was underway in response to the widespread nursing shortage; however, it was premature to evaluate the impact of this initiative on the workloads of the existing nursing workforce (Buchan et al., 2019; NHS Employers, 2020). Additionally, there had been a reported lack of investment towards the continuous training and development of nursing professionals (Buchan et al., 2019).

During the same timeframe in the United Kingdom (UK), persistent concerns prevailed regarding the health and retention of the midwifery workforce. The country was grappling with a notable shortfall of approximately 3,500 full-time midwives (Cull et al., 2020; The Royal College of Midwives, 2018). As a substantial proportion, approximately one in three midwives in their fifties and sixties retired, their wealth of experience, skillset, and confidence was progressively lost (Cull et al., 2020; The Royal College of Midwives, 2018). The staffing deficiency was, in part, due to persistent challenges in retaining midwives; for every 30 midwifery students that enter the field, there is effectively only one additional midwife contributing to the overall workforce (Cull et al., 2020; The Royal College of Midwives, 2018). While the government had committed to supporting the training of 3,000 additional midwives in England, the short-term strategy for this implementation was perceived as ambiguous and poorly planned. This was mainly because the number of student admissions was limited by the available clinical and academic resources needed to accommodate these students (Cull et al., 2020; Marshall & Furber, 2017). Furthermore, difficulties in maintaining interest in the midwifery profession saw a further 25% of midwifery students discontinue their course prior to obtaining their qualifications (Cull et al., 2020).

A campaign entitled ‘Caring for You’ was created, aiming to examine the issues around retention and wellbeing whilst working to enhance health, safety, and wellbeing conditions within the UK midwifery workforce (Hunter et al., 2019). This initiative stressed the urgency and importance of addressing these concerns to ensure sustainable practice within the profession (Hunter et al., 2019). The principal findings of the study highlighted a significant degree of emotional distress among the midwifery workforce in the UK (Hunter et al., 2019). It was found that 83% (N = 1464) of the participants reported moderate to severe personal burnout, and 67% (N = 1167) indicated moderate to high work-related burnout (Hunter et al., 2019). Notably, the scores for personal and work-related burnout, stress, anxiety, and depression were markedly higher than those recorded in Australia, New Zealand, and Sweden (Creedy et al., 2017; Dixon et al., 2017; Hildingsson et al., 2013; Hunter et al., 2019). These issues at the time were additionally compounded by a seven-year public sector wage freeze that has effectively capped all NHS staff salaries, precluding any potential increases (Buchan et al., 2019).

In New Zealand (NZ), little work has been undertaken with nurses who have left the profession. A longitudinal study that tracked 2,596 registered nurses for the first eight years after their registration, revealed that 42% had discontinued their practice (Nursing Council of New Zealand, 2015b). Anticipated nursing shortages in larger nations, such as the United States of America (USA), Canada, and Australia, could have repercussions for smaller countries like NZ, which might find it challenging to compete with escalating salaries (Walker & Clendon, 2018).

Currently, over 43% of the nursing and midwifery workforce in NZ is aged over 50 years old (Nursing Council of New Zealand, 2015a). Projections suggest that up to half of this workforce may retire in the next decade to a decade and a half (Walker & Clendon, 2013). Furthermore, the demand for midwives in NZ surpasses the available supply by 24.2%, highlighting a significant shortage (Eddy, 2022). This shortage is compounded by the fact that 421 midwives opted not to renew their practicing certificates in 2022, nearly doubling the attrition rate of the previous year when 224 midwives left the industry in NZ (Eddy, 2022). Several factors have been identified as contributing factors to the increase in midwives leaving the profession such as parental leave, heightened workforce distress caused by stress and workload, and individuals choosing early retirement as a result of unfavourable working conditions (Eddy, 2022). The research also found that the implementation of vaccine mandates negatively affected retention of midwives in NZ. McCready et al., (2023) umbrella review found that vaccine hesitancy rates varied among professional roles, whereby some professions such as

physicians (Machado et al., 2021), were more accepting of a COVID-19 vaccine than other occupations such as nurses (Khubchandani et al., 2022). Concerns about safety, efficacy, and potential side effects of the COVID-19 vaccine were some of the frequent factors that influenced hesitancy among healthcare workers and students. The review also indicated that past vaccination practices impacted COVID-19 vaccination intention (McCready et al., 2023).

While some contend that NZ is registering a sufficient number of new nurses to compensate for the impending retirements, at least until 2025 (Walker & Clendon, 2018), external factors such as expected global shortages could potentially modify these projections. NZ's nursing workforce heavily relies on Internationally Qualified Nurses (IQN) who represent over 25% of nurses registered in NZ (Nursing Council of New Zealand, 2015b). Recent data suggests that these IQNs are increasingly younger and originate predominantly from Asian countries (Nursing Council of New Zealand, 2015a). There was reported growing concerns of their viewing NZ as a preliminary step towards advancing their careers in countries like Australia and the USA (Walker & Clendon, 2015), or they may choose to exit the nursing profession altogether (Nursing Council of New Zealand, 2015a). Both of these factors intensified the existing nursing shortages in NZ.

The WHO approximates that there is an existing deficit of up to 13 million nurses and midwives globally (WHO, 2020f). An additional 17% of all nurses worldwide will be of retirement age within the next five years, with many international nursing and midwifery associations also reporting evidence of mass traumatisation and burnout faced by their members during the pandemic, creating further predicted shortages (International Council of Nurses, 2020b). The State of the World's Midwifery Report (2021) also predicts further deterioration in midwifery shortages in the coming years due to the aftermath of the COVID-19 pandemic, including burnout and fatalities, as well as the aging of the midwifery workforce (United Nations Population Fund, 2021). Over the past several years, discrepancies in the definition and assessment of staff turnover rates have resulted in a broad spectrum of international nurse and midwife turnover estimates, spanning from 4% to 54% (Flinkman et al., 2010). Notably, these turnover rates exhibit significant variation across countries, with turnover rates estimated to be 15% in Australia (Duffield et al., 2014), 20% in Canada (O'Brien-Pallas, 2008), 27% in the USA (Jones, 1990), and 44% in NZ (North et al., 2013).

Specifically in Australia, the financial repercussions of staff turnover are substantial, with associated costs amounting to a notable $48,790 per individual (Duffield et al., 2014). This cost primarily arises from termination expenses and the financial burden associated with hiring temporary replacements (Duffield et al., 2014). In contrast, the USA, Canada, and NZ report markedly lower turnover costs, estimated at $20,561, $26,652, and $23,711 respectively (Duffield et al., 2014). This significant discrepancy in turnover rates between these countries underscores the critical need for comprehensive and effective strategies to managing and mitigating staff turnover (Duffield et al., 2014). The nursing and midwifery workforce encounters challenges that are universal throughout the entire healthcare sector. These challenges encompass ensuring appropriate staffing levels with a well-balanced composition of highly skilled and less experienced professionals (Assaye et al., 2021), as well as equitable allocation of staff across all nursing and midwifery disciplines with access to high quality education and efficient regulations (Assaye et al., 2021), and safe working conditions (World Health Organization, 2020e). Additionally, nurses and midwives face distinct obstacles that are exclusive to their professions, such as issues related to gender bias (Schneider et al., 2016), policy leadership (World Health Organization, 2020e), diverse practice roles (Schneider et al., 2016), and varying levels of educational needs and regulatory requirements (World Health Organization, 2020e).

Retention of nursing and midwifery professionals within their practice setting can pose significant challenges as discussed in the World Health Organization's State of the World's Nursing 2020 report. Nursing attrition and turnover is an unavoidable outcome of market dynamics, exerting both advantageous and disadvantageous influences on health care organisations, patients/women, and the nursing and midwifery workforce (Dewanto & Wardhani, 2018; Labrague et al., 2018). For example, moderate turnover rates may contribute positively to professional competence, when a nurse or midwife vacates their position to seek career progression within the organisation or healthcare system (Falatah & Salem, 2018). On the contrary, job resignations and employee turnover are more frequently associated with organisational expenses and potential adverse effects on patient/women care.

The WHO recognises that there are both intrinsic and extrinsic factors that determine a nurse or midwife's tendency to remain or depart from a specific job (World Health Organization, 2020e). Intrinsic factors encompass changes to an individuals' or family circumstances, health, educational objectives, occupational stress, job dissatisfaction, or sense of empowerment in

decision-making (Halter et al., 2017; Li et al., 2018). Extrinsic factors influencing retention consist of the work environment, professional relationships, working conditions, remuneration, managerial methods, and efficacious supervision (Mazurenko et al., 2015). A multi-country research study conducted in Australia, Egypt, the Islamic Republic of Iran, the Republic of Ireland, Jordan, and the Philippines revealed that the leadership styles of clinical managers and the prevailing organisational culture have a direct influence on the job satisfaction and attrition rates among nurses and midwives. Furthermore, these factors have the potential to impact the quality of care provided to patients/women (Abou Hashish, 2017; O'Keeffe et al., 2015; Pishgooie et al., 2019).

1.3.1 The Australian Perspective

For thirty consecutive years since their inclusion in the survey in 1994, Australian nurses and midwives have consistently earned recognition as the most trusted profession (Australian Nursing and Midwifery Federation, 2021b). This remarkable feat signifies the enduring trust and confidence placed in these healthcare professionals by the public (Australian Nursing and Midwifery Federation, 2021b). Their consistent recognition as the most trusted profession attests to the high regard and esteem with which Australian nurses and midwives are held in society (Australian Nursing and Midwifery Federation, 2021b). These statistics not only highlight the public's profound respect for these healthcare professionals, but also underscores their unwavering commitment to upholding the highest ethical standards (Cowin et al., 2019), exceeding esteemed occupations such as physicians, law enforcement officers, and educators (Australian Nursing and Midwifery Federation, 2021b).

The public's perception of nurses and midwives upholding the highest ethical standards can be attributed to the codes of practice that govern these professions. According to Cowin et al., (2019) the Australian nursing and midwifery profession highly regards the Code of Conduct (Nursing and Midwifery Board of Australia, 2018a) that aims to prevent inappropriate and incompetent behaviour within the profession and making safety of the public a priority (Cowin et al., 2019). These codes of conduct are designed to uphold and embody the values and principles that define the profession, and play a crucial role in guiding nursing and midwifery performance that is intricately woven into the day-to-day practice of nurses and midwives (Cowin et al., 2019). It was viewed by the participants of Cowin and colleagues research (2019) as being highly relevant to their work and serves as an integral foundational framework for maintaining ethical integrity in their professional responsibilities (Cowin et al., 2019).

The nursing and midwifery profession is committed to ensuring the safety and advocacy of the general public within healthcare settings. In recent years, there has been a notable addition to the codes of conduct and standards for practice, incorporating the concept of cultural safety (Cox & Best, 2022). This inclusion aims to foster a profound understanding of cultural needs and promote safe practices when engaging with diverse members of the community (Cox & Best, 2022). Unlike previous approaches that emphasised cultural other-awareness and notions of cultural competency, the focus now lies on working in partnership, addressing power imbalances, racial discrimination, LGBTIQA+ discrimination and other various forms of prejudice and bias (Cox & Best, 2022). The enduring acknowledgement of Australian nurses and midwives, as the most trusted profession, reflects their unwavering dedication to delivering exceptional care while upholding the highest ethical standards in a rapidly evolving healthcare landscape. The sustained trust and high ethical standards demonstrated by nurses and midwives over the past twenty-four years is a testament to their unwavering commitment to their patients/women and the healthcare system at large.

Addressing the challenges surrounding the retention of existing nurses and midwives remains a highly debated issue, with the predominant singular solution being adequate staffing levels (Aiken et al., 2014). This solution is based on the notion that if safe staffing levels were achieved, job satisfaction and retention levels among nurses and midwives would increase (Aiken et al., 2014). However, this well-documented solution, suggested for decades, has yet to resolve the issue.

In the latter part of the 1980s and throughout the 1990s, the growth rate of the nursing and midwifery professions in Australia was reported to be only half that of all other occupations (Shah & Burke, 2002). Recruitment into the nursing and midwifery programs had significantly declined over the preceding decade, further exacerbating the problem of staff retention (O'Brien-Pallas et al., 2001; Tang et al., 1996). This finding coincided with changes made to the training and accreditation requirements for nurses and midwives, including legislation supporting the transition of nurse education from hospital to university sectors, implemented in 1984 (Shah & Burke, 2002). As a result of this development, individual states and territories took on the responsibility of establishing services to implement and oversee the new legislative requirements. By 1993, all aspiring registered nurses in Australia were required to pursue their education through a tertiary pathway (Aquilia et al., 2020; Mason, 2013).

Historically, an effective approach in managing a temporary decrease in workforce supply has involved the recruitment of nursing and midwifery professionals from foreign nations (Duffield & O'Brien-Pallas, 2002). However, a notable concern regarding the ethical implications of depleting financially disadvantaged countries of their valuable nursing workforce has emerged as a significant international issue (Buchan, 1999; O'Brien-Pallas et al., 2001). The concern was that these countries already faced a shortage of domestic nurses and midwives to meet the healthcare needs of their own population. It was also argued that while this strategy might provide a temporary solution, it involves significant financial and time costs for the countries employing it (Duffield & O'Brien-Pallas, 2002). Furthermore, considering the prevailing nursing and midwifery shortages experienced globally, this approach was deemed no longer viable or feasible (Lipley & Stokes, 1998). Given the extensively documented international scarcity of nurses and midwives, alternative measures for mitigating future nursing shortages were imperative (Lipley & Stokes, 1998). To mitigate the issues of recruitment, the Australian government has implemented a strategic shift in their recruitment approach, placing a greater emphasis on targeted marketing efforts aimed at school-age individuals (Tang et al., 1996). This proactive approach aims to secure their commitment and foster a sustained interest in the nursing profession from an early stage (Tang et al., 1996).

In 1986, Professor Lesley Barclay, an educational leader, health service researcher, and systems reformer known for her projects enhancing maternal and child health services in both urban and remote areas of Australia, conducted a thorough scholarly investigation. The primary focus of her study was to meticulously examine the historical development of midwifery education in Australia (Barclay, 1985). Barclay's study discerned a prevailing ambiguity surrounding the professional responsibilities and educational standards required of midwives across most states within Australia (Barclay, 1985). The regulatory bodies of midwifery was revealed to be inconsistent, and frequently obscured by nursing leaders (Barclay, 1985; Tierney et al., 2018). The study discovered that for a midwife to advance within the profession, possession of a nursing qualification was generally a prerequisite (Barclay, 1985). This, together with the notable absence of indemnity insurance for midwives, was highlighted as deterrents in both attracting and retaining midwifery professionals within the Australian healthcare system (Barclay, 2003). At the time midwifery skills were not fully utilised and also had few opportunities for midwives to practice autonomously (Barclay, 2003). In light of international advancements and the observable inefficiencies within the existing midwifery education

infrastructure, a reconsideration of the 'direct entry' pathway was recommended and implemented (Barclay, 2003).

An emerging international trend favouring a model that recognised a distinct definition of a midwife, and a philosophy of practice that is 'with woman', stimulated renewed interest in midwifery education that did not necessitate a nursing qualification (Barclay, 2003). This critical shift in perspective led to the inception of the Australian College of Midwives Bachelor of Midwifery National Taskforce, dedicated to developing a set of national standards for accrediting a Bachelor of Midwifery degree, with the objective of providing a comprehensive, universally applicable framework throughout Australia (Barclay, 2003; Tierney et al., 2018). It was hoped that with the streamlining of midwifery education and entry to practice would see the midwifery workforce expand.

In Australia in 2001, census data revealed that 40% of all nurses and midwives were 45 years old or older, an increase from 18% in 1986. In contrast, the percentage of nursing professionals aged 15-24 years decreased from 21% in 1986 to 5% in 2001 (Australian Bureau of Statistics, 2005). The decrease in the number of nursing and midwifery staff under 25 years of age was considered to be linked to changes in registration and training processes (Australian Bureau of Statistics, 2005). Previous research also hypothesised that there would be an impending critical deficit of nursing professionals, particularly in the fields of geriatric and mental health nursing. This could potentially lead to diminished accessibility to various hospital and residential aged care services (Kenny & Duckett, 2003; Parliament of Australia, 2002). To alleviate nursing and midwifery shortages at the time in rural and remote regions and aged care services, the Australian government implemented numerous measures including re-entry to practice schemes, scholarships, and incentives to work rurally (Australian Bureau of Statistics, 2005). The government also expanded opportunities for health employers to recruit overseas nurses and midwives by modifying the migration occupational listing. Following the changes to the migration listing, an additional 800 nurses and midwives arrived in 2001 on fixed or permanent visas to bolster the workforce (Australian Bureau of Statistics, 2005).

In the early 2000s, scholarly literature highlighted the challenges faced by registered nurses and midwives who were not actively practicing, particularly when they sought to participate in refresher programs. These individuals were observed to experience significant levels of anxiety, notably less self-confidence, and apprehension regarding their acceptance among nursing staff

who were already employed (Davidhizar & Bartlett, 2006; Tanaka et al., 2008). McMurtrie et al., (2013) sought to investigate the factors affecting non practicing Australian nurses and midwives returning to practice between 2008-2010 (McMurtrie et al., 2014). The authors reported findings that indicated that to support successful return to the workforce, the following themes needed to be addressed by the workforce. These were; how the program was structured and how the content was delivered, the flexibility of employment, the level of preceptorship and educator support, learning contracts, and the amount of supernumerary time standardised by regulatory authorities (McMurtrie et al., 2014). The effectiveness of these incentives was reviewed in the 2013 Review of Australian Government Health Workforce Programs (Mason, 2013). The recommendation was for the program and scholarships to continue, with the preference being that the commonwealth should consider providing financial support for supervised re-entry courses for those in the regional, rural and remote locations until satisfactory flexible delivery or eLearning options were available in all states and territories (Mason, 2013).

Fairbrother et al. (2010) pioneered the development and implementation of the Nursing Workplace Satisfaction Questionnaire (NWSQ) in the early 2000s, in response to the limitations the authors identified in pre-existing tools (Fairbrother et al., 2010). The Australian nursing workforce had exhibited limited engagement with these earlier instruments, as they were perceived to be overly lengthy, exhaustive, and biased (Fairbrother et al., 2010). Consequently, these tools hindered the effective assessment of factors influencing job satisfaction among Australian nurses. The NWSQ, in contrast, was specifically tailored to the Australian context and presented as a concise, one-page questionnaire with carefully chosen terminology. This instrument facilitated the measurement of three distinct domains of job satisfaction: intrinsic, extrinsic, and relational factors. The validated NWSQ tool has been used in several international and Australian nursing studies over the past two decades and has been adapted to serve midwifery studies also (Alenazy et al., 2021; Fairbrother et al., 2010; Mansour & Sharour, 2021; Oliver & Geraghty, 2022; Tomic, 2017). This was accomplished by merely modifying the language to better suit the context of care (Oliver & Geraghty, 2022). Specifically, the term ‘patient’ was replaced with ‘woman’, thereby accurately reflecting the target population under midwifery care (Oliver & Geraghty, 2022). The versatility of the selected tool to effectively survey both nurses and midwives was one of the determining factors in its choice for implementation in this research study.

In early 2014, the Australian Government published a comprehensive report examining the sustainability of the future health workforce. The report predicted a significant long-term demand-supply gap for nurses, with an estimated shortage of roughly 85,000 nurses by 2025 and 123,000 nurses by 2030, based on the prevailing conditions at that time (Health Workforce Australia, 2014). The report did not provide a specific deficit figure for midwives. Instead, it merged the numbers for nurses and midwives, providing a combined total for the healthcare personnel required, thus obscuring the shortage in the field of midwifery. This deficit was attributed to several underlying issues requiring a coordinated decision-making approach among tertiary education institutions, governments, employers, and the nursing and midwifery profession, with no single solution identified (Health Workforce Australia, 2014). Consequently, the combination of extended delays in implementing changes and wide-ranging economic influences on decision-making by these regulatory bodies has led to a fluctuating cycle of growth and decline in nursing and midwifery education. This fluctuation affects the subsequent quantity of nursing and midwifery graduates (Health Workforce Australia, 2014).

The healthcare sector's demand was driven by the intricate needs and challenges of an aging population, coupled with advances in medical science and technology, and rising consumer expectations (Health Workforce Australia, 2014). There was also an acknowledgement of the imminent retirement of older nurses affecting the workforce with average age of 44.6 years, with those aged over 55 years making up 23.1% of the Australian nursing workforce (Australian Health Practitioner Regulation Agency, 2021; Australian Institute of Health and Welfare, 2021). This sentiment was echoed by the Nursing and Midwifery Board of Australia (NMBA) which noted that between 2011 and 2015, there were more employed nurses and midwives in the 50-54 years of age group than any other age group, with almost half (149,867 or 48.8 %) of the workforce choosing to work less than 35 hours per week, meaning more nurses and midwives are required to provide the same level of nursing and midwifery services (Australian Health Practitioner Regulation Agency, 2021). This glaring omission stands in contrast to the insightful observations made by the Nursing and Midwifery Workforce Report in 2015. That report illustrated a deeply concerning trend, showing the dramatic decline in the number of registered midwives in Australia, plummeting from 52,273 in 2009 to 32,651 in 2015 (Australian Health Practitioner Regulation Agency, 2021; Australian Institute of Health and Welfare, 2021). During that period, a global comparison was conducted to assess Australia's capacity for retaining nurses in relation to other nations' experiences. In 2011, Australia had 10.1 nurses per 1,000 individuals, a rate that surpassed the average of 8.7 set by the Organisation for Economic Co-operation and

Development (OECD) (Health Workforce Australia, 2014). The varying distribution of responsibilities between nurses and other healthcare professionals across OECD countries could potentially account for the differences in these rates (Health Workforce Australia, 2014).

The provision of high-quality and safe, optimal maternal and neonatal care is reliant upon the availability of a highly skilled midwives, as noted in several studies (Gilkison et al., 2018; Liberati et al., 2019). Despite this, healthcare organisations worldwide are grappling with the issue of midwife retention, resulting in a significant shortage of skilled midwives (Callander et al., 2021b; Harvie et al., 2019; Lumadi & Matlala, 2019).

In 2015, a national survey of midwifery workplace culture in Australia was conducted to identify how organisational culture was impacting midwives' intentions to stay in the profession in Australia. Of the 322 eligible participants surveyed, the findings suggested that midwives had strong opinions regarding the support, involvement, and empowerment they received from colleagues in their workplace (Catling & Rossiter, 2020). They also expressed their concerns on organisational leadership, vision, workloads, and bullying culture (Catling & Rossiter, 2020). Insufficient staff numbers and ineffective management had led to reported feelings of disempowerment among numerous midwives in their work environment. While some participants recounted negative toxic workplace environments and low morale, others recounted experiences of highly favourable work environments characterised by mutual respect among peers, strong staff-manager relationships, and efficient teamwork (Catling & Rossiter, 2020).

In their recent studies aimed at improving working environments to enhance midwives' retention intentions and job satisfaction, Rogriguez-Garcia et al., (2023) discovered significant correlations among the work environment and safety culture for women, and midwives' intentions to leave their job or profession (Rodríguez-García et al., 2023). Establishing a conducive working environment was identified as an effective strategy to enhance women's safety culture in healthcare organisations and increase midwives' likelihood of staying in their current positions (Rodríguez-García et al., 2023). Considering working conditions and the work environment, it is crucial to understand the impact of diverse employment policies on midwives' intention to remain in the profession. HakemZadeh et al., (2023) discovered that employment status policies have both advantages and disadvantages for midwives and the healthcare system. These findings underscore the importance of aligning actual and preferred employment policies

to positively influence midwives' intention to continue working in the profession (HakemZadeh et al., 2021).

Despite numerous attempts to rectify midwifery shortages and associated cultural challenges in Australia, the problem of midwife retention continues to persist. Despite an adequate influx of new midwifery graduates completing their pre-registration education in alignment with the needs of the Australian populace (Department of Health, 2019), there is a distinct vulnerability among early-career midwives towards burnout and premature departure from the profession. Cull et al., (2020) conducted a study focusing on job satisfaction factors among early career midwives. The research findings clearly demonstrate the detrimental effects of persistently heavy workloads and staffing crisis on the mental health and well-being of early career midwives. The study highlights the importance of improving working conditions by fostering a positive and supportive environment (Cull et al., 2020). Additionally, tailoring work schedules to accommodate individual preferences, with ample notice of shifts for relaxation, social activities, and family time, emerged as a key strategy to enhance job satisfaction in the midwifery profession (Cull et al., 2020).

Considering the criticality of nurturing a competent, fit-for-practice midwifery workforce, Sheehy et al., (2021) also undertook an investigation to discern the experiences of early career midwives and identify the determining factors that shape workforce retention (Sheehy et al., 2021). Dissatisfaction was mainly attributed to concerns about compensation, inflexible scheduling, excessive workloads, and suboptimal managerial tactics. Instances of workplace bullying were disturbingly prevalent. Notably, the factors that motivated midwives to persist in their profession were not merely the absence of these factors causing dissatisfaction, but rather the bond between midwives and their woman helped to uphold their practice (Sheehy et al., 2021).

This research resonates with another Australian study that examined job satisfaction levels among midwives with varying degrees of experience in maternity care, further reinforcing these common concerns. While the general findings were positive, indicating that participants derived satisfaction from their work, certain aspects elicited dissatisfaction (Oliver & Geraghty, 2022). Specifically, the midwives expressed concern regarding the limited time available for discussing patient/women issues with colleagues. Furthermore, participants disputed the notion that their work had become more interesting over the past year, with emergent themes such as

‘management don’t care’, ‘we have no time’ and ‘we are desperately short of staff’ underpinning their sense of discontent (Oliver & Geraghty, 2022). In a recent study by Capper et al., (2022), it was emphasised that routine exposure to workplace violence, both physical and verbal, experienced by midwives in Australia and New Zealand, significantly contributes to premature attrition within the profession. Notably, graduate midwives were found to be particularly susceptible to leaving due to these circumstances (Capper et al., 2022).

The historical issues encountered by the nursing and midwifery workforce highlight the criticality of addressing these challenges for the long-term viability and efficacy of healthcare systems. It is also essential to thoroughly investigate historical pandemics with the aim of identifying effective safeguarding measures that were implemented to mitigate the attrition of nursing and midwifery professionals who encountered work-related vicarious trauma, thus preventing their premature departure from their respective positions or fields.

1.4 Past Pandemics and the Nursing and Midwifery Workforce

This section investigates the influence of past pandemics on shaping the readiness strategies for the COVID-19 pandemic. The analysis scrutinises the challenges faced, responses enacted, and lessons garnered from prior outbreaks such as the HIV/AIDS pandemic, the H1N1 influenza pandemic and the Ebola epidemic. This historical examination highlights the impact on the nursing and midwifery professions. From this retrospective review, valuable insights emerge, helping to improve preparedness, enhance workforce support, and mitigate adverse effects on the healthcare workforce during present and future health crises. The overarching aim is to comprehend the historical factors that have moulded the nursing and midwifery workforce, and the strategies currently implemented to address similar challenges. This comprehensive analysis illuminates the journey of nurses and midwives navigating their roles amidst crises, from past outbreaks to the present COVID-19 pandemic.

1.4.1 HIV/AIDs Pandemic

In the last 50 years, humanity has been faced with two monumental global health crises. These include Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) pandemic, identified in 1981, and the COVID-19 pandemic, instigated by SARS-CoV-2, which surfaced towards the end of 2019 (Illanes-Álvarez et al., 2021; Vermund, 2022). Both health emergencies are the result of Ribonucleic Acid (RNA) viruses that have crossed species

barriers from animals to humans (Illanes-Álvarez et al., 2021). These two viruses, while sharing a similar origin, differ significantly in their modes of transmission and the symptoms they produce in infected individuals.

HIV/AIDS presented the first contemporary pandemic that tested the resilience and adaptability of health systems across the globe, infecting over 70 million and causing approximately 35 million fatalities (World Health Organization, 2023d). Currently, approximately 37 million people live with HIV globally, with 22 million receiving treatment (World Health Organization, 2023d). In assessing public perception during the early stages of both diseases, certain parallels can be drawn between HIV/AIDS and COVID-19. The AIDS epidemic, comparable to prior pandemics of historical magnitude, instigated widespread panic, stigmatisation, and blame. It was also uniquely characterised by a persistent infection, which often exhibited a lengthy asymptomatic period before the emergence of serious symptoms (Fela, 2018a). The societal mis association of HIV with sexual and social 'deviance' led to the habitual rejection of HIV-positive individuals by their families and community, and caregivers of these individuals faced similar ostracisation within their respective communities (G. Fela, 2018b).

Nurses and midwives who worked in HIV/AIDS wards or clinics, or those who treated pregnant women, had to navigate complex social and political environments. In addition, they had to confront the inherent health risks presented by the virus itself, along with the accompanying anxiety it caused (Ware, 2019). These healthcare professionals were tasked with balancing patient/woman care against personal health risks in an environment fraught with societal prejudice and medical uncertainty. In a study conducted by Kabotho and Chivese (2020), it was observed that approximately one of every nine nurses at a major tertiary hospital had occupational exposure to HIV (Kabotho & Chivese, 2020). The results of the study revealed inadequate reporting and underutilisation of post-exposure prophylaxis. The substantial number of needle stick injuries among nurses highlights the urgent requirement for improved infection control training. Moreover, the study revealed a notable lack of knowledge regarding HIV post-exposure prophylaxis, emphasising the necessity for structured interventions and in-service training programs aimed at healthcare workers (Kabotho & Chivese, 2020). According to the WHO, estimates at the time suggested there was a pressing need for over 4 million additional health workers to address the shortage during the HIV/AIDS pandemic globally (World Health Organization, 2006). The global deficit of doctors, nurses, and midwives was estimated to be at least 2.4 million (World Health Organization, 2006). Sub-Saharan Africa, in particular, was

confronted with significant challenges in this regard. Despite having 11% of the world's population and bearing 24% of the global burden of disease, the region only possessed 3% of the world's health workers, and received less than 1% of global health expenditure (World Health Organization, 2006). Based on the WHO estimates at that time, Botswana faced a considerable loss of 17% of its health workforce due to AIDS between 1999 and 2005 (World Health Organization, 2006). The WHO projected that in the absence of intervention, a significant portion of 40% of the health workforce in Botswana would be affected by the disease (HIV/AIDS) between 1999 and 2010 (World Health Organization, 2006).

The COVID-19 pandemic, mirroring the initial societal reaction to the AIDS epidemic, provoked widespread panic and hysteria, coupled with the marginalisation of certain societal groups (Illanes-Álvarez et al., 2021). The manifestation of this was seen in the form of an increase in stigmatisation, racial discrimination, and hate crimes against Chinese and other Asian populations (Australian College of Nursing, 2020). According to White (2020), racial or ethnic groups are often unfairly targeted and blamed during outbreaks of infectious diseases (White, 2020). Notably, anti-Chinese sentiment, rooted in part in stereotypes of them as 'eternal outsiders' (Huynh et al., 2011), and carriers of 'dirtiness' and 'disease' (Eichelberger, 2007), has been perpetuated repeatedly, including during the SARS-CoV-1 outbreak in 2003 (Person et al., 2004). Like the SARS-CoV-1 outbreak, an escalation of anti-Asian discrimination was observed in numerous countries during the initial wave of the COVID-19 pandemic (Hahm et al., 2021). Notably, the USA experienced a substantial increase in hate incidents, rising from 3,795 to 6,603 within a span of just one month (Jeung et al., 2021). Donald Trump, the former president of the United States of America (USA), played a significant role in promoting this discrimination, frequently referring to the virus as the 'China virus' or 'Kung Flu' (Forgey, 2020). As early as March 2020, President Trump attributed blame to China for the origins of the virus and persisted in politicising and weaponising such language throughout his presidency, even in the face of emerging reports of pandemic-related anti-Asian attacks (Forgey, 2020). The degree of population angst was further compounded by the lack of established effective antivirals (Vermund, 2022). Moreover, the ubiquity of the Internet, coupled with an information overload, the spread of unsubstantiated rumours, and the prevalence of digital connectivity in today's world, collectively escalated public fear and anxiety (Illanes-Álvarez et al., 2021).

Like the HIV pandemic, the emergence of COVID-19 also witnessed a significant reaction of fear and unease among health care professionals and their representative organisations. Van

Reyk (2014) observed that despite nurses being in the most prolonged and close contact with HIV-positive patients, thus at higher exposure risk, it was the doctors and surgeons who advocated for expensive, advanced protective equipment resembling hazmat suits, costing around $5,000 (Van Reyk, 2014; Ware, 2019). Furthermore, they sought the right to decline to care or perform surgical procedures for patients who tested positive for the virus (Ware, 2019). In Australia during the 1980s, nurses and their unions were involved in a political conflict with surgeons and doctors regarding the implementation of infection control measures. They opposed the 'test and contain' strategy promoted by the Australian Medical Association and Australian Association of Surgeons during that period (Power, 2011; Sendziuk, 2003).

Nurses demonstrated a pragmatic and empathetic response during the HIV pandemic, advocating for an infection control strategy rooted in 'universal precautions' (G. Fela, 2018a). This principle operates on the presumption that all patients, their blood, and bodily fluids could potentially harbor infectious agents. By adhering to this approach, nurses were not only able to maintain a safe working environment, but also ensured equal treatment for all patients, including those living with HIV and associated demographics, notably gay men (G. Fela, 2018a). Such a strategy prevented them from being isolated or subjected to discriminatory 'special' treatment, and nurses were engaged in community work at bathhouses used specifically by gay men in Melbourne, administering tests for sexually transmitted infections, encompassing HIV. Nurses at the time expressed that working in health was incredibly stressful and sad, with one nurse stating that "Young men were dying from this dreadful and not fully known disease in the prime of their lives. As a front-line health professional, it was emotionally challenging and relentless" (Australian Nursing and Midwifery Federation, 2020, p. 2). In a study conducted by Gueritault-Chalvin et al., (2000), it was reported that occupational stress and burnout had a substantial effect on the quality of care delivered to individuals living with HIV/AIDS. The researchers specifically highlighted the significant role played by both external and internal coping mechanisms in predicting burnout among nurses who provide care for these patients, surpassing the influence of other potential factors. These findings emphasised the critical need to address occupational stress and facilitate the adoption of effective coping mechanisms, not only to improve patient care for those with HIV/AIDS but also to promote nurse retention in this field (Gueritault-Chalvin et al., 2000).

Nurses and midwives were contending with growing workloads, evolving roles, potential exposure to HIV in healthcare settings, and the complexities of meeting a myriad of

patient/woman care needs (Manyisa & van Aswegen, 2017). The prevalence of HIV among nurses matched or even exceeded that in the general population in South Africa, resulting in increased sick days and job turnover (Manyisa & van Aswegen, 2017). According to reports from the South African Department of Health, the perceived societal prestige of nursing had declined, and compensation was often deemed inadequate (Dohrn et al., 2009). These factors contributed to significant burnout, leading nurses to transition to the private sector, seek opportunities abroad with more attractive compensation and work environments, or even to abandon the profession entirely (Dohrn et al., 2009; Manyisa & van Aswegen, 2017). The HIV/AIDS epidemic continues to exert a significant impact on healthcare systems and staff retention globally (Beyrer, 2021). However, the attention and resources dedicated to addressing this enduring public health challenge have, at times, been temporarily redirected due to the emergence of other pandemics such as H1N1 and COVID-19 (Beyrer, 2021). Consequently, primary healthcare strategies, including health promotion, screening, and advancements in vaccinations for HIV/AIDS, have experienced a shift in focus. It is essential to recognise the ongoing importance of sustaining efforts to combat the HIV/AIDS endemic alongside addressing other pressing public health crises.

1.4.2 H1N1 Influenza Pandemic

The next significant pandemic to shape global health landscapes was the H1N1 influenza pandemic, which emerged in 2009, causing widespread illness and impacting healthcare systems worldwide. Governments worldwide implemented significant and costly interventions to mitigate the impact of this widespread outbreak (Doshi, 2011). The main reason for these measures being the perceived need for distinct management strategies for H1N1 and seasonal influenza, a notion that was bolstered by the WHO classification of the H1N1 outbreak as a pandemic (Doshi, 2011). During the time of the H1N1 declaration, many felt that it incited unwarranted panic among the public and healthcare sector (MacInnis & Harding, 2009), prompting WHO advisers to take this lesson on board at the time (Doshi, 2011; Kelly, 2011). As the pandemic unfolded, the actual severity of the H1N1 outbreak was found to be less than what experts had initially projected. This disparity led to widespread scrutiny, with bodies like the Council of Europe launching a formal inquiry into the aggressive public health reactions to the virus (Collignon, 2009; Godlee, 2010; Hanrieder & Kreuder-Sonnen, 2014). Furthermore, concerns surrounding potential conflicts of interest between WHO advisers and industry stakeholders raised doubts about the impartiality and appropriateness of the decision-making processes at both national and international levels (Cohen & Carter, 2010).

The H1N1 pandemic was declared to have subsided a little over a year later in August 2010. The experiences from this event have informed subsequent preparedness and response efforts for future public health emergencies following numerous inquiries (Cohen & Carter, 2010; Hamilton et al., 2010; Hilton & Smith, 2010; Kelly, 2011; United States Government Accounability Office, 2011). A key area of research focused on healthcare staff retention, specifically addressing global shortages and the impact of H1N1 on health professionals' job satisfaction (Cohen & Carter, 2010). The outbreak prompted a sharp rise in admissions and presentations of acutely ill patients in healthcare settings worldwide, directly affecting the workloads of health professionals (Doshi, 2011; Kelly, 2011).

Amidst the H1N1 pandemic, the field of midwifery underwent a significant transformation in its scope of practice (Courtney et al., 2010; Massot & Epaulard, 2018). Midwives emerged as key educators, emphasising the importance of influenza vaccinations and ensuring their availability during antenatal visits and clinics (McCarthy et al., 2015). This proactive approach aimed to protect one of the most vulnerable populations during the outbreak, which were pregnant women. Research conducted by Cleary et al., (2014) revealed that among 6,894 pregnant women studied during the H1N1 pandemic, 2,996 (43.5%) reported receiving the influenza vaccine (Cleary et al., 2014). The study demonstrated that the uptake of the 2009 H1N1 influenza vaccine was influenced by various sociodemographic factors among expectant mothers. They noted that to achieve high vaccination rates during a pandemic, effective strategies were crucial (Cleary et al., 2014). These strategies included developing future public health campaigns that offer clear information about the safety of vaccinations during pregnancy, ensuring consistent recommendations from healthcare professionals, and providing easy access to vaccines (Cleary et al., 2014). This comprehensive approach aimed to optimise vaccination uptake, particularly among population subgroups that are less likely to receive immunisations. The dedication of midwives to promoting vaccination and safeguarding the well-being of pregnant women underscored their vital role in protecting maternal and foetal health during the global health crisis. It is important to note that the increased workload faced by midwives during the height of the pandemic was an essential component of this critical response.

It is well known that excessive workloads have a direct impact on health care workers job satisfaction and significantly contributes to retention issues (Aiken et al., 2002; Wilson, 2006). A USA hospital-based study by Aiken et al., (2002) found a 23% increase in nurse burnout and a 15% rise in job dissatisfaction correlated with each additional patient allocated to a nurse's

workload. Furthermore, dissatisfaction has been recognised as a predictor of an individual's intention to leave an organisation (Blau & Lunz, 1998; Duffield et al., 2007). An essential component of an ideal working environment is the ability to provide the quality-of-care patients anticipate. However, this benchmark may be unachievable when nurses and midwives, face a massive influx of patients/women during pandemics, such as the H1N1 outbreak.

In an Australian study conducted by Considine et al., (2011), the impact of H1N1 on the emergency nursing and medicine workforce was examined, with a specific focus on absenteeism and deployment (Considine et al., 2011). Perceived barriers to working during the pandemic included concerns for the well-being of family members, mistrust in the department of health, inadequate information regarding risks and staff expectations, fear of litigation, and a perception that employers did not prioritise staff needs (Ives et al., 2009). Interestingly, the study found that only 2-5% of participants identified these factors as contributors to absenteeism, suggesting their minimal impact on the workforce. Additionally, only 8% of respondents reported that they had experienced redeployment, with most instances attributed to operational necessities (Considine et al., 2011).

A study by FitzGerald et al., (2012) also reported the impact of the H1N1 pandemic on Australian emergency departments. This study reported that staff members raised multiple concerns, encompassing inadequate familiarity with pandemic plans, instances of patient and family aggression, disorganised communication channels both internally and with the public, heightened stress due to heavier workloads and reduced staffing caused by illnesses, obligations to care for family members, and the reassignment of personnel to flu clinics (FitzGerald et al., 2012). In this study, 94% of participants reported that these factors contributed to heighten levels of personal stress (FitzGerald et al., 2012). Staff also expressed significant discomfort from prolonged use of personal protective equipment. The staff expressed their perspective that the care for non-influenza patients was compromised during the pandemic due to overwhelming work responsibilities, which diverted their attention from the primary duties of the Emergency Department (ED) (FitzGerald et al., 2012). Furthermore, it was noted that staff encountered challenges in trying to manage infectious patients within an environment not designed for such cases. The survey for this study was conducted from the 29th October 2009 to mid-December 2009, and it was reported that only 26% of the staff had already received the vaccination for H1N1 influenza (FitzGerald et al., 2012). The remaining participants who had not been vaccinated were asked about their intentions to receive the vaccine. Amongst these individuals

49% (N = 376) responded with a negative inclination, stating they would definitely not, or probably not get vaccinated. Only 30% of participants expressed a definite, or probable, intention to receive the vaccine. Meanwhile, 21% of participants were uncertain about their decision regarding vaccination (FitzGerald et al., 2012).

The Martin et al., (2013) study in the USA, revealed that initially 90% (N = 735) of respondents expressed their willingness to work during a flu pandemic, with various factors significantly influencing their decision. The availability of adequate personal protective equipment (PPE) increased their likelihood of working, while the absence of adequate PPE or concerns about their family members contracting H1N1 decreased their willingness (Martin et al., 2013). Additionally, being assigned to directly care for H1N1 patients, having a colleague quarantined or die from H1N1, fearing the death of their own family members, experiencing personal illness, having a sick family member who required care at home, lacking a written family protection plan, or being offered certain incentives (such as antiviral medication or vaccine for themselves and their family, double pay, or free room and board at work) all significantly reduced their likelihood of working during the pandemic (Martin et al., 2013). These findings from Martin et al.'s (2013) study shed light on the complexities nurses and midwives faced during the H1N1 pandemic, and they set the stage for understanding some of the unique challenges that emerged during the subsequent COVID-19 outbreak.

On March 11th, 2020, the WHO, mindful of the premature declaration of a pandemic for H1N1 which led to widespread panic, convened an urgent press conference. The aim of the meeting was to emphasise the gravity of what was unfolding globally at the time, and the use of the term 'pandemic' in relation to COVID-19 (World Health Organization, 2020j). WHO representatives expressed to the international media that the utilisation of this particular term, if employed incorrectly, has the potential to induce unwarranted fear among the public. Furthermore, it may lead to an unjustifiable belief that the fight was over, leading to unnecessary suffering and death (World Health Organization, 2020j). During this press conference, WHO representatives said although they had been watching and assessing COVID-19 closely, it was clear that now is the time to 'ring the alarm bell loud and clear' declaring COVID-19 a pandemic (World Health Organization, 2020j). The postponement in labelling COVID-19 as a global pandemic has been subject to scrutiny by global scientists who contended that the delay stemmed from prior criticism, the concern about inciting public panic, and trepidation concerning the provocation of an unsuitable alteration in outbreak management strategies (Green, 2020; Oxford

Analytica, 2020). Nevertheless, the ongoing reluctance to employ the term has created its own set of issues, including the perception that such avoidance can be perceived by the public as a signal that authorities have lost control of the situation, consequently triggering irrational and panicked responses amongst the population (Green, 2020; Oxford Analytica, 2020). This was demonstrated by the widespread panic purchasing of food and household goods, and unreasonable conduct observed among the general population, who engaged in the hoarding of essential items such as medications, food, and masks. Such actions deprived those with the greatest need and significantly strained healthcare systems, pushing them to the brink of collapse.

1.4.3 Ebola Epidemic

In December 2013, an unidentified contagious and deadly illness emerged with a young boy in a small town in Guinea being identified as the first case of a highly contagious deadly disease (Centers for Disease Control and Prevention, 2019). This disease, later identified as Ebola Virus Disease (EVD), a disease with an average CFR of 50% and as high as 90% in past outbreaks, was first recognised in 1976 during simultaneous occurrences spikes in the Democratic Republic of Congo and Sudan (Buseh et al., 2015). The limited understanding of disease transmission and spread, coupled with fear and misinformation, fuelled a state of global panic surrounding this unfamiliar illness (Buseh et al., 2015; Shultz et al., 2016).

On August 8th 2014, the WHO declared the worsening situation in West Africa, as a Public Health Emergency of International Concern (PHEIC) (World Health Organization, 2014). This term is reserved for events that pose a risk of international spread or necessitate coordinated international response (Centers for Disease Control and Prevention, 2019). Sierra Leone, Liberia and Guinea were the main countries drastically affected by the outbreak, all of which were still recovering from civil wars (Bell, 2016). These circumstances led to a scarcity of health resources and dysfunctional healthcare systems, primarily due to a shortage of adequately trained and available healthcare workers at the beginning of the epidemic (Bell, 2016; Shultz et al., 2016). With no available vaccine or specific treatment for EVD, the disease caused alarm within the global public health community. Guinea, Liberia, and Sierra Leone collectively reported 11,310 deaths due to EVD and 28,616 confirmed cases of EVD (Centers for Disease Control and Prevention, 2019). Furthermore, 36 additional cases and 15 deaths ensued as the outbreak spread beyond those three countries (Centers for Disease Control and Prevention, 2019). Throughout the course of the epidemic, EVD spread to seven additional countries, the USA, UK, Italy, Nigeria, Mali, Spain and Senegal (Centers for Disease Control and Prevention, 2019).

The unfolding events in West Africa during the EVD epidemic were observed by the world from a safe distance, with countries providing physical and material assistance to support disease control activities. Nurses, midwives and doctors played a crucial role in the response efforts, utilising their expertise and resources to aid in monitoring, tracing contacts, handling data, conducting laboratory tests, and providing health education (Centers for Disease Control and Prevention, 2019). Their contributions extended beyond the frontline, encompassing logistics, staffing, communication, analytics, and management support (Centers for Disease Control and Prevention, 2019).

To prevent the transmission of the disease across borders, rigorous screening measures were implemented at airports for travellers departing from West Africa. Exit screening proved instrumental in identifying individuals at risk for EVD and effectively containing the circulation of the disease to other countries, successfully averting a pandemic scenario (Buseh et al., 2015; Shultz et al., 2016). However, that came at a cost with Liberia, one of the heavily impacted nations, who experienced the loss of 8% of its doctors, nurses, and midwives due to EVD (Evans et al., 2015). The EVD epidemic had a profound impact on both the healthcare workforce and the delivery of healthcare services in Sierra Leone, Guinea and Liberia, causing significant devastation in both areas impeding efforts to control and treat other diseases such as HIV, tuberculosis, measles, and malaria in these countries (Parpia et al., 2016).

During the height of the response, the Centers for Disease Control and Prevention (CDC) trained a substantial number of healthcare workers in West Africa, with a total of 24,655 individuals receiving training in infection prevention and control practices (Centers for Disease Control and Prevention, 2019). In the USA, over 6,500 individuals underwent training through live events conducted throughout the response period (Centers for Disease Control and Prevention, 2019).

During the EVD outbreak, the Australian Health Protection Principal Committee assumed responsibility for coordinating the response efforts in Australia (Gilbert, 2016). This encompassed the implementation of enhanced screening procedures for individuals arriving at international airports and the formulation of public health and laboratory testing protocols through the expertise of subcommittees (Gilbert, 2016). States and territories designated specific hospitals to provide care for potential EVD patients. However, the initial coordination of EVD Infection Prevention and Control (IPC) guidelines within and between jurisdictions was

inadequate, leading to inconsistencies and causing confusion and fear among healthcare workers (Gilbert, 2016). To address this issue, the Infection Prevention and Control Expert Advisory Group was formed to create national IPC guidelines.

While Australia did not have any confirmed EVD cases, the examination of numerous individuals with suspected EVD provided valuable experience in implementing protocols and utilising high-level control health care settings (Gilbert, 2016). Originally, the Australian Government exhibited hesitancy in deploying aid workers to West Africa. Nonetheless, they subsequently enlisted the services of a private company to oversee the staffing and management of a treatment centre located in Sierra Leone (Gilbert, 2016). This experience provided valuable insights for Australia, emphasising the importance of strengthening awareness and adherence to routine IPC practices within hospitals. The identification of significant deficiencies in infection prevention and control guidelines highlighted the need for proactive measures to address these shortcomings. Moreover, it emphasised the necessity of maintaining a state of preparedness at a heightened level to protect healthcare workers and the public from future infectious disease emergencies that inevitably will occur in the future (Gilbert, 2016).

According to a study by Li et al., (2021), Australian emergency clinicians reported feeling adequately prepared to handle and provide care to COVID-19 patients during the initial wave of the pandemic. This sense of preparedness was attributed to extensive infection control training, education, and guidelines specific to COVID-19. Such measures might not have been established without the IPC practices developed in response to EVD. However, the study also revealed several significant challenges faced by these clinicians. Inconsistent messages from higher management and a lack of clear communication were noted as concerns, along with issues related to the quality and availability of PPE and clinicians expressed worries about the potential transmission of the disease to their family members (Li et al., 2021).

As the WHO declared COVID-19 was no longer a global emergency on the 5th of May 2023 (World Health Organization, 2023b), there is potential for this enduring and protracted pandemic, spanning over three years, to have long-term implications on the wellbeing of nurses and midwives. These effects could carry notable repercussions for the future workforce.

1.4.4 The Significance of the Study

This PhD thesis aims to investigate the impact of the COVID-19 pandemic on job satisfaction, retention and career pathways of nurses and midwives in Australia. Despite the global significance of this health crisis, there is limited research focusing specifically on the experiences of nurses and midwives during the pandemic in Australia. This knowledge gap hinders our understanding of the factors that influence their job retention decisions and career trajectories, thereby impeding the development of effective retention strategies.

By conducting in-depth mixed methods methodology and to investigate the lived experiences of nurses and midwives, this study sought to explore any challenges they faced, the coping mechanisms employed, and the factors that influenced their job retention decisions. The study examined intrinsic factors, such as personal motivation, job satisfaction, and work-life balance, and also extrinsic factors, including organisational support, leadership styles, and the impact of workplace policies and practices. Additionally, it considered relational factors, such as interpersonal relationships within the workplace.

Findings from this study will contribute to the existing literature by providing a nuanced understanding of how the COVID-19 pandemic has shaped the job retention and career pathways of nurses and midwives in Australia. The insights gained will inform the development of evidence-based strategies and policies that aim to improve job satisfaction, enhance career progression opportunities, and foster a supportive work environment for healthcare professionals.

Ultimately, this research aims to contribute to the field of nursing and midwifery by providing valuable insights into the experiences and needs of these frontline healthcare workers during times of crisis. By addressing the gaps in knowledge, this study seeks to inform policy and practice, and contribute to the development of sustainable workforce strategies that will support and retain nurses and midwives, ensuring the provision of high-quality care in Australia's healthcare system.

1.4.5 Research Aim and Objectives

Research Aim: The aim of this research study was to investigate Australian Registered Nurses and Registered Midwives' lived experiences of working through the COVID-19

pandemic whilst, examining how the pandemic has affected their intention to stay or leave their job or profession.

Research Objectives were:

1. To explore how the level of COVID-19 exposure in the Australian state where participants practice, along with governing policies, procedures, and lockdown measures, affects job satisfaction and retention intentions among nurses and midwives.
2. To compare the level of job satisfaction between nurses and midwives nationally in Australia, considering the variations in COVID-19 restrictions and exposure.
3. To identify the factors (intrinsic, extrinsic, relational) that have the most significant impact on retention intentions among nurses and midwives.
4. To investigate the correlation between higher levels of job satisfaction, driven by job fulfillment and positive work relationships, and greater retention intentions amongst nurses and midwives.
5. To explore the lived experiences of nurses and midwives who actively worked during the COVID-19 pandemic and understand how this experience affected their job satisfaction.
6. To assess the overall wellbeing of nurses and midwives in relation to the prolonged COVID-19 pandemic.

These research aims and objectives were used to guide the study and provide a clear direction for data collection, analysis, and interpretation in order to address the research questions effectively.

1.4.6 Research Question

The Overarching Research Question for this study is:

"How has the COVID-19 pandemic influenced the intrinsic, extrinsic, and relational factors of job satisfaction among Australian Registered Nurses and Midwives, and what effect does this have on their decision to continue or leave their profession?"

The Research Sub Questions are:

1. What is the quantifiable impact of intrinsic, extrinsic, and relational factors on job satisfaction among nurses and midwives?
2. How does the level of COVID-19 exposure in the state where healthcare professionals practice, along with the associated governing policies, procedures, and lockdown measures, impact their job satisfaction and retention intention in nurses and midwives?
3. Which factors (intrinsic, extrinsic, relational) have the most substantial impact on the retention intentions among nurses and midwives?
4. Is there a correlation between higher levels of job satisfaction, specifically those driven by job fulfillment and positive work relationships, and greater retention intentions among nurses and midwives?
5. How has working through the COVID-19 pandemic affected job satisfaction among nurses and midwives?
6. What impact has the prolonged COVID-19 pandemic had on nurses and midwives' overall wellbeing?

1.4.7 Research Design

As the phenomenon of interest is the lived experience of the participants, a mixed methods approach was chosen for this research. The mixed methods design recognises the existence and significance of the physical, natural world, as well as reality and the impact of unique human experiences. By adopting a mixed methods approach, this study combines both quantitative and qualitative methods, leveraging the respective strengths of each while mitigating the limitations inherent to each method (Creswell & Creswell, 2017).

Utilising a mixed methods approach, this study recognises that relying solely on quantitative or qualitative methods would be insufficient to adequately address the research objectives and questions. By incorporating both quantitative and qualitative methodologies, this design provides a robust framework. Quantitative methods enable data standardisation and generalisability, while qualitative inquiry offers in-depth insights into the complex nature of the participants' reality with the phenomenon (Creswell & Creswell, 2017; Mays & Pope, 2020). Data collection involved the administration of a survey to gather quantitative data and subsequent semi-structured interviews to capture qualitative data. The survey provided quantitative measures, while the interviews delved into the complex nature of the participants' reality with the phenomenon. Integrating these methods facilitated a comprehensive understanding of the research topic.

Chapter three will delve into further discussion regarding the theoretical perspectives that underpin the study, data analysis and interpretation approaches, considerations of rigor and trustworthiness, as well as the ethical implications and considerations of this research.

1.5 The Overall Thesis Structure

This thesis investigates the individual experiences of nurses and midwives during the COVID-19 pandemic and examines the potential effects it has had on critical aspects of their professional lives, including job satisfaction, retention, and career progression decisions. Specifically, it seeks to examine the impact of the pandemic on their decision-making processes, particularly in terms of whether they choose to stay in their current roles or opt to leave their respective positions or fields altogether. By delving into these personal experiences, this study aims to shed light on the broader implications of the pandemic on the nursing and midwifery workforce. This thesis is organised into a series of chapters, with the subsequent sections providing a synopsis of the subjects within each respective chapter.

Chapter One: Introduction

- A comprehensive examination of the context and background pertaining to the research study's setting and sample is presented in this chapter. It delves into the historical aspects of nursing and midwifery retention both within Australia and on a global scale. Additionally, the chapter explores previous pandemics, identifying commonalities and distinctions among them, examining the impact on the retention of nurses and midwives over the years. Furthermore, this chapter encompasses aspects pertinent to the nursing and midwifery workforce, which have provided the basis and justification for the content of the present research study.

Chapter Two: Literature Review

- This chapter offers an in-depth review of international literature on job satisfaction and retention among the nursing and midwifery workforce during the pandemic, incorporating a scoping review relevant to the topic.

Chapter Three: Methodology

- This chapter offers a detailed examination of the theoretical framework, research design, and methodology employed in this study. Additionally, it sheds light on the philosophical

perspective I took and the choice I made to utilise a convergent parallel mixed methods approach. Following that, the chapter outlines the procedures employed for data analysis.

Chapter Four: Quantitative and Qualitative Results

- This chapter comprises of two main sections that detail the quantitative and qualitative findings of the research study. The quantitative section presents descriptive and bivariate statistics, whereas the qualitative section explores the personal experiences of the participants. Moreover, this section reveals three main themes and 11 sub-themes that emerged from the qualitative data, derived from the analysis of online semi-structured one-on-one interviews, accompanied by direct quotes from the participants.

Chapter Five: Discussion

- This chapter encompasses the analysis and interpretation of the findings derived from both the quantitative and qualitative phases. The significance of these results was evaluated in relation to the existing body of literature. A more profound contemplation of these findings unveils new insight of how the lived experiences of nurses and midwives shaped their professional and personal identity. Furthermore, the chapter encompasses a discussion on the variations in participants' experiences based on their workplace and the state in which they practice.

Chapter Six: Conclusion

- In this chapter, the research study is summarised, and the implications of the findings for nursing and midwifery policies and practice are discussed. Additionally, recommendations are provided to safeguard the future of the profession.

1.6 Summary

The chapter began with an exploration of my professional background, highlighting my strong interest in research topics relating to the wellbeing, job satisfaction, and retention of nurses and midwives. Following that, a comprehensive dialogue emphasised the historical viewpoints on pandemics, highlighting the differences in past events and their influence on the retention of nurses and midwives worldwide. Finally, a concise overview of the thesis was provided, briefly outlining the contents of each chapter. Chapter 2 will present a comprehensive review of the literature, examining the impact of the COVID-19 pandemic on job satisfaction and retention within the nursing and midwifery workforce.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

This chapter offers a review of global literature focusing on job satisfaction and retention in the nursing and midwifery professions, and the career implications arising from the impact of COVID-19. Working in collaboration with and under the guidance of the supervisory team, a scoping review was identified as the most suitable approach to comprehensively understand the breadth and depth of literature related to this specific area of interest. A scoping review seeks to present an overview of a potentially large and diverse body of literature pertaining to a broad topic and aims to provide a descriptive overview of the reviewed material (Anderson et al., 2008; Arksey & O'Malley, 2005; Munn et al., 2018). The primary objectives of this review were to identify existing evidence, clarify essential terms and concepts, evaluate the common research methodologies employed, determine the main attributes associated with the subject, as well as pinpoint any gaps in the literature. Through this scoping process, I was able to discern the volume and characteristics of the available studies, thus providing a detailed perspective on the central themes represented in the current literature.

An initial series of searches was conducted using electronic databases such as the Cumulative Index of Nursing and Allied Health Literature (CINAHL), PubMed, MEDLINE (Ovid), and PsychINFO, as well as search engines like Google Scholar and World Health Organization (WHO). Initially, the focus was on identifying research from Australia and New Zealand to uncover any existing or ongoing work in the field. However, due to limited findings from these regions, the focus was broadened to encompass research from a global perspective. Preliminary searches of MEDLINE (Ovid), the Cochrane Database of Systematic Reviews and Joanna Briggs Institute (JBI) Evidence Synthesis, revealed several systematic and integrative reviews and individual studies. Typically, these reviews and studies focused on the nurse, midwife, or Health Care Worker's (HCWs) experiences during COVID-19, and the impact the pandemic has had on HCWs' as a whole and/or nurses and midwives' well-being, including their psychological and physiological health. Examples of these include studies and reviews on the psychological burdens (Alanazi et al., 2021), protective and risk factors affecting mental health of HCW during the pandemic (De Brier et al., 2020), and the psychosocial experiences of frontline nurses (Xiong et al., 2022; Xu et al., 2021). While these reviews provide critical insights into the immediate and direct effects of the pandemic on HCWs, there remains a notable gap in understanding how these experiences during the pandemic have shaped job satisfaction and

retention intentions within the nursing and midwifery workforce. At the time of this scoping review there were no current or in-progress systematic reviews or scoping reviews on the specific topic identified. This gap is particularly significant given the potential long-term implications for healthcare systems and workforce sustainability worldwide. This scoping review aims to fill this void by specifically focusing on factors affecting job satisfaction and retention intention among nurses and midwives due to the pandemic. By building upon the existing knowledge of the pandemic's mental and physical health impacts, this review seeks to provide a comprehensive perspective on how these aspects interlink with and influence job satisfaction and retention, thereby offering new insights that are crucial for informing future policies and practices.

Discovering gaps in our understanding of job satisfaction and retention within the nursing and midwifery workforce, especially considering COVID-19, addresses broader concerns about global healthcare workforce sustainability. This is further emphasised by the WHO's identification of nursing and midwifery shortages as a critical global healthcare issue. As previously mentioned, the WHO has identified the global shortage of nurses and midwives as a top healthcare priority in relation to the pandemic (World Health Organization, 2020e). The WHO approximates that there is an existing deficit of up to 13 million nurses and midwives globally (World Health Organization, 2020e). An additional 17% of all nurses and midwives worldwide will be of retirement age within the next five years, with many international nursing and midwifery associations also reporting evidence of mass traumatisation and burnout faced by their members during the pandemic, creating further predicted shortages (International Council of Nurses, 2020b). Strategic planning strategies to overcome these shortages include focusing on the education, recruitment of new nurses and midwives and the retention of existing nurses and midwives already in the workforce (World Health Organization, 2021).

Given the proposed planning strategies are meant to mitigate workforce shortages, it is essential to ensure we understand the factors contributing to decreased job satisfaction among existing nurses and midwives during the pandemic. Job satisfaction has been widely recognised since the early 1930s and can be described as a combination of factors, including psychological, physiological, and/or environmental factors, that lead a person to genuinely feel that they are content and satisfied with their employment (Hoppock, 1935; Lu et al, 2019). Job satisfaction is a critical area of concern within the healthcare sector, as empirical evidence consistently demonstrates that lower levels of job satisfaction are significantly correlated with increased

tendencies toward turnover intent and subsequent resignation (Bonenberger et al., 2014; Hayes et al., 2012; Judge, 1993; Mosadeghrad et al., 2008).

Before the COVID-19 pandemic, a substantial and well-established body of literature existed on job satisfaction and retention among nurses and midwives globally, identifying several approaches for investigation and improvement in these areas (Chan et al., 2013; Dilig-Ruiz et al., 2018; El-Jardali et al., 2009; Hackman & Oldham, 1976; Judge et al., 2017; Lu et al., 2019). Despite the considerable body of research conducted before the pandemic, the predicted shortages in the nursing and midwifery workforce remained a significant concern. To date, no single pre pandemic solution had effectively addressed these challenges. The emergence of the pandemic has exacerbated these issues, intensifying the already critical workforce shortage, and highlighting the need for more effective and immediate strategies. Additionally, the pandemic has introduced new, largely unexplored challenges to these professions. It remains unclear whether the pre-pandemic solutions and identified factors affecting job satisfaction and retention are still applicable or have changed in the current context. This uncertainty highlights the need for further research to adapt to these evolving challenges. This scoping review aims to fill the void by concentrating on factors affecting job satisfaction and retention intention among nurses and midwives who worked through the pandemic.

2.2 Aim and Objective

The initial aim of this scoping review was to discern factors influencing job satisfaction and retention of nurses and midwives during the COVID-19 pandemic. The review systematically explored contemporary literature to identify the intrinsic and/or extrinsic factors influencing job satisfaction and retention intention of nurses and midwives in the workforce during the COVID-19 pandemic. The review's primary objectives were to identify studies that have either investigated or explored factors that influence nurses' and midwives' decisions to remain in or leave their roles as a result of the pandemic, thereby mapping factors that either positively or negatively impacted their decision.

By identifying the perspectives of nurses and midwives regarding the pandemic's impact on their professional intentions, this scoping review aimed to explore the breadth of literature on the topic, by mapping and summarising available evidence.

2.3 Methods

This scoping review has adopted the approach outlined by Arksey and O'Malley (2005), while integrating recommendations by Levac et al., (2010) and Tricco et al., (2018) (Arksey & O'Malley, 2005; Levac' et al., 2010; Tricco et al., 2018). The methodical steps involved in this scoping review include: (1) defining the research question, (2) determining the relevant studies, (3) choosing studies, (4) organising the data, and (5) gathering, summarising, and reporting the findings. Two additional steps, (6) consultation, and (7) knowledge dissemination, will aid in providing context to the entire methodological process for this review (Levac et al., 2010; Tricco et al., 2018). The review's process will align with the PRISMA-ScR Guidelines for Scoping Reviews (Tricco et al., 2018).

2.3.1 Inclusion and Exclusion Criteria

The review was limited to studies written in English that were published between November 2018 and October 2023. Studies before 2018 were excluded since COVID-19 was not prevalent or widespread before this period.

2.3.1.1 Types of Sources

This review encompasses a range of study designs, including quantitative, qualitative, and mixed methods approaches. All types of quantitative studies are included, encompassing quasi-experimental and experimental designs, such as pre and post studies, non-randomised and randomised controlled trials, analytical cross-sectional, longitudinal, case-controlled, case series, and prospective and retrospective cohort studies. Furthermore, all types of qualitative studies are included, encompassing methodologies such as phenomenology, grounded theory, and narrative inquiry were evaluated for potential inclusion. Additionally, mixed methods studies were included for review and includes sequential, convergent, and exploratory designs.

The review excluded certain sources that did not align with its objectives. Excluded sources included opinion/discussion papers, unpublished studies, grey literature, dissertations, theses, conference papers, policy documents, and systematic, integrated, and scoping reviews. Grey literature and unpublished studies were excluded from scoping reviews due to concerns about their quality, accessibility, and the potential for duplication

2.4 The Scoping Reviews Primary Research Question

The Population, Concept, and Context (PCC) mnemonic was applied in the early stages of developing the review question, which in succession with the establishment of the review's inclusion and exclusion criteria, directed the scope of search terms used in the process of searching and screening the literature (Schneider et al., 2016; Tricco et al., 2018). The definitions for this mnemonic can be seen in Table 1. This method allowed establishment of clear boundaries in order to have a successful framework for shortlisting or eliminating according to the relevance of the article to the review question and supporting criteria (Stern et al., 2014).

Table 1. PCC for this Scoping Review

Population:	All qualified and registered nurses and midwives, who were practicing nursing and midwifery during the COVID-19 pandemic. Nursing and midwifery axillary support staff, health care workers and students were excluded.
Concept:	The key concepts underpinning this scoping review focus on understanding the intrinsic and extrinsic factors, as shaped by the COVID-19 pandemic, that have impacted job satisfaction and career intentions of qualified and registered nurses and midwives.
Context:	The scoping review considers studies that included qualified and registered nurses and midwives undertaken in any health care setting including, but not restricted to Primary, Secondary, or Tertiary health care settings in Australia and worldwide during the COVID-19 pandemic.

2.4.1 Review Question

During the COVID-19 pandemic, what intrinsic and extrinsic factors influence job satisfaction of registered nurses and midwives, and how do these factors shape retention or attrition intentions within nursing and midwifery professions?

2.4.2 Population

In the 'Population' segment of the scoping review, precise inclusion and exclusion criteria were delineated based on participants' educational qualifications and professional roles during the COVID-19 pandemic. Such stringent selection ensures the validity and coherence of the data under scrutiny, aligning with the research's overarching objectives. This review analysed studies that included participants with specific qualifications: Bachelor of Nursing, Dual Degree Bachelor of Nursing/Bachelor of Midwifery, entry-to-practice Master of Nursing, Bachelor of Midwifery, entry-to-practice Master of Midwifery, or Postgraduate Diploma of Midwifery. Additionally, the inclusion criteria also included participants with any form of postgraduate qualifications, including postgraduate certificates, diplomas, master's degrees, and doctoral or PhD qualifications. These qualifications formed the inclusion criteria for the scoping review.

Participants who were employed in education, administration, research, leadership, or frontline bedside roles in the health care setting during the COVID-19 pandemic were also included when examining the studies. In this review, health care workers, licensed practical nurses, enrolled nurses, nursing and midwifery students and assistants in nursing and midwifery were excluded due to their distinct scopes of practice and training prerequisites compared to registered nurses and midwives. Given their roles often operating under the direct supervision of registered nurses or registered midwives, their experiences and decision-making processes may vary significantly, thereby introducing extraneous variables. Ensuring a homogenous participant demographic is paramount for the consistency and reliability of data acquisition (Colquhoun et al., 2014; Creswell & Creswell, 2017). Inclusion of a more diverse workforce population may introduce variables irrelevant to registered professionals, whereas a consistent participant group produces more reliable data.

2.4.3 Concept

The key concepts underpinning this scoping review focus on understanding the intrinsic and extrinsic factors, as shaped by the COVID-19 pandemic, that have impacted job satisfaction and career intentions of registered nurses and midwives. Specifically, this review prioritised studies that explored how these pandemic-influenced factors might drive nurses and midwives to either continue in their current professions, contemplate departure, or even consider entirely different career pathways. To develop a comprehensive understanding of the concept, it was crucial to examine what signifies these intrinsic and extrinsic factors.

Intrinsic factors are characterised by specific attributes including age, sex, marital status, educational attainment, psychological capital (self-efficacy, hope, and optimism), perceived readiness, mindfulness, coping methods, and resilience, among others (El-Jardali et al., 2009; Fredrickson et al., 2003; Gillespie et al., 2007; Luthar et al., 2006; Rees et al., 2015; Rees et al., 2019; Shin et al., 2014; Sutcliffe & Vogus, 2003). Individual resilience and psychological capacity allow nurses and midwives to adapt through periods of hardship or substantial causes of stress (Yörük & Güler, 2021). Resilience and self-efficacy are protective factors that help to preserve the individual's psychological health in times of crisis (Alameddine et al., 2021; L. Huang et al., 2020; Labrague et al., 2020; Manomenidis el al., 2019; Olsen et al., 2017). Measures used to enhance nurses and midwives' resilience can decrease the risk of burnout and improve individuals personal and professional satisfaction (Epstein & Krasner, 2013; Hart et al., 2014; Q. Huang et al., 2019; McAllister & McKinnon, 2009).

Alternatively, extrinsic factors are external constructs that directly influence the practical environment in which care is delivered. They encompass organisational concepts like key policies and procedures and broader system management which includes staffing, workload modelling, human resources, management structures, logistics, workplace culture, and support services (Cusack et al., 2016; Yörük & Güler, 2021). Organisational resilience can be defined as the organisation's ability to withstand and cope with challenges through flexibility, adaptability and compassion, whilst maintaining the health and resilience of the individual (Taylor et al., 2019). In recent research it has been argued that resilience (historically an individual concept and construct) should not be the responsibility of the individuals in the organisation to adapt to, it should instead be the organisation's responsibility to adapt the resources and services offered to be resilient in times of crisis (Hind et al., 1996; Mallak, 1998; Taylor et al., 2019). Furthermore, given this shift away from the expectation that nurses and midwives should navigate factors affecting job satisfaction on their own, it is crucial to understand the challenges they confront during crises to enhance job satisfaction.

Given the multifaceted nature of factors affecting job satisfaction, especially during the unprecedented times of the COVID-19 pandemic, to what extent do intrinsic and extrinsic elements influence the decisions of nurses and midwives to continue or leave their roles and profession? As such, this review seeks to examine the intricate links between these intrinsic and extrinsic factors, especially in the unique context of the COVID-19 pandemic, building upon the foundation of previous research.

2.4.4 Context

In scoping reviews, 'Context', derived from the Latin words signifying "with or together" and "to weave", highlights the detailed integration of evidence-based practices within particular organisational frameworks, essential for understanding the intricacies of implementation (Nilsen & Bernhardsson, 2019). Considering the role of context is vital in understanding the dynamics of implementation outcomes. Overlooking its significance can hinder the applicability of results to diverse clinical environments or situations (Kaplan et al., 2010).

In this review, studies carried out in the primary, secondary, or tertiary health care settings were examined. In the initial database search, only studies from Australia and New Zealand were evaluated. This was to determine if local investigations had already addressed the intrinsic and

extrinsic factors affecting retention and job satisfaction during the pandemic. This approach aimed to ensure this research would not duplicate ongoing or completed studies. Given the limited findings from the initial scope focusing on Australia and New Zealand, the inclusion criteria focus was broadened to incorporate global studies.

2.5 Search Strategy

The objective of the search strategy was to identify published research studies on the topic. An initial exploratory search was conducted on MEDLINE (Ovid), PsychINFO, and CINAHL Plus (EBSCO) to determine the available articles. Utilising the nomenclature identified in the titles and abstracts of relevant articles, as well as the index terms used for their description, a comprehensive search strategy of keywords and MeSH terms was developed for MEDLINE (Appendix G). Consistent with the PCC criteria, MeSH headings related to job satisfaction, retention, COVID-19, nurses, midwives, and health settings were utilised to search the appropriate databases an example of some of the keywords and terms is presented below in Table 2. The search strategy was peer-reviewed by the institutes' librarian and PhD supervisors, including all identified keywords and index terms. The search process involved modifying these key terms and index phrases to suit each specific database. Additionally, the reference lists of all chosen sources were examined to identify any further relevant studies.

Table 2. Example of Search Keywords and MeSH Terms

Population:	(Midwives OR midwi* OR nurses OR nurs* exp Nursing Service, Hospital/ OR exp Nursing/ OR exp Nursing Staff/ OR exp Nursing Services/ OR exp Nursing Staff, Hospital/ OR exp Nursing Stations/ exp Midwifery/ exp Nurse Midwives/)
Concepts:	(job retention OR work retention OR skill* retention OR personnel retention OR employee retention OR staff retention OR retain* staff OR retain* employ* OR job satisfaction OR work satisfaction OR employ* satisfaction OR burnout OR burnt out OR burn-out OR career burnout OR staff burnout OR employ*burnout OR occupational burnout OR professional burnout OR psychological burnout OR career mobility OR career pathway* OR career intention* OR personnel turnover* OR staff turnover* OR employee turnover* OR job securit * OR employment securit* OR job redundanc* OR staff redundanc* OR employment redundanc* OR career ladder OR job ladder OR quit* job* OR quit* career* OR quit* work* OR quit* profession* OR mov* job* OR job trans* OR work trans*)
Context:	(Coronavirus OR Coronavirus infections OR SARS-CoV-2 OR COVID-19 OR COVID19 OR COVID2019 OR COVID 2019 OR COVID* OR 2019 nCoV OR 2019-nCoV OR 2019nCoV OR Novel CoV OR nCOVID OR nCoV2019 OR nCoV19 OR 19nCoV OR nCoV OR CoV OR CoV 2 OR CoV2 OR hCoV OR hCoV19 OR hCoV-19 OR hCoV2019 OR hCoV-2019 OR severe acute respiratory syndrome coronavirus 2 OR severe acute respiratory syndrome corona virus OR Severe acute respiratory syndrome OR SARS virus OR SARS coronavirus OR SARS Co V 2 OR SARS CoV 2 OR SARSCoV2 OR SARSCoV 2 OR SARSCoV-2 OR SARS-CoV2 OR SARS-CoV-2 OR SARS-CoV OR SARSCoV OR SARS 2 OR SARS2 OR Corona virus* OR Coronavir* OR Beatacoronavir* OR Corona pandemic* OR Corona virus pandemic OR Corona virus outbreak OR Coronavirus pandemic OR Coronavirus outbreak OR Wuhan coronavirus* OR Wuhan virus)

2.5.1 Databases

Several online databases were used to search for relevant studies between 2018 and 2023. The findings from the database search and the process of selecting studies are illustrated in the flow diagram below (Figure 1), adhering to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) format (Tricco et al., 2018). All identified citations were collated and exported into the citation management software EndNote, where the reviewer removed all duplicates. All citations titles and abstracts were then screened and assessed against the eligibility criteria by one reviewer to identify the relevant studies for inclusion. A random sample (20%) of all citations were additionally screened by the second reviewer. Articles deemed potentially relevant were subsequently accessed in full. The full text of the selected articles was then analysed in detail against the inclusion/exclusion criteria by two independent reviewers. In cases of uncertainty or inconsistency related to inclusion, the specific citations were discussed among the reviewers until a success consensus was reached. Reasons for exclusion of full text papers were recorded and reported below in Figure 1.

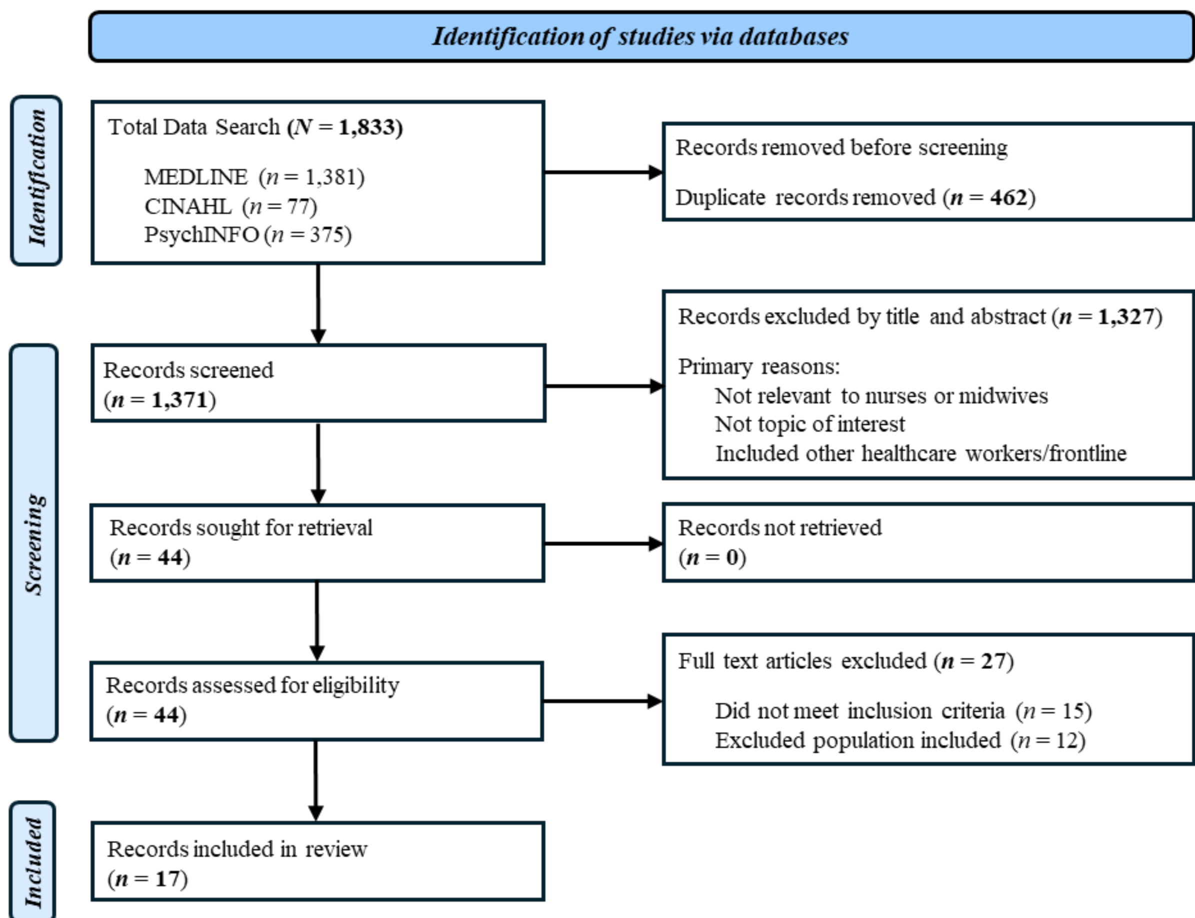


Figure 1. PRISMA Flow Diagram

2.6 Database Findings

A total of 1,833 articles were discovered (Figure 1). The principal literature search identified articles from MEDLINE (1381), CINAHL (77), and PsychINFO (375). The process of screening and selecting the relevant articles as discussed above was followed with 462 duplications removed. The removal of the duplicates reduced the number of articles eligible for title and abstract review to 1,371. From this subset, 44 articles were deemed to meet the eligibility criteria and were then retrieved in full for closer review. The data extracted during this process included the authors, the journal, country, date of publication, study design, sample size and key findings. The full text of these selected articles was analysed in detail against the inclusion criteria by two independent reviewers. Upon thorough evaluation, 17 of these articles met the established inclusion criteria for this scoping review.

Table 3. Summary of Included Studies

Article Title / Journal	*Country / Author / Year*	*Study Design*	*Sample Size*	*Measurement / Instrument*	*Key Findings*
S1) Factors Associated with the Resilience of Nurses During the COVID-19 Pandemic. *Worldviews on Evidence-Based Nursing*	Lebanon Alameddine, M., Clinton, M., Bou-Karroum, K., Richa, N., & Doumit, M. A. (2021)	Cross-sectional Online Quantitative Survey	511	1. Connor-Davidson Resilience Scale 2. Copenhagen Burnout Inventory Scale 3. Intention to Quit Scale 45 items	There was a significant inverse relationship observed between the resilience of nurses and personal, work-related, and client-related burnout. These correlated with their intention to quit. Being male and having a master's degree were independently associated with higher resilience. Nurses reporting the intention to quit their job had lower resilience scores. Results highlight the importance of personal resilience in mitigating the effects of burnout and turnover, especially at times of crisis (Alameddine et al., 2021).
S2) Identifying patterns of turnover intention among Alabama frontline nurses in hospital settings during the COVID-19 pandemic. *Journal of Multidisciplinary Healthcare*	United States of America Astin, C., Ali, H., Ahmed, A., Hamasha, M., & Jordan, S. (2021)	Cross-sectional Online Quantitative Survey	111	1. Job Demands 2. Organisational Resources 3. Motivation 37 items	The findings showed that there was a direct correlation between gender, marital status, and seniority on turnover intention. Nurse's perceived anxiety and stress related to their patients' acuity, their personal health as a risk factor, their patient assignments, their personal protective equipment, and their psychological support correspond to higher turnover intention among nurses working with patients infected with COVID-19 (Astin et al., 2021).
S3) Is COVID-19 the straw that broke the back of the emergency nursing workforce? *Emergency Medicine Australasia*	Australia Cornish, S., Klim, S., & Kelly, A. M. (2021)	Ancillary study design derived from research question of the parent protocol Online Quantitative Survey	398	1. Future career intention 2. Intention to remain in or leave emergency nursing 69 items	Nurses working in emergency departments where COVID-19 positive patients were received, were more likely to express an intention to leave ED nursing. Intention to leave emergency nursing was associated with not feeling more connected to their emergency nursing colleagues, the broader ED team, and their organisation since the onset of the pandemic. The data suggest that approximately one year after the onset of the COVID-19 pandemic in Australia, a high proportion of ED nurses (48.2%) intend to leave ED nursing within five years (Cornish et al., 2021).

Article Title / Journal	*Country / Author / Year*	*Study Design*	*Sample Size*	*Measurement / Instrument*	*Key Findings*
S4) The mental health impact of the COVID-19 pandemic on Canadian critical care nurses. *Intensive and Critical Care Nursing*	Canada Crowe, S., Howard, A. F., & Vanderspank, B. (2022)	Cross-sectional Mixed-methods Online Survey (Quantitative and Qualitative)	425	1. Impact of Event Scale 2. The Depression, Anxiety, Stress Scale 3. The Professional Quality of Life Scale 4. The Intent to Turnover Scale 5. One open ended question for any additional information participants wished to share 81 items	Findings depicted immense mental health toll on the nurses that stemmed from 1) failed leadership and 2) the traumatic nature of the work environment, that led to 3) a sense of disillusionment, defeat, and an intent to leave. 87% were suffering from signs of secondary traumatic stress, 74% of participants reported symptoms of post-traumatic stress disorder, 70% reported symptoms of depression, 57% reported symptoms of anxiety, 61% reported symptoms of stress and all (100%) reported moderate to high burnout. Furthermore, 22% intended to quit their current employment (Crowe et al., 2022).
S5) Burnout and intent to leave during COVID-19: A cross-sectional study of New Jersey hospital nurses. *Journal of Nursing Management*	United States of America De Cordova, P. B., Johansen, M. L., Grafova, I., Crincoli, S., Prado, J., Pogorzelska-Maziarz, M., & de Cordova, P. B. (2022)	Cross-sectional Online Quantitative Survey	3030	1. Staffing 2. PPE Adequacy 3. Physical Exhaustion 4. Burnout Dolan single-item measure 5. Intent to Leave 11 items	Participants reported a significant association between high levels of burnout and intent to leave. 64.3% of participants reporting burnout and 36.5% reporting they have the intention to leave the hospital within a year. Reported inadequate PPE and physical exhaustion remained predictors of burnout among nurses. These, coupled with physical exhaustion and short staffing, contributed to burnout and intent to leave (De Cordova et al., 2022).
S6) The impact of fear of COVID-19 on job stress, and turnover intentions of frontline nurses in the community: A cross-sectional study in the Philippines. *Traumatology*	Philippines De los Santos, A. J & Labrague, J. L. (2021)	Cross-sectional Online Quantitative Survey	385	1. Fear of COVID-19 Scale 2. Schriesheim and Tsui's Job Satisfaction Index 3. House and Rizzo's (1972) Job Stress Index Scale 4. Two single item measures of turnover intention were used to assess organisational and professional turnover intentions. *Item numbers not specifically broken down*	The study aimed to assess fear of COVID-19 among nurses in a community setting. The results indicated a nurses displayed moderate to high fear of the virus, with this fear influencing job stress, and organisational and professional turnover intention (De los Santos & Labrague, 2021).

Article Title / Journal	***Country / Author / Year***	***Study Design***	***Sample Size***	***Measurement / Instrument***	***Key Findings***
S7) Turnover intention and coronaphobia among frontline nurses during the second surge of COVID-19: The mediating role of social support and coping skills. *Journal of Nursing Management*	Philippines Fronda, D. C., & Labrague, L. J. (2022)	Correlational research design Online Quantitative Survey	687	1. Coronavirus Anxiety Scale 2. Brief Resilient Coping Skills Scale 3. Perceived Social Support Scale 15 items	This study found that turnover has been attributed, in part, to excessive fear of the virus (a condition called corona phobia). Frontline nurses who experienced corona phobia were more likely to quit their job and the nursing profession, with more than half of the frontline nurses surveyed experiencing corona phobia. Corona phobia had a direct impact on nurses' organisational and professional turnover intention with 25.8% reported a desire to leave their job and 20.7% reported a desire to leave their profession. Social support and coping skills partially mediated the relationship between organisational and professional turnover intention (Fronda & Labrague, 2022).
S8) Factors contributing to nurse resignation during COVID-19: A qualitative descriptive study. *Journal of Advanced Nursing*	Australia Jarden, R. J., Scott, S., Rickard, N., Long, K., Burke, S., Morrison, M., Twomey, B. (2023)	Qualitative Descriptive Individual semi-structured online interviews	39	1. Interview questions invited participants to tell the interviewer what: a. Inspired them to join the organisation b. Created a great day at work for them c. Factors contributed to their resignation d. Factors that might have supported them to stay *Interview guide used*	Four themes were constructed for each of the key research questions. Inspiration to join the organisations transpired through organisational reputation, recruitment experiences, right position and right time, fit and feel. A great day at work was created through relationships with colleagues, experiences with managers, adequate resourcing and delivering quality care. Factors contributing to nurses resigning included COVID-19, uncertainty of role, workload and rostering, and finally, not feeling supported, respected and valued. Factors that may have supported the nurses to stay included flexible work patterns and opportunities, improved workplace relationships, workload management and support, and supportive systems and environments. Cutting across these themes were five threads: (1) relationships, (2) communication, (3) a desire to learn and develop, (4) work–life balance and (5) providing quality patient care (Jarden et al., 2023).

Article Title / Journal	*Country / Author / Year*	*Study Design*	*Sample Size*	*Measurement / Instrument*	*Key Findings*
S9) COVID-19 anxiety among front-line nurses: Predictive role of organisational support, personal resilience and social support. *Journal of Nursing Management*	Philippines Labrague, L. J., & De los Santos, J. A. A (2020)	Cross-sectional Online Quantitative Survey	325	1. COVID-19 Anxiety Scale 2. Brief Resilient Coping Scale 3. Perceived Social Support Questionnaire 4. Perceived Organisational Support questionnaire. 23 items	Compassion fatigue in frontline nurses was noted to affect job satisfaction, turnover intention, and the quality of care in their assigned unit. 38.5% of frontline nurses experienced medium to high compassion fatigue during the second wave of the pandemic (Labrague & de Los Santos, 2020).
S10) Fear of Covid-19, psychological distress, work satisfaction and turnover intention among frontline nurses. *Journal of Nursing Management*	Philippines Labrague, L. J., & De los Santos, J. A. A. (2021).	Cross-sectional Online Quantitative Survey	261	1. The Fear of COVID-19 Scale 2. Job Stress Index Scale 3. Two single item measures of turnover intention were used to assess organisational and professional turnover intentions 14 items	An increased level of fear of COVID-19 was associated with decreased job satisfaction, increased psychological distress and increased organisational and professional turnover intentions. Frontline nurses who reported not having attended COVID-19-related training and those who held part-time job roles reported increased fears of COVID-19 (Labrague & de Los Santos, 2021a).
S11) Perceived COVID-19-associated discrimination, mental health and professional-turnover intention among frontline clinical nurses: The mediating role of resilience. International *Journal of Mental Health Nursing*	Philippines Labrague, L. J., De los Santos, J. A. A., & Fronda, D. C. (2021)	Cross-sectional Online Quantitative Survey	259	1. COVID-19 Associated Discrimination Scale. 2. Brief Resilient Coping Skills Scale 3. Mental Health Inventory 4. Turnover Intention 11 items	The results revealed that frontline nurses perceived a moderate level of COVID-19 associated discrimination. Frontline nurses who perceived a higher level of discrimination during the coronavirus pandemic reported poorer mental health and higher professional-turnover intention. Resilience acted as a mediator and reduced the effects of COVID-19 associated discrimination on nurses' mental health and their professional-turnover intention (Labrague et al., 2021).

Article Title / Journal	*Country / Author / Year*	*Study Design*	*Sample Size*	*Measurement / Instrument*	*Key Findings*
S12) Midwifery workforce challenges in Victoria, Australia. A cross-sectional study of maternity managers. *Women and Birth*	Australia Matthews, R. P., Hyde, R. L., McLachlan, H. L., Llewelyn, F., & Forster, D. A. (2023)	Cross-sectional Mixed-methods Online Survey (Quantitative and Qualitative)	38	1. Estimation of current number of midwives permanently employed and number of Equivalent Full Time (EFT) midwives permanently employed 2. If adequately staffed and if not, number of EFT required 3. Use of casual and agency staff and frequency of use in the 12 months prior to the survey 4. Use of casual/agency staff prior to COVID-19 pandemic 5. Estimation of turnover of midwives in 12 months prior to survey, impact of turnover and comparison prior to COVID-19 6. Difficulties in recruitment of midwives in 12 months prior to survey and prior to COVID-19 7. Concerns regarding skill mix of midwives at maternity service. Open ended questions with free text responses were included to allow further exploration *Item numbers not specifically broken down*	Of the respondents 76% reported inadequate midwifery staff levels, with deficits ranging from one to 19 estimated Full-Time Equivalent (EFT) midwives, with a combined total deficit of 135 EFT. In the 12 months prior to the survey, 73% of services had found it difficult to recruit midwives, with increased difficulty during the COVID-19 pandemic. Managers were concerned about retaining and recruiting 'experienced' midwives due to an ageing workforce and high turnover due to work/life imbalance and job dissatisfaction. These issues have led to a predominantly early career midwifery workforce and created concern about skill mix (Matthews et al, 2023).

Article Title / Journal	*Country / Author / Year*	*Study Design*	*Sample Size*	*Measurement / Instrument*	*Key Findings*
S13) Occupational stress, job satisfaction, and intent to leave: Nurses working on front lines during COVID-19 pandemic in Zagazig City, Egypt. *Environmental Science and Pollution Research*	Egypt Said, R. M., & El-Shafei, D. A. (2021)	Comparative Cross-sectional Online Quantitative Survey	420	1. The Expanded Nursing Stress Scale 2. Specific COVID-19 Stressors Scale 3. The McCloskey/Mueller Satisfaction Scale 4. The Nurses Intent to Leave Scale 107 items	Three quarters of nurses (75.2%) working in the COVID triage hospital had high stress levels versus 60.5% working in the non-triaging COVID hospital. Workload (98.6%), dealing with death and dying (96.7%), personal demands and fears (95.7%), employing strict biosecurity measures (95.2%), and stigma (90.5%) represented the highest priority stressors in those working in the COVID triaging hospital, while exposure to infection risk (97.6%) was the stressor of highest priority among nurses working in the non-triaging COVID hospital nurses. More than half of the nurses (51.0%) working in the COVID triage hospital reported low satisfaction level versus 41.9% working in the non-triaging COVID hospital. Only 4.8% of nurses working in the COVID triaging hospital definitely had no intent to leave their present job. The type of hospital and its related workload was the most significant predictor of all the studied outcomes (Said & El-Shafei, 2021).
S14) Impact of the COVID-19 pandemic crisis on turnover intention among nurses in emergency departments in Thailand: a cross sectional study. *BMC Nursing*	Thailand Sungbun, S., Naknoi, S., Somboon, P., & Thosingha, O. (2023)	Cross-sectional Online Quantitative Survey	322	1. Burnout assessment tool 2. Turnover Intention Scale 3. Emotional Intelligence Assessment Tool 4. Organisational resources and maladaptive self-regulation scale 61 items	During COVID-19 pandemic crisis, 72.8% of ED nurses in dark-red zone areas desired to leave their organisation. The factors of motivation, exhaustion, and cognitive impairment positively influenced turnover intention among ED nurses in dark-red zone areas. The low availability of organisational resources was associated with an increase in the turnover intention rate. Maladaptive regulation, exhaustion, and cognitive impairment positively influenced turnover intention among ED nurses in non-red zone areas (Sungbun et al., 2023).

Article Title / Journal	*Country / Author / Year*	*Study Design*	*Sample Size*	*Measurement / Instrument*	*Key Findings*
S15) Factors affecting Iranian nurses' intention to leave or stay in the profession during the COVID-19 pandemic. International Nursing Review	Iran Varasteh, S., Esmaeili, M., & Mazaheri, M. (2022)	Qualitative descriptive study Individual semi-structured interviews in person	16	1. A series of questions were asked. Example questions provided were: a. What was your perception of working in the hospital when theCOVID-19 pandemic began? b. What were you concerned about? c. What were your reasons for not leaving the profession despite the high risk of coronavirus infection?	The study aimed to explore the factors affecting nurses' intentions to stay or leave their profession. Findings indicated three main categories that either kept nurses working or gave nurses a reason to quit the profession. Those were fear, organisational factors, and commitment/work conscience. Commitment and work conscience in the pandemic conditions was one of the main factors keeping nurses in the profession (Varasteh et al., 2022).
S16) UK advanced practice nurses' experiences of the COVID-19 pandemic: A mixed-methods cross-sectional study. BMJ Open	United Kingdom Wood, E., King, R., Senek, M., Robertson, S., Taylor, B., Tod, A., & Ryan, A. (2021)	Cross-sectional Mixed-methods Online Survey (Quantitative and Qualitative)	124	1. Preparedness of participants organisation at the start of the outbreak 2. Impact on patient and staff safety 3. Shortages of staff and equipment, concerns, ability to access guidelines and advice 49 items	Advanced Practicing Nurses (APNs) report COVID-19 related shortages in staff and equipment across primary and secondary care and all regions of the UK. APNs in this study reported shortages of staff (51%) and personal protective equipment (PPE) (68%) during the first three months of the coronavirus outbreak. Almost half (47%) of the APNs surveyed were considering leaving their job over the same three months (Wood et al., 2021).

Article Title / Journal	*Country / Author / Year*	*Study Design*	*Sample Size*	*Measurement / Instrument*	*Key Findings*
S17) A mixed methods study of an organization's approach to the COVID-19 health care crisis. *Nursing Outlook*	Italy Zaghini, F., Fiorini, J., Livigni, L., Carrabs, G., & Sili, A. (2021)	Longitudinal Mix method Online Quantitative Survey Qualitative 6 focus groups in person	322	Quantitative: 1. Health and Safety Executive Management Standards Work-Related Stress Indicator Tool 2. The Nursing Quality of Life Scale 3. The Scale of Positive and Negative Indicators of the Nursing Questionnaire on Organisational Health 63 items Qualitative: 1. Different dimensions focused on included psychological functionality, physical functionality, and work and social functionality	The results were collected in a dynamic, active organisation with a proactive approach to problem-solving, which has undertaken a series of interventions to make nurses as ready as possible to face the SARSCoV-2 pandemic. After implementing a series of interventions nurses themselves confirmed feelings of greater safety, preparation and support from colleagues and superiors, and attesting the effectiveness of the implemented interventions (Zaghini et al., 2021).

2.7 Results

Table 3 provides a summary of the characteristics of the studies featured in this scoping review. The articles (*N* = 17) ranged in date from 2019 to 2023, with zero studies (0%) retrieved from 2019, one study (6.25%) retrieved from 2020, eight studies (50%) retrieved from 2021, four studies (25%) retrieved from 2022 and three studies (18.75%) retrieved from 2023.

The majority of studies were conducted in the Philippines, representing 31.25% with five studies (S6, S7, S9, S10, S11). Australia followed with 18.75%, based on three studies (S3, S8, S12), and the USA accounted for 12.5% with two studies (S2, S5). Lebanon, Canada, Egypt, Iran, Thailand, UK, and Italy, each contributed a single study, collectively making up 43.75% (S1, S4, S13, S14, S15, S16, S17). All studies provided insights from various geographical contexts with studies spanning 10 countries.

The studies under review exhibited a range of designs, with a majority utilising quantitative methodology. Variations in the research methodologies were noted as follows: The majority employed cross-sectional quantitative designs, as seen in studies (S1, S2, S5, S6, S9, S10, S11, S14). Three studies (S4, S12, S16) adopted a mixed methods cross-sectional design. One study (S7) utilised a correlational design, while an ancillary sub-study approach was evident in study (S3). One study (S13) incorporated a comparative cross-sectional methodology. Uniquely, study (S17) adopted a longitudinal mixed-method design, examining the before and after transformation into a COVID-19 designated hospital and the implementation of organisational interventions. This was achieved using a quantitative online survey combined with in-person explanatory focus groups, supported by Grounded Theory. Additionally, two qualitative descriptive studies were noted (S8, S15). Neither of these explicitly referenced any frameworks or theories to underpin their chosen research methodology.

In the studies reviewed for this scoping review, the majority (88%) used online survey instruments for data collection, with no utilisation of hard copy methods identified in the review (S1, S2, S3, S4, S5, S6, S7, S9, S10, S11, S12, S13, S14, S16, S17). For those studies using a qualitative approach, (S8) conducted individual semi-structured interviews online. In contrast, study (S15) carried out its individual semi-structured interviews face-to-face, much like the in-person focus groups undertaken by study (S17).

The 17 studies reviewed varied in their sample sizes, ranging from as few as 16 nurses in Iran (S15) to as many as 3,030 nurses from New Jersey, USA (S5). All of these studies met the set inclusion criteria for this scoping review. Notably, the nurses participating in these studies held a minimum of a Bachelor's degree and were registered with the relevant governing bodies (S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S13, S14, S15, S16, S17). Similarly, midwives in the one identified study (S12) held the appropriate qualifications and were registered with the regulatory governing body Australian Health Practitioner Regulation Agency (AHPRA). Per the inclusion criteria of this review, studies must have been undertaken during the COVID-19 pandemic, with participants were actively working during that time.

Many studies placed an emphasis on the need for participants to have actively practiced during some period of the pandemic to meet their inclusion criteria, such as intervals lasting over three months (S2), the year 2021 (S8), or during notable events such as surges and waves (S14). Essential criteria for most of these studies often specified that participants work in environments like hospitals, where they provided direct care to COVID-19 patients (S1, S2, S4, S6, S7, S8, S9, S10, S11, S12, S15) or in primary or secondary health care settings (S16). Some studies sought to compare and differentiate the experiences of those employed in non-triaging COVID-19 hospitals with those in facilities designated for treating and triaging COVID-19 patients (S13, S14) as a focal point of interest. A consistent requirement was that participants had at least six months of clinical experience as a registered nurse (S6, S7, S9, S10, S11, S14, S15).

After reviewing the studies, 11 key categories of factors were identified as being associated with job satisfaction and retention intention of participants in these studies, as seen in Table 4. Seventy one percent of the studies analysed specific factors while also measuring participants' level of job satisfaction and/or intention to remain in their positions and/or profession. Key factors explored included burnout (S1, S5, S14), mental health conditions such as depression, anxiety, and stress (S4, S6, S10, S11, S13), fear related to COVID-19 (S6, S7, S9, S10), impact of the event (S4), resilience metrics (S1, S7, S9, S11), physical fatigue (S5), both organisational resources and support and/or social support (S5, S7, S9), instances of discrimination (S11), quality of life (S4, S17), and projections regarding future career paths (S3). While other studies aimed to explore, describe and understand the experiences, factors, and patterns influencing the retention and job satisfaction of nurses and midwives (S2, S8, S12, S15, S16).

Table 4. Factors Affecting Job Satisfaction and Retention

Categories / Factors Reported	*Supporting Studies*
Pandemic-Related Patient & Family Care Challenges: Studies that highlighted the issues stemming from interactions with patients and families, coupled with the challenges of upholding quality care in the face of rising patient-staff ratios, staffing disruptions, and skill mix concerns.	S1, S2, S3, S4, S5, S7, S8, S9, S12, S13, S14, S15, S16, S17
Well-being & Coping Mechanisms: Studies that examine burnout and work-related stress, along with resilience and methods of coping.	S1, S2, S4, S5, S6, S7, S8, S9, S10, S11, S13, S14, S17
Work life balance: Studies that discuss the challenges and adaptations faced by individuals in balancing their professional responsibilities with personal life amidst the pandemic.	S3, S8, S12, S13, S17
Pandemic-Induced Health Impacts: Refers to both physical and psychological health changes due to the pandemic.	S2, S4, S5, S6, S7, S9, S10, S11, S13, S14, S17
Leadership & Organisational Support: Studies that discuss the impact of leadership on intention to stay or leave the profession.	S1, S2, S3, S4, S7, S8, S9, S12, S13, S15, S16, S17
Organisational Environment & Resources: Studies that discuss the impacts of leadership and management, as well as the resources provided to or accessible by staff.	S2, S3, S4, S5, S6, S7, S8, S9, S15, S17
PPE Availability: Studies focused on the adequacy and accessibility of personal protective equipment for staff during the pandemic.	S2, S3, S5, S7, S8, S13, S14, S15, S16
Professional Integrity & Value: Studies exploring rumination, discrimination, respect for the profession, and professional identity during the pandemic.	S1, S2, S3, S4, S8, S11, S12, S13, S15
Personal Circumstances: Studies that explore concerns about transmitting COVID-19 to dependents or ill family members, as well as studies where families express apprehensions about participants working during the pandemic.	S1, S3, S6, S8, S12, S13, S15, S16
Fear of COVID-19 Transmission: Studies examining participants' fears related to COVID-19 and its impact on retention.	S6, S7, S9, S10, S11, S13, S15, S16

2.8 Discussion

A scoping review was identified as the most appropriate method to achieve the review's objectives and address the research question. Unlike systematic reviews which aim to answer specific research questions, the objective of this scoping review was to explore and map the scope and characteristics of existing studies (Munn et al., 2018). This approach is especially beneficial when collecting data from studies with diverse methodologies or when no prior reviews have been conducted on the topic of interest.

The results of the scoping review, as highlighted in Table 3, reveal that there has been a limited number of studies conducted on the impact of COVID-19 on job satisfaction, retention and career pathways for nurses and midwives in Australia. Given the limited findings from Australia, the search strategy was adjusted to encompass studies from around the world. All retrieved studies focused on job satisfaction, retention, and career pathways from a nurse's viewpoint. While one study did focus on the midwifery profession, its emphasis was solely on the experiences of midwifery managers, excluding midwives engaged in direct care. Notably, no

studies meeting the inclusion criteria addressed the impact of COVID-19 on the job satisfaction, retention, and career pathways of midwives, either within Australia or globally. This identifies a gap in the literature to date. From these 17 studies, the factors that were found to be linked to a job satisfaction and retention were identified and broadly grouped into two overall themes. These were Intrinsic factors and Extrinsic factors. The following section of this literature review chapter will focus on these factors highlighted in the literature to date.

2.8.1 Intrinsic Factors

From a thorough review of the literature, it is evident that specific intrinsic factors influenced job satisfaction and retention during the pandemic. As outlined earlier in the concept section of this chapter, for the context of this scoping review, intrinsic factors are understood to include attributes such as age, sex, marital status, educational attainment, psychological capital (with elements like self-efficacy, hope, and optimism), perceived readiness, mindfulness, coping strategies, resilience, among other individual-related aspects.

Within this category, three interconnected sub-themes emerged. These were Personal Characteristics, Nursing and Midwifery Wellbeing, and the Individual Responses and Challenges in the COVID-19 Era. At an individual level, participants placed significant emphasis on experiences tied to their overall wellbeing, professional identity, and the balance and routine of their work life.

2.8.1.1 Personal Characteristics

This scoping review analysed studies that examined specific personal characteristics, referred to as demographic factors, to determine their direct association with changes in job satisfaction and their intention to remain in the job. These demographic factors included: Age, gender, marital status, number of years in nursing or midwifery, number of years in their current job, the type of clinical unit the participants worked in, and their education level.

In examining gender's role, study (S6) determined a significant association between gender and the fear of COVID-19 (De los Santos & Labrague, 2021). Specifically, female participants displayed heightened apprehension related to the pandemic in comparison to males. This intensified anxiety, as evidenced in their research, arises from female participants' concerns about contracting COVID-19 and the ensuing potential transmission to their families.

Building on this, study (S2) Astin et al., (2021) indicated a correlation between intent to resign during the pandemic with factors such as gender, marital status, and seniority. These results highlighted that females who were married, and those individuals in senior roles were more inclined to consider resignation during this period (Astin et al., 2021). The implications drawn from this study suggest that personal characteristics significantly affected professional decisions in the wake of the pandemic's challenges.

To delve deeper into the diverse experiences of nurses during the pandemic, a comparative cross-sectional study was conducted by Said et al., (2020). This study (S13) compared the experiences of nurses at Zagazig Fever Hospital (ZFH), a designated COVID-19 Triage Hospital, against those at Zagazig General Hospital (ZGH). This hospital neither functioned as a triage nor isolation hospital, only caring for suspected COVID-19 patients in emergency circumstances. One key distinction that surfaced pertained to work experience of nurses at ZGH having a significantly longer professional tenure than their counterparts at ZFH. This raises important considerations regarding the impact of experience on coping mechanisms and resilience in high-stress environment (Said & El-Shafei, 2021). The contrast in tenure and location of work notably impacted job satisfaction levels. Participants with less than 10 years of experience showed a greater intention to leave compared to those with over 10 years' experience. Furthermore, in study (S13), distinctions in work hours between nurses at the designated COVID-19 Hospital, ZFH, and those at the general hospital, ZGH, were examined. The results indicated that a larger proportion of nurses at ZFH, 89.5%, experienced extended work hours compared to 60.0% of their counterparts at ZGH. Additionally, only 11.9% of the ZFH nursing staff had no night shift assignments, contrasting with the 19.5% observed in the ZGH group. There were statistically significant associations between hospital type, and work hours per week (>40 h) for all the studied outcomes (intention to leave, expanded nursing stress, nursing satisfaction scale specific COVID-19-associated stressors). Study (S17) confirmed that in the early stages of the pandemic, participants faced significantly extended work hours and increased responsibilities beyond their usual duties and scope of practice. This, combined with the unfamiliarity, unpredictability, and stress associated with COVID-19, exacerbated workplace incivilities and deteriorated working conditions, adversely impacting job satisfaction (Zaghini et al., 2021).

Educational background has also emerged as a significant factor affecting nurses and midwives during the pandemic. A key theme emerging from study (S1) by Alameddine et al., (2021) was the significant role of educational background on resilience. This study's observation

that nurses with a Master of Science in Nursing (MSN) demonstrated greater resilience than those with a Bachelor of Science in Nursing (BSN) adds to the growing body of literature underscoring the importance of advanced education in healthcare professions (Alameddine et al., 2021). Such findings are consistent with prior research (Ang et al., 2018; Roberts et al., 2021), which suggests a positive association between higher educational qualifications and resilience. Interestingly, study (S3) determined that, among participants working in a specific specialty area, there was no significant difference in the intention to leave emergency department nursing between nurses with advanced postgraduate qualifications and those without (Cornish, Klim, & Kelly, 2021). Despite the apparent correlation between educational level and resilience as seen in (S1), the decision to remain in the profession is often heavily influenced by the financial and familial obligations.

Study (S1) identified that 38.3% of participants no longer wished to maintain their roles in nursing profession. However, obligations to meet family financial needs required them to continue working in the field (Alameddine et al., 2021). Study (S4) reported a prevalent sentiment of despair and being burden among participants, who felt trapped in their nursing roles due to familial responsibilities and a perceived lack of alternative career opportunities (Crowe et al., 2022). Several participants openly acknowledged their desire to transition to a different career but felt impeded by financial obligations, such as mortgages and childcare. One participant commenting “because I have a mortgage and kids to take care of… I regret becoming a nurse and am now trapped in a job that is soul sucking in order to continue to provide for my family” (Crowe et al., 2022, p.5). Study (S9) revealed that more than 90% of frontline nurses felt unprepared to handle COVID-19 patients, and only 20.3% expressed a complete willingness to care for individuals with COVID-19 (Labrague & de Los Santos, 2020). This section has highlighted the substantial implications of demographic variables on professional fulfillment and retention of nurses amidst the pandemic.

2.8.1.2 Nursing and Midwifery Wellbeing

Most studies included in this scoping review established an association between individual psychological, emotional, and physiological health and well-being and variations in job satisfaction and retention. Study (S1) found that 86% of participants noted a substantial rise in stress and anxiety levels when contrasted with pre-pandemic working conditions (Alameddine et al., 2021). Furthermore, study (S17) captured the initial period following a hospital’s transformation into a COVID-19 hospital, highlighting the initial shock experienced by

participants, which was characterised by a significant surge in work-related stress and a perceived deterioration in working conditions following organisational interventions (Zaghini et al., 2021). In this longitudinal study, some likened their unpreparedness for the pandemic to ‘going to war without any weapons’.

Building on the findings of study (S1) and study (S17), study (S2) provides further insights into the emotional toll on healthcare workers. Participants in study (S2) reported a profound sense of being overwhelmed by the increased complexity of patient care during the pandemic. Compounded by the stress concerning their own health risks, 66% of study (S2) participants expressed this concern (Astin et al., 2021). Furthermore, it was found that various demographic factors, such as gender, marital status, parenthood, level of experience, area of speciality, and work shifts, played a substantial role in the anxiety and stress levels experienced by nurses due to these personal characteristics. Moreover, the study found that participants who were married with children, as well as those who were younger, reported experiencing high levels of stress and anxiety. This sense of being overwhelmed aligns with the initial shock and the heightened levels fear previously noted, indicating the significant impact of the pandemic on nurses’ mental health.

Upon examining the prevalence of stress associated with COVID-19, study (S13) determined that participants employed at a hospital designated for COVID-19 cases (ZFH) experienced significantly higher stress levels at 71.1%, in contrast to 58.1% among those at the general hospital (ZGH) that was not designated for treating COVID-19 patients (Said & El-Shafei, 2021). Further exploring workplace impacts, study (S6) investigated the impact of workplace exposure to COVID-19 on job satisfaction and found community-based nurses had a moderate level of job satisfaction, potentially due to less stress compared to their counterparts in hospital acute and critical care units dealing with COVID-19 (De los Santos & Labrague, 2021). This suggests that the intense demands of acute care in hospitals contribute to higher stress levels among nurses in these settings.

A prolonged exposure to chronic stress can lead to burnout, which is a persistent dysfunctional state where an individual is continuously facing high levels of demands with limited resources related to both their work and surrounding environment (Jourdain & Chênevert, 2010). In the study (S14) conducted by Sungbun et al., (2023), a comparative analysis was made between participants in the most affected pandemic areas, known as the dark-red zones, and those in areas less impacted by the pandemic, referred to as non-red zones. While

high burnout scores in the dark-red zones were anticipated, there was similarity in maladaptive coping mechanisms across both settings. This suggests a broader issue within the nursing/midwifery professions, where high-stress conditions, irrespective of the pandemic's severity, lead to comparable levels of dysfunctional coping (Sungbun et al., 2023). Furthermore, the inverse correlation between motivation and intention to resign in the dark-red zones highlights a crucial aspect of resilience. Higher motivation in these more demanding environments possibly acts as a buffer against the desire to leave, highlighting the importance of fostering motivation and engagement in high-stress settings. Furthermore, this implies that enhanced organisational support could potentially diminish the intention to quit. The role of organisational support, as seen in study (S5), further emphasises the impact of workplace resources on participants' experiences. The study discovered that participants who doubted their organisations ability to provide adequate PPE for their safety, were more likely to experience burnout than participants who were confident in the organisations ability to provide vital resources (De Cordova et al., 2022).

In circumstances where an organisation demonstrates insufficient capability to adequately address and mitigate the complexities introduced by a pandemic, empirical evidence suggests a subsequent reliance on the individual resilience of its workforce. Consequently, Alameddine et al., (2021) found that resilience acts as a mediator to compassion fatigue, and turnover rates was reported by study (S1) to decrease with high levels of personal, work related and client related burnout. Participants who reported the intention to quit their job, demonstrated lower resilience scores (Alameddine et al., 2021). This finding aligns with the observations of study (S11), which noted that increased psychological resilience was associated with improved mental health outcomes and lower intention to resign (Labrague et al., 2021). These studies collectively emphasise the crucial role resilience in enhancing mental health and job retention among participants. In research to date, resilience has been found to act as a buffer against the negative impacts of work-related stressors, suggesting that interventions aimed at strengthening resilience could be key in improving overall job satisfaction, reducing burnout, and lowering turnover intentions (Fronda & Labrague, 2022; L. Huang et al., 2020; Labrague & de Los Santos, 2021b; Labrague et al., 2021; Manomenidis et al., 2019).

Building on this understanding of resilience, study (S5) uncovered a significant link between physical exhaustion and an increased intention to resign amongst participants, a finding that resonates with earlier research (Bourdeanu et al., 2020; Lee et al., 2020). Further

complimenting this, the findings from study (S14) by Sungbun et al., (2023) explored this dynamic, revealing that both exhaustion and cognitive impairment significantly predict consideration of resignation. Notably, these effects were reported as being more pronounced in high-stress COVID-19, dark-red zone areas than the non-red zones which were less impacted by the pandemic (Sungbun et al., 2023).

When physical health and psychological resilience are severely strained, study (S4) identified the extensive effects, with up to 74% of participants experiencing symptoms of post-traumatic stress disorder (PTSD), 70% suffering from depression, 57% facing anxiety, and 61% dealing with stress. Every participant in the study reported experiencing moderate to severe burnout, and 87.1% showed signs of secondary traumatic stress at the time of the survey (Crowe et al., 2022). Existing research highlights how prolonged exposure to chronic stress can lead to burnout, which is recognised as a persistent dysfunctional state, primarily due to continuously facing high levels of stress with inadequate support services (Jourdain & Chênevert, 2010). The studies included in this scoping review identified various intrinsic factors that led to increased stress and anxiety levels during the pandemic. The findings from these studies in the scoping review offer a profound understanding of the heightened stress, burnout, and challenges to mental and physical health and job retention faced by nurses and midwives during the pandemic, highlighting the significant impact of these factors on their professional and personal well-being.

2.8.1.3 Individual Responses and Challenges in the COVID-19 Era

This sub section examines the personal challenges, fears, and responses to the pandemic as documented in literature.

During the early stages of the pandemic, study (S15) revealed that participants faced several pandemic-related fears, such as the risk of spreading the infection to their families, the lack of adequate PPE, and concerns about the consequences of quitting their jobs. While some participants experienced a diminishing of their fears as the pandemic evolved and time passed, others persisted in their roles despite enduring concerns and anxiety, driven by a sense of commitment to their profession. Significantly, the concern about transmitting the infection to family members was cited as one of the primary causes participants chose to leave their positions during the pandemic (Varasteh et al., 2022). Study (S7) explored the connection between coronaphobia, characterised by increased levels of anxiety and overwhelming fear that impacts daily functioning and leads to behavioural and psychological disturbances stemming from the

coronavirus pandemic (Leng et al., 2021), and its relation to organisational and professional turnover. The study's findings revealed that over half of participants surveyed experienced varying levels of coronaphobia. Building on this, it was noted that there was a direct correlation between high levels of coronaphobia and increased intent to resign among participants, suggesting that pandemic-related anxiety plays a significant role in influencing job-related decisions and commitment to professional roles (Fronda & Labrague, 2022).

In addition, study (S7) highlights the mitigating role of social and organisational support, as well as personal resilience, in reducing COVID-19 anxiety with the findings showing that nurses who feared COVID-19 were more likely to report work-related stress and turnover intentions. When provided with sufficient social support, the impact of coronaphobia diminished, resulting in a reduction in both organisational turnover and professional resignation among nurses (Fronda & Labrague, 2022). Labrague & de Los Santos (2020) study (S9) further substantiated these findings, showing that enhanced social and organisational support, coupled with greater personal resilience, correlated with reduced psychological distress, heightened self-efficacy, better sleep quality, and lower levels of anxiety and stress in their participants (Labrague & de Los Santos, 2020). Moreover, this relationship is further evidenced by study (S10), which established a distinct connection between the fear of COVID-19 and decreased job satisfaction, and an increase in both organisational turnover and consideration of resignation from the nursing profession (Labrague & de Los Santos, 2021a).

In addition to these stressors, the emotional toll of working under such conditions is evident in the findings of study (S4) (Crowe et al., 2022). The authors reported that participants experienced a sense of disillusionment and defeat, factors that contributed to their intent to leave. This emotional burden, when combined with the practical challenges identified in the study (S13) by Said et al., (2021), highlight the complex pressures faced by participants during the pandemic. The study by Said et al., (2021) compared job satisfaction levels between nurses at a COVID-19 triaging hospital (ZFH) and a non-COVID-19 triaging hospital (ZGH). It found that nurses at the COVID triaging hospital reported significantly lower job satisfaction, compounded by higher occupational stress and less satisfactory working conditions, including long hours, increased responsibilities, inadequate staffing ratios, and a lack of work-life balance. Notably, dissatisfaction was more acute in areas like control and responsibility, scheduling, team interaction, extrinsic rewards, and balancing family and work (Said & El-Shafei, 2021). These findings highlight the intense challenges faced by nurses in direct COVID-19 management

settings, where the demanding workload, insufficient recognition and compensation, disrupted work-life balance, and constant changes in COVID-19 policies and guidelines significantly impacted their job satisfaction and decision-making abilities. This contrast highlights the need for enhanced support and tailored interventions in high-pressure healthcare environments like ZFH to address these specific challenges and improve job satisfaction (Said & El-Shafei, 2021).

Exploring the concept of professional identity, various studies within this scoping review highlighted how nurses' and midwives' self-perception and pride in their roles have been significantly impacted during the pandemic. Study (S4) found a significant association between the intention to leave emergency department (ED) nursing and a diminished sense of pride in being an ED nurse. This finding emphasises the integral role professional identity has in job satisfaction and retention. Furthermore, study (S11) found that a considerable number of participants faced discrimination related to COVID-19. This included being feared and ostracised by the public and even family and friends, due to concerns of them being potential virus carriers. Some participants also encountered substandard service in stores and restaurants, and in more extreme cases, were subjected to threats and harassment in public places (Labrague et al., 2021). However, this discrimination was found to be less impactful on those with higher levels of resilience, suggesting that resilience mitigates the negative effects of such discrimination on mental health and intent to resign for some participants. These results indicate professional identity is imperative in maintaining workforce stability for nurses and midwives, especially in the face of discrimination experienced during the pandemic.

Expanding upon these findings, the study by Said et al (2021) (S13) pinpointed further stress factors linked to COVID-19 that affected individuals irrespective of their employment in a designated COVID-19 hospital. These included concerns about personal isolation, the risk of infecting family members, the indefinite duration of the pandemic, the absence of effective treatments for the disease at that time, the constant reporting of new COVID-19 cases in the media, and the anticipated scarcities of workforce, supplies, and sufficient PPE (Said & El-Shafei, 2021). Whilst Jarden et al.'s (2023) study (S8) highlighted that factors such as role uncertainty, workload, rostering issues, and a lack of support and respect were key contributors to nurses resigning (Jarden et al., 2023). Wood et al., (2021) reported that in the span of three months from April to June 2020, a significant 43% of respondents contemplated resigning from their positions, with a notable 25% considering leaving the nursing profession altogether. This data from study (S16) indicates a divided reaction to the crisis, with 22% of respondents feeling

more compelled to leave their job now compared to before the pandemic, while a matching 22% were less inclined to leave. Notably, the majority (56%) reported no shift in their intention to leave (Wood et al., 2021). Varasteh et al., (2022) study (S15) found that one key reason for participants leaving their roles was the initial fear and uncertainty regarding the availability of PPE during the early stages of the pandemic (Varasteh et al., 2022).

This section of the scoping review, through its exploration of literature, has revealed a range of personal challenges, fears, and responses individuals have experienced as a result of the COVID-19 pandemic.

2.8.2 Extrinsic Factors

This scoping review's examination of extrinsic factors reveals the profound impact these factors have on job satisfaction and retention following the impact of the pandemic. Defined broadly as elements external to the individual, extrinsic factors encompass aspects such as organisational culture and the work environment. Within this realm, two interconnected sub-themes have emerged from the literature. These are Work Environment and Organisational Culture. In this section, participants' perceptions of decision making, leadership styles and organisational structures and available supports were heavily featured. Just as intrinsic factors like personal characteristics and individual well-being are vital, these extrinsic factors equally contribute to shaping the professional landscape for nurses and midwives following the impact from the pandemic.

2.8.2.1 Working Environment

This subsection focuses on the intricacies of the work environment during the COVID-19 pandemic. Key areas of focus include patient acuity, staff assignments, ratios, staff skill mix, staff shortages, leadership dynamics, and the availability of PPE, all of which have shown to have significantly shaped the experiences of nurses and midwives in this unprecedented period.

Study (S2) offered important insights into the stress and anxiety nurses faced during the pandemic, particularly related to patient acuity. Notably, 64% of nurses reported experiencing stress and anxiety in this context. The study highlighted that younger, single, and female nurses tended to report higher stress levels compared to their older counterparts and male participants, indicating increased vulnerability to stress among these specific groups in high-acuity situations

(Astin et al., 2021). The stress extended to caring for COVID-19 patients with 69% of nurses reporting this causing them stress and anxiety. Furthermore, concerns extended to the possibility of caring for infected colleagues.

Building on these findings, study (S12) surveyed a group of midwifery managers, who expressed significant concerns regarding staffing skill mix and the departure of experienced midwives, leaving a predominantly early-career workforce. Over a third (35%) were 'Somewhat concerned', while 16% were 'Moderately concerned' about their team's skill composition. Concerns were particularly high in public metropolitan services, with 82% ranging from 'Somewhat' to 'Moderately concerned', and in regional/rural public services, 47% shared these concerns. In contrast, most private services participants reported minimal or no concerns regarding their skill mix. The shift towards a reliance on casual and agency staff, as reported in study (S12) by 97% of managers, marks a significant departure from pre-pandemic staffing patterns. This trend reflects broader workforce transformations within the healthcare sector, indicating a substantial change in how healthcare facilities are adapting to new challenges and demands (Matthews et al., 2023).

Echoing these staffing challenges, study (S13) highlighted that 51% of participants facing staff shortages and 41% experiencing redeployment, complicating workforce management and adding stress to the workforce itself (Said & El-Shafei, 2021). This situation was further strained as 22% of the participants were asked to supervise redeployed staff, introducing additional responsibilities and stressors. Additionally, Wood et al., (2021) study (S16) reported that 43% of staff were compelled to work additional overtime, often unpaid, highlighting the increased workloads of nurses during the pandemic (Wood et al., 2021). This relentless demand for additional shifts, as study (S8) found, left staff feeling bullied and drove others toward burnout due to the pressure of overtime (Jarden et al., 2023). Study (S13) by Said et al (2021) identified workload (98.6%), dealing with death and dying (96.7%), personal fears and demands (95.7%), employing strict biosecurity measures (95.2%), and stigma (90.5%) as primary stressors leading to burnout amongst participants (Said & El-Shafei, 2021). Complementing this, study (S8) emphasised the critical role of adequate resourcing in ensuring manageable workloads and proper staffing levels, essential for preventing feelings of being overwhelmed and stressed. The workdays that were perceived as positive were characterised by strong relationships with colleagues and supportive interactions with managers (Jarden et al., 2023).

In the context of organisational resilience and empowerment, a key factor influencing nurses and midwives' ability to cope with the pandemic's challenges was the adequacy of organisational resources, particularly PPE. Study (S5) found that nearly 75% of participants lacked confidence in their hospital's ability to supply PPE, with 90% of participants needing to ration and reuse PPE (De Cordova et al., 2022). Similarly, study (S3) reported that more than 89% of participants experienced stress related to PPE shortages, and over 76% were stressed by ventilator shortages (Astin et al., 2021).

Some of the research reviewed also reported that equipment shortages significantly influenced participants' perceptions of workplace safety and priorities. Study (S16) noted that 39% of participants believed their risk of exposure to the virus could have been minimised, and 21% felt that their safety was not prioritised by the organisation (Wood et al., 2021). This concern was exacerbated by the deaths of colleagues from COVID-19, further amplifying the psychological impact and highlighting the consequences of organisational disfunction on nursing staff wellbeing. Moreover, study (S3) detailed how the stringent ongoing requirements for wearing face masks and mandatory COVID-19 screenings contributed to rising stress levels, with around 70% of participants feeling stressed about these additional measures (Astin et al., 2021). This ongoing stress was linked to a significant intention to resign, as evidenced by Wood et al. (2021), who found a correlation between inadequate management communication regarding coronavirus planning and increased intent to resign. Complementing these findings, study (S3) by Crowe et al. (2022) reported that participants felt overlooked, unsupported, and disrespected by leadership at various levels, including government, healthcare and hospital management. Challenges such as redeployment to unfamiliar areas, inflexible scheduling, and the expectation of excessive overtime left many struggling to balance their work with family responsibilities (Crowe et al., 2022). Furthermore, participants reported that they often faced higher nurse-patient ratios than normal, hindering their ability to deliver the high-quality care they were committed to before the pandemic. These conditions, coupled with workforce shortages, a lack of PPE, and perceived leadership failures, contributed to burnout, diminished job satisfaction, and an increased likelihood of participants considering leaving the profession (Crowe et al., 2022).

Study (S9) found that only a small proportion of participants felt fully prepared to care for COVID-19 patients, with many expressing uncertainty or unwillingness to provide care (Labrague & de Los Santos, 2020). This lack of preparedness was echoed by study (S10), who

noted that despite most participants being aware of workplace COVID-19 protocols, only a minority had received relevant training (Labrague & de Los Santos, 2021a). Lack of training correlated with higher levels of COVID-19 fear, psychological distress, and turnover intentions. Equally, study (S17) demonstrated that strategic interventions like increased staffing, psychological support, and targeted training not only mitigated work-related stress but also improved job satisfaction and quality of life among participants. This indicates the potential effectiveness of proactive organisational strategies in enhancing resilience and empowerment.

Study (S8) emphasised the need for supportive systems and environments, including opportunities for learning and access to senior nurses and educators (Jarden et al., 2023). Sungbun et al. (2023) study (S14) observed that ED nurses in non-red zone areas experienced low organisational resources and high maladaptive regulation, contributing to their intention to resign, underscoring the impact of organisational support on employee wellbeing (Sungbun et al., 2023).

A significant theme that emerged from the studies was the expectation and desire for compensation among participants working during the COVID-19 pandemic. Astin et al. (2021) study (S2) reported that 77% of participants believed they should receive compensation for the increased workload and risks associated with the pandemic. This sentiment was particularly strong among younger participants (Astin et al., 2021). Further elaborating on this theme, study (S15) found that many participants were motivated to continue working during the pandemic due to expectation of financial incentives. Additionally, the prospect of improved employment status played a crucial role in sustaining their motivation (Varasteh et al., 2022). This was especially true for younger and less experienced participants, who often lacked stable employment status. Study (S3) further highlighted participants frustrations regarding governmental and organisational responses to their compensation requests. Many expressed dissatisfaction with the government's reluctance to negotiate fair pay, potential wage cutbacks, and the disparity in compensation compared to physicians (Crowe et al., 2022). In line with these findings, study (S8) highlighted that participants believed that greater financial remuneration and workload support was needed. The acknowledgement and gratitude for managing excess workload and overtime were seen by these participants as critical factors contributing to their job satisfaction and retention (Jarden et al., 2023).

Study (S3) highlighted that 76% of midwifery managers reported significant staffing deficits, particularly in public metropolitan hospitals where 72% had lost six or more midwives

in the previous year. Factors contributing to staffing deficits included an aging workforce, the pursuit of work/life balance by midwives, and the impact of the pandemic itself. Notably, the easing of travel restrictions during COVID-19 led to an uptake in retirements and subsequent resignations. Recruitment challenges were immense, with 32% finding it very difficult and 41% difficult to recruit especially in regional/rural areas, marking a significant shift from pre-pandemic trend (Matthews et al., 2023). Interestingly, 62% of managers observed turnover levels similar to pre-pandemic times, while 24% reported a decrease and 14% an increase. Study (S3) also revealed parallel trends among ED nurses, with a significant number contemplating leaving their roles, with many considering alternative career paths, transitions to different nursing specialties, or retirement (Cornish et al., 2021).

The insights gathered from this section highlight the multifaceted challenges and adaptations in the nursing and midwifery work environments during the COVID-19 pandemic. Key factors, including patient acuity, staffing dynamics, leadership quality, and resource availability, have significantly shaped the professional experiences of nurses and midwives. These findings highlight the critical importance of responsive and supportive healthcare systems to navigate such unparalleled challenges effectively. Following the exploration of the multifaceted work environment challenges encountered by nurses and midwives during the COVID-19 pandemic, the discussion now shifts to the critical aspect of organisational culture, and its impact on job satisfaction during these unprecedented times.

2.8.2.2 Organisational Culture

Nurses and midwives are universally acknowledged as the most trusted professionals worldwide, and their crucial role has been highlighted even more during the COVID-19 pandemic (Edmonds et al., 2020). Despite their commendable efforts in patient/woman care during this crisis, significant shifts in organisational culture have impacted their professional experiences. One such shift, noted in study (S3), was that nurses intending to leave the profession felt increasingly disconnected from their ED nursing colleagues, the wider emergency department team, and their organisation since the pandemic began (Cornish et al., 2021). In a similar vein, Varasteh et al., (2022) in study (S15), reported that undesirable organisational culture was a key factor for some participants choosing to leave the profession. One participant stated, “I prefer to die than to work with people who harass me. More than anything, the stress and disrespect made me leave my job” (Varasteh et al., 2022, p. 143). However, interestingly, other participants in the same study expressed reluctance to leave, not wanting to burden their

co-workers with increased workloads. They opted to stay, holding onto hope for a brighter future post-pandemic (Varasteh et al., 2022).

Contrasting this, study (S8) revealed a widespread apprehension among nurses about voicing concerns regarding overtime and other issues to their line managers, fearing the consequences of speaking out. This reluctance was observed not only in situations involving a clear power difference but also in seeking advice from their colleagues. Many nurses reported the fear of making a mistake due to uncertainty about correct procedures or policies (Jarden et al., 2023). Similarly, Wood et al., (2021) study (S16) found a direct correlation between nurses' intentions to leave their roles and their perceived inability to maintain pre-pandemic care standards (Wood et al., 2021). Participants feeling that their safety was not an organisational priority and that communication around COVID-19 planning by management was inadequate (Wood et al., 2021).

Complementing this, study (S2) discovered that over 80% of participants experienced stress and anxiety due to the constant changes in COVID-19 regulations (Astin et al., 2021). This stress was potentially linked to conflicting and constantly changing information and decision-making processes, as highlighted by study (S17) (Zaghini et al., 2021). These studies indicate a significant shift in organisational culture, affecting participants' confidence in their work environment and future career prospects.

Furthering this narrative, study (S13) found that the pandemic exacerbated conflicts with supervisors, with nurses often lacking support and being unfairly blamed for errors beyond their control. Additionally, as nurses became the primary link between isolated patients and their families, they faced increased pressure, often encountering heightened levels of abuse and unreasonable demands (Said & El-Shafei, 2021).

Adding to these challenges, study (S4) by Crowe et al. (2022) revealed complex intentions among participants regarding their employment futures. A substantial 44% of participants surveyed were considering quitting their current position. Among these, 38.1% were looking to work at different organisations, and 49.4% were planning to seek new employment in the future highlighting the multifaceted nature of their intentions. Furthermore, 23.3% had already begun actively searching for a new job, and 22.4% indicated an intention to leave the nursing profession entirely (Crowe et al., 2022).

Throughout this discussion, the varied and profound challenges faced by nurses and midwives during the COVID-19 pandemic are made evident, from shifts in organisational culture to heightened pressures in the workplace. These challenges, coupled with personal and professional dilemmas, highlight the critical need for supportive and adaptive healthcare environments to sustain the resilience and commitment of these vital professionals in times of crisis.

2.9 Limitations

This scoping review was limited to English language articles, which may have resulted in studies of relevance being missed. In many of these studies, a cross-sectional design was utilised, potentially constraining the interpretation of results and the ability to infer causal relationships, thereby potentially affecting the synthesis of findings. The generalisation of findings is limited as many nations were not represented in this scoping review.

2.10 The Research Gap

The COVID-19 pandemic's impact on job satisfaction and retention of nurses and midwives globally remains largely unexplored, as indicated by my review. A significant issue identified is the scarcity of research on the intrinsic and extrinsic factors affecting midwives' retention and job satisfaction during the pandemic. Gaining a clear understanding of midwives' lived experiences is essential to comprehend their unique challenges, particularly in times of crisis, and to discern how these challenges impact their job satisfaction and retention. Additionally, it is important to explore whether the factors affecting job satisfaction differ between nurses and midwives. This review highlights the urgent need for more extensive research in this area.

Further qualitative and quantitative studies are essential to determine if the factors influencing nursing and midwifery retention globally also affect to the nursing and midwifery population in Australia. The reviews findings confirm that there are broad, overarching intrinsic and extrinsic factors influencing nurses' intentions to leave their positions and consider alternative career paths. However, current research is limited in specifically identifying how these factors collectively impact job satisfaction and retention of nurses and midwives. The results of this review are of utmost significance, as they reveal a critical lack of research in this crucial area within Australia.

While my sample predominantly reflects the nursing population, it is crucial to acknowledge that these findings might not directly apply to the midwifery population. My review identified a singular study focusing on midwifery, which examined the perspectives of midwifery managers in Victoria, Australia, on staffing dynamics, turnover, recruitment, and skill mix in both public and private maternity services.

2.11 Conclusion

This scoping review critically assesses existing research on the experiences of nurses and midwives during the COVID-19 pandemic, offering an in-depth examination of the pandemic's extensive impact on the already overburdened health workforce. The review has identified a significant research gap, being the differing influence of the COVID-19 pandemic on job satisfaction and retention among Australian registered nurses and midwives. This highlights the necessity and relevance of my PhD research. Considering the global nursing and midwifery response to the pandemic, my research presents an opportunity to strengthen and protect the workforce, which has worked tirelessly through the pandemic to protect the greater community.

This study aims to bridge the identified research gap by delving into the experiences of nurses and midwives in Australia during the pandemic. The findings of this study are poised to inform strategic policies and framework in Australia, addressing both the supportive and challenging aspects within these professions during times of crises. The recommendations from this study aim to improve the experiences of nurses and midwives, which in turn is expected to positively impact the safety and well-being of patients and women. The insights derived from this research have the potential to fundamentally transform and strengthen the Australian health workforce, creating a more resilient and sustainable system that is well-equipped to tackle future health care crises and pandemics.

The initial phase of this research, guided by the scoping review, was invaluable in shaping the research questions. The review not only highlighted the evidence necessary for clinical relevance in current practice but also outlined the methodological frameworks integral to these investigations. The upcoming chapter will provide an in-depth discussion of the research methodology employed to address the research questions posed in this study.

CHAPTER 3 METHODOLOGY

In order to understand the factors affecting job satisfaction and retention of nurses and midwives, it was necessary to seek the perceptions and lived experiences of those who deliver care. The literature to date highlighted the absence of much-needed research into this area within Australia. The selection of the appropriate research methodology was vital to successfully answer the research question, whilst aligning with the philosophical assumptions and theoretical framework that underpin the research.

I initially went about investigating the various research designs used in health sciences research. During this process of analysing the different types of research designs, I constantly went back to review the overarching research question and objectives to identify if a given design would aid in addressing these research aims, whilst also considering the potential benefits and limitations of each study designs.

In the last 50 years, the use of mixed methods research approaches in health sciences has grown in popularity and acceptance (Regnault et al., 2018). This is due to its ability to address the complexities seen in health science outcome-based research, whilst being able to guide stakeholders understanding of the essence of the mixed methods enquiry, ultimately measuring what matters in clinical care and research (Regnault et al., 2018). This is because a mixed methods design addresses the research question from both a quantitative and qualitative approach. A mixed methods design blends the standardisation and generalisability of data generated through quantitative research with the rich, subjective insights on complex realities from qualitative inquiry, with the limitations of one method being counterbalanced by the strengths of the other (Creswell & Creswell, 2003). It should be noted, however, that this design has constraints that I had to consider. A mixed methods approach, for example, is a more time-consuming and complex process to implement. It requires me to have extensive knowledge of the collection, analysis, and interpretation phases for both quantitative and qualitative methods, rather than just one method (Creswell & Poth, 2016). To overcome these constraints, I used a concurrent approach whilst working closely and seeking ongoing expert advice from PhD supervisors at the commencement of each phase to reduce the risk of errors.

I chose to employ a mixed methods approach as neither a quantitative nor qualitative method in isolation could comprehensively address the objectives or overarching research

question. The data collection followed a rigorous process where data was divided into two separate studies (quantitative surveying and qualitative semi-structured one-on-one interviews). I chose to use a convergent parallel mixed methods approach where the collection of both datasets occurred approximately at the same time. The results were then integrated together to allow for a comprehensive analysis of the data where I could draw inferences regarding the phenomenon using both quantitative and qualitative results (Creswell & Creswell, 2003). Additionally, this enhanced the overall credibility and trustworthiness of the study's outcomes as the results were derived from multiple datasets or types (Creswell, 2014; Ingham-Broomfield, 2016; Parahoo, 2014).

Chapter three will proceed to discuss the philosophical views that underpin this research. Subsequently, the chosen research methodology, design and methods applied will be discussed methodically. The chapter will conclude with a reflection on the challenges encountered.

3.1 Philosophical Stance

A paradigm, as defined by Lincoln and Guba (1985), consists of four fundamentals. These are Epistemology, Ontology, Methodology and Axiology. This naturalistic approach of enquiry rather than the rationalistic method of inquiry helps researchers avoid manipulating the research outcomes (Lincoln & Guba, 1985). The following sub section will focus on these key elements.

3.1.1 Epistemology of a Paradigm

Before conducting the research, I believed it was crucial to recognise what my epistemological stance was, as it would aid in directing the planning and thinking around the most suitable methodological approach to address and answer the research question. To comprehend how my perspective on knowledge should be formed as a result of conducting my research, it was necessary for me to spend some time contemplating my own epistemological viewpoint. Cooksey and McDonald (2011) stated that epistemology is used in research to define how we distinguish something, how we understand the facts or authenticity of a situation, and what qualifies as knowledge in the world. Gray (2005) previously proposed that epistemology is focused on defining the type of knowledge that is seen as valuable, true, and widely acknowledged as real. The importance of epistemology stems from the fact that it helps me establish the faith I put into collected data. It ultimately influences how I will find information in the social context that is under investigation.

For the purpose of this study, the contrasting epistemological positions of objectivism and subjectivism were investigated. According to Crotty (1998), objectivism is the view that truth and meaning live in objects and are independent of human subjectivity. Individuals who assert objectivity profess to eliminate all circumstantial influences in order to examine and comprehend the phenomenon, as it occurs independently from the human mind (Crotty, 1998). Removal of human bias leads to the discovery of knowledge. The observer has no effect on what is being seen, nor is the observer affected by what is being viewed. Objectivist epistemology demonstrates that things are considered to possess essences that are unaffected by human intervention, and such fundamental qualities are uncovered through unbiased observation (Levers, 2013). The universal applicability of knowledge stems from the substance of an object that remains unchanged regardless of who studies it. From this epistemological perspective, the objective of knowing is commonly used to describe, predict, and control (Grant & Giddings, 2002). Objectivism epistemology does not align with this study, as I was not looking to assess the meaning of COVID-19 without a humanistic perspective.

Subjectivism is the concept of viewing knowledge as “always filtered through the lenses of language, gender, social class, race, and ethnicity” (Denzin & Lincoln, 2008, p. 21). While not rejecting the existence of an external reality outside of human perceptions and interpretations, the knowledge of an external reality both unaffected and universal is not attainable. Subjectivism recognises that the observer influences observations made and vice versa, the observed influences the observer. Subjective research aims to enhance comprehension, heighten sensitivity to moral and ethical challenges, and individual and political emancipation (Denzin & Lincoln, 2008). Subjectivism epistemological position best aligns with my position as a researcher and will best help to assist me in answering the overall research question and aims.

3.1.2 Ontology of a Paradigm

Ontology is a philosophical domain that addresses the underlying beliefs we hold to consider something as logical or real, and it is also examines the essence or character of the social phenomena under investigation (Scotland, 2012). Ontology is described as the philosophical examination of the essence of existence or the character of reality, encompassing both the state of being and the process of being, together with the fundamental groupings and interactions between these existing objects. It investigates my basic beliefs about the essence of being and existence. It focuses on the presumptions we hold when determining whether something makes sense or is genuine, as well as the nature or substance of the social phenomena under

investigation (Scotland, 2012). Ontology aids in conceptualising the assumptions we make of reality and what the individual believes can be learned about it. The philosophical assumptions I have about the nature of truth are essential to comprehending how I can interpret the evidence collected. These expectations, conceptions, or assertions guide ones perceptive about the study topic, its relevance, and how it could be approached in order to contribute to its resolution.

My philosophical perceptions and beliefs naturally influence the nature of my research question, along with aiding in the forming of the theoretical basis for the research itself (Baillie, 2015; Darawsheh, 2014). There are several existing theoretical frameworks with which differing views about what constitutes ontology (truth or reality), and each of these attempts to make sense of the world we live in. Constructionist, positivism and postpositivist are just some of the well-known and established research frameworks. The positivism paradigm is based on a real and objective interpretation of that data (Park et al., 2020). The positivism assumption being that there is one singular and quantifiable reality, that can be understood, identified and measured in its approach (Park et al., 2020). This objective and scientific means are used to discover reality using a quantitative approach (Park et al., 2020). Alternatively, constructivism believes that there are many realities that are each constructed by an individual's encounter with the phenomenon, and this information is discoverable through an epistemological approach using a qualitative research methodology (Kelly et al., 2018; Prosek & Gibson, 2021). The postpositivist paradigm allows for a qualitative or quantitative approach as it seeks to develop numeric measures of observations identifying and assessing the causes that influence outcomes (hypothesising) or observing critical realist ontology by inquiring into the nature of things, to verify and refine individuals' world views (Creswell & Creswell, 2003).

I chose to use a postpositive theoretical framework in this study for several reasons. The objective of postpositivist research is to understand and recognise that context affects how meaning is made, and to take into consideration my participation in the interpretation (Kelly et al., 2018). Additionally, a postpositive framework uses a scientific approach. Thus, ensuring rigor, trustworthiness, and usability of the research by having strict quantitative and qualitative methods for data collection and analysis. This scientific approach is evident through the well-defined structural layout of the research which includes having a description pertaining to the research problem for investigation, the research questions, the methodology chosen to be used for data collection and analysis, and finally an exposition of results and conclusion drawn

(Creswell & Poth, 2016). The positivism framework supports rigorous inquiry while also accounting for and acknowledging the complexities of human experiences.

By investigating the phenomenon of interest, I sought to understand how the reality is perceived by the nurses and midwives experiencing the phenomenon. This allowed me to develop relevant, true statements that could be used to describe the situation of concern or understand the variables, and the relationship these have as casual relationships of interest. The postpositivist view is that all humans have multiple and differing perspectives of reality, and it is conceivable to get close to understanding reality, however, that reality can never be fully substantiated (Ryan, 2019). This aligns with the ontological views of reality, where I believe that each individual experience within the phenomenon of interest is unique. However, there are often commonalities about the phenomenon that all participants experience (Ryan, 2019). This is because each participant has different life experiences and backgrounds (demographics, professional identities etc.) that will affect the way in which they view and interpret the phenomenon (Ryan, 2019). However, there are also likely to be commonalities across all participants' experiences. As a result of these shared commonalities, a greater understanding of the phenomenon as a lived experience is obtainable (Ryan, 2019).

The postpositive framework reinforces the need for objectivity, which due to the subjective nature of each participant's lived experience with the phenomenon, cannot be fully achieved because of the reality being subjective. I choose to elevate the primacy of the theoretical orientation to influence the use of mixed methods design. As a result of this, rich data was collected to discover commonalities within the phenomenon by engaging with participants who had experience with the phenomenon. To guarantee an unbiased data collection and analysis of data, it was important that I explored their relationship with the research, thus being transparent about their values and biases (Creswell & Poth, 2016).

3.1.3 Methodological Paradigm

Methodology refers the over-arching strategy and rationale used within research, and includes the research design, methods, approaches, and procedures employed to investigate a topic. This includes the data collection technique, the participant enrolment strategies, the instrument utilised to assess the phenomenon and data analysis process. The methodological paradigm signifies the logical flow of the systematic procedures followed when carrying out research in order to obtain insight into the research problem (Creswell & Poth, 2016).

3.1.4 Axiology

The consideration of the ethical issues and challenges in research at the proposal phase is referred to as Axiology. According to Finnis (2011), the researcher must analyse and evaluate the philosophical approach to making valuable judgements. The process entails defining, assessing, and comprehending the perceptions of ethical and unethical behaviours related to the research. Furthermore, it was crucial that I considered the principles of every individual that is included with and participating in the research, to guarantee my research is culturally sensitive and adheres to human rights. This study has demonstrated the ethical principles of honesty, integrity, respect and ethical behaviour as outlined in the Australian Code for Responsible Conduct of Research (Nursing and Midwifery Board of Australia, 2018b). I completed a rigorous data management plan prior to data collection to ensure the four principles of privacy, accuracy, property, and accessibility of the research were addressed (Mele & Sverdlik, 1996; Slote, 2020).

I also utilised risk mitigation strategies to ensure the safety (physical, psychological, legal, and social) of participants in the research. This included the use of a validated instrument for data collection that had been used in several studies and obtained ethical clearance from both the Human Research Ethics Committee (HREC) and the owner of the instrument to ensure it was fit for consumer consumption. The interview questions were piloted prior to conducting the formal study to seek feedback on the types of questions used and the feelings these questions may provoke. The data collected from these pilot interviews was excluded from the study's research analysis. I had a plan in place if participants became distressed by the study questions. This included referral links to support services such as counselling or other appropriate services (medical practitioner, Beyond Blue, Lifeline or free counselling through the participants' employer provided counselling service). By using these strategies and aligning the study with the ethical principles noted, I could be assured that diligence had occurred. Ethical approval and consumer consultation for this study occurred and was granted prior to beginning the proposed research.

3.2 Ethical Considerations

This study demonstrated the ethical principles of honesty, integrity, respect and ethical behaviour as outlined in the Australian Code for Responsible Conduct of Research (Nursing and Midwifery Board of Australia, 2018b). By building trust between the participants and myself, I

adhered to ethical principles ensuring the prevention of harm and mitigating risks to the participants (Nursing and Midwifery Board of Australia, 2018b). Participants in this study shared their experiences of working through the COVID-19 pandemic, whilst discussing the impact of the pandemic on their intention to stay or leave the profession in Australia. There was a risk that the participants included in this study may have become upset or distressed when recalling their lived experiences (DiCicco-Bloom & Crabtree, 2006). It was important that I managed risk mitigation throughout all stages of the research.

Participants who participated in the study did so in a voluntary manner and were provided with comprehensive information about the study, prior to consenting (Appendix B and C). This included the process for voluntary withdrawal from the study, as well as the accessible resources if participants became upset or distressed in the process of being involved in the study. The consent form included information about consent for ongoing contact with the participant for the purpose of ensuring transcriptions accurately reflected the participants' statements (Appendix D and E). All data was then de-identified with data storage complying with the university's policy on data storage. No data was collected on specific place of employment where participants experiences had occurred. Permission to use the survey tool was obtained (Appendix H) from the principle author Dr Fairbrother (Fairbrother et al., 2010). Ethical clearance was obtained from the University of Notre Dame Australia's Human Research Ethics Committees (Reference Number: 2022-114F) prior to the commencement of the study with all processes verified, to ensure the research was carried out in line with the National Statement of Ethical Conduct in Human Research (National Health and Medical Research Council, 2018).

3.3 Theoretical Perspective

After the completion of the scoping review (Chapter two), it became evident there was a limited understanding of the phenomenon of interest within Australia, and the associated exploration of the lived experiences of nurses' and midwives' job satisfaction and retention intentions in Australia in relation to COVID-19. The main objective of Phenomenology is to directly study and give an account of phenomena as consciously experienced by the participants as possible, devoid of theories regarding their informal description and as unrestricted as feasible from unexamined presumptions and conjecture (Spiegelberg, 1975). To substantiate the suitability of a phenomenological design for this study, I investigated other potential research designs including Grounded Theory and Ethnography. Although the use of a Grounded Theory design would align and support a postpositive paradigm framework, it was considered that this

methodology may not answer the research question as Grounded Theory produces a substantive theory in which the findings are transferable rather than generalisable (Levers, 2013). As there is little known about the phenomenon of interest, I felt that it was more appropriate to have an in-depth understanding of the phenomenon and generalisable findings rather than transferability, as little is known about the subject matter under investigation.

Ethnography is comparable to Grounded Theory methodology, in the sense that is also fits with the postpositive paradigm and has often been the favoured approach to research for post-positivist realists such as Atkinson (Atkinson & Hammersley, 1998; Ryan, 2019). Atkinson and Hammersley's work predominately focuses on social research methodology and philosophical issues in the social science such as racism (Atkinson & Hammersley, 1998). It is plausible in principle to consider this methodological exploration in examining nurses and midwives lived experiences through the COVID-19 pandemic. Ethnography is primarily the study of the characteristics of different people and the differences and relationships between them, exploring the collective behaviour, language, and actions commonly observed within a cultural group. It can be noted that as I look to investigate this phenomenon on a national scale, an observational design would not be feasible due to the limited ability to interact with and observe participants in their settings. Furthermore, a phenomenological investigation of the lived experiences may reveal behaviours and beliefs of the group through methods other than the conventional in-setting observation normally used in ethnological data collection (Creswell & Creswell, 2003).

3.4 Descriptive Phenomenology verses Interpretive Phenomenology

The two main phenomenological approaches used in nursing and midwifery research are Descriptive (Transcendental) Phenomenology, and Interpretive (Hermeneutic) Phenomenology. Both approaches result in knowledge that reflects insight into the meaning of the phenomena under investigation, however both have differences in their aim (Lopez & Willis, 2004). Having established Phenomenology as the suitable design to answer the research question, a further analysis of Transcendental and Hermeneutic Phenomenology was essential to determine the exact approach. Hermeneutic Phenomenology is described as the theory and methodology of interpretation (Creswell & Poth, 2016; Heidegger, 1962; Laverty, 2003). Alternatively, Transcendental phenomenology is described as purely descriptive in nature (Laverty, 2003; Neubauer et al., 2019). While both designs discover the meaning behind the phenomenon being explored, there are notable differences in how the researcher is positioned within the research, as well as how the analysis is carried out and how the rigour is assured (Laverty, 2003).

Transcendental Phenomenology was first developed by Husserl in the late 20th century (Husserl, 1999). This descriptive phenomenology aims to acquire an impartial portrayal of the raw data which in-turn captures the 'essence' of the phenomenon (Creswell & Poth, 2016; Laverty, 2003). There is a focus on the connection between the researcher and the research, designed to safeguard the researcher's values and views are bracketed out to ensure they do not create bias in the research (Laverty, 2003). In contrast to Transcendental Phenomenology, Hermeneutic Phenomenology, suggests identifying researcher's values and biases that are viewed as entrenched within the interpretation of experiences (Laverty, 2003). According to Patton "What something means depends on the cultural context in which it was originally created as well as the cultural context within which it is subsequently interpreted" (Patton, 2014, pg.113). Hermeneutic Phenomenology, sees the researcher clarify the data together with the participants to verify and determine the meaning of the phenomenon (Laverty, 2003).

When determining the type of phenomenology to use, Patton (2014) states the researcher should begin by reflecting upon their own philosophical position (Patton, 2014). My own philosophy aligns with the postpositivist theory that underpins Interpretive (Hermeneutic) Phenomenology. The objective of postpositivist research is to understand and recognise that context affects how meaning is made, and take into consideration my participation in the interpretation (Kelly et al., 2018). The Postpositivist framework supports rigorous inquiry whilst also accounting for and acknowledging the complexities of human experiences. By investigating the phenomenon of interest, I sought to understand how the reality is perceived by the nurses and midwives experiencing the phenomenon. This allowed me to develop relevant, true statements that were used to describe the situation of concern or understand the variables involved. As the researcher undertaking this study, my philosophical views aligned with the theories that underpin Hermeneutic Phenomenology. Being a registered nurse with current experience in clinical practice, clinical education, and academia, I have been exposed to working through the COVID-19 pandemic in each of these different roles. All of the roles require me to regularly engage in the process of self-reflection on a regular basis. This practice of regular self-reflection enabled me to make decisions about the way the research questions were focused, whilst drawing on my own lived experiences relating to the phenomenon being interpreted.

A phenomenological design was believed to be the most appropriate design for the qualitative component of this study. The intention of interpretive phenomenology is to study the

conscious experience of something, by examining the experiences of people who have encountered the phenomenon (Creswell & Creswell, 2003). All information about the phenomenon itself is built on the essence of those who encounter the phenomenon (Neubauer et al., 2019). The ontological position of a postpositivist framework is consistent with this finding of discovering the common meaning or understanding (Racher & Robinson, 2003). Thus, a phenomenological design using a postpositive framework enables the research question to be answered whilst adhering to my philosophical beliefs. Interpretation and contemplation following each meeting with a new participant, resulted in new information that enhanced my comprehension (Smith & Fieldsend, 2021). This concept appeals to me as the researcher as it considers each participant's story individually before examining commonalities across stories.

The study employed a mixed methods technique that applied a deductive approach, where I sought to determine the 'Keyness' of a theme based on "whether it captures something important in relation to the overall research" (Braun & Clarke, 2006, pg. 82). This involved using a mixture of the survey and semi-structured interviews, where the results from the survey would underpin the qualitative data. An Interpretive Phenomenology Analysis (IPA) approach was not deemed appropriate. This is because I sought to base analysis on pre-existing theories and formulated hypothesis (Moseholm & Fetters, 2017). Traditionally, an IPA structure uses a more inductive approach, where there is a clustering of data through pure holistic nature. In an IPA structure, the researcher seeks to find specific observations, pattern recognition and from there denote a general conclusion through enquiry. As the study used a convergent parallel (Mixed Methods Design) for the data collection, the use of a thematic analysis approach (Qualitative Data Analysis) was deemed more appropriate for a mixed methods qualitative data analysis.

3.5 Mixed Methods Design

A mixed methods design acknowledges the presence and importance of the physical, natural world, coupled with significance of reality and its impact on each individual's experiences (Braun & Clarke, 2006; Creswell & Creswell, 2003). By employing a mixed methods approach, both methodologies are integrated, with the confines of one method being underpinned by the benefits of the other. The choice of a mixed methods approach was driven by the impression that either quantitative nor qualitative methods in isolation could not effectively address the research objectives and questions. The chosen design served as the overarching framework for this research, incorporating both quantitative and qualitative methodologies, allowing for the standardisation and generalisability of data through quantitative

means and measures, whilst generating rich subjective insights into the complex nature of the participants' reality with the phenomenon through qualitative inquiry.

The qualitative approach was utilised to help explain and interpret the quantitative findings, whilst capturing the participant's perceptions of how COVID-19 has affected their intention to stay or leave their jobs or profession. Pope et al., (2000) explains that a qualitative approach is useful in seeking the meaning participants attribute to their experiences of a phenomenon, and how they comprehend that phenomenon. Additionally, a qualitative approach supports a naturalistic approach where participants are studied in their natural setting rather than in an artificial or experimental environment (Pope et al., 2000). It was crucial when exploring social phenomena that an interpretation of the meaning individuals attribute to the phenomenon is as close to reality as possible (Creswell & Poth, 2016).

The quantitative method was used to determine the relationships between the independent and dependent variables. These factors included age, level of education, role participant is practising in (midwifery or nursing), duration of work experience, health professional related barriers and organisational related barriers that affect overall participant job satisfaction.

Additionally, when using a mixed method design, I needed to consider and contemplate how the blending, merging, and synthesis of the quantitative and qualitative findings was going to occur (Creswell & Clark, 2017; Creswell & Creswell, 2003; Ivankova et al., 2006; Zhang & Creswell, 2013). As I used a convergent parallel mixed methods approach, where the collection of both data forms occurred approximately at the same time, and then integrated together to allow for a comprehensive analysis of the data (Figure 2) (Creswell & Creswell, 2003). In addition, the reliability and dependability of the study's conclusions are enhanced when they are based on more than one data set or type (Creswell, 2014; Ingham-Broomfield, 2016; Parahoo, 2014).

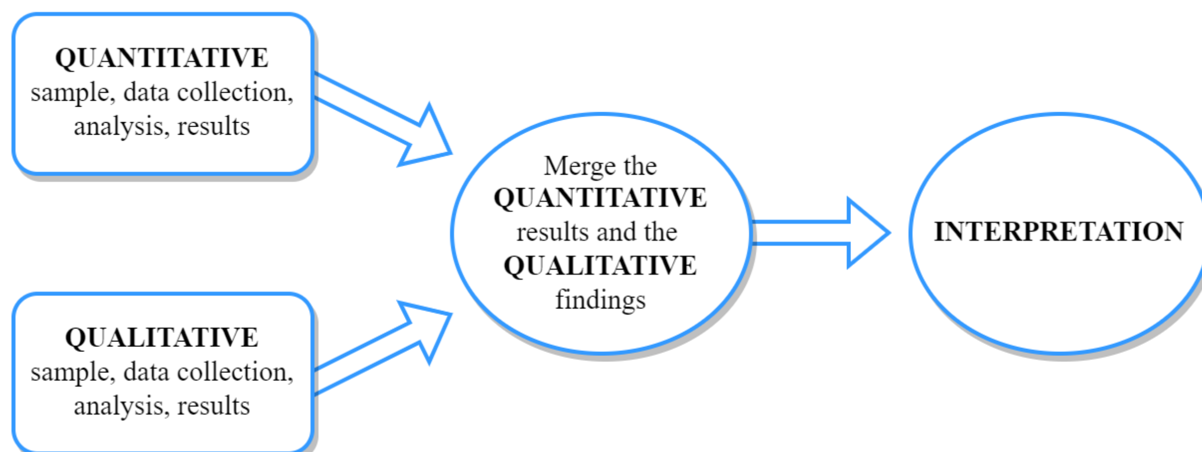


Figure 2. Convergent Parallel Mixed Methods Design (Creswell & Clark, 2017)

3.5.1 Limitations

The limitations of utilising a mixed method design include that it is a timely process and more difficult to implement, requiring me to have extensive expert knowledge of the collection, analysis, and interpretation phases than using a single method (Creswell & Poth, 2016). To overcome these constraints, I used a concurrent approach whilst working closely and seeking ongoing advice from PhD supervisors at the commencement of each phase to reduce the risk of errors, as they are the experts in this design methodology.

3.6 Methods

This section of the chapter will explain the methods used in the research, from the sampling technique and participant recruitment process to the data collection and data analysis phases.

3.6.1 Setting

The participants recruited to this study were registered nurses, dual practicing registered nurse/midwives, and registered midwives working in those roles which may occur in any jurisdiction, or in the public or private sector in Australia. Potential participants must have contributed to care of patients and/or women during the COVID-19 pandemic for the purpose of this study.

3.7 Sampling

Sampling is a technique that enables me to infer information about a population based on the results of a subset of the population without studying the entire population (Iphofen, 2009).

3.7.1 Quantitative Sampling

The data collection phase for the quantitative component of the research involved gathering data from the participants who were chosen using a snowballing sampling technique and who met the inclusion criteria (Table 5). The snowballing technique is a non-probability sampling method where existing participants help recruit future participants for the study (Noy, 2008). The sample size required for the quantitative portion of the study was established by using a power analysis calculation. The power analysis determined the number of participants required to achieve saturation and prevent type I and type II errors (Jones et al., 2003). The predicted sample size helps gauge the research's strength in identifying and highlighting statistical variations among the various groups. The level of significance refers to the minimum probable chance that a sample is likely to get associated with the population. Type I errors suggest the possibility of discarding a null hypothesis that ought to be trusted (referring to a false positive result occurring even though it is not a true outcome). A Type II error occurs when we mistakenly accept a null hypothesis that should be dismissed, thus overlooking a real effect or outcome (Hair, 2009; Jones et al., 2003). There were approximately 337,000 registered nurses and registered midwives working in Australia at the time the study was conducted, and the survey was dispersed to 3,000 potential participants (Department of Health, 2020). The regression tests were applied to this research with an alpha significance level of 0.05 to determine that the total sample size of N = 323 nurses and midwives were required to produce data with a passable statistical power of 0.95 (Lemeshow et al., 1990). Consequently, over 90% more surveys were distributed than the minimal predicted sample size, which increased the generalisability of the study's findings.

3.7.2 Qualitative Sampling

Sample sizes in qualitative studies are not determined by the same guidelines as in quantitative studies. Instead, they are influenced by aspects like the intended data analysis methods and the availability of resources (Nicholls, 2009). Qualitative research sampling is based on the quality of the data extracted and not the quantity, as I aim to find participants who can give a comprehensive and profound understanding of the phenomenon under investigation (Iphofen, 2009; Nicholls, 2009). Fusch and Ness, (2015) highlight the importance of reaching data saturation in qualitative research. Although this concept of data saturation was originally derived from Grounded Theory, it has been adapted as a guide for sampling size in qualitative research (McGlinchey et al., 2021), more broadly including in phenomenological research

(Fusch & Ness, 2015). Phenomenological studies regularly require a smaller sample size typically as few as five to eight participants, as suggested by Guba and Lincoln (1989), researchers should continue sampling until they reach a point of redundancy, where no further themes or information are identified (Guba & Lincoln, 1989). This smaller sample size facilitates engagement with participants in a way that produces rich information and produces sufficient data to reach saturation of the developing themes.

Qualitative research aims to foster insight and formulate a theory about a phenomenon. This theory can subsequently be generalised to other situations or groups. This study was concerned with the way individuals (registered nurses and registered midwives) gave meaning to their world (working through the pandemic). The interpretation will vary and be distinct for every individual (Nicholls, 2009). Given that the objective of the sample was to collect rich data about the phenomenon under investigation, a nonprobability sample was deemed to be the more appropriate sampling technique (Iphofen, 2009). Following the eighth one-on-one semi-structured interview, redundancy in the responses from participants was discerned. Nevertheless, the study included three additional interviews to ascertain that no unexplored themes were present. This rigorous methodology led to the establishment of redundancy, with the study, encompassing interviews with a total of six registered nurses and five registered midwives.

3.7.3 Recruitment

The aim of this study was to explore the lived experiences of practicing registered nurses and midwives who were employed in Australia in any jurisdiction during the COVID-19 pandemic. Thus, the participants required for this study were those who had lived this phenomenon. Participants who provided direct patient care or were employed in education, administration, research, leadership, and in the health care setting during the COVID-19 pandemic were included in the study. Enrolled nurses, nursing and midwifery students and assistants in nursing and midwifery were excluded due to their distinct scopes of practice and training prerequisites compared to registered nurses and midwives. Given their roles often operating under the direct supervision of registered nurses or registered midwives, their experiences and decision-making processes may vary significantly, thereby introducing extraneous variables. Ensuring a homogenous participant demographic is paramount for the consistency and reliability of data acquisition (Creswell & Creswell, 2017). Including them might introduce variables irrelevant to registered professionals, whereas a consistent participant group is essential for reliable data collection.

Participants who held a Bachelor of Nursing, entry-to practice Master of Nursing, Bachelor of Midwifery, entry-to practice Master of Midwifery, or Postgraduate Diploma of Midwifery qualification formed the inclusion criteria. Participants who met the inclusion criteria were best placed to provide the greatest amount of information about the phenomenon of interest, thus contributing meaningful data about the phenomenon to the study.

I used a mixture of both purposive and snowballing techniques in the recruitment process. The snowballing technique started with a select group of initial contacts (referred to as 'seeds') that fit the research criteria who were invited to engage in the study (Noy, 2008). These initial participant seeds were used to recruit the first round of participants. These participants were then asked to suggest other contacts or disseminate the study details to others who meet the identified inclusion criteria (Noy, 2008). In order to establish early links and build a sampling momentum that would eventually capture a larger chain of participants for the quantitative survey, I initially used my own social networks (Noy, 2008). The snowballing sampling process finished once the targeted sample size was achieved or the point of saturation was achieved (Noy, 2008). Participants were recruited via social media platforms (Twitter, Facebook, LinkedIn, Nursing and Midwifery Speciality Peak Body Support groups and the University of Notre Dame Alumni website platform). For the qualitative component of the research, I employed a purposive sampling technique, where a question was added to the end of the survey encouraging participants to participate in a semi-structured one-on-one interview. This form of recruitment ensured participants had experience with the phenomenon under investigation. This method was intended to develop a sample that was assumed to be typical of the total population. This is because phenomenology studies are the most effective when the participants are genuinely interested in the phenomenon being explored (Noy, 2008). Thus, participants in this study were considered experts because of their experience working during the COVID-19 pandemic currently or during the past three years.

Permission to carry out the study was granted by the University of Notre Dame Australia's Human Research Ethics Committee (Approval number: 2022-114F) prior to the distribution of the survey and conduction of the one-on-one semi-interview. During the recruitment process, each participant received an information sheet (Appendix A) outlining the purpose and terms of the survey (Appendix B) or individual interview (Appendix C) before beginning data collection process. Prior to the start of the interview, participants were given the option to pose any questions they might have. Before signing the consent form (Appendix D and E), none of the

participants felt that they needed additional information or further clarification before signing the consent form. At the start of the interview the aims, nature and confidential process were discussed. It was disclosed that the only time privacy or confidentially could not be maintained would be if I was required by law to provide the data from the research. Should such a situation arise, it would be communicated with the participants beforehand.

Table 5. Inclusion and Exclusion Criteria for Participant Sampling

Inclusion Criteria	*Exclusion Criteria*	*Sample Size*
✓ Participants with an undergraduate Bachelor of Nursing Degree ✓ Entry-to practice Master of Nursing ✓ Bachelor of Midwifery ✓ Entry-to practice Master of Midwifery ✓ Postgraduate Diploma of Midwifery qualification	x Enrolled nurses x Assistants in nursing x Assistants in midwifery x Nursing and Midwifery students who worked under the direct supervision of registered nurses or registered midwives	**Qualitative sample size**: 10 to 14 registered nurses and 5 to 7 registered midwives **Quantitative sample size**: N = 323 registered nurses and midwives are needed to estimate the population proportion of 30% (Lemeshow et al, 1990)

3.8 Data Collection

A convergent parallel study design was used to gather both types of data concurrently. From there, the results were integrated together to allow for a comprehensive analysis of the data where I was able to draw inferences regarding the phenomenon under investigation (Creswell & Creswell, 2003).

3.9 Survey Instrument

I used the Nursing Workplace Satisfaction Questionnaire (NWSQ) by Fairbrother and Jones (2010) with permission granted from the principal author Dr Fairbrother (Fairbrother et al., 2010). The validated NWSQ tool has been used in several international and Australian nursing and midwifery studies (Alenazy et al., 2021; Fairbrother et al., 2010; Mansour & Sharour, 2021; Oliver & Geraghty, 2022; Tomic, 2017). The NWSQ has a Cronbach α = 0.90 indicating that the instrument is expected to generate results that are reproducible and generalisable (Fairbrother et al., 2010). By utilising this validated instrument for both nurses and midwives, I could ensure that the study would be effective in measuring the perceptions of the participants accurately (Creswell, 2014). The survey was written in English, and I made a clear effort to guarantee that the terms used in the survey could be easily interpreted by participants where English was not their first language.

The survey is comprised of a series of 18 Likert scale questions to assess three distinct domains: Intrinsic Job Satisfaction, Extrinsic Job Satisfaction and Relational Job Satisfaction. The Likert scale range from 1= 'Strongly agree', 2= 'Somewhat agree', 3= 'Neither agree nor disagree', 4= Somewhat disagree', and 5= 'Strongly disagree'. Please see Appendix F for the outline of the survey structure used and the scoring system used. The best score possible being 15, indicating greater job satisfaction and the lowest possible score being 75, indicating low job satisfaction. There are several benefits to using a Likert scale tool to measure the attitudes, beliefs or characteristics participants have. The Likert Scale tool is visually attractive and relatively user-friendly for participants to fill out (Newman, 2003; Robson, 2002; Thomas, 2017). Furthermore, the tool does not force specific responses, instead it provides a degree of flexibility in the response options participants have rather than the conventional survey design that limits responses to yes or no answers or ask for a large degree of detail to be given in the responses (Newman, 2003; Robson, 2002; Thomas, 2017). However, critics of the scale believe that it offers too many choices to participants, which can be overwhelming and results in participants struggling to decide on what level of agreeance to select and the response may limit real understanding of why participants feel a certain way (De Vaus, 2013). There was a slight adaption made to the validated survey in order to consider the midwifery cohort, and the term 'woman' was added as an adaption as the original design of the survey focused on nurses and 'patient' relationships (Appendix F).

The intrinsic questions focused on how much the participant enjoyed their job, if they were enthused by their present job, if their job had grown more interesting over time, and if their job gave them satisfaction and meaning. The survey then explored the extrinsic factors that affected participants' ability to do their job. The extrinsic questions focused on how participants felt about having enough time to deliver adequate care to patients or women, whether they had enough support from colleagues and if increased workloads due to the pandemic in their clinical environments affected their ability to learn. The final section of the survey focused on relational aspects of job satisfaction, which encompassed how participants interacted and formed relationships with colleagues. This included whether the participants felt they belonged and whether it was possible for participants to form good friendships amongst colleagues, including whether they thought their colleagues liked them. Importantly, participants were asked to consider their responses in the context of working during the COVID-19 pandemic.

The survey was conducted on the Qualtrics™ online platform. The survey data was not de-identified as it was anonymous in nature, containing no identifiable data traces. This meant that any information submitted was unable to be returned to the participants or withdrawn from the study due to the anonymous nature of the survey. The data was already anonymous, with no identifying features in the survey that required de-identification. The first part of the survey collected the participant's demographical data including the participant's gender, years of experience as a registered nurse or midwife, as well as the participant's current practising role, what state or territory the participant was currently practicing in, and their highest level of education to date. This demographical data was critical in understanding the sample characteristics which were then able to be quantitatively evaluated and a hypothesis drawn.

The closing statement of the survey invited participants to contact me via email if they were interested in participating in a one-on-one interview.

3.10 The Interview Process

Interviews traditionally are the most common form of data collection for phenomenological research, as this approach examines the participants' experiences with the phenomenon of interest (Creswell & Creswell, 2003). In order to develop both textural and structured descriptions of the phenomenon from a phenomenological perspective, Giorgi (2009), supports Moustakas (1994) suggestion that by asking broad questions regarding the experiences, circumstances or environments that have influenced the participants, will provide me with rich data (Giorgi, 2009; Moustakas, 1994). The term 'conversation with purpose' portrays the essence of what I believe qualitative interviewing of a participant should look like (Burgess, 2002). The advantage of the interview process over observational data collection is that this method is helpful when participants cannot be directly observed (Creswell & Poth, 2016). Furthermore, it enables me to assess the perceptions of nurses and midwives in numerous states and rural/regional/remote areas of Australia that otherwise would not have been included in the study. Having perceptions of nurses and midwives from multiple states and territories allowed me to gain a deeper understanding of the phenomenon from a national perspective, whilst enabling me to compare the perceptions and experiences of participants within the phenomenon. I was able to draw inferences and conclusions about how COVID-19 had impacted upon the intentions of nurses and midwives to stay or leave the profession in different regions of Australia.

The benefits of a semi-structured interview design include the ability to combine aspects of both structured and unstructured interviewing techniques (Birmingham & Wilkinson, 2003). Although, semi-structured interviews have a casual design, they depend heavily on the interactional exchanges between the researcher and the participant (Mason, 2004). When interviewing participants, phenomenological researchers are encouraged to maintain a neutral, non-directive stance consistent with the hermeneutics approach (Denzin & Lincoln, 2008). This is because participants are regarded as co-investigators engaged in a dialogue that develops through questions and responses (Denzin, 2001). The discussion centres on the researchers' and participants' reflections as they share ideas and reflect together (Denzin & Lincoln, 2008). Semi-structured interviews allow the participants to be a part of an experience in which they can provide a historical context, and include a meaning thus providing insight into the phenomenon of interest (Creswell & Creswell, 2003; DiCicco-Bloom & Crabtree, 2006). This interviewing style aligns with the research aim of this study to examine the lived experiences of nurses and midwives whilst working through the COVID-19 pandemic, and to also explore how the pandemic has affected their intention to stay or leave their job or profession.

Semi-structured interviews typically follow a format which is conducted using pre-planned, open-ended questions that guide the direction of the interview, yet as these questions are open ended it allows for flexibility in discussion between the participants and myself (Bowling, 2014; Gobo, 2013). This open, flexible, and interactive structure encourages participants to freely discuss the phenomenon under investigation. It also provides me the leeway to ask follow-up or probing questions in retort to participant responses, in order to explore the issues raised, whilst also permitting me with the opportunity to clarify incomplete or unclear data (Bowling, 2014; Gobo, 2013; Mason, 2004; Ritchie & Lewis, 2006). Furthermore, Mason (2004) suggests that interviews that are theme based, topic-based or narrative based should have a flexible design starting with a traditional list of pre-planned questions to aid in the dialogue and direction of the interview initially (Mason, 2004). This results in myself and the participant having the opportunity to develop and explore broader themes of information about the experiences of participants, whilst still answering the research question (Bowling, 2014).

The semi-structured questions were piloted with four registered nurses and two registered midwives prior to commencement of the interview process to assess the questions and content. This helped to evaluate and determine if the questions being asked would collect the required information to answer the research question, and whether the questions may cause participants

discomfort or distress. The data collected from these pilot interviews was excluded from the study's research analysis. The reviewers of the interview questions initially provided feedback that suggested the structure of the inquiries could potentially hinder the flow of conversation, given their overly direct nature. In response to this, a comprehensive revision was undertaken to reshape these questions into a more open-ended format. This included removing any leading or closed ended questions, adding prompts to encourage detailed responses, and ensuring the language was neutral and non-directive. Following this modification, the revised set of questions underwent another round of review and approval with the original reviewers.

The interview phase comprised of one-on-one semi-structured interviews via a secure online video platform nationally. Interviews were arranged in advance of time to ensure the time suited the participants schedule, and thus ensured participants felt organised and prepared for the interview in order to elicit richer data. Interviews were not scheduled in participants work hours and were conducted away from the hospital or health care premises in which they worked. This ensured participants had adequate privacy and time to express their feelings and experiences openly. This also gave the participants time to self-reflect following the completion of the interview. Participation in the interview process was voluntary, and this was clearly communicated to participants both through the participant information form and at the start of the interview. Participants were informed of their right to withdraw from the qualitative component of the study at any point before the data analysis commenced. This meant they could withdraw their consent during the data collection phase and up until the point where their data was compiled and de identified for analysis. Once the data had been processed and integrated into the overall dataset, withdrawal was no longer possible to ensure the integrity and continuity of the research findings.. I chose one-on-one interviews as I felt that due to the delicate nature of the research topic, that participants might not have felt comfortable expressing their feelings in a group setting. Following each interview, I kept field notes in order to record ideas during the interview along with helping to process new themes participants reported as well as reoccurring themes between all participants.

3.11 Data Analysis

The process of data analysis began with the initial retrieval of the data from the various quantitative and qualitative sources (Qualtrics™ and online Zoom platform). During the data analysis process, I used a collaborative iterative approach, working simultaneously with the data collected. An iterative approach enabled me to have the flexibility to amend the interview

questions as required, as information about the phenomenon became known (DiCicco-Bloom & Crabtree, 2006).

3.11.1 Quantitative Data Analysis

The raw data from the 396 completed surveys were extracted and imported into the Statistical Package for Social Science (SPSS) version 27. Upon initial examination of the collected data, 32 instances of missing data or incomplete sections were identified. These were excluded from the analysis, as they failed to contribute to the understanding of job satisfaction, containing only partially completed demographic information. As the surveys were anonymous, there were no identifiable variables that required de-identification. All completed participant's surveys were assigned a unique code (Table 6). SPSS facilitates the exploration of the relationships between all variables and the significance of said relationships (Levesque, 2007). The goal of the descriptive statistical analysis was to describe and clarify the data collated into a more interpretable form (Levesque, 2007). The SPSS software aided in summarising the meanings of the data collected as well as the rate of repetition of all categorical variables (Levesque, 2007). The bivariate and descriptive analyse of the quantitative data were performed (Table 7). Significance values of $p < 0.05$ were considered statistically significant, and a p value < 0.001 was considered highly statistically significant.

Table 6. Coding Quantitative Variables

Variables	***Code and Justification***
Gender	1= Male 2= Female 3= Non-binary / third gender 4= Prefer not to say
Age	1= 18-25 2= 26-35 3= 36-45 4= 46-55 5= 56-65 6= Over 65
Current practicing role	1= Registered nurse 2= Registered midwife 3= Both a midwife and a practicing registered nurse
Sector of health the participant currently works in	1= Public 2= Private 3= Both
Current role	1= Acute care bedside (ward) registered nurse 2= Community registered nurse 3= Staff development and education nurse 4= Staff development and education midwife 5= Leadership and higher management role 6= Research nurse or midwife 7= Labour and birth suite midwife

Variables	*Code and Justification*
	8= Antenatal and or postnatal midwife 9= Specialist nurse practicing in critical care (ED, CCU, HDU, ICU) 10= Mental health nurse 11= Perioperative nurse 12= Paediatric 13= Other 14= Nurse practitioner 15= Digital health nurse 17= Clinical nurse specialist 18= Consultant midwife
Years of practicing since initial registration	1= 0-3 years 2= 4-10 years 3= 11-15 years 4= 16-20 years 5= Over 21 years
Highest level of education obtained	1= Bachelor Degree in Nursing 2= Entry to Practice Master of Nursing 3= Bachelor of Midwifery 4= Entry to Practice Master of Midwifery 5= Postgraduate Certificate 6= Postgraduate Diploma 7= Master's Degree (other) 8= PhD
What state or territory are you currently practicing in?	1= Victoria 2= New South Wales 3= Queensland 4= South Australia 5= Tasmania 6= Northern Territory 7= Australian Capital Territory 8= Western Australia
What best reflects the work hours you currently work?	1= 35+ hours per week 2= 15-34 hours per week 3= < 15 hours per week 4= casual work hours
How often would you complete overtime shifts?	1= Never 2= Sometimes: 1-2 shifts a month 3= Fairly often: 3-4 shifts a month 4= Often: 5-6 shifts a month 5= Routinely: 6 plus shifts a month
Which category best reflects your routine work hours?	1= < 8-hour shifts 2= 8.1 - 10-hour shifts 3= 10.1 - 11.9-hour shifts 4= > 12-hour shifts
Have you considered or have you already left your job or the profession in the last 2 years?	1= No, I am content with my job and profession 2= Yes, I have considered leaving my job on more than 5 occasions in the last 2 years 3= Yes, I have considered leaving my profession on more than 5 occasions in the last 2 years 4= Yes, I have left my job in the last 2 year 5= Yes, I have left the profession for an alternative career pathway in the last 2 years
Scale used for each question in the NWSQ	1= Strongly agree 2= Somewhat agree 3= Neither agree nor disagree 4= Somewhat disagree 5= Strongly disagree

Table 7. Quantitative Analysis Statistical Methods Utilised

Methods	***Definition***
Descriptive statistics	Mode values, frequencies, percentages, and visualisation of categorical data representation
Bivariate statistics	Mean values, standard deviations, frequencies, percentages, chi-square test, t-test, correlation coefficients, analysis of variance, and correlation matrix

3.12 Quantitative Statistical Methods

The presentation of the comprehensive results of this study will explore the relationship between job satisfaction and a variety of demographics. These results stem from statistical analysis, using three primary methods. These methods were the Chi-Square test, Analysis of Variance (ANOVA), and Spearman's Correlation in Chapter 4.

The Chi-Square test was employed to examine potential statistical relationships between nominal and ordinal variables. By comparing observed and expected frequencies, it was used to determine whether the differences in job satisfaction measured across various categories were statistically significant or coincidental. ANOVA was utilised to assess differences in job satisfaction among multiple groups. This approach was crucial in determining whether the mean job satisfaction scores vary significantly across different sectors, roles, and education levels, among other factors. Spearman's Correlation was also instrumental in this research, providing a non-parametric measure of correlation between the ranked variables. The use of Spearman's Correlation coefficient allowed for identification of possible relationships between ranked variables and the strength of these associations.

Together, the use of these three statistical methods ensured a comprehensive and robust analysis of the data collected through the NWQS. They accounted for the diverse range of variables and provided a nuanced understanding of their interaction with job satisfaction.

The following nomenclature table (Table 8) provides clarification of the symbols and statistical terms utilised throughout this research.

Table 8. Nomenclature

Symbol	*Definition*
p	The p-score, which is the probability of the NULL hypothesis being true
F	The F-Statistic, which is used in the ANOVA test to determine whether the differences among the means of two or more groups are statistically significant
η^2	A measure of effect used in ANOVA, representing the proportion of the total variance in the dependent variable that can be attributed to the independent variable(s)
ω^2	A measure of effect used in ANOVA, providing an unbiased estimate of the proportion of total variance in the dependent variable that can be attributed to the independent variable(s)
r_s	The Spearman's rank correlation coefficient is a statistical measure used to assess both the magnitude and direction of the relationship that exists between two ranked variables

(International Business Machines Corporation, 2023)

3.12.1 Chi-Square

The Chi-Square test for independence, sometimes referred to as Pearson's Chi-Square test or the Chi-Square test of association, was utilised to determine if there was a significant relationship between two categorical variables (Laerd Statistics, 2023a). In this statistical exploration, the Chi-Square test enabled me to probe hypotheses relating to the associations between categorical variables present in the dataset. Subsequently, this aided in addressing the overall research question and the associated sub-questions of this study. The Chi-Square test served as a vital tool in this research, that facilitated the unearthing of complex interconnections between the myriad of factors impacting job satisfaction and the intention to remain in the profession among Australian Registered Nurses and Midwives during the COVID-19 pandemic.

When opting to analyse data using a Chi-Square test for independence, two assumptions needed to be met. It was important to confirm these assumptions in this study as a Chi-Square test for independence is only applicable if they are satisfied (Laerd Statistics, 2023a).

These two assumptions are:

1. Both variables should be measured at a nominal or ordinal level.
2. The two variables should comprise two or more categorical, independent groups, such as ethnicity (Caucasian, Chinese, Hispanic, African American), different levels of physical activity (inactive, low, moderate, high), profession (surgeon, physician, nurse, midwife, occupational therapist), etc.
   (Laerd Statistics, 2023a)

3.12.2 One-Way ANOVA

The One-Way Analysis of Variance (ANOVA) was performed to see whether there were any statistically significant differences between the means of two or more unique independent groups that were unrelated to one another (Connelly, 2021). Crucially, the One-Way ANOVA is an omnibus test that detects differences among groups but cannot identify specific group differences, it only suggests that at least two groups were different (Laerd Statistics, 2023b). A post hoc test was used to determine this. The Tukey Honestly Significant Difference (HSD) test was utilised for groups with both homogeneous and heterogeneous sample sizes. While maintaining a consistent number of subjects across groups is preferred to enhance the statistical power and optimise variance control, it is not an essential prerequisite for implementing the Tukey HSD test (Keselman et al., 1976). The test was effectively executed even with disparate group sizes, a condition referred to as unbalanced designs. Despite uneven group sizes, the Tukey HSD test remains robust. It calculates standard error based on a pooled standard deviation and the harmonic mean of the compared group sizes, not their actual sizes (Keselman et al., 1976). Even with significant size disparities, like a 40:1 ratio, the probability of type I errors rarely exceeded standard significance thresholds by more than 1%, further establishing the test's dependability under challenging conditions (Keselman et al., 1976).

When opting to analyse data using a One-Way ANOVA, a critical part of the process was to confirm that the data under investigation aligns with the criteria required for this form of analysis (Connelly, 2021). This validation was crucial as a One-Way ANOVA can only yield valid results if the data meets six specific assumptions (Connelly, 2021). Verifying these assumptions necessitates additional steps in the analysis process when conducting the analysis with SPSS Statistics. These six assumptions encompass:

1. The dependent variable must be measured on an interval or ratio scale, implying that it is continuous. Age is an example of a variable that meets this condition (measured in years), temperature (measured in degrees), dosage of medication (measured in various units) etc.
2. There should be two or more different independent categorical groupings in the independent variable. One-Way ANOVAs are frequently used when there are three or more categorical, independent groups, although it can also be used when there are just two groups in some circumstances.

3. Observations should be independent, indicating no connections between observations within or among groups.
4. No significant outliers should be present; outliers are individual data points that deviate from the typical pattern.
5. The dependent variable should approximate a normal distribution within each category of the independent variable.
6. Homogeneity of variances is necessary. If this assumption is violated, consider conducting a Welch ANOVA as a substitute of a One-Way ANOVA.

   (Laerd Statistics, 2023b)

3.12.3 Spearman's Correlation

The Spearman rank-order correlation coefficient, commonly referred to as Spearman's Correlation, is a nonparametric method used to measure the strength and direction of the relationship between two variables that are an ordinal scale (Laerd Statistics, 2023c).

When choosing to conduct analysis using Spearman's Correlation, it was crucial to ensure that the data under scrutiny met the specific criteria needed for this statistical method (De Winter et al., 2016). Spearman's Correlation test is applicable only when the data meets three specific assumptions, ensuring the validity of the results. These three assumptions are:

1. Either an ordinal, interval, or ratio scale should be used to measure the two variables. Examples include Likert scales, other ranked categories, revision time measured in hours, IQ scores, exam performance, weight in kilograms, etc.
2. The two variables must represent paired observations. For instance, if studying the connection between electronic cigarette consumption and weekly exercise frequency. The scores of each participant on these two variables form a paired observation. For a study with 30 participants, there would be 30 paired observations.
3. A monotonic relationship must exist between the two variables, where either both variables rise in value simultaneously, or when the value of one variable rises, the other tends to fall.

   (Laerd Statistics, 2023c)

3.13 Justification of Quantitative Statistical Methods

Each statistical method was chosen based on the characteristics of the dependent and independent variables involved in this study, ensuring their alignment with the assumptions and requirements of the chosen tests. The selected methods offered unique and complementary insights, facilitating a robust understanding of the relationships between job satisfaction and a range of demographic factors. A breakdown of the tests performed on the demographics below can be seen in Table 9.

Table 9. Statistical Tests Used for Each Demographic

	Chi-Square	*One-Way ANOVA*	*Spearman's Correlation*
Gender	✓		
Age		✓	✓
Profession	✓	✓	
Sector	✓	✓	
Role		✓	
Experience		✓	✓
Education	✓	✓	

	Chi-Square	*One-Way ANOVA*	*Spearman's Correlation*
State	✓		
Hours per week		✓	✓
Overtime Frequency		✓	✓
Hours per shift		✓	✓
Contentment and Discontentment	✓		

3.13.1 Chi-Square Dataset Compatibility

The dependent variables in this study, intrinsic, extrinsic, relational, and overall job satisfaction are continuous variables, measured using either an interval or ratio scale. These variables meet Assumption #1 for the Chi-Square test, as each of these dependent variables were scored or rated using a numerical scale, providing a quantitative measure of job satisfaction.

The independent variables for this study encompassed a broad range of categorical factors. Each of these independent variables satisfies Assumption #2 for the Chi-Square test, as they consisted of multiple independent groups, usually two or more. For example, the variable 'Profession' comprised of three categories which were 'Registered Nurse', 'Registered Midwife' and 'Both'.

When the independent variables consisted of only two categories, as in the case of 'Contentment', the Chi-Square test was appropriately employed. This aligns with the standard use of the Chi-Square test, which is designed to investigate associations between two categorical variables. In this context, the Chi-Square test provided an effective way to examine potential relationships between each category (Contentment or Discontentment) and the dependent variables (different types of job satisfaction).

3.13.2 One-Way ANOVA Dataset Compatibility

The dependent variables in this study; intrinsic, extrinsic, relational, and overall job satisfaction, are continuous variables measured at the interval or ratio level. These variables are suitable for analysis using the One-Way ANOVA test as they meet Assumption #1 for this statistical method. Each of these dependent variables have been scored or rated using a numerical scale, thus providing a quantitative measure of job satisfaction.

The independent variables for this study encompassed a broad range of categorical factors. Each of these independent variables satisfied Assumption #2 for the ANOVA test, as they consisted of two or more independent groups. For example, the variable 'Age' comprised of seven categories ranging from '18-25' to 'Over 65'.

For the independent variables with more than two categories, such as 'Age', 'Profession', 'Role', and others, the ANOVA test was also used. The ANOVA test was optimal for this type of analysis, as it can handle more than two groups and is designed to ascertain whether statistically significant differences exist among the means of these groups (Connelly, 2021). By applying ANOVA, I assessed whether different levels of job satisfaction were associated with different age groups, professions, roles, and other factors.

These independent variables also meet Assumption #3 for ANOVA since they were considered independent of each other. There was no specific relationship assumed between different age groups, different professions, or different roles.

Assumption #4 for ANOVA stipulates that there should be no significant outliers in the data, which might adversely affect the results of the test. As the current data was collected from the NWQS and was careful screened, it was reasonable to assume that this condition was met.

Regarding Assumption #5 and #6 for ANOVA, these should be verified during the actual data analysis process (Connelly, 2021). In this study the normality of distribution for each category of the independent variables and the homogeneity of variances were checked using the appropriate statistical methods.

3.13.3 Spearman's Correlation Dataset Compatibility

The variables 'Age', 'Years of Experience', 'Hours per Week', 'Hours per Shift', and 'Overtime Frequency' meet the first assumption of Spearman's Correlation, as they are measured on an ordinal scale. This means that there was a clear order or ranking to the categories within these variables. 'Age', for instance, ranged from '18-25' to 'Over 65', and 'Years of Experience' included categories from '0-3 years' to 'Over 20 years'. 'Hours per Week' also followed an ordinal pattern with categories like 'Less than 15 hours', '15 - 34 hours', and '35+ hours'. The same was true for 'Hours per Shift', which ranged from '< 8 hours' to '> 12 hours', and

‘Overtime Frequency’ with categories such as ‘Never’, ‘Sometimes’, ‘Fairly often’, ‘Often’, and ‘Routinely’.

The second assumption for Spearman’s Correlation is that of paired observations. Each of the variables mentioned aligned with this requirement. They represented observations that were paired with a continuous dependent variable, which, in this case, was job satisfaction. For every participant in the study, there was a corresponding value for job satisfaction, forming a series of paired observations.

Finally, the third assumption of Spearman’s Correlation pertains to a monotonic relationship between variables. This assumption was reasonable for all the variables under consideration. For ‘Age’ and ‘Years of Experience’, it was expected that as this increase or decreased, there could be a corresponding change in job satisfaction. The same relationship was hypothesised for ‘Hours per Week’ and ‘Hours per Shift’, where an increase or decrease in hours might be related to a corresponding change in job satisfaction. Likewise, for ‘Overtime Frequency’, as this increased or decreased, a change in job satisfaction could be anticipated.

3.13.4 NWSQ Percentage for Visual Representation

This study employed the NWSQ survey instrument to measure job satisfaction levels among nurses and midwives in Australia who worked during the COVID-19 pandemic.

The NWSQ tool evaluates job satisfaction across four distinct categories which are intrinsic, extrinsic, relational, and overall job satisfaction (Fairbrother et al., 2010). Each of these categories has its unique scoring range. Intrinsic satisfaction is measured on a scale of 6 to 30, extrinsic on a scale of 5 to 25, relational on a scale of 4 to 20, and overall job satisfaction on a scale of 15 to 75. Each scale maintains an inverse proportional relationship, where a higher score indicates lower satisfaction.

These varied scales can lead to challenges when comparing across categories or visualising the data. An upward trend on a graph counterintuitively signifies decreasing job satisfaction due to the inverse nature of the scales. Additionally, the differences in score ranges between categories make it difficult to present all categories on the same graph with a common baseline of ‘0’.

To overcome these issues and provide a clearer, more intuitive visualisation and interpretation of the data, these scores were transformed into a percentage-based format. This not only allowed for easier comparison across the different categories, but also ensured a common starting point of ‘0%’ for all categories. This conversion enhanced the readability of the data, making it more intuitive and visually understandable.

The scaling of the NWSQ job satisfaction score ‘S’ to percentage ‘P_{NWSQ}’ was performed using the following formula:

$$P_{NWSQ} = \frac{S_{max} - S}{S_{max} - S_{min}} \times 100\%$$

where

S_{min} was the lowest possible score (Indicating the highest possible job satisfaction), and

S_{max} was the highest possible score (Indicating the lowest possible job satisfaction).

For example, for intrinsic job satisfaction, the lowest and highest possible scores were 6 and 30 respectively. If an individual scored a job satisfaction of 21, indicating a low job satisfaction, this would be converted to percentage as:

$$P_{NSWQ} = \frac{30 - 21}{30 - 6} \times 100\% = 37.5\%$$

All statistical analyses, conducted on both the original data and the converted percentage scores, yielded identical outcomes for each type of test executed. This consistency reaffirms the robustness of the method used to transform the raw NWSQ scores into a percentage format.

3.13.5 Quantitative Reliability and Validity

In quantitative research, reliability is known as the dependability and uniformity of an instrument. To consider an instrument reliable, it is essential that all elements within it consistently produce results. This implies that if the same instrument was used again with the same participants, the outcomes would be consistent and reproducible (Griffiths & Murrells, 2010; Tappen, 2022). In contrast, validity depicts the overall accuracy of these measures whilst, also evaluating whether the particular measurement instrument used is appropriate for the intended purpose (Griffiths & Murrells, 2010; Tappen, 2022). Rigour in quantitative research is expressed through the use of an established and existing survey instrument. The original internal reliability of the NWSQ that studied workplace satisfaction was measured using Cronbach’s coefficient alpha score. The instrument had an internal consistency and reliability of 0.90 indicating that the instrument is expected to generate results that are reproducible and

generalisable (Fairbrother et al., 2010). By using an established instrument, I can be assured that the instrument will generate results that are reproducible, generalisable, valid and reliable (Fairbrother et al., 2010).

The survey's validity was determined by its thoughtful design, the piloting of the measurement instrument, and lastly by addressing given feedback prior to the distribution of the survey. In addition, the simplicity of the survey was evaluated by four registered nurses and two registered midwives to ensure the survey was user friendly prior to distribution of the instrument. Face validity, which addresses the instrument's clarity in terms of language and structure, was successfully established. Lastly, I ensured the content validity was achieved by having independent reviewers surmising how well the survey measures the constructs that it set out to measure (Lewis, 1994; Rattray & Jones, 2007). The reviewers confirmed content validity was assured prior to the survey being conducted.

3.14 Qualitative Data Analysis

The management of qualitative data must be conducted in a constructive and effective manner. There are various stages in the qualitative data analysis phase. Prior to the data being stored, it was de-identified, and an identification code assigned to each participant. Recordings, transcriptions, and field notes made by myself were securely stored on a computer that was password protected in a locked office, with data only accessible to me. This aligns with the requirements of the University of Notre Dame Australia Research Data Management Policy and the National Health and Medical Research Council (National Health and Medical Research Council, 2018).

Any field notes made by myself during the interviews were analysed shortly after each interview, as this helped me in documenting extra contextual information. Field notes ensure rich context continues following the interviews, allowing for documentation of contextual information or themes (Mulhall, 2003). The transcribed interviews were then investigated further during the main data analysis phase. Furthermore, a summary of the main points from the transcriptions was sent back to the participants for their comments and confirmation, a process known as member checking. Member checking as suggested by Prosek and Gibson (2021) is important for verification and can be helpful in building a further understanding of the phenomenon. Additionally, after the completion of each interview, the individual video recording of the interviews (with participant's permission) were downloaded. Before an official

transcribing took place, I carefully reviewed the recordings multiple times to ensure there were no possible misinterpretations or ambiguities in the participants' expressions. Subsequently, I then transcribed the recordings word-for-word onto a Microsoft Word document myself. The principal supervisor was a silent observer for two of the first interviews to provide feedback and to ensure I was confident during the interview process. The first three transcripts were presented for discussion with the supervisory team, to ensure accuracy of transcribing before any subsequent interviews took place.

When preparing for the core data analysis, I thoroughly reviewed all transcriptions multiple times, along with all field notes/reflections to help me to become immersed in the findings. The transcriptions were then subsequently transferred into the qualitative data analysis software NVivo version 14. The decision to utilise this software was made as I felt it assisted in classifying, organising, and analysing the data more efficiently. NVivo 14 features a variety of capabilities that allow me to rearrange the emerging coding frameworks as they go. The benefit to this is that I am able to visualise these changes in real time. In addition, I am able to code data and review any coded fragments of a text easily and rapidly. The code constituting the framework may be relocated, deleted, merged, or joined at any moment. Overall, the utilisation of this program made the process of data analysis more contextually engaging for me, as I could see the themes emerging in real time. Furthermore, this program ensured that I could explore details and concepts that may have otherwise been neglected if I completed the analysis manually. By employing critical reflection, I recognised my role in the research and how it might have influenced the data collection, interpretation, and analysis processes, thereby practising research reflexivity. Furthermore, I achieved research reflexivity by conducting a thorough literature review and reflecting on my own experiences, assumptions, and beliefs about how the pandemic has affected my overall job satisfaction and intention to stay or leave the profession, as well as the impact this may have on the proposed research.

3.14.1 Data Analysis Procedures

Whilst some methods used for qualitative data analysis suggest the collection of all data before analysis (Miles et al., 2018), the process adapted in this research involved a high degree of iteration and vigour. The process included constant comparative methods which involved making continued comparisons between and within each transcript (Glaser & Strauss, 1967). This process occurred repeatedly as new data was presented and collected. A thematic analysis approach was employed to interpret and analyse the transcripts to reveal themes and sub-themes.

The thematic data analysis was carried out following the six phases as described by Braun and Clarke (2006).

The initial stage of data analysis involved becoming acquainted with the collected data, which included verbatim transcription of recorded interviews. The transcripts were read on multiple occasions, word by word, line by line, and sentence by sentence, where I searched for patterns and meanings. After the transcripts had been complied and checked for accuracy, a copy of the main points from the transcriptions were returned for comments and verification to the participants. This ensured rigour and accuracy of the transcriptions of the interview, thus further ensuring the credibility of the data collected. In the process of member checking, I obtained a single transcript back from the participants. The feedback from that participant concerning the grammatical aspects of this transcript rather than the content aspect of the transcript with very minimal comments noted. The grammatical aspects were rectified and sent back the participant for final approval.

The second stage involved generating initial codes to construct meaning. I worked systematically through the complete data set, acknowledging striking features within the data that could serve as categories and the basis for recurring patterns and themes throughout the dataset. Subsequently, the codes and segments of reflected data were manually input into a Microsoft Excel spreadsheet. The codes from the initial three transcripts were then reviewed and discussed with my supervisors to ensure accurate representation of the data.

Subsequently, the codes were grouped and organised into themes. In this phase, I focussed the analysis on the broader levels of the themes, rather than the initial coding. I used visual representation to help organise the different codes into themes. Having visual displays and representations of the codes during the analysis phase aids in the presentation of inferences and conclusions, and presents the data in an organised, simplistic, and transformational manner that captures my attention, spurring action and increasing the speed of comprehension (Tracy, 2019). Coding led to the identification of themes that were discovered to reveal meaning within the data (Iphofen, 2009). Themes give a metaphorical framework by establishing a network upon which lived experiences are woven to create meaning (Iphofen, 2009). Developing themes from data is a complex process requiring the identification of thematic features. Before a theme can be discovered from the data, the thematic aspect must be uncovered. By analysing the codes found, and considering how different codes may associate with one another, a central overarching theme emerged from the data.

Subsequently, all the themes were re-evaluated in connection with the extracted codes, and the entire dataset was once again examined to construct a thematic map. The first part to this process involved reviewing all themes and considering what themes did not have enough data to support them or what themes could be collapsed into one theme. The second phase entailed validating the individual themes within the dataset and assessing whether the thematic map accurately reflected the underlying meaning found in the data. In this phase of data analysis, the data was synthesised in order to examine the interrelationships between the various themes to gain a more comprehensive understanding of the phenomena as a whole. Once I was confident that the thematic map accurately represented the dataset, I proceeded to define and clarify the themes, aiming to understand the nature of each theme.

Finally, I produced a report. The report provided a textural description (the what) of the phenomenon which was created from the key themes along with a structural description (the how) of the experience (Neubauer et al., 2019). This stage represented the final opportunity to analyse the themes, ensuring their alignment with the research questions and the relevant literature. The entire dataset was then subject to an additional review to encode any supplementary data within the themes that may not have been established during the previous coding stages. I then ensured the analysis was concise, clear, valid, and non-repetitive.

3.14.2 Qualitative Validity and Reliability

The matter of validity and reliability for the quantitative data has been discussed separately (Quantitative Reliability and Validity). The concept of reliability is rarely examined in relation to qualitative research, because of the subjective individual nature of qualitative research and its ensuing analysis. This is because it is not logical to assume that qualitative findings are replicable. Instead in qualitative research, reliability is commonly referred to as 'trustworthiness' as this is believed to be the most telling of thorough, cautious, and honest process of conducting qualitative research.

Rigour in qualitative research is expressed through the attributes related to the qualitative research process itself. To accomplish this, processes for rigour were utilised throughout the current study. I ensured the design enabled the research question to be answered, and ensured significant time was set aside for data collection. The data was collected in a multitude of forms, as well as confirming that there were multiple layers of data analysis using validated strategies, including checking the data and results/findings with the participants, and having the findings

peer reviewed by my PhD supervisors (Creswell & Poth, 2016; Cypress, 2017). Subsequently, a number of meetings were held to confirm the required processes and methods were utilised for the analysis phase of the qualitative dataset. The use of the postpositive framework helped me to ensure that the correct conclusions had been drawn, thus instilling confidence that the results were reliable and transferable (Cypress, 2017; Laverty, 2003). These procedures ensured rigour through meeting the constraints for validity and reliability otherwise known as 'trustworthiness'.

In order to ensure trustworthiness, Guba and Lincoln's (1989) four trustworthiness criteria were assessed in this study. Credibility was demonstrated by ensuring that the research measured precisely what was intended and represented an accurate depiction of the social experiences of the participants (Alsaigh & Coyne, 2021; Cypress, 2017). Credibility was achieved through holding in-depth interviews where a significant amount of time was devoted to hearing and learning about the phenomenon of interest (Alsaigh & Coyne, 2021; Cypress, 2017). Furthermore, the data and findings were checked for accuracy by both the participants and the supervisors to ensure the credibility of the results.

Transferability was achieved by ensuring a detailed and transparent account of the research context, enabling readers to determine whether the research could be applicable to their own circumstances (Cypress, 2017; Maher et al., 2018; Neubauer et al., 2019). This ensured the findings were valuable to those wanting to gain knowledge and insight into the short to long term impacts of the COVID-19 pandemic on nursing and midwifery job satisfaction and retention.

Concerning dependability, as the study examined the experiences of nurses and midwives who were dealing with a phenomenon in a particular setting, the data should not change due to the context during the research. The dependability of the data was displayed via clear documentation of the data collection and analysis processes, supplemented by the peer reviewing process (Maher et al., 2018; Neubauer et al., 2019).

Confirmability was achieved throughout this research by minimising my own bias, and by documenting the methods for initially verifying and subsequently reviewing the data at various stages of the research process (Creswell & Poth, 2016). Following this framework, and using the suggested tactics to address each principle, supports a rigorous research process (Connelly, 2016; Korstjens & Moser, 2018). The figure below (Figure 3) conveys how triangulation was achieved by mixing theories, methodologies, and observers in the study to guarantee that any fundamental biases stemming from the adoption of a single approach or single observation were safeguarded

against. This figure conveys how the rigour of robust findings were secured by the completion of a thorough scoping review, the acquisition of various types of data, and the utilisation of multiple data collection methods.

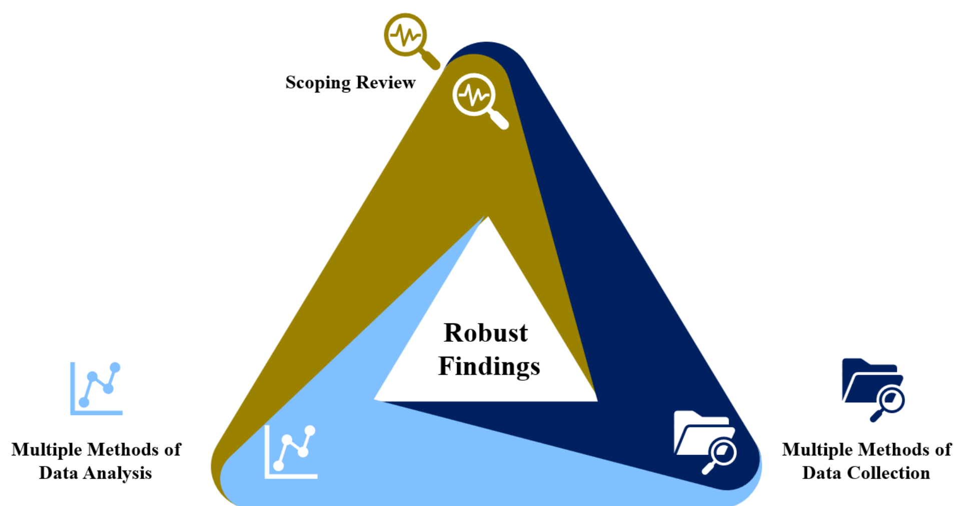


Figure 3. Triangulation

3.14.3 Research Audit Trail

This study employed strategies to ensure the confirmability, trustworthiness, and the quality of the qualitative research. These strategies, when applied by an independent researcher using the same dataset, would yield comparable results. This allows the researcher to authenticate events, influences, and actions, as well as examine the research for potential errors or fraud (Akkerman et al., 2008; Hoepfl, 1997; Koch, 1994).

The construction of a research audit trail was embedded into the study process using the Lincoln and Guba (1985) qualitative trustworthiness criteria, as well as an electronic audit trail document. In the generation of the audit trail, I provided records of all research choices and activities conducted throughout the study. This included logging research activities, developments, data collection and analysis processes carried out during the course of the study (Creswell & Miller, 2000). I ensured that a logical follow through has been accomplished through constant self-reflection throughout the study by examining each of these requirements as well as the field notes I retained. Following the conclusion of each interview, I reflected upon on the conversations from the interviews in a research diary. This helped me to assess the progress and success of the interviews, along with my early thought processes about recurring factors identified by participants (Pope et al., 2000). Silverman (2020) reported that keeping the

developing notes of the researcher's thought process whilst conducting a study offers substantial aid during the writing phase (Silverman, 2020).

The research audit trail was both intellectual and physical in nature, following Carcarys' checklist as seen below in Table 10 (Carcary, 2020).

Table 10. Research Audit Trail Checklist

Physical Audit Trail
Research problem identification and proposal development:
• Is the research problem (e.g., the gap in the existing literature) clearly defined? • Is a research question specified? • Are the research aims and objectives stated? • Is a formal research proposal (as required) submitted to and approved by the relevant funding body?
Literature review:
• Is a literature review protocol (key steps and procedures) clearly documented and validated? • Is the literature search scope defined? • Are all publication sources documented (e.g., bibliographic databases, library search portals, journals)? • Are literature search parameters documented (e.g., keyword search strings)? • Are literature screening criteria documented (e.g., specific keywords, language, authors, date ranges)? • Are literature quality appraisal standards defined (e.g., grounding of findings in the body of evidence)? • Is the literature data extraction process outlined (e.g., use of coding, CAQDAS)? • Is the literature data classification and analysis process outlined (e.g., use of thematic categories, conceptual frameworks, and concept maps)?
Research framework definition:
• Is a research methods strategy specified (e.g., use of interviews, focus groups, case studies, design science)? • Is the rationale for the chosen research methods specified? • Are notes on research trustworthiness maintained? • Are changes to the research framework and methodological decisions over the course of the study, and the rationale for same, documented?
Sample selection:
• Are criteria for research participant selection defined (e.g., domain expertise, seniority)? • Is the sampling strategy (e.g., purposive, snowball) and rationale for its selection defined?
Evidence/raw data collection:
• Are all sources of secondary evidence specified (e.g., contextual descriptions, policy documents, research reports)? • Are all sources of primary data specified (e.g., interview or focus group transcripts, pilot validation feedback)? • Are research journals and reflections on the body of evidence recorded?
Evidence management and analysis:
• Are all thematic codes and categories documented? • Are memos developed to enable emerging thematic categories to be traced to the body of evidence? • Are reflexive memos attached to the thematic categories? • Are relationships across the thematic structure explored (e.g., diagrammatically modelled)? • Are examples of how the emerging analysis is grounded in the body of evidence maintained (e.g., in an appendix)?
Artefact development:
• Is the research audience and dissemination strategy specified? • Is the research report/research paper documented in a manner that the intended research audience will clearly understand? • Are the research findings discussed vis-à-vis prior research studies?

Intellectual Audit Trail
Clarification of philosophical stance:
• Is the researcher's philosophical position clarified?
Consideration of alternatives for evidence collection and data analysis:
• Is the researcher's analytical thinking and decision-making transparent during the design of the research framework? • Is the rationale for the data management and analysis approach clearly specified? • Is the rationale for use or non-use of CAQDAS, and the benefits of the chosen approach, specified?
Evidence interpretation:
• Are the researcher's analytical thinking and decision-making transparent during the data analysis? • Are researcher interpretations on emerging thematic categories recorded in memos? • Are research findings appropriately grounded in the body of evidence (with supporting examples)? • Are researcher reflections and insights on findings and interpretations documented? • Are the researcher's personal assumptions and subjectivities made transparent in a reflexive journal?

(Carcary, 2020)

3.15 Summary

This chapter has presented and substantiated the methodology and design utilised in the study. The paradigm, which assisted me in choosing a philosophical stance, was discussed in the first section of this chapter. It was crucial to consider the potential ethical ramifications, which are an essential component of any participant-based research. After considering various theoretical frameworks, I decided that a postpositive framework would be the most appropriate framework for this research. After considering the different types of research designs it was determined that a mixed method approach was the most appropriate design to address and answer the research question. This approach acknowledges the presence and significance of the physical, natural world as well as the importance of reality and how they influence each individual's human experiences. The limitations of this chosen research design were also taken into consideration. The NWSQ survey instrument and one-on-one semi-structured interviews were deemed the most appropriate methods to gather the quantitative and qualitative data. In this chapter, the data analysis techniques were explained. In particular, the use of thematic analysis for the qualitative data analysis and descriptive and bivariate statistics used for the quantitative data analysis. Also discussed were the procedures for determining the efficacy of both approaches. To make sure the research is reproducible, I used an audit trail. This chapter has provided an explanation of the study's methodology and design. It has thoroughly elaborated on the processes utilised and the rationale for their inclusion. The following chapter will present the results of the data analysis.

CHAPTER 4 QUANTITATIVE AND QUALITATIVE RESULTS

4.1 PART ONE – QUANTITATIVE RESULTS

In the preceding chapters, a notable gap in the literature concerning the impact of the COVID-19 pandemic on the career trajectories and retention of registered nurses and midwives in Australia was identified. To address this gap, I had to devise a suitable methodology capable of accurately capturing the experiences of these healthcare professionals across various Australian states and territories. Among the array of theoretical frameworks evaluated, it was concluded that the postpositivist framework provided the most fitting structure for this study. Moreover, a mixed-method approach was selected as the optimal research design, given its capacity to comprehensively address the overarching and subsidiary research questions. The value of this design lies in its capacity to combine quantitative and qualitative data within a single study, enhancing the potential for stronger inferences compared to using a standalone method (Wasti et al., 2022).

To collect the necessary quantitative and qualitative data, I employed the previously validated Nursing Workplace Satisfaction Questionnaire (NWSQ) survey instrument (Fairbrother et al., 2010) and conducted one-on-one semi-structured interviews. These tools offered a comprehensive means of gathering valuable insights into the subject matter via the analysis of the results presented in this chapter.

The Results Section of this dissertation is segregated into two subsections, 'Quantitative Results' and 'Qualitative Results'. The chapter initially focuses on presenting the quantitative findings of the study. It commences with a description of the sample including the demographic characteristics of the registered nurses and midwives in the study. Following this, the bivariate analysis results of the data set are presented. The chapter will conclude with a summary of the quantitative results before presenting the intention of the next sub chapter.

4.2 Quantitative Results

This section concentrates on the results from the quantitative phase of data collection as identified in the methodology chapter (Data Collection). Three hundred and sixty-four (N = 364) participants were recruited via social media platforms across Australia. The NWSQ survey instrument consisted of questions related to the participants personal characteristics. These included demographic profile (age, gender), employment background (job title, years of

experience, contracted hours), state where participant is working/living, and education background (highest degree obtained). The data collected was analysed using the NWSQ tool to gauge the overall job satisfaction levels among the study participants. By implementing both the personal characteristics portion of the questionnaire with the NWSQ, I was able to gather information about the study participants' backgrounds and characteristics, as well as their overall level of job satisfaction. The quantitative data was analysed using SPSS version 27 software, utilising two essential statistical analysis techniques. These were descriptive statistics and analysis and bivariate statistics and analysis. These techniques allowed me to identify statistical significance in any differences, relationships or patterns between participant demographics and job satisfaction levels, thus providing an understanding of the factors that contribute to job satisfaction in different participant populations. Each of these techniques provides a layer of insight into the data, moving from basic summaries to understanding relationships and interactions between variables, to complex modelling of multiple variables on an outcome, ensuring comprehensive and rigorous analysis.

All the necessary conditions required for the selected statistical tests were stringently observed and met. This included adherence to the preconditions required for each of the selected statistical methods (the Chi-Square test, One-Way (ANOVA), and Spearman's Correlation).

It was established that all preconditions for the Chi-Square test were satisfied, as both variables were categorised into two or more independent groups, thus meeting the criteria defined by Laerd Statistics (2023a). The One-Way ANOVA test was employed after ensuring the existence of continuous dependent variables and categorical independent variables across two or more independent groups, thus adhering to the guidelines defined by Connelly (2021). In the case of Spearman's Correlation, a positive alignment with the given assumptions was observed. Variables measured on an ordinal, interval, or ratio scale showed paired observations, and a monotonic relationship were discerned among the variables, aligning with the guidelines delineated by Laerd Statistics (2023c).

4.3 Study Population Characteristics

Key demographic data was collected to understand the study population characteristics including the participants age, gender, educational attainment, years of experience, current practicing role and sector they were currently working in. The data overview of the demographic responses can be seen in Table 11.

The gender distribution of participants was highly skewed towards females, who constituted a significant 94.0% (*N* = 342) of the total, with males comprising 5.8% (*N* = 21) (Figure 4). When looking at age demographics, the largest group of participants was between 26-35 years of age 32.7% (*N* = 119), closely followed by the 36-45 age group 26.1% (*N* = 95) and then the 46-55 age group 17.3% (*N* = 63) (Figure 5).

Professionally, most participants were nurses 84.1% (*N* = 306), with a small proportion identifying as midwives 4.4% (*N* = 16), and some participants practicing both professions 11.5% (*N* = 42) (Figure 6). A breakdown of the sectors in which they worked revealed that most were employed in the public sector 65.2% (*N* = 236), while the rest were split between the private sector 27.6% (*N* = 100) and both sectors 7.2% (*N* = 26) (Figure 7).

When considering the participants' roles, Specialist registered nurses (RNs) in Critical Care 18.2% (*N* = 66), Acute Care Bedside RNs 16.5% (*N* = 60), and Perioperative RNs 15.4% (*N* = 56) were the most common (Figure 8). Regarding the experience levels, the majority of participants had spent between 4-10 years in the respective field, constituting 30.8% (*N* = 112) of the total sample. Additionally, a large portion of the participants had over 21 years of experience, accounting for 25.3% (*N* = 92) of the total (Figure 9).

Examining the highest level of education achieved, a Bachelor's Degree in Nursing was the most common 32.3% (*N* = 117), followed by Postgraduate Certificates 24.0% (*N* = 87) and Postgraduate Diplomas 21.8% (*N* = 79) (Figure 10). Geographically, Western Australia (WA) 54.3% (*N* = 197) had the highest number of participants followed by New South Wales (NSW) 21.2% (*N* = 77), Victoria (VIC) with 10.5% (*N* = 38) and South Australia (SA) with 5% (*N* = 18) (3.0%) (Figure 11).

Working hours per week showed that a majority were working full-time or more, with 52% (*N* = 188) putting in 35+ hours (Figure 12). On the topic of overtime, 'Sometimes: 1-2 shifts a month' was the most common frequency at 42.2% (*N* = 153) (Figure 13). Most participants were working shifts of 8.1 - 10 hours, representing 56.8% (*N* = 206) of the total Figure 14).

In terms of perceived job satisfaction, a sizable group had considered leaving their job 34.3% (*N* = 125) and 22% (*N* = 80) considering leaving the profession completely, while 22.0% (*N* = 79) reported contentment with their current positions (Figure 15).

Table 11. Data Overview for Demographic Responses

	Category	*N*	*Percentage (%)*
Gender	Female	342	94.0
	Male	21	5.8
	Other	0	0.0
	Prefer not to say	1	0.3
Age	18-25	33	9.1
	26-35	119	32.7
	36-45	95	26.1
	46-55	63	17.3
	56-65	50	13.7
	Over 65	4	1.1
Profession	Nurse	306	84.1
	Midwife	16	4.4
	Both	42	11.5
Sector	Public	236	65.2
	Private	100	27.6
	Both	26	7.2
Role	Specialist RN in Critical Care	66	18.2
	Acute care bedside RN	60	16.5
	Perioperative RN	56	15.4
	Leadership/Higher Management	40	11.0
	Other	30	8.3
	Birth Suite RM	25	6.9
	Community RN	17	4.7
	Staff Development RN	17	4.7
	Antenatal/Postnatal RM	13	3.6
	Clinical Nurse Specialist	13	3.6
	Mental Health RN	12	3.3
	Researcher	5	1.4
	Staff Development RM	3	0.8
	Pediatric	3	0.8
	Nurse Practitioner	3	0.8
	Digital Health RN	0	0.0
	Consultant RM	0	0.0
Years of Experience	0-3 years	48	13.2
	4-10 years	112	30.8
	11-15 years	68	18.7
	16-20 years	44	12.1
	Over 21 years	92	25.3
Highest Level of Education	Bachelor's Degree in Nursing	117	32.3
	Entry to Practice Master of Nursing	5	1.4
	Bachelor of Midwifery	7	1.9
	Entry to Practice Master of Midwifery	3	0.8
	Postgraduate Certificate	87	24.0
	Postgraduate Diploma	79	21.8
	Master's degree	61	16.9
	PhD	3	0.8

	Category	*N*	*Percentage (%)*
State of Residence	Western Australia	197	54.3
	New South Wales	77	21.2
	Victoria	38	10.5
	South Australia	18	5.0
	Queensland	11	3.0
	Northern Territory	10	2.8
	Australian Capital Territory	8	2.2
	Tasmania	4	1.1
Hours per Week	35 + hours	188	52.0
	15 -34 hours	136	37.5
	Less than 15 hours	10	2.75
Overtime Frequency	Never	98	27.0
	Sometimes: 1-2 shifts a month	153	42.2
	Fairly often: 3-4 shifts a month	55	15.2
	Often: 5-6 shifts a month	26	7.2
	Routinely: 6 plus shifts a month	31	8.5
Hours per Shift	< 8-hour shifts	107	29.5
	8.1 - 10-hour shifts	206	56.8
	10.1 - 11.9-hour shifts	21	5.8
	> 12-hour shifts	29	8.0
Perceived Job Satisfaction	Considered leaving current position	125	34.3
	Considered leaving the profession	80	22.0
	Content	79	22.0
	Changed jobs in past two years	63	17.3
	Resigned for an alternative career	17	4.7

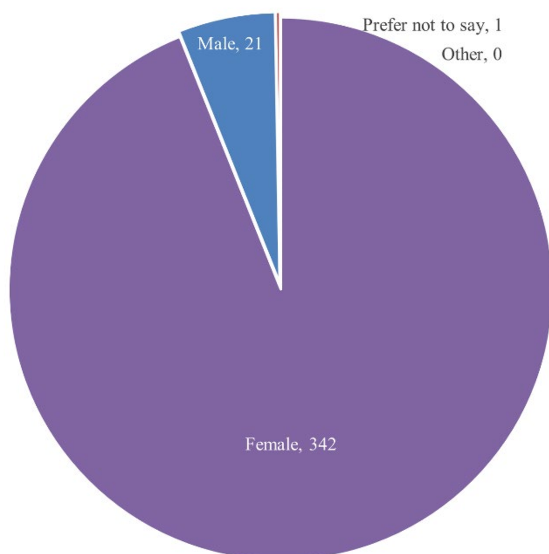


Figure 4. Participation by Gender

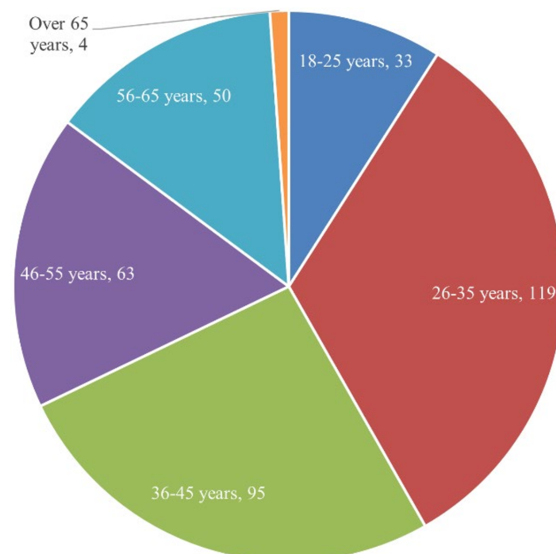


Figure 5. Participation by Age

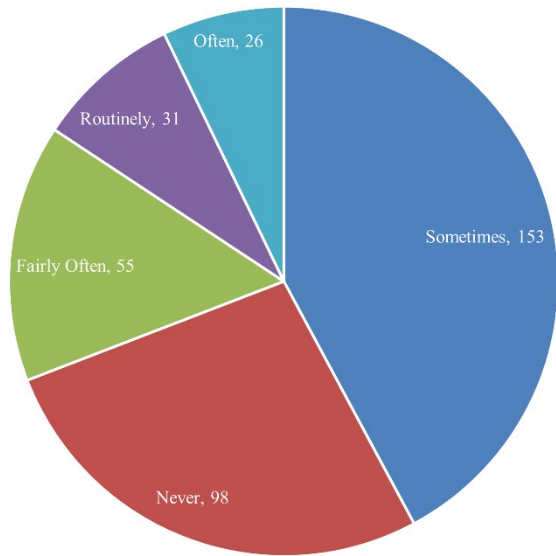


Figure 6. Participation by Overtime Frequency

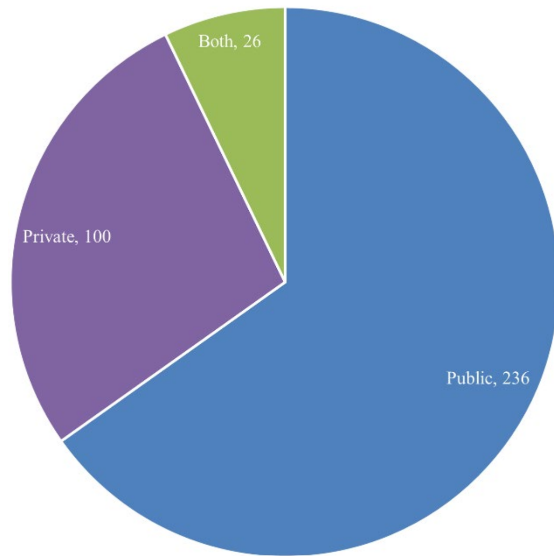


Figure 7. Participation by Sector

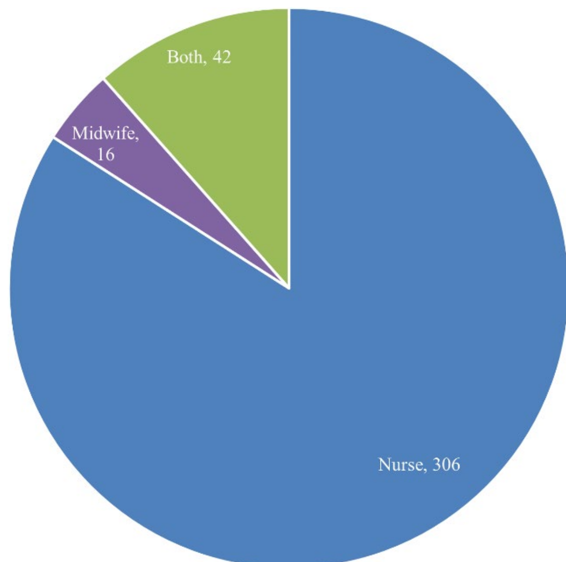


Figure 8. Participation by Profession

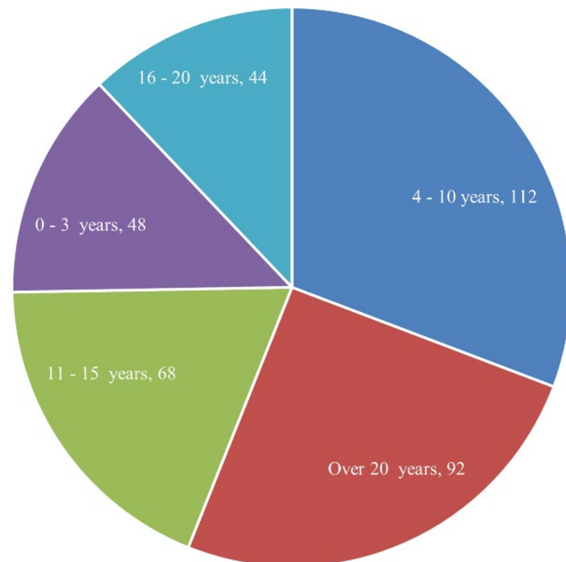


Figure 9. Participation by Years of Experience

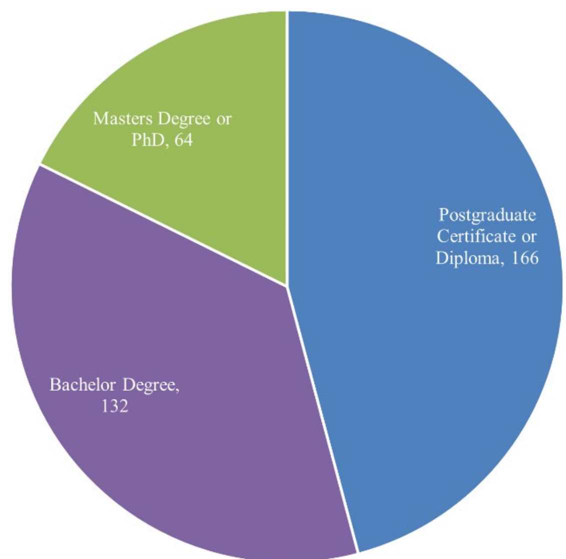


Figure 10. Participation by Education

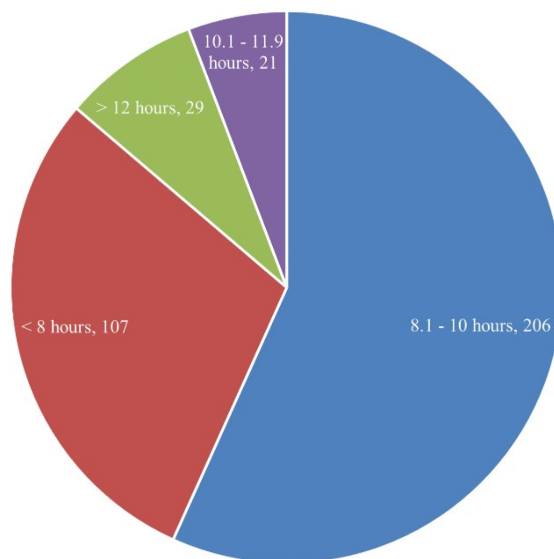


Figure 12. Participation by Hours per Shift

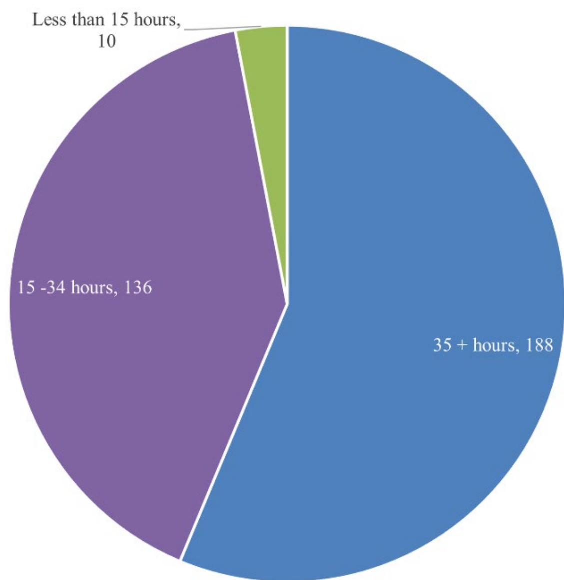


Figure 11. Participation by Hours per Week

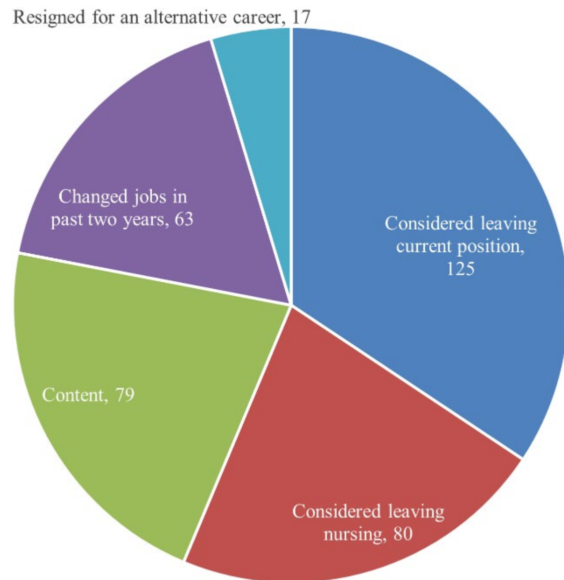


Figure 13. Participation by Contentment

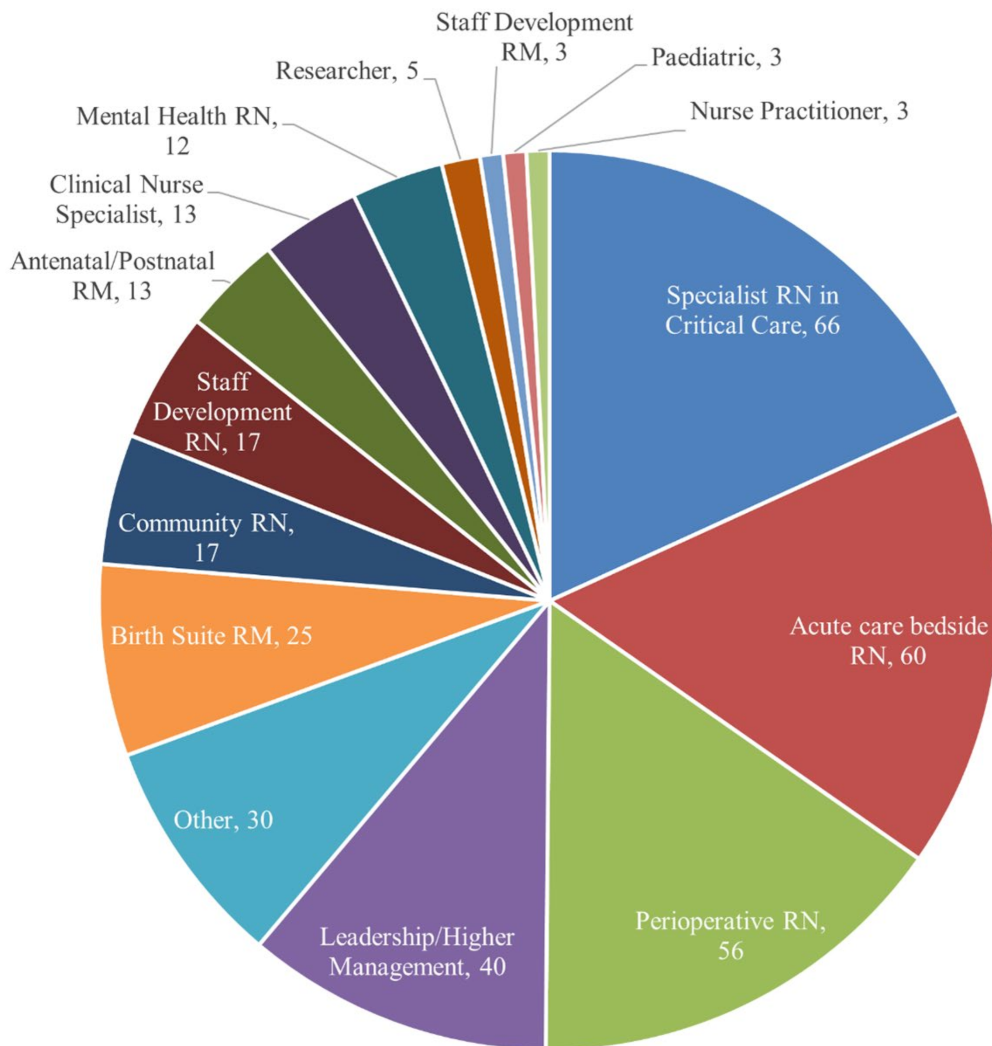


Figure 14. Participation by Role

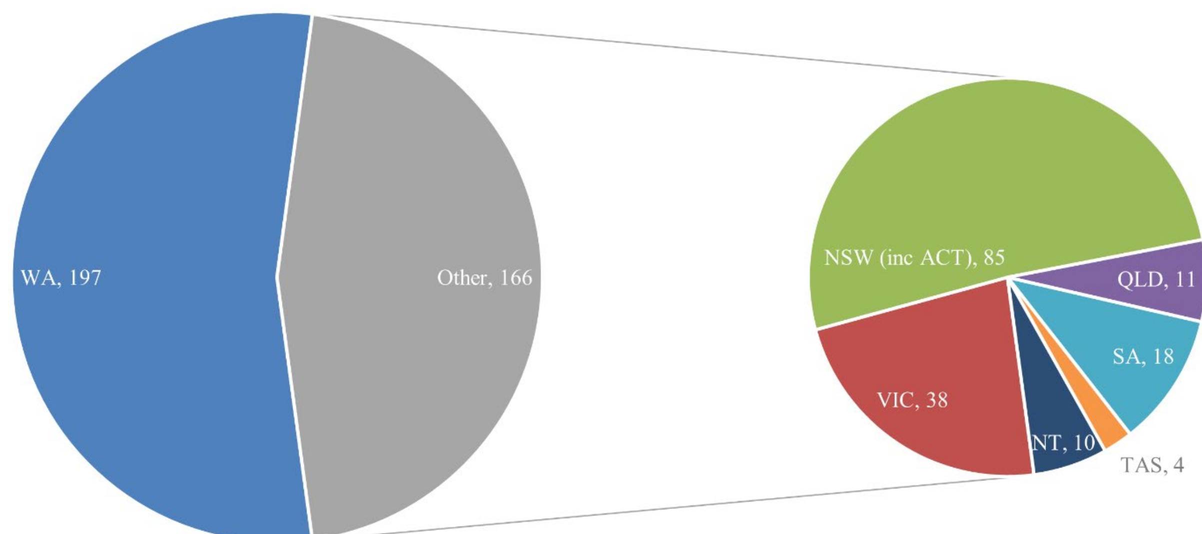


Figure 15. Participation by State

4.4 Nursing Workplace Satisfaction Questionnaire Response

A survey was conducted to evaluate the job satisfaction of nurses and midwives who worked through the COVID-19 pandemic in Australia, using the validated NWSQ tool (Table 12). The methodology chapter describes the nuances of the NWSQ tool, detailing its application to the study population and the approach taken to analyse the data, thus providing a comprehensive understanding of the process employed in this research. Based on the guidance from Fairbrother et al., (2010) modifications were made to the questionnaire where questions 10, 13, and 14 were omitted due to overlapping content and their independent nature not fitting into an extrinsic domain (Fairbrother et al., 2010).

The results yielded a complex perspective of job satisfaction among nursing and midwifery participants. From the intrinsic standpoint, reflecting personal gratification and the value derived from the work (questions 1-6), it became evident that most participants found significant meaning in their work. For example, most participants strongly agreed 44.6% (N = 162) and 43.3% (N = 157) somewhat agreed that their work was meaningful to them. However, the results revealed that only 17.1% (N = 62) strongly agreed that their work had become more interesting in the past year.

The extrinsic factors included time management, opportunities, and support for patient/woman care, these results revealed there were apparent levels of dissatisfaction. Interestingly, only 6.6% (N = 24) of the participants expressed a strong agreement that they had enough time to provide high-quality patient/woman care. Furthermore, while 8.8% (N = 32) of

the participants strongly agree that they had enough opportunities to discuss patient/woman problems with their colleagues, a large proportion 43.2% (*N* = 157) of participants either somewhat disagreeing or strongly disagreeing with the statement. Moreover, an additional 45% (*N* = 162) of participants expressed that they either somewhat or strongly disagreed with how the ward/unit was currently being ran, suggesting potential challenges in workplace culture.

The relational component of the survey, which evaluated interpersonal relationships within the workplace, showed a largely positive atmosphere among the participants. A significant majority of participants, specifically 75.4% (*N* = 272), either strongly agreed or somewhat agreed that they could foster good friendships among their colleagues, and that they felt included in a team and were liked by their colleagues.

Notably, 53.6% (*N* = 194) of participants strongly agreed that they would function better if their ward/unit was less busy, indicating issues related to workload. However, despite this, a high percentage of participants 83.2% (*N* = 301) either strongly agreed or somewhat agreed that they felt clinically confident.

Table 12. Participants' Response to the Nursing Workplace Satisfaction Questionnaire

Types of Questions	*Question*	*Response rate (n)*	*Strongly agree n (%)*	*Somewhat agree n (%)*	*Neither agree nor disagree n (%)*	*Somewhat disagree n (%)*	*Strongly disagree n (%)*	*Mode Average*
Intrinsic	Q1. My job gives me a lot of satisfaction	363	78 (21.5)	186 (51.2)	39 (10.7)	47 (12.9)	13 (3.6)	2
	Q2. My job is very meaningful to me	363	162 (44.6)	157 (43.3)	28 (7.7)	14 (3.9)	2 (0.6)	1
	Q3. I am enthusiastic about my work	363	111 (30.6)	159 (43.8)	52 (14.3)	27 (7.4)	14 (3.9)	2
	Q4. My work gives me the opportunity to show my worth	363	75 (20.7)	151 (41.6)	46 (12.7)	57 (15.7)	34 (9.4)	2
	Q5. In the last year, my work has grown more interesting	362	62 (17.1)	81 (22.4)	98 (27.1)	80 (22.1)	41 (11.3)	3
	Q6. It is worthwhile to make an effort in my job	363	134 (36.9)	130 (35.8)	47 (12.9)	31 (8.5)	21 (5.8)	1
Extrinsic	Q7. I have enough time to deliver good care to patients/women	363	24 (6.6)	70 (19.3)	38 (10.5)	108 (29.8)	123 (33.9)	5
	Q8. I have enough opportunity to discuss patient/woman problems with my colleagues	363	32 (8.8)	111 (30.6)	63 (17.4)	109 (30)	48 (13.2)	2
	Q9. I have enough support from colleagues	363	77 (21.2)	134 (36.9)	66 (18.2)	60 (16.5)	26 (7.2)	2
	Q11. I feel able to learn on the job	362	58 (16)	141 (39)	49 (13.5)	79 (21.8)	35 (9.7)	2
	Q12. I feel isolated from my colleagues at work	362	27 (7.5)	95 (26.2)	82 (22.7)	104 (28.7)	54 (14.9)	4
Relational	Q15. It is possible for me to make good friends among my colleagues	361	118 (32.7)	154 (42.7)	55 (15.2)	27 (7.5)	7 (1.9)	2

Types of Questions	Question	Response rate (n)	Strongly agree n (%)	Somewhat agree n (%)	Neither agree nor disagree n (%)	Somewhat disagree n (%)	Strongly disagree n (%)	Mode Average
	Q16. I like my colleagues	362	156 (43.1)	162 (44.8)	34 (9.4)	9 (2.5)	1 (0.3)	2
	Q17. I feel that I belong to a team	362	141 (39)	140 (38.7)	41 (11.3)	29 (8)	11 (3)	1
	Q18. I feel that my colleagues like me	360	116 (32.2)	177 (49.2)	60 (16.7)	7 (1.9)	0 (0)	2
Stand-alone	Q10. I would function better if it was less busy on the ward/unit	362	194 (53.6)	99 (27.3)	51 (14.1)	15 (4.1)	3 (0.8)	1
	Q13. I feel confident, clinically	362	139 (38.4)	162 (44.8)	30 (8.3)	30 (8.3)	1 (0.3)	2
	Q14. I like the way my ward/unit is run	361	40 (11.1)	104 (28.8)	55 (15.2)	105 (29.1)	57 (15.8)	4

4.5 Gender

In the examination of job satisfaction differentiated by gender, the study comprised of a sample size of 363 participants, with 21 (5.8%) identifying as male and 342 (94%) as female. No participants identified as non-binary/other, and only one participant chose not to reveal their gender, which made further statistical analysis based on gender impractical for these categories.

The study implemented a Chi-Square test to examine the differences in intrinsic, extrinsic, and relational, and overall job satisfaction between males and females. The test did not yield significant results in any of the categories, indicating no substantial discrepancy in job satisfaction based on gender. The *p*-values were observed to be 0.1 for intrinsic job satisfaction, 0.955 for extrinsic job satisfaction, 0.599 for relational job satisfaction, and 0.633 for overall job satisfaction.

Despite the lack of statistically significant differentiation, the mean values for each type of job satisfaction were calculated separately for males and females (Figure 16). For male participants, the average intrinsic job satisfaction was reported to be 65.48%, with extrinsic satisfaction at 56.43%, relational satisfaction at 71.73%, and overall job satisfaction at 64.13%. Conversely, female participants showcased slightly different mean scores of 68.59% for intrinsic satisfaction, 50.78% for extrinsic satisfaction, 77.76% for relational satisfaction, and 65.08% for overall job satisfaction.

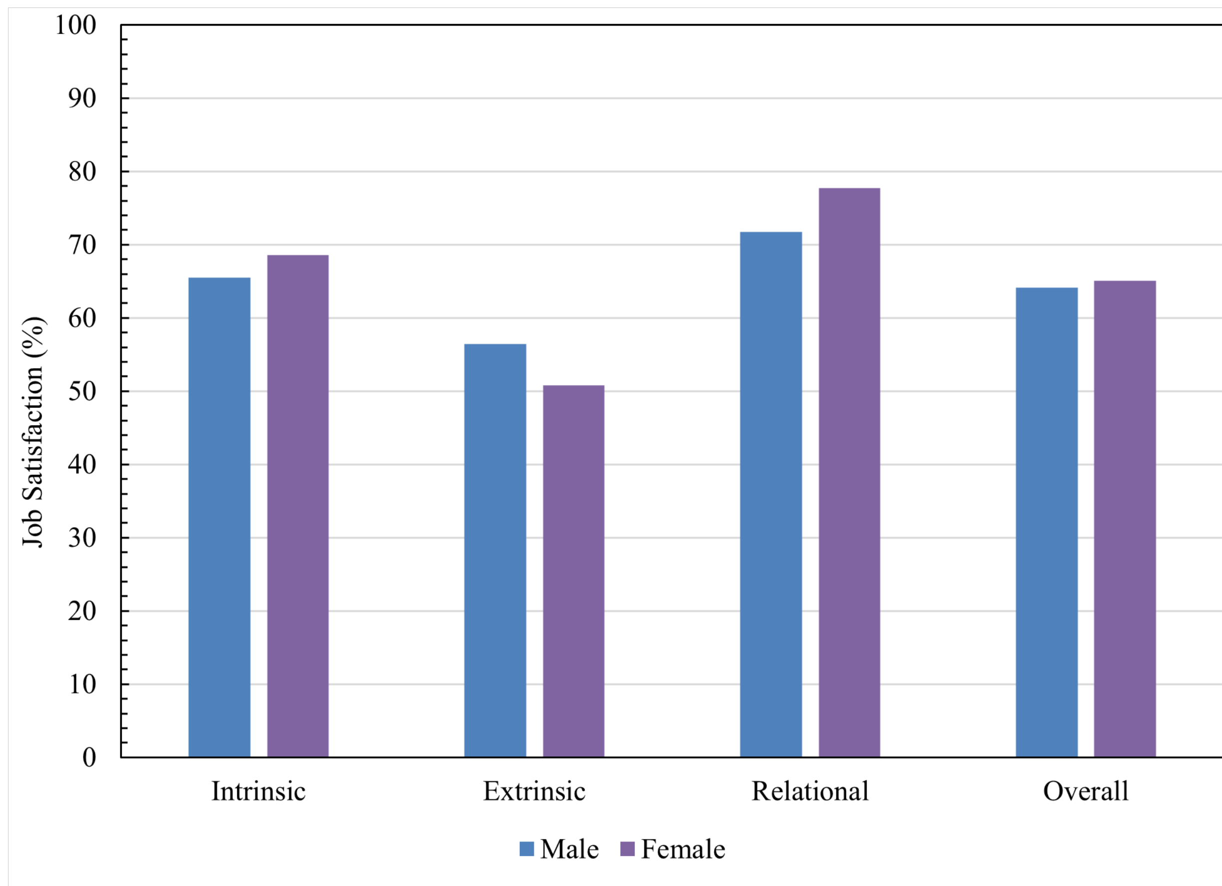


Figure 16. Job Satisfaction by Gender

4.6 Age

To explore the role of age, on participant job satisfaction a One-Way ANOVA test and Spearman's Correlation analysis was undertaken.

There were a total of 364 participants distributed across five age brackets, with the majority falling into the 26-35 years category 32.7% (*N* = 119), followed by participants in the 36-45 years bracket 26.1% (*N* = 95). The remaining participants were distributed fairly evenly across the 18-25 years, 46-55 years, and 55+ years brackets.

Four different facets of job satisfaction were examined, namely intrinsic, extrinsic, relational, and overall job satisfaction. It was found, through the application of the One-Way ANOVA test, that the differences in these areas across the age groups were not statistically significant.

When evaluating the mean values of job satisfaction, a general decline was observed in intrinsic job satisfaction as the age of participants increased (Figure 17). This trend was mirrored in overall job satisfaction, albeit with a slight rebound observed among the oldest age bracket (55+ years). Regarding extrinsic job satisfaction, the peak score was observed in the youngest

participant group (18-25 years), followed by a decrease among middle-aged participants and then a mild recovery in the oldest age participant brackets. In terms of relational job satisfaction, the results indicated minor variations with age, but without a distinct trend, with scores being lowest in the 46-55 years age bracket and highest in the 36-45 years age bracket.

Notably, the data suggest an intriguing inverse relationship between extrinsic and relational job satisfaction as age progresses. While this observation does not definitively establish a causality or explain the underlying reasons, it does uncover avenues for future exploration into how job satisfaction elements are prioritised with advancing age.

Using Spearman's Correlation analysis, the independent variable, age, was found to have minimal correlations with the four dependent variables of job satisfaction.

Although the data appears to trend towards a negative association between age and various aspects of job satisfaction, there was no statistically significant relationship identified. The relationship between age and intrinsic job satisfaction yielded (r_s = -0.075, p = 0.153), extrinsic job satisfaction showed (r_s = 0.008, p = 0.884), relational job satisfaction yielded (r_s = -0.010, p = 0.843), and overall job satisfaction with age was observed with (r_s = -0.045, p = 0.396).

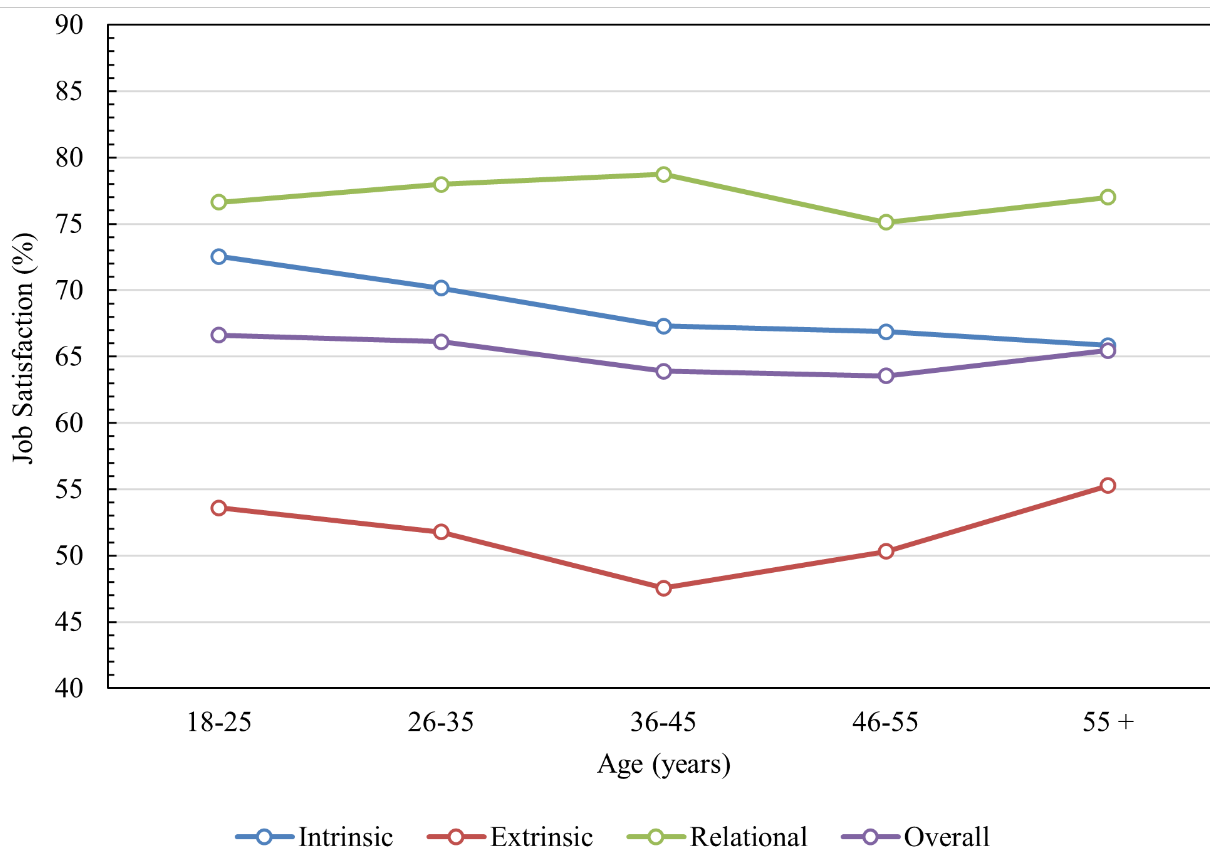


Figure 17. Job Satisfaction by Age

4.7 Profession

The investigation of job satisfaction across nurses and midwives, provided notable insights. Although a Chi-Square test was employed to detect potential discrepancies in intrinsic, extrinsic, and relational job satisfaction as well as overall job satisfaction, no significant differences were identified. Following the initial Chi-Square analysis, a One-Way ANOVA test was conducted, which revealed statistical significance in the relationship between job satisfaction levels among the groups.

The mean job satisfaction scores were calculated for each cohort, revealing only minor variations (Figure 18). For the nursing group, intrinsic job satisfaction was marked at 67.80%, extrinsic job satisfaction reported at 51.94%, relational job satisfaction at 76.26%, and overall job satisfaction was noted at 64.73%. Comparatively, midwives displayed slightly differing average scores of 68.75% for intrinsic satisfaction, a lesser 46.11% for extrinsic job satisfaction, a heightened 82.72% for relational job satisfaction, and an overall job satisfaction rate marginally surpassing the nurses at 65.29%. Although these discrepancies lack statistical significance, a noteworthy observation is that midwives reported a higher mean relational job satisfaction, yet a lower extrinsic job satisfaction than their nursing counterparts.

An additional layer of analysis was added by examining the satisfaction scores for participants practicing both professions concurrently. These practitioners generally reported higher satisfaction scores with intrinsic, extrinsic, and overall percentages reported as 73.41%, 47.02%, 67.38% respectively than either sole practicing registered nurses or registered midwives, except for relational satisfaction scores. In this case, practitioners of both professions scored highest (83.78%), followed by registered midwives (82.5%) and registered nurses (76.26%).

Applying the One-Way ANOVA test, it was determined that the only statistically significant difference among the professional groups was found in the relational percentage satisfaction scores ($F(2,356) = 3.601$, $p = 0.028$). In contrast, differences in intrinsic, extrinsic, and overall satisfaction scores were not statistically significant and could be attributed to chance. Further examination using the Tukey HSD multiple comparisons test demonstrated that the relational satisfaction score was significantly lower for registered nurses (76.26%) compared to participants practicing both professions (83.77%).

It is important to note that participants practicing both professions typically reported higher satisfaction scores, particularly in terms of relational satisfaction.

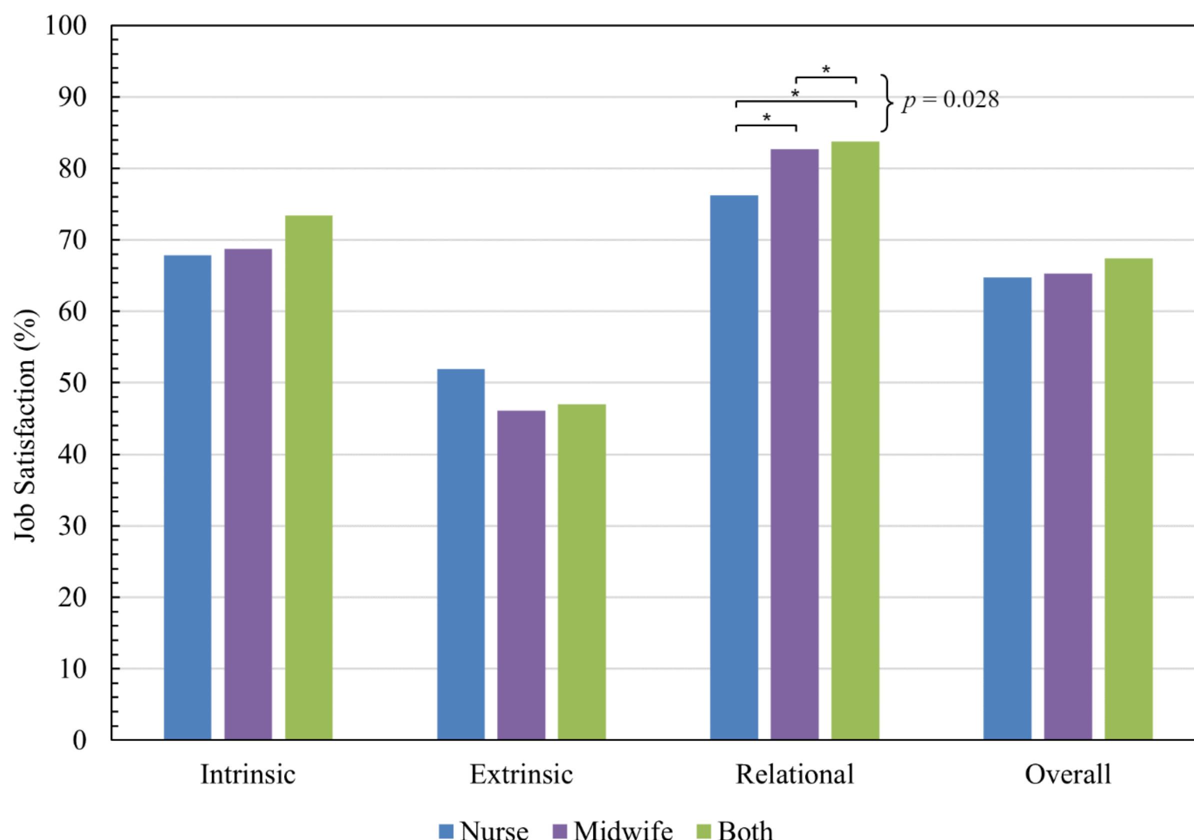


Figure 18. Job Satisfaction by Profession

4.8 Public vs Private Sectors

The study extended its analysis to compare job satisfaction between employees working in public and private sectors. Out of the total participants, 236 (65.2%) were employed in the public sector, while 100 (27.6%) participants were in the private sector, 26 (7.2%) worked across both public and private sectors. Two participants did not give a response to this question.

Chi-Square tests were utilised to probe any differences in intrinsic, extrinsic, and relational job satisfaction, as well as overall job satisfaction between the two sectors. The tests showed no significant differences, with the *p*-values standing at 0.221 for intrinsic job satisfaction, 0.426 for extrinsic job satisfaction, 0.273 for relational job satisfaction, and 0.890 for overall job satisfaction.

Variations were noted across public and private sector employees across the job satisfaction domains (Figure 19). Whilst these differences were not statistically significant using

Chi-Squared analysis, the data trends suggest greater job satisfaction in those working in the private sector.

Mean scores for each type of job satisfaction were calculated for both sectors (Figure 19). In the public sector, the average scores were found to be 68.71% for intrinsic satisfaction, 51.21% for extrinsic satisfaction, 76.92% for relational satisfaction, and 65.14% for overall job satisfaction. In contrast, in the private sector, the average scores were marginally different with 68.43% for intrinsic satisfaction, 53.23% for extrinsic satisfaction, 80.93% for relational satisfaction, and 66.46% for overall job satisfaction.

Statistical analysis of intrinsic job satisfaction using the One-Way ANOVA indicated no significant differences among the public, private, or both sectors ($F(2,357) = 0.265$, $p = 0.767$). The mean intrinsic satisfaction scores in all three sectors were relatively similar, suggesting that the sector of work does not significantly influence employees' intrinsic satisfaction.

A more nuanced picture emerged in the analysis of extrinsic job satisfaction. Here, the One-Way ANOVA test showed significant variations in job satisfaction across different sectors ($F(2,357) = 3.420$, $p = 0.034$). A follow-up Tukey HSD post hoc test revealed that participants working in both sectors experienced significantly lower extrinsic job satisfaction compared to those exclusively in the private sector ($p = 0.026$).

Considering relational job satisfaction, significant differences were once again noted across the sectors ($F(2,354) = 4.878$, $p = 0.008$) indicating that those employed in the private sector had significantly higher relational job satisfaction in comparison to their counterparts in the public sector. As determined by the Tukey HSD post hoc test, participants working in both sectors reported lower relational job satisfaction than their counterparts in the private sector ($p = 0.007$).

In the case of overall job satisfaction, although there were no significant differences among the sectors ($F(2,353) = 2.639$, $p = 0.073$), a possible trend was suggested. The Tukey HSD post hoc test indicated a tendency for employees working in both sectors to have lower overall job satisfaction compared to those in the public ($p = 0.099$) or private sector ($p = 0.059$).

While the sector of work did not seem to affect intrinsic job satisfaction, it significantly influenced both extrinsic and relational job satisfaction. Nurses and midwives working in both public and private sectors generally experienced lower extrinsic and relational job satisfaction compared to those working solely in the private or public sector. Moreover, there was a trend toward lower overall job satisfaction for employees involved in both sectors.

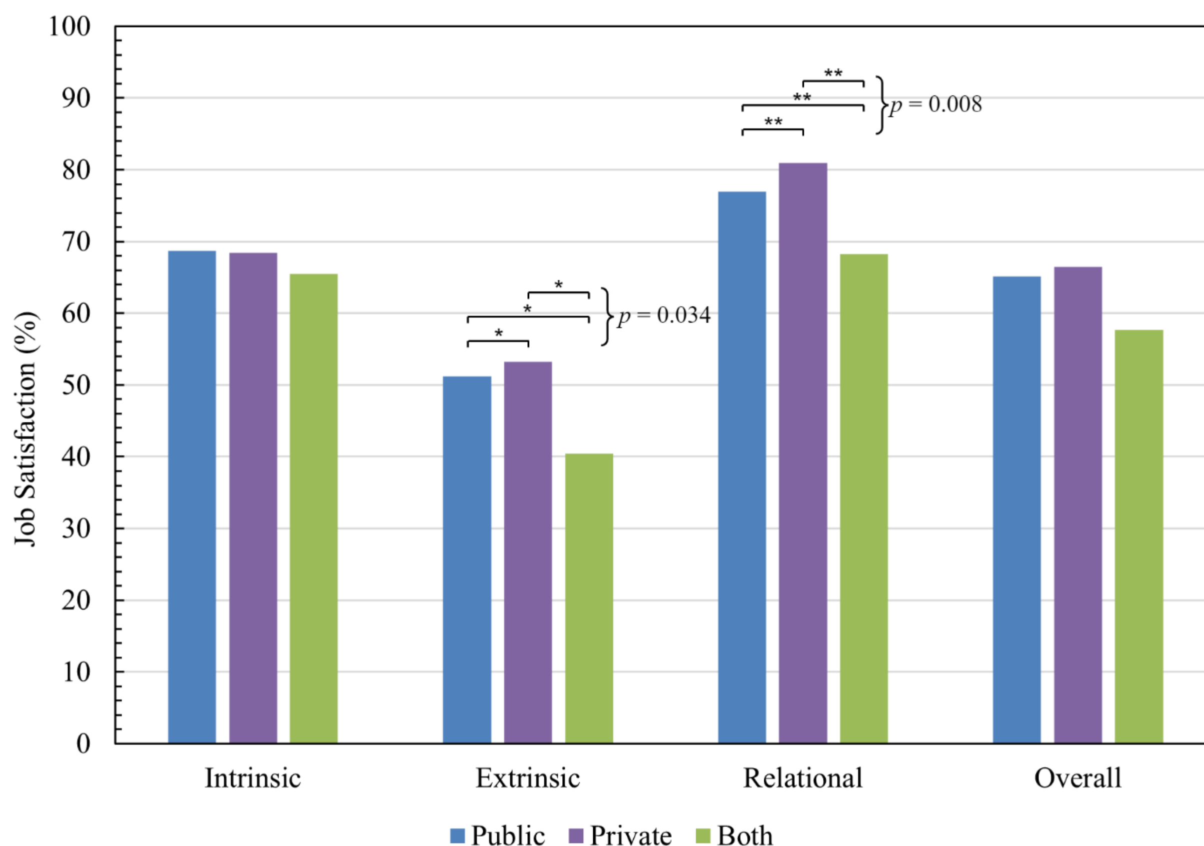


Figure 19. Job Satisfaction by Sector

4.9 Role

In this section, the analysis employed the One-Way ANOVA, followed by the Tukey HSD post hoc test on data gathered from different clinical roles including Perioperative registered nurses (RN), Acute Care Bedside RN, Specialist RN in Critical Care, Antenatal/Postnatal registered midwives (RM), Staff Development RN, Birth Suite RM, Mental Health RN, Community RN, Leadership/Higher Management, and Clinical Nurse Specialist.

The mean scores were calculated for each role recorded (Figure 20). The Perioperative RN and Acute Care Bedside RN roles reported similar intrinsic satisfaction (63.39% and 63.61% respectively), while the highest intrinsic satisfaction was reported by the Clinical Nurse

Specialist role at 73.72%. The Mental Health RN and Community RN roles were close behind, with intrinsic job satisfaction percentages of 70.49% and 72.14%, respectively.

The analysis used One-Way ANOVA to compare mean job satisfaction domain scores across the roles, and the Levene's test for homogeneity of variances was conducted for each satisfaction category. The results of this test were not significant, indicating that the assumption of homogeneity of variances was met. However, the results of the One-Way ANOVA tests were also not significant for any of the job satisfaction categories. The F statistic was not significant for intrinsic satisfaction ($F(9,308) = 1.068$, $p = 0.386$), extrinsic satisfaction ($F(9,307) = 1.517$, $p = 0.141$), relational satisfaction ($F(9,304) = 1.317$, $p = 0.227$), or overall satisfaction ($F(9,304) = 1.199$, $p = 0.295$). The Tukey HSD test was applied due to the unequal sizes of the groups, which utilised the harmonic mean of the group sizes to account for these discrepancies. The analysis revealed no significant difference in intrinsic job satisfaction across the different roles ($p = 0.850$).

Extrinsic job satisfaction also did not demonstrate any significant differences across the roles ($p = 0.060$), although the range of percentages reported was broader than that of intrinsic satisfaction. The Antenatal/Postnatal RM role reported the lowest extrinsic satisfaction at 44.23%, while the Mental Health RN role reported the highest at 65%.

The analysis of relational job satisfaction displayed no significant variance across the roles ($p = 0.466$). The Community RN role reported the lowest percentage (72.92%), while the Birth Suite RM role reported the highest at 85.16%.

Lastly, overall job satisfaction also showed no significant differences among the various roles ($p = 0.612$). The Acute Care Bedside RN role exhibited the lowest overall job satisfaction at 61.72%, while the Mental Health RN role showed the highest at 71.94%.

The absence of significant differences across the different roles in all the job satisfaction measures - intrinsic, extrinsic, relational, and overall indicates that job satisfaction levels may not be distinctly influenced by the role itself.

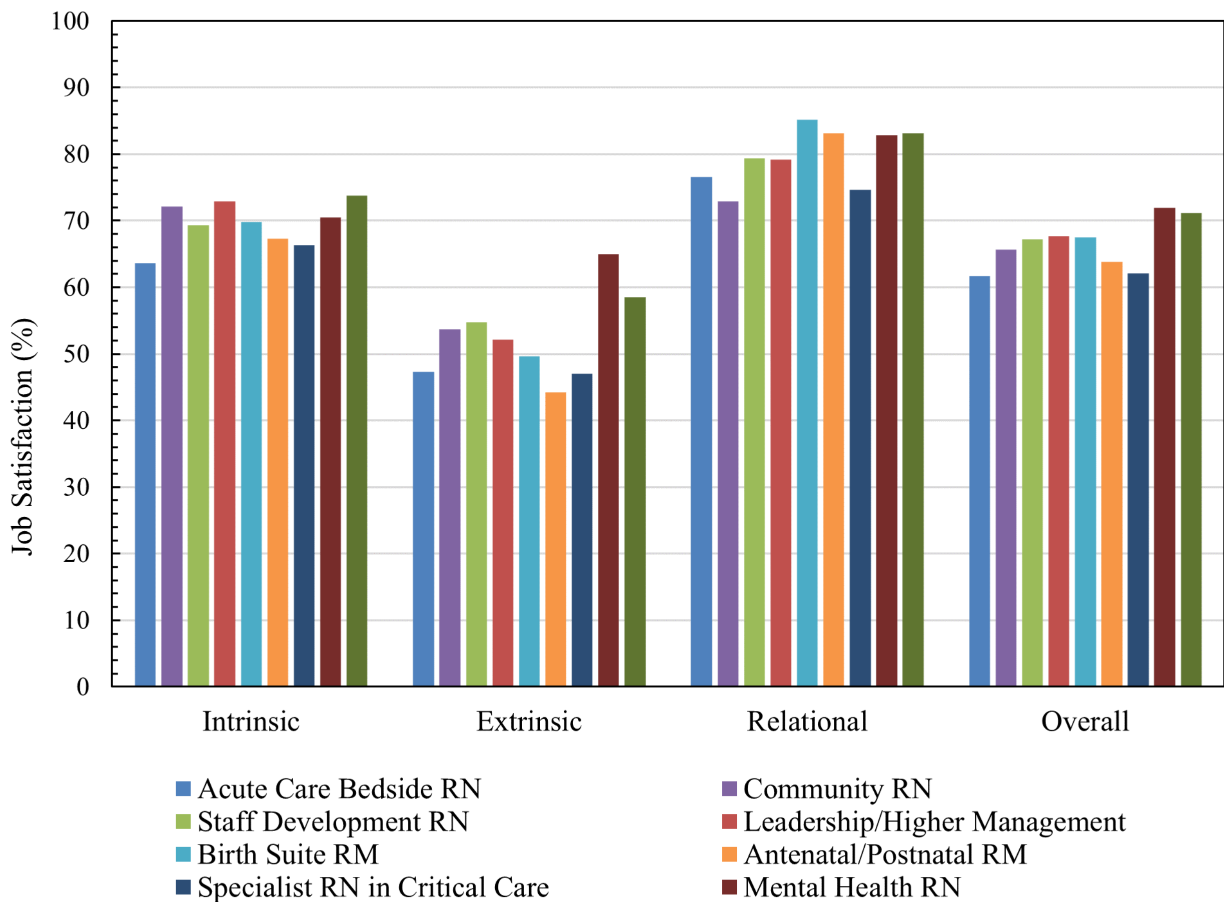


Figure 20. Job Satisfaction by Role

4.10 Experience

This section examines the comparison of years of experience as a nurse or midwife in relation to the intrinsic job satisfaction, extrinsic job satisfaction, relational job satisfaction, and overall satisfaction percentages. The categories for years of experience include 0-3 years, 4-10 years, 11-15 years, 16-20 years, and over 21 years.

The mean values were calculated and displayed in Figure 21. Beginning with the intrinsic percentage, those with 0-3 years of experience had a mean score of 75.63%. As the years of experience increased, the mean intrinsic score tended to decrease, with the lowest mean observed in those with over 21 years of experience 66.03%. For extrinsic percentage, the highest mean value (55.53%) was observed in the 0-3 years' experienced group of nurses and midwives, with the lowest mean (48.38%) in the nurses and midwives with 11-15 years of experience group.

When it comes to the relational percentage, there was less variation in the mean scores across the different experience groups. The highest mean value (81.68%) was seen in the 16-20

years' experience group, while the lowest mean value (76.52%) was seen in the 4-10 years' experience group. The overall percentage, which represents the combination of intrinsic, extrinsic, and relational percentages, also revealed a similar trend, with the highest mean score (69.47%) in the 0-3 years' experience group and the lowest mean score (62.16%) in the 11-15 years' experience group.

Levene's test of homogeneity of variances revealed no significant differences between the experience groups for any of the percentage variables. This suggests that the variance in scores across the different years of experience is relatively equal for all four percentages.

However, the One-Way ANOVA tests indicated that there was a significant difference between the experience groups for the intrinsic job satisfaction percentage ($F(4,357) = 3.259$, $p = 0.012$). No significant differences were found for the extrinsic, relational, or overall percentages.

Further post hoc analyses using Tukey HSD test revealed that the only significant mean difference for intrinsic job satisfaction percentage was between the 0-3 years and 11-15 years' experience groups ($p = 0.021$), with the 0-3 years group having a significantly higher mean intrinsic percentage, indicating higher job satisfaction.

Finally, effect size estimates showed that the effect of years of experience on the intrinsic percentage was small to moderate ($\eta^2 = 0.035$, $\omega^2 = 0.006$). This indicates that the years of experience account for a small to moderate amount of the variance in the intrinsic percentage scores. In contrast, the effect sizes for the extrinsic, relational, and overall percentages were negligible.

The years of experience held by participants appeared to have a small to moderate impact on the intrinsic job satisfaction of nurses and midwives, with those in the earliest stage of their career (0-3 years) showing the highest level of intrinsic job satisfaction.

Years of experience showed a small but statistically significant negative correlation with intrinsic job satisfaction ($r_s = -0.142$, $p = 0.007$), indicating decrease in intrinsic job satisfaction as years of experience increase. In contrast, years of experience exhibited an insignificant correlation with extrinsic job satisfaction ($r_s = -0.045$, $p = 0.393$) and relational job satisfaction

(r_s = 0.025, p = 0.632). These results suggest that years of experience have no significant association with these two facets of job satisfaction. Overall job satisfaction was slightly negatively correlated with years of experience (r_s = -0.102, p = 0.053), although this correlation was marginally non-significant, suggesting that as years of experience increase, overall job satisfaction does not necessarily decrease in a meaningful way.

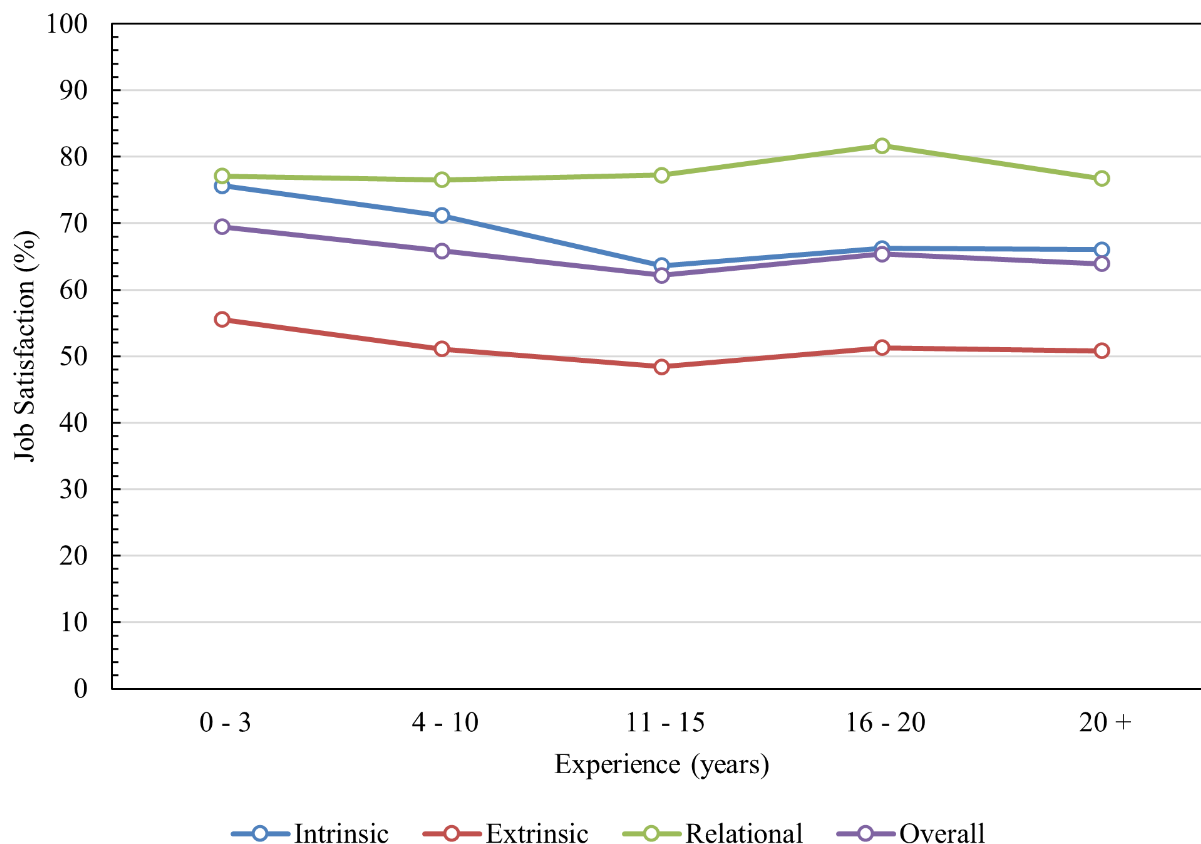


Figure 21. Job Satisfaction by Experience

4.11 Education

In the analysis of the variance in job satisfaction based on level of education, it was observed that the mean intrinsic satisfaction score was highest for participants with a Master's degree or PhD (70.05%), followed by those with a Bachelor or entry-level degree (69.10%), and finally, participants holding a Postgraduate Certificate or Diploma (67.09%) (Figure 22). However, the differences were not statistically significant, (F(2, 357) = 0.593, p = 0.553). In terms of extrinsic satisfaction, there were no significant differences based on the level of education, (F(2, 357) = 2.448, p = 0.088). Similarly, the analysis of relational job satisfaction showed no significant differences among the three education levels, (F(2, 354) = 0.332, p = 0.718).

In analysing the overall job satisfaction, the mean satisfaction was highest for participants with a Master's degree or PhD (67.09%), then those with a Bachelor or entry-level degree (65.66%), and the lowest for those with a Postgraduate Certificate or Diploma (63.67%), ($F(2, 353) = 1.097$, $p = 0.335$).

Thus, the results suggest that the level of education does not significantly influence job satisfaction among the participants. These results indicate that other factors may be more significant predictors of job satisfaction than the level of education.

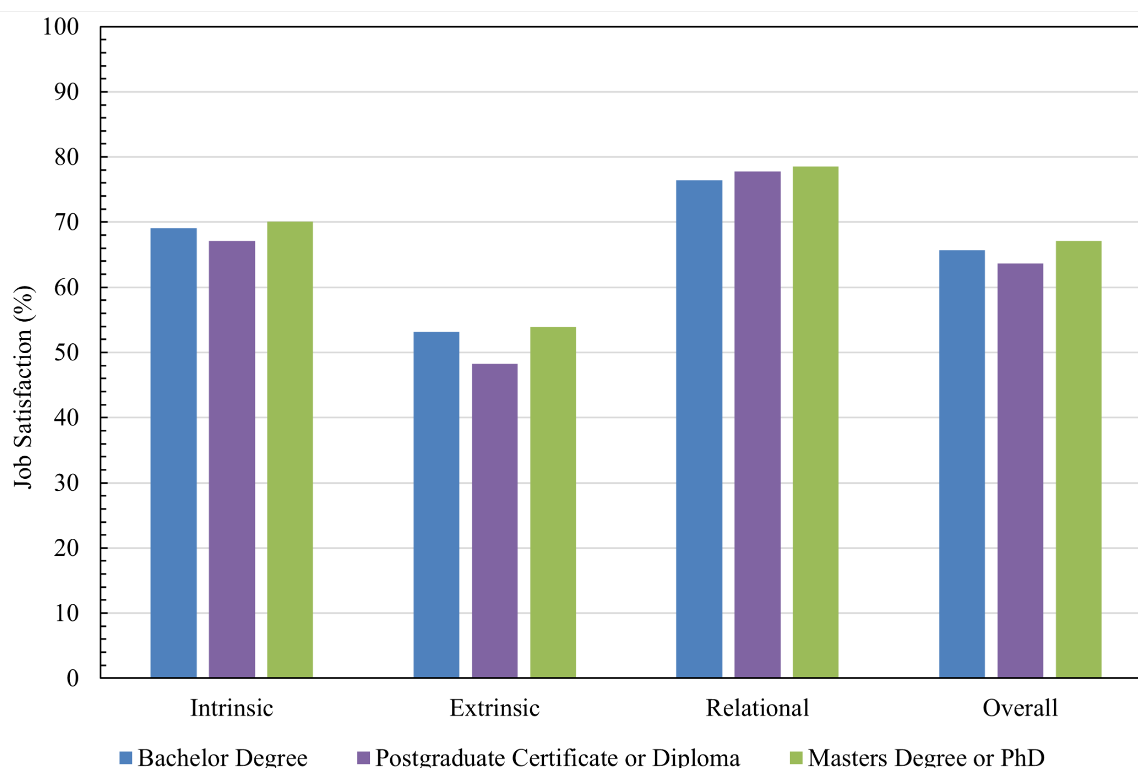


Figure 22. Job Satisfaction by Education

4.12 State

The comparison of job satisfaction among nurses and midwives was made between Western Australia (WA) and the other states and territories. Since I am based in WA, I had greater industry connections here. As a result, the sample size from this region was naturally larger. Equally, the other states and territories, experiencing more protracted and stringent lockdowns, higher numbers of COVID-19 positive cases, and stricter quarantine measures than WA, were analysed as a single group. This grouping allowed for a focused comparison, reflecting both the unique sample size considerations and the varying impacts of COVID-19. The sample included participants from Western Australia (N = 197) and from the combined Eastern States and Northern Territories (N = 166).

Chi-Square tests were utilised to determine any significant differences in intrinsic, extrinsic, and relational job satisfaction, as well as overall job satisfaction between WA and the other states and territories. However, the results did not show significant variances, with *p*-values standing at 0.900 for intrinsic job satisfaction, 0.118 for extrinsic job satisfaction, 0.291 for relational job satisfaction, and 0.630 for overall job satisfaction.

Though the test results were statistically insignificant, mean scores for job satisfaction types were calculated for each region (Figure 23 and Figure 24). For the other states and territories, the averages were 67.97% for intrinsic satisfaction, 50.17% for extrinsic satisfaction, 75.34% for relational satisfaction, and 63.97% for overall job satisfaction. In contrast, for WA, the averages were 66.94% for intrinsic satisfaction, 48.88% for extrinsic satisfaction, 78.16% for relational satisfaction, and 63.98% for overall job satisfaction.

A noteworthy observation from the results is the slightly higher relational job satisfaction mean score for nurses and midwives in WA compared to those in the other states and territories. Interestingly, despite this, extrinsic job satisfaction mean was lower in WA where the relational satisfaction was higher.

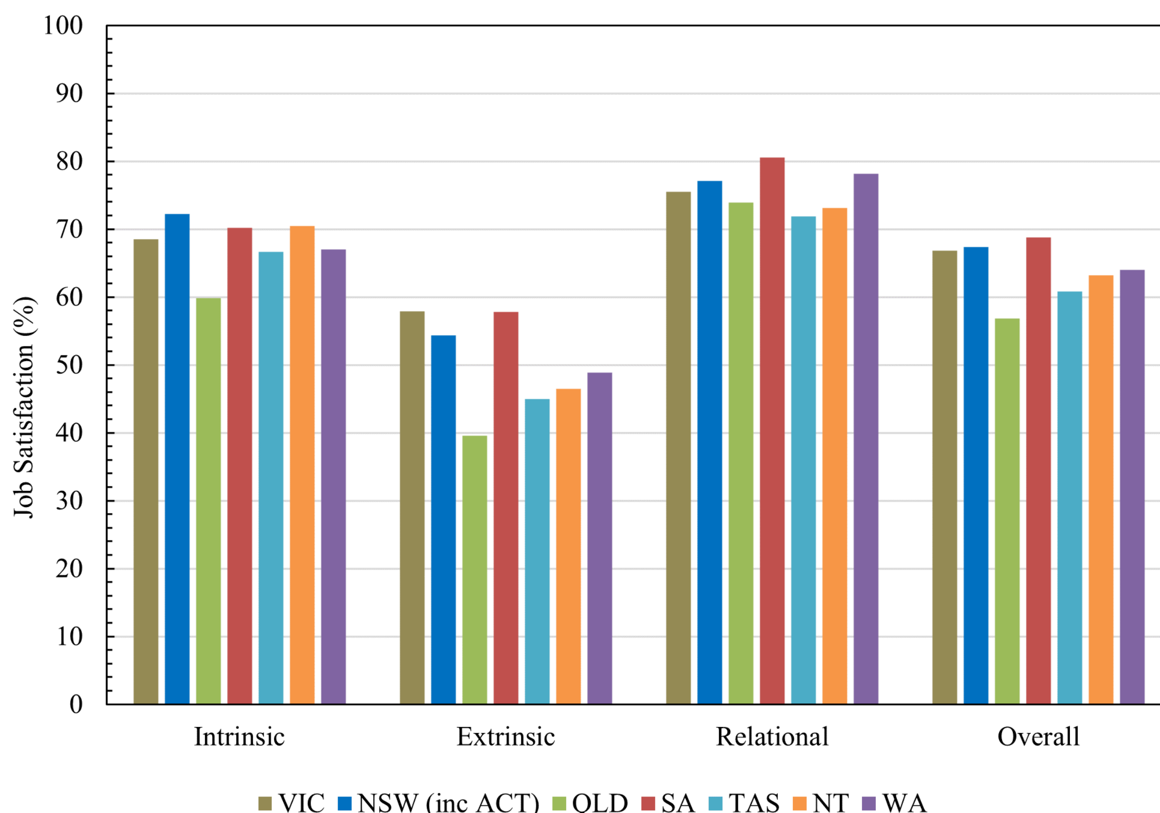


Figure 23. Job Satisfaction by State

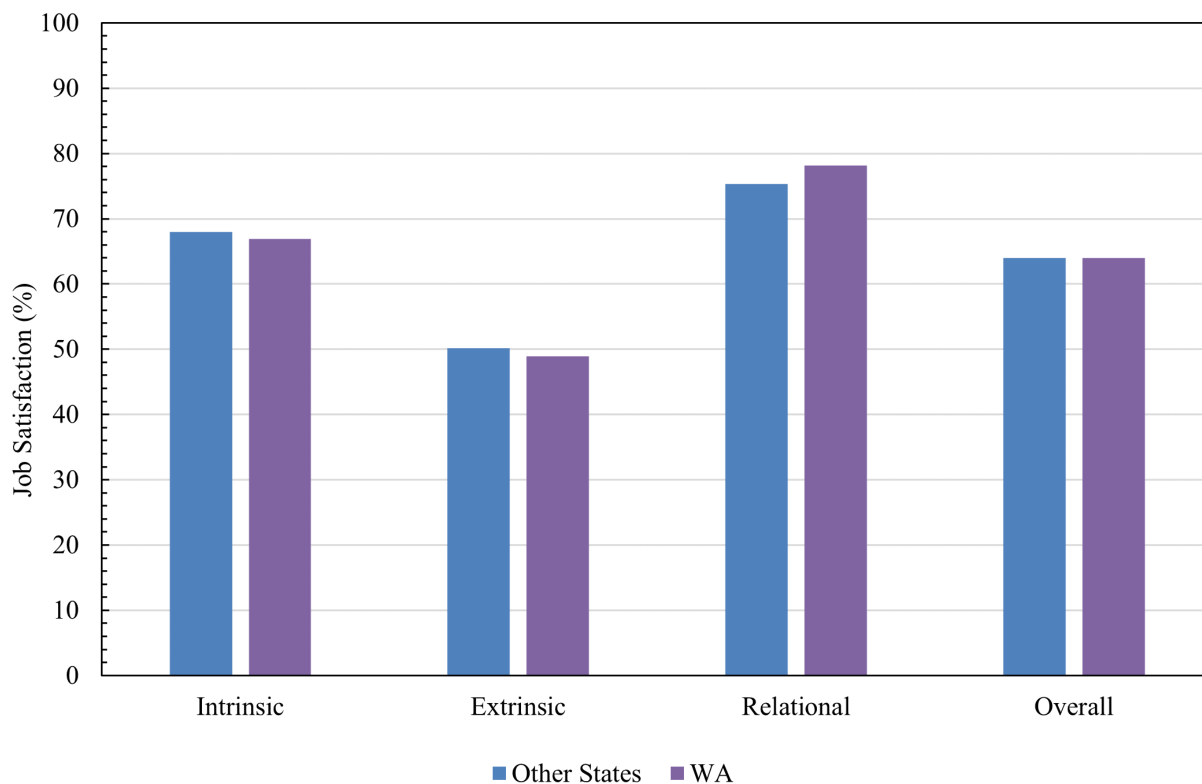


Figure 24. Job Satisfaction by State – Western Australia vs Other States and Territories

4.13 Hours per Week

For intrinsic job satisfaction, there was a slight variation across different hours worked per week. The mean satisfaction for those who worked 35 or more hours was approximately 70.50%, 67.40% for those who worked 15-34 hours, and 70.83% for those who worked less than 15 hours per week (Figure 25). However, the One-Way ANOVA test did not find a significant difference between these means ($F(2,329) = 0.923$, $p = 0.398$).

Similarly, extrinsic job satisfaction showed small differences across the groups. The average satisfaction for participants who worked 35 or more hours, 15-34 hours, and less than 15 hours per week were 52.78%, 49.49%, and 58.89%, respectively. Again, the One-Way ANOVA test did not identify these differences as statistically significant ($F(2,329) = 1.391$, $p = 0.250$). The relational job satisfaction appeared to increase with fewer hours worked per week. Yet, the One-Way ANOVA test did not find this trend to be significant ($F(2,327) = 0.271$, $p = 0.763$).

In terms of overall job satisfaction, the results were similar to those of intrinsic and extrinsic satisfaction. Participants who worked 35 or more hours had an average satisfaction

score of 66.26%, those who worked 15-34 hours had a mean score of 64.25%, while those who worked less than 15 hours had a mean score of 68.70%. However, these differences were not statistically significant ($F(2,326) = 0.745$, $p = 0.476$).

These results suggest that the number of hours worked per week does not significantly impact the intrinsic, extrinsic, relational, or overall job satisfaction of the participants in this study.

Using the Spearman's Correlation analysis, the independent variable was the number of hours worked per week. The primary focus of this analysis was to determine if there was a correlation between the number of hours worked per week and these job satisfaction categories. Intrinsic job satisfaction ($r_s = -0.061$, p = 0.264), extrinsic job satisfaction ($r_s = -0.050$, p = 0.365), and overall job satisfaction ($r_s = -0.024$, p = 0.667) exhibited a tendency toward a weak negative correlation. Conversely, relational job satisfaction ($r_s = 0.049$, p = 0.379) showed a trend toward a weak positive correlation. The analysis did not yield any statistically significant relationships among job satisfaction based on hours worked per week.

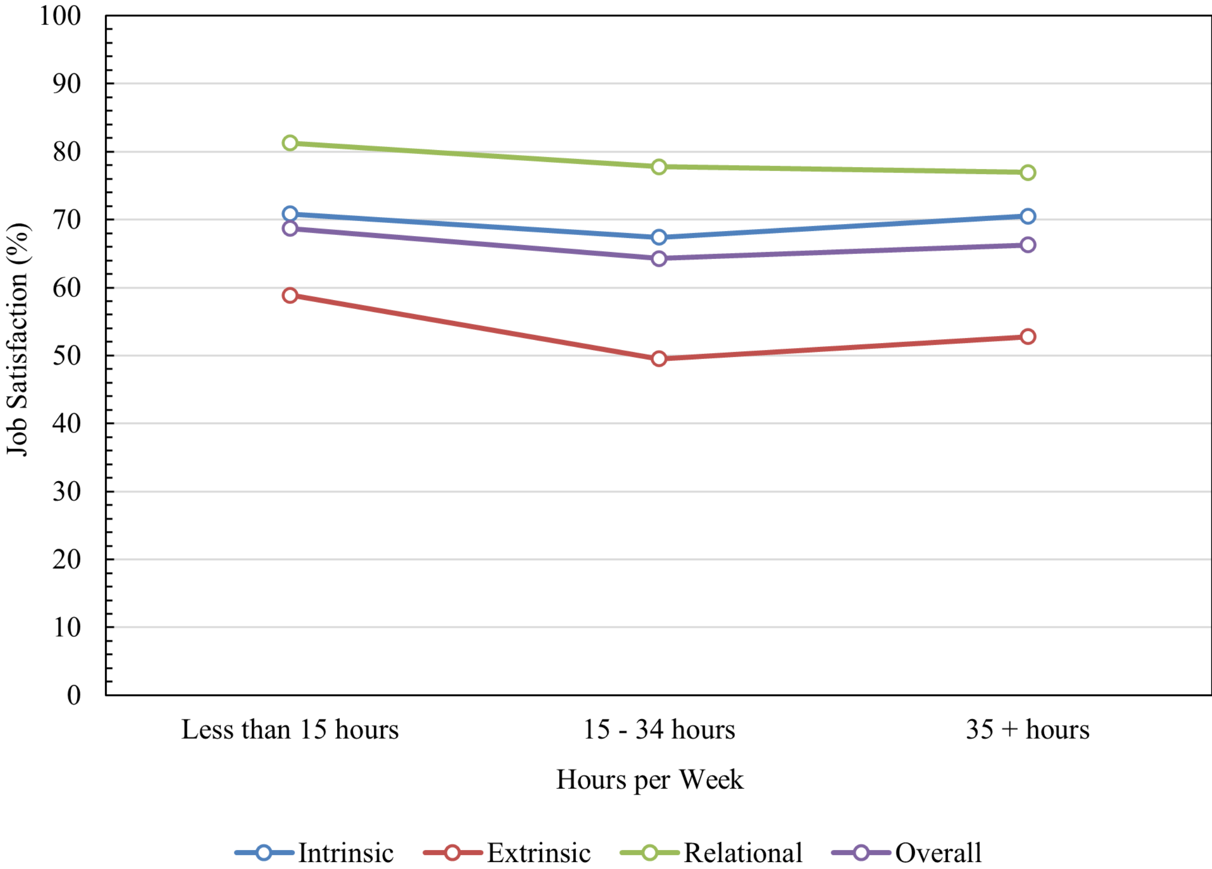


Figure 25. Job Satisfaction by Hours per Week

4.14 Overtime Frequency

The results for participants who worked overtime shifts fairly regularly, between 3-4 shifts a month, exhibited a lower mean intrinsic percentage (65.53%) in comparison to those who never worked overtime (68.26%) (Figure 26). A corresponding trend was noticed for the extrinsic and overall percentages. However, in the case of the relational percentage, the mean percentage increased alongside the frequency of overtime shifts, with the highest average observed for the group that worked overtime 'Fairly often'.

To evaluate the homogeneity of variances across the groups within each category, Levene's test was performed. This test demonstrated proved homogeneity for variances in the categories 'Relational Percentage' and 'Overall Percentage' ($p < 0.05$).

The One-Way ANOVA test was utilised to compare the means across the groups within each category of job satisfaction. This test yielded a non-statistically significant difference in means for all the categories.

The frequency of overtime shifts was found to have little to no influence on the intrinsic, extrinsic, relational, and overall percentages among the participants. The single exception was observed in the elevated extrinsic percentage among participants who regularly worked six or more overtime shifts a month compared to those who worked overtime 1-2 shifts a month.

The Spearman's Correlation test was employed to investigate the relationship between overtime frequency and intrinsic, extrinsic, relational, and overall job satisfaction. Whilst the data appeared to trend towards a correlation being detected between intrinsic job satisfaction and overtime frequency ($r_s = 0.017$, $p = 0.748$), there was no statistically significant relationship identified.

The correlation between extrinsic job satisfaction and overtime frequency was negative and statistically significant at the p 0.05 level ($r_s = -0.104$, $p = 0.049$). This suggests that as overtime frequency increases, extrinsic job satisfaction experiences a slight decline.

Whilst relational job satisfaction trended towards a positive correlation it was deemed not to be a statistically significant correlation with overtime frequency ($r_s = 0.085$, $p = 0.107$). This does however hint at a possible trend where higher overtime frequency could coincide with a

slight increase in relational job satisfaction, though this association falls short of the conventional threshold for statistical significance.

Lastly, the correlation between overall job satisfaction and overtime frequency was non-significant (r_s = -0.015, p = 0.775). This implies that overall job satisfaction is likely unaffected by changes in overtime frequency within the sample group studied.

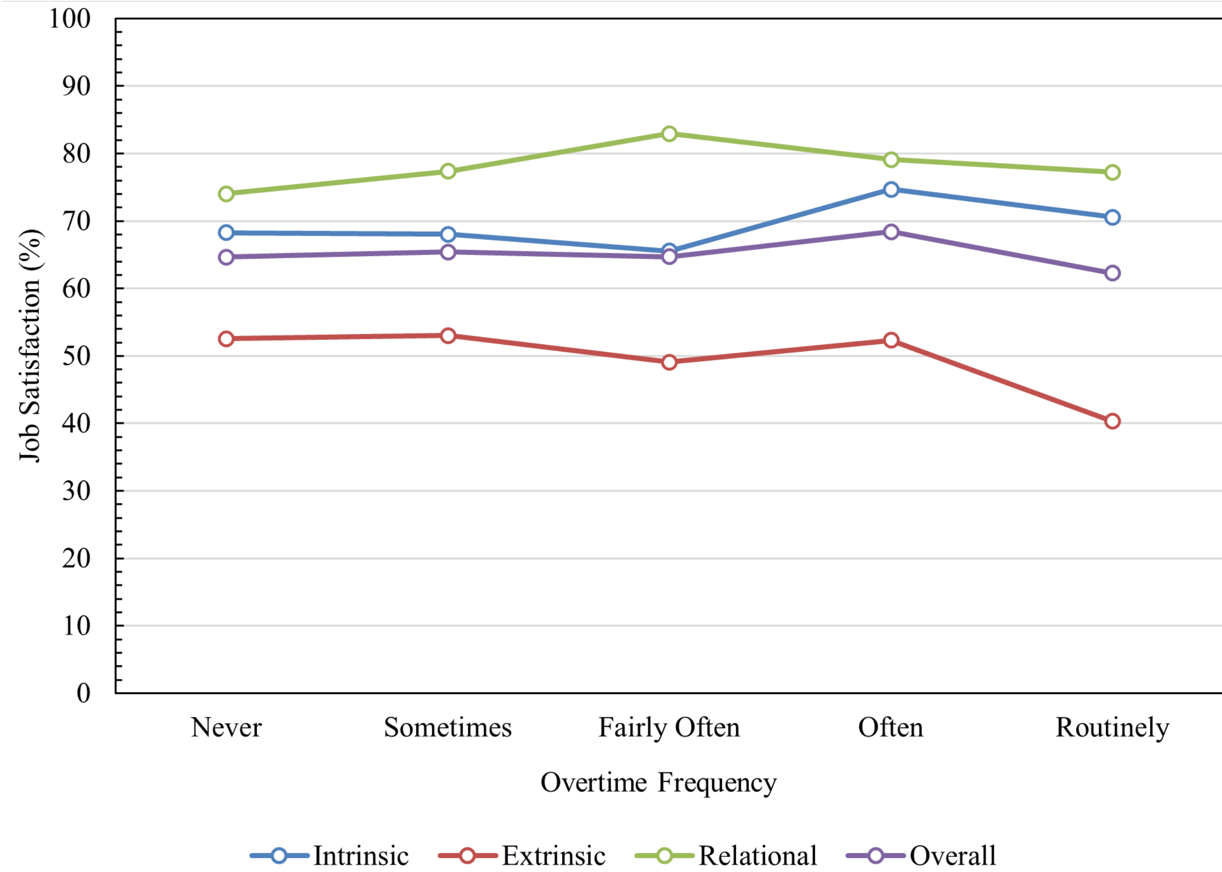


Figure 26. Job Satisfaction by Overtime Frequency

4.15 Hours per Shift

The results of the One-Way ANOVA test revealed no significant differences in intrinsic job satisfaction across the three shift durations < 8 hours, 8.1-10 hours, and >10.1 hours, (F(2, 358) = 0.800, p = .450). Similarly, relational job satisfaction did not significantly differ across the shift lengths, (F(2, 355) = 2.032, p = 0.133), nor did overall job satisfaction percentage, (F(2, 354) = 2.371, p = .095).

The results revealed a trend towards significance for the percentage of extrinsic job satisfaction. There was marginal variability in the mean extrinsic job satisfaction across the three

shift durations ($F(2, 358) = 2.857$, $p = 0.059$). For shifts of less than 8 hours, the mean extrinsic job satisfaction was 53.679% (Figure 27). This was slightly higher than the shifts between 8.1 and 10 hours, which had a mean extrinsic job satisfaction of 51.122%. Both were higher than for shifts longer than 10.1 hours, where the mean was 44.70%.

Tukey HSD post hoc test revealed a significant difference in extrinsic job satisfaction between the groups working less than 8 hours and those working more than 10.1 hours. Specifically, participants who worked less than 8 hours exhibited a higher percentage of extrinsic job satisfaction (53.679%) compared to those who worked more than 10.1 hours (44.70%). The mean difference was 8.979 ($p = 0.046$), indicating statistical significance.

The Levene's test showed that the assumption of homogeneity of variances was met for all job satisfactions across the three different shift lengths ($p > 0.05$). This indicates that the variances of the different groups are not significantly different, lending support to the reliability of the One-Way ANOVA results.

The shift length appears to have little impact on the intrinsic, relational, and job satisfaction of nurses and midwives. However, a longer shift length (>10.1 hours) may be associated with a lower extrinsic job satisfaction.

The Spearman's Correlation analysis was performed with 'hours per shift' as the independent variable and four categories of job satisfaction. In the case of extrinsic job satisfaction, a weak negative correlation with hours per shift was found to be significant at the 0.05 level ($r_s = -.111$, $p = 0.035$). This signifies that an increase in the hours per shift could lead to a decrease in extrinsic job satisfaction, and this correlation was statistically significant. Relational job satisfaction presented a weak, negative correlation with hours per shift ($r_s = -0.097$, $p = 0.068$), hinting at a slight decline in relational job satisfaction as shift duration escalates. This correlation, while not deemed statistically significant is approaching the boundary of significance. Similarly, a weak, negative correlation was observed between overall job satisfaction and hours per shift ($r_s = -0.101$, $p = 0.057$). Although this trend suggests a marginal decrease in overall job satisfaction as hours per shift increase, the correlation narrowly surpasses the conventional $p = 0.05$ cut-off.

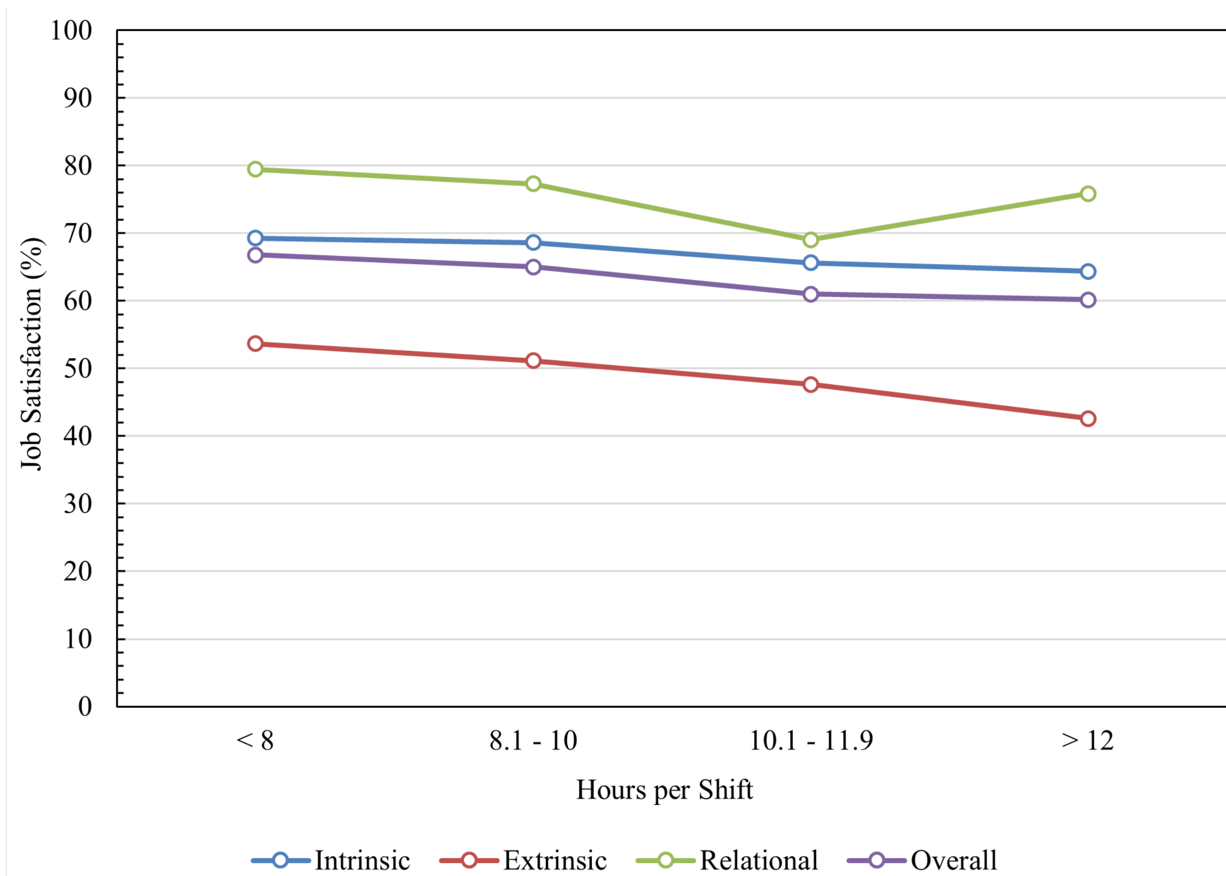


Figure 27. Job Satisfaction by Hours per Shift

4.16 Contentment

The Contentment demographic was developed based on participants' responses to a specific question from the survey 'Have you considered, or have you already left your job or profession in the last 2 years?' The potential responses to this question are catalogued in Table 13.

Responses falling under Row 1 were classified as demonstrating 'Content', indicating that these participants had not considered leaving their job or profession in the past two years. Contrastingly, participants who selected options in Rows 2, 3, and 5 were categorised as 'Discontent', indicating that they had considered or had already left their job or profession within the same timeframe.

Responses corresponding to Row 4 were excluded from this classification due to ambiguity in the interpretation. It was not clear whether these responses indicated contentment or discontentment with the job or profession. Consequently, the Contentment demographic

provides a dichotomous measure of perceived job contentment versus discontentment, based on participants' reported consideration or action to leave their current job or profession.

Table 13. Survey Question

#	*Have you considered, or have you already left your job or profession in the last 2 years?*
1	No, I am content with my job and profession
2	Yes, I have considered leaving my job on more than 5 occasions in the last 2 years
3	Yes, I have considered leaving my profession on more than 5 occasions in the last 2 years
4	Yes, I have left my job in the last 2 years
5	Yes, I have left the profession for an alternative career pathway in the last 2 years

The study also explored the perceptions of participants, comparing job satisfaction between self-reported content and discontent participants. Of the participants, 79 were categorised as being contented with their job, while 222 were categorised as being discontented.

Significant differences were noted across all categories of job satisfaction via the Chi-Square test. The *p*-values were observed to be 0.01 for intrinsic job satisfaction, extrinsic job satisfaction, relational job satisfaction, and overall job satisfaction, demonstrating a statistically significant difference in job satisfaction between content and discontent participants.

Furthermore, the analysis of mean job satisfaction scores presented distinct contrasts (Figure 28). Content participants scored notably higher on all aspects of job satisfaction. The average scores were 83.86% for intrinsic satisfaction, 69.37% for extrinsic satisfaction, 86.30% for relational satisfaction, and 79.53% for overall job satisfaction. Conversely, the average scores for discontent participants were substantially lower, with 62.80% for intrinsic satisfaction, 44.00% for extrinsic satisfaction, 72.74% for relational satisfaction, and 58.88% for overall job satisfaction.

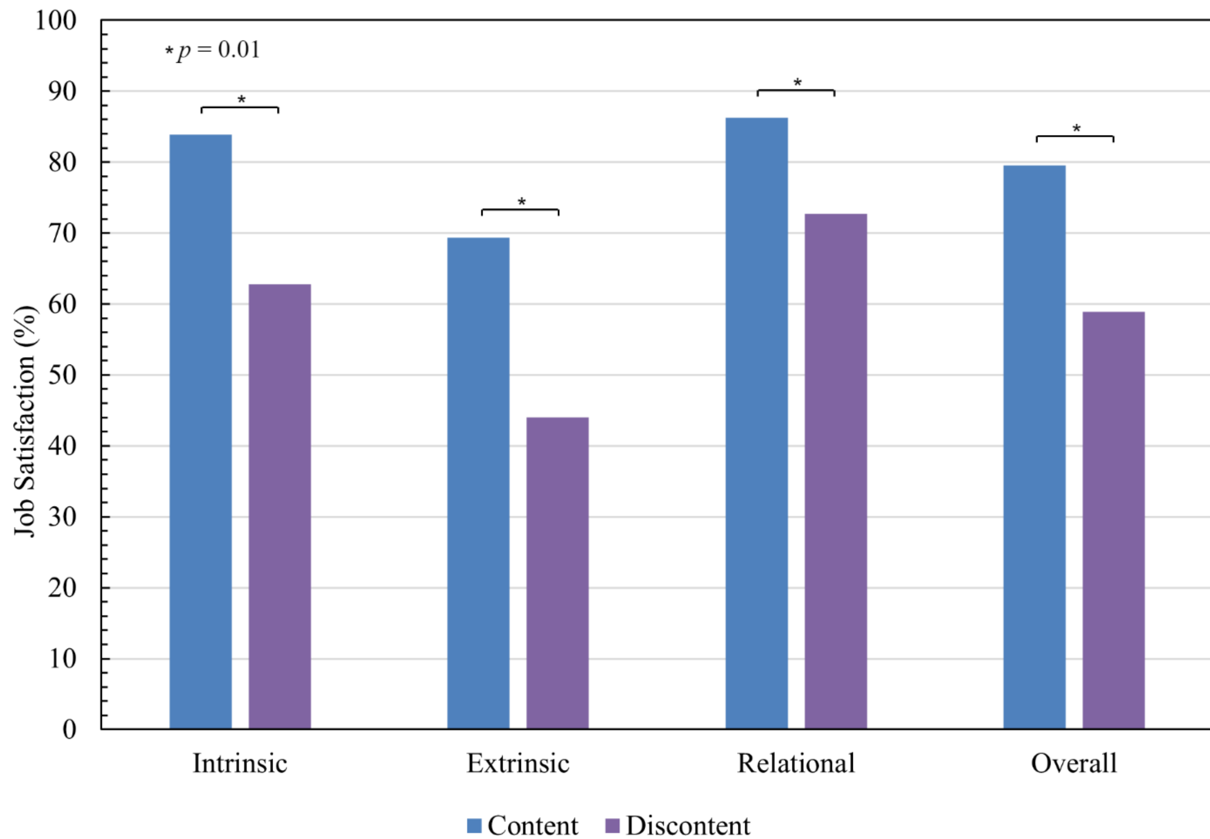


Figure 28. Job Satisfaction by Contentment

4.17 Spearman's Correlation Among Aspects of Job Satisfaction

The outcomes from a Spearman's Correlation test, run in SPSS, are detailed here. The test was used to investigate the correlations among the dependent variables previously analysed, specifically intrinsic job satisfaction, extrinsic job satisfaction, and relational job satisfaction. The results can be seen in Table 14.

Table 14. Spearman's Correlation Among Aspects of Job Satisfaction

		Intrinsic	*Extrinsic*	*Relational*	*Overall*
Intrinsic	***Correlation Coefficient***	-	.537**	.376**	.836**
	Sig. (2-tailed)	-	<0.001	<0.001	<0.001
	N	-	361	358	358
Extrinsic	***Correlation Coefficient***	.537**	-	.447**	.841**
	Sig. (2-tailed)	<0.001	-	<0.001	<0.001
	N	361	-	359	358
Relational	***Correlation Coefficient***	.376**	.447**	-	.667**
	Sig. (2-tailed)	<0.001	<0.001	-	<0.001
	N	358	359	-	358
Overall	***Correlation Coefficient***	.836**	.841**	.667**	-
	Sig. (2-tailed)	<0.001	<0.001	<0.001	-
	N	358	358	358	-

** Correlation is significant at the 0.01 level (2-tailed).

A statistically significant positive correlation was discovered between relational job satisfaction and intrinsic job satisfaction ($r_s = .376$, $p < 0.001$), which indicates that as the level of satisfaction in relational job aspects increases, there is a tendency for the level of intrinsic job satisfaction to also increase.

A similar positive correlation was observed between relational job satisfaction and extrinsic job satisfaction ($r_s = .447$, $p < 0.001$). Here, an increase in relational job satisfaction also tended to be accompanied by an increase in extrinsic job satisfaction.

Furthermore, the relationship between intrinsic job satisfaction and extrinsic job satisfaction was also examined, and a statistically significant positive correlation was revealed ($r_s = .537$, $p < 0.001$). This implies that as the level of intrinsic job satisfaction increases, there is a trend for the level of extrinsic job satisfaction to also rise.

The relationship between intrinsic job satisfaction and overall job satisfaction was also investigated, and a statistically significant positive correlation was found ($r_s = .836$, p < 0.001). This indicates that as the level of intrinsic job satisfaction increases, there is a tendency for the level of overall job satisfaction to also rise.

Similarly, a positive correlation was observed between extrinsic job satisfaction and overall job satisfaction ($r_s = .841$, p < 0.001). An increase in extrinsic job satisfaction tends to be accompanied by an increase in overall job satisfaction.

Lastly, a significant positive correlation was discovered between relational job satisfaction and overall job satisfaction ($r_s = .667$, p < 0.001). This suggests that as the level of satisfaction in relational job aspects increases the overall level of job satisfaction also tends to increase.

The overall job satisfaction score was calculated from the other three job satisfaction scores, so a significant correlation was to be expected. However, since each of the individual job satisfaction scores was determined separately, uncovering the statistical correlations among these distinct job satisfaction domains is a noteworthy finding. These results, statistically significant at the 0.001 level (2-tailed), present a multi-faceted view of job satisfaction, highlighting the importance and interconnectedness of considering various domains of job

satisfaction in a holistic manner. Given the strength and direction of these correlations, there seems to be a synergistic effect among relational, intrinsic, and extrinsic job satisfaction.

4.18 Summary of the Quantitative Results

The study provides a multifaceted view of job satisfaction across various nursing and midwifery roles, highlighting nuanced relationships between different job satisfaction aspects. Intrinsically, the Clinical Nurse Specialist role reported the highest satisfaction at 73.72%. Meanwhile, a declining trend in intrinsic satisfaction was observed with increasing years of experience, reaching its lowest mean in those with over 21 years of experience at 66.03%. The Mental Health RN role emerged as having the highest overall job satisfaction at 71.94%. Extrinsic satisfaction demonstrated a significant negative correlation with overtime frequency and shift length, specifically revealing a lower mean extrinsic job satisfaction for shifts longer than 10.1 hours at 44.70%. The evaluation of educational qualifications showed that participants with a Master's degree or PhD reported the highest overall satisfaction at 67.09%. Geographic variations were also detected, with a slightly elevated relational job satisfaction in WA. Notably, overall job satisfaction in WA was reported at 63.98%, marginally higher by 0.01% compared to 63.97% in other states and territories, an intriguing observation considering the varying degrees of COVID-19 severity across regions. Additionally, robust correlations were observed between the various dimensions of job satisfaction, particularly intrinsic and extrinsic, intrinsic and overall, and extrinsic and overall job satisfaction. These findings collectively underscore the multifaceted and synergistic nature of job satisfaction within this professional group, demonstrating the complex interplay between individual, occupational, and systemic factors. The analysis of these results necessitates careful consideration, due to the variations in the number of participants across different categories, including profession, gender, sector, and the specific states and territories that were part of the study.

After a thorough examination of the quantitative raw data, revealing specific trends and numerical relationships within the examined parameters, attention is now turned to exploring the qualitative data findings in preceding part two of this chapter. As the focus transitions into the qualitative data, there is an opportunity to delve into a more nuanced exploration, uncovering intricate and meaningful insights that lie beneath the statistics. This progression, grounded in the research framework, offers a profound exploration of the complex nature of the participants' reality with the phenomenon, generating rich subjective insights, and providing a complementary perspective to the statistical analysis discussed in part one of this results chapter.

4.19 PART TWO – QUALITATIVE FINDINGS

As discussed in Chapter One, the aim of the research study was to explore and examine the intrinsic, extrinsic, and relational impact of the COVID-19 pandemic on Australian nurses and midwives job satisfaction, and how this affects their intentions to stay or leave the profession. This section presents the findings of the qualitative semi-structured, one-on-one interviews.

In this chapter, we begin with an in-depth introduction to the participant group involved in the interview stage of the study. This is followed by the identification of three main themes and 11 sub-themes that have emerged from the research data. Via a robust analysis, each of these themes and sub-themes were underpinned by direct quotes drawn from the participants' interview transcripts, thereby providing rich context and depth to the insights gained. This chapter concludes with a succinct consolidation of the qualitative findings, followed by a deliberation on the contents of the following discussion chapter.

4.20 Qualitative Participants

As reported in the methodology chapter, Chapter 3, I used a convergent parallel mixed methods approach, where the collection of both quantitative and qualitative data occurred approximately at the same time. These data forms were then integrated together to allow for a comprehensive analysis of the data, where I could draw inferences regarding the phenomenon using both quantitative and qualitative results (Creswell & Creswell, 2003). As the data is based on more than one dataset and type, this allowed the research question to be studied from different perspectives adding to the reliability and dependability of the study's conclusions (Creswell, 2014; Ingham-Broomfield, 2016; Parahoo, 2014).

4.21 Qualitative Data Collection

The decision regarding the sample size for the qualitative phase of the research was not based on the same principles as the quantitative research. Rather, it was dependent on other factors such as the data analysis techniques chosen and the availability of resources (Nicholls, 2009). A purposive sampling technique was used to recruit individuals who could offer meaningful descriptions of the phenomenon under investigation (Iphofen, 2009; Nicholls, 2009).

As discussed in the methodology chapter, I aimed to develop both textural and structured descriptions of the phenomenon from a phenomenological perspective. To achieve this, a series

of open-ended questions were used, which facilitated collaborative conversations and discussions between myself and individual participants. This flexible and interactive structure encouraged participants to freely express their thoughts and experiences related to the phenomenon under investigation. Furthermore, this afforded me with the opportunity to ask follow-up or probing questions in response to participants' reported experiences, and to explore the issues raised and clarify incomplete or unclear responses. Conducting semi-structured interviews via an online platform enabled me to understand the perceptions of nurses and midwives from multiple Australian States and Territories, providing a comprehensive national perspective. Additionally, the platform allowed for comparison of the participants' perceptions and experiences of the phenomenon.

4.22 Qualitative Data Analysis

While certain qualitative data analysis methodologies recommend complete data gathering prior to analysis, as per Miles et al. (2018), the approach employed in this study was more cyclical and robust (Miles et al., 2018). The process entailed using constant comparative methods, as described by Glaser & Strauss (1967), whereby I made ongoing comparisons between and within each transcript as new data was collected and presented. Thematic analysis was employed to interpret and analyse the transcripts and to distinguish patterns of emerging themes and sub-themes. This analysis was conducted in six phases, following the approach described by Braun and Clarke (2022). The phases are familiarisation of data, generation of codes, combining codes into themes, reviewing themes, determining significance of themes and reporting findings as seen in Figure 29 (Braun & Clarke, 2022). Chapter 3 provides a comprehensive and detailed discussion of the thematic data analysis process employed in this study.

Figure 29. Braun and Clarke's Six Step Data Analysis Process

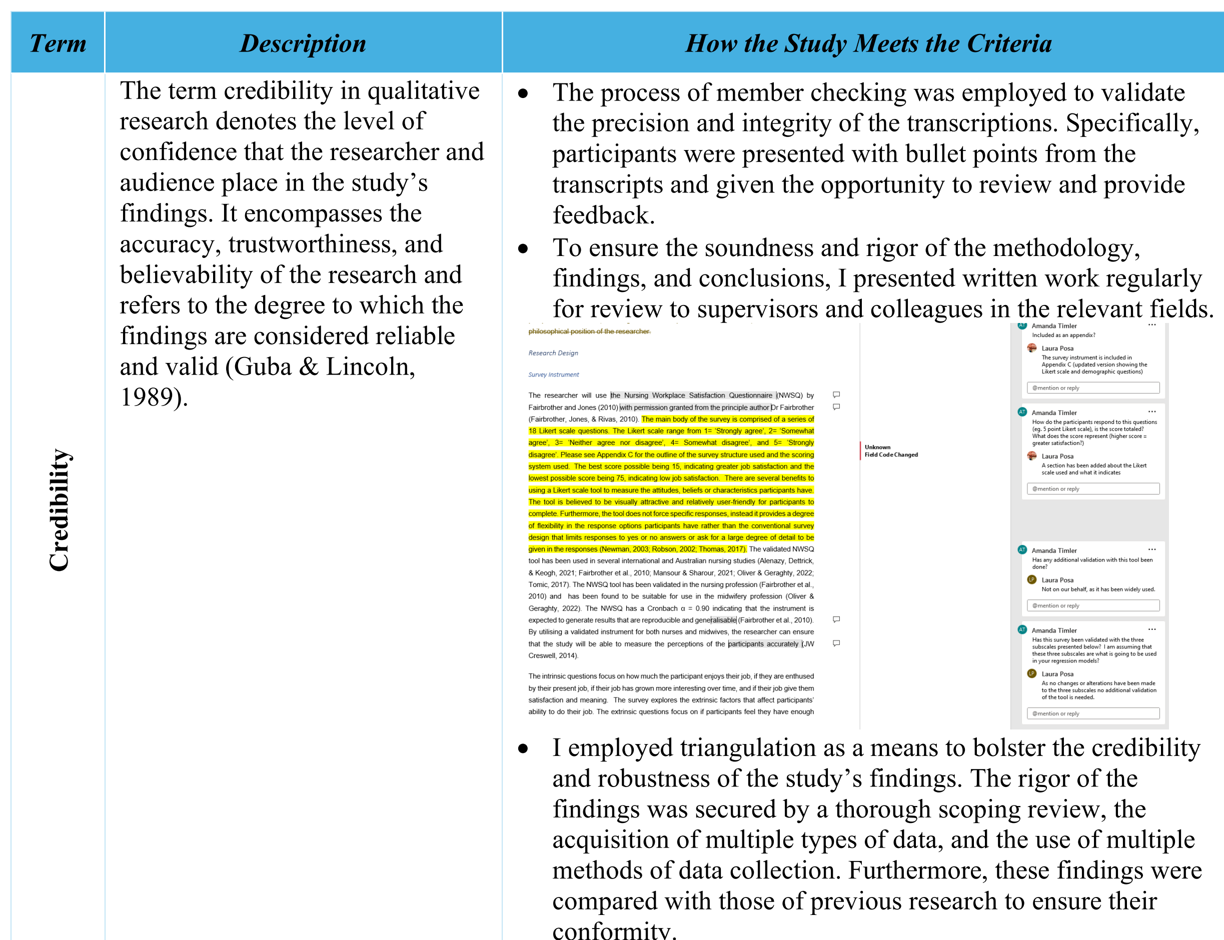
4.23 Trustworthiness and Rigour

The methodology chapter emphasised that rigor in qualitative research is demonstrated through the attributes associated with the research process itself. The process of ensuring rigor

in this study was achieved by ensuring the appropriate methodology and design were chosen to answer the research questions.

Data was collected in various forms, and multiple layers of data analysis were carried out using validated strategies. This included member checking the data and findings with the participants and having the findings peer-reviewed by my PhD supervisors (Creswell & Poth, 2016; Cypress, 2017). Several meetings were held to verify necessary processes, and methods were employed for the qualitative data analysis phase. I utilised the postpositive framework to ensure the accuracy of the conclusions drawn, instilling confidence in the reliability and transferability of the findings (Cypress, 2017; Laverty, 2003). These procedures ensured rigor by meeting the requirements for validity and reliability, also known as trustworthiness. Table 15 shows how trustworthiness of the qualitative findings was considered and achieved. In addition, an audit trail was integrated into the research methodology following Guba and Lincoln's (1989) criteria for qualitative trustworthiness. This was complemented by the implementation of a digital audit trail document to enhance the integrity and reliability of the study process.

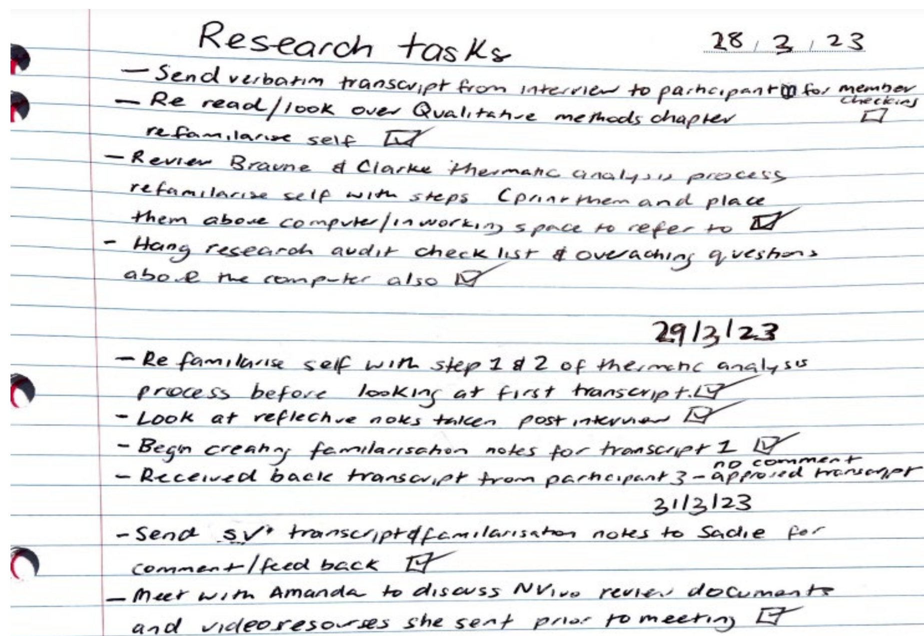
Table 15. Evidence of Trustworthiness and Rigour

Term	***Description***	***How the Study Meets the Criteria***
Credibility	The term credibility in qualitative research denotes the level of confidence that the researcher and audience place in the study's findings. It encompasses the accuracy, trustworthiness, and believability of the research and refers to the degree to which the findings are considered reliable and valid (Guba & Lincoln, 1989).	• The process of member checking was employed to validate the precision and integrity of the transcriptions. Specifically, participants were presented with bullet points from the transcripts and given the opportunity to review and provide feedback. • To ensure the soundness and rigor of the methodology, findings, and conclusions, I presented written work regularly for review to supervisors and colleagues in the relevant fields.  ~~philosophical position of the researcher.~~ *Research Design* *Survey Instrument* The researcher will use the Nursing Workplace Satisfaction Questionnaire (NWSQ) by Fairbrother and Jones (2010) with permission granted from the principle author Dr Fairbrother (Fairbrother, Jones, & Rivas, 2010). The main body of the survey is comprised of a series of 18 Likert scale questions. The Likert scale range from 1= 'Strongly agree', 2= 'Somewhat agree', 3= 'Neither agree nor disagree', 4= Somewhat disagree', and 5= 'Strongly disagree'. Please see Appendix C for the outline of the survey structure used and the scoring system used. The best score possible being 15, indicating greater job satisfaction and the lowest possible score being 75, indicating low job satisfaction. There are several benefits to using a Likert scale tool to measure the attitudes, beliefs or characteristics participants have. The tool is believed to be visually attractive and relatively user-friendly for participants to complete. Furthermore, the tool does not force specific responses, instead it provides a degree of flexibility in the response options participants have rather than the conventional survey design that limits responses to yes or no answers or ask for a large degree of detail to be given in the responses (Newman, 2003; Robson, 2002; Thomas, 2017). The validated NWSQ tool has been used in several international and Australian nursing studies (Alenazy, Dettrick, & Keogh, 2021; Fairbrother et al., 2010; Mansour & Sharour, 2021; Oliver & Geraghty, 2022; Tomic, 2017). The NWSQ tool has been validated in the nursing profession (Fairbrother et al., 2010) and has been found to be suitable for use in the midwifery profession (Oliver & Geraghty, 2022). The NWSQ has a Cronbach α = 0.90 indicating that the instrument is expected to generate results that are reproducible and generalisable (Fairbrother et al., 2010). By utilising a validated instrument for both nurses and midwives, the researcher can ensure that the study will be able to measure the perceptions of the participants accurately (JW Creswell, 2014). The intrinsic questions focus on how much the participant enjoys their job, if they are enthused by their present job, if their job has grown more interesting over time, and if their job give them satisfaction and meaning. The survey explores the extrinsic factors that affect participants' ability to do their job. The extrinsic questions focus on if participants feel they have enough Unknown Field Code Changed Amanda Timler Included as an appendix? Laura Posa The survey instrument is included in Appendix C (updated version showing the Likert scale and demographic questions) @mention or reply Amanda Timler How do the participants respond to this questions (eg. 5 point Likert scale), is the score totaled? What does the score represent (higher score = greater satisfaction?) Laura Posa A section has been added about the Likert scale used and what it indicates @mention or reply Amanda Timler Has any additional validation with this tool been done? Laura Posa Not on our behalf, as it has been widely used. @mention or reply Amanda Timler Has this survey been validated with the three subscales presented below? I am assuming that these three subscales are what is going to be used in your regression models? Laura Posa As no changes or alterations have been made to the three subscales no additional validation of the tool is needed. @mention or reply • I employed triangulation as a means to bolster the credibility and robustness of the study's findings. The rigor of the findings was secured by a thorough scoping review, the acquisition of multiple types of data, and the use of multiple methods of data collection. Furthermore, these findings were compared with those of previous research to ensure their conformity.

Term	Description	How the Study Meets the Criteria
Transferability	Transferability in qualitative research refers to the degree to which the findings of a study can be transferred or applied to other contexts, beyond the immediate study setting (Polit & Beck, 2020). It determines the relevance and usefulness of the research findings in addressing similar research questions or problems in different contexts, thus enhancing their generalisability and applicability (Polit & Beck, 2020).	• The study settings were clearly documented. • Detailed and descriptive accounts of the findings, including quotes from participants were provided in the results chapter of the thesis. This enables readers to evaluate the credibility of the study. • The findings were established from the reported experiences of the participants.
Dependability	Topping (2006) describes dependability as the trail of decisions made by the researcher throughout the research process (Topping, 2006).	• Clear documentation of the data collection and analysis practices are presented. • I, along with the supervisory team, evaluated the identified codes and themes, ultimately reaching an agreement that no modifications to the codes or themes were required. • The data collection and analysis process were conducted concurrently, and continued until data saturation was achieved.
Confirmability	Confirmability in qualitative research refers to the extent to which the findings are free from the researcher's personal biases. It involves ensuring that the findings are solely derived from the data collected, with a clear audit trail provided. This increases transparency and credibility, resulting in reliable and trustworthy findings (Polit & Beck, 2020; Topping, 2006).	• The developed themes and sub-themes were based on the data that had been transcribed. • The thematic analysis method employed was delineated by using a straightforward step by step approach method as specified by Braun and Clark. • The corresponding themes were accompanied by relevant participant quotes as supporting evidence. • I utilised a research audit trail checklist during all stages of the research to ensure transparency and credibility were achieved.

4.23.1 Research Audit Trail

During the establishment of the audit trail, I documented all methodological decisions and activities undertaken throughout the course of the study. This involved a comprehensive record of all research tasks, advancements, and procedures related to data collection and analysis, as suggested by Creswell and Miller (2000) see Figure 30.



Research tasks 28/3/23

- Send verbatim transcript from interview to participant for member checking
- Re read/look over Qualitative methods chapter refamiliarise self ☑
- Review Braune & Clarke thematic analysis process refamiliarise self with steps (print them and place them above computer/in working space to refer to ☑
- Hang research audit check list & overaching questions above the computer also ☑

29/3/23

- Re familiarise self with step 1 & 2 of thematic analysis process before looking at first transcript. ☑
- Look at reflective notes taken post interview ☑
- Begin creating familiarisation notes for transcript 1 ☑
- Received back transcript from participant 3 – approved transcript no comment

31/3/23

- Send SV' transcript & familiarisation notes to Sadie for comment/feed back ☑
- Meet with Amanda to discuss NVivo review documents and videoresourses she sent prior to meeting ☑

Figure 30. An Example of Recording all Research Tasks

I also ensured a coherent and logical flow through continuous introspection at various stages of the study, scrutinising these components alongside with field notes that were maintained, see Figure 31.

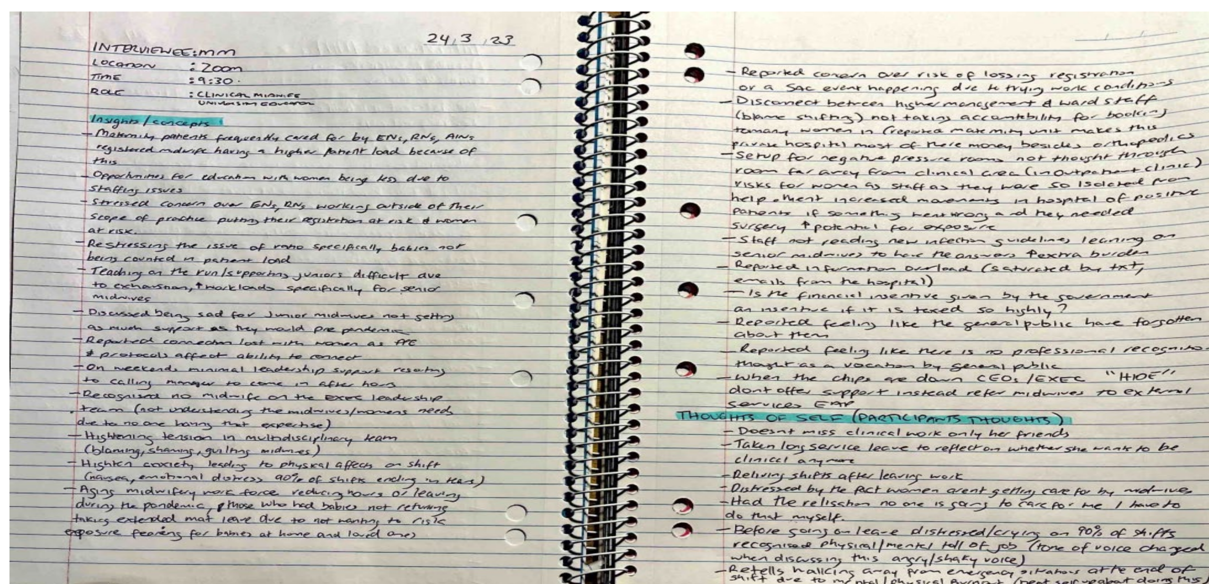
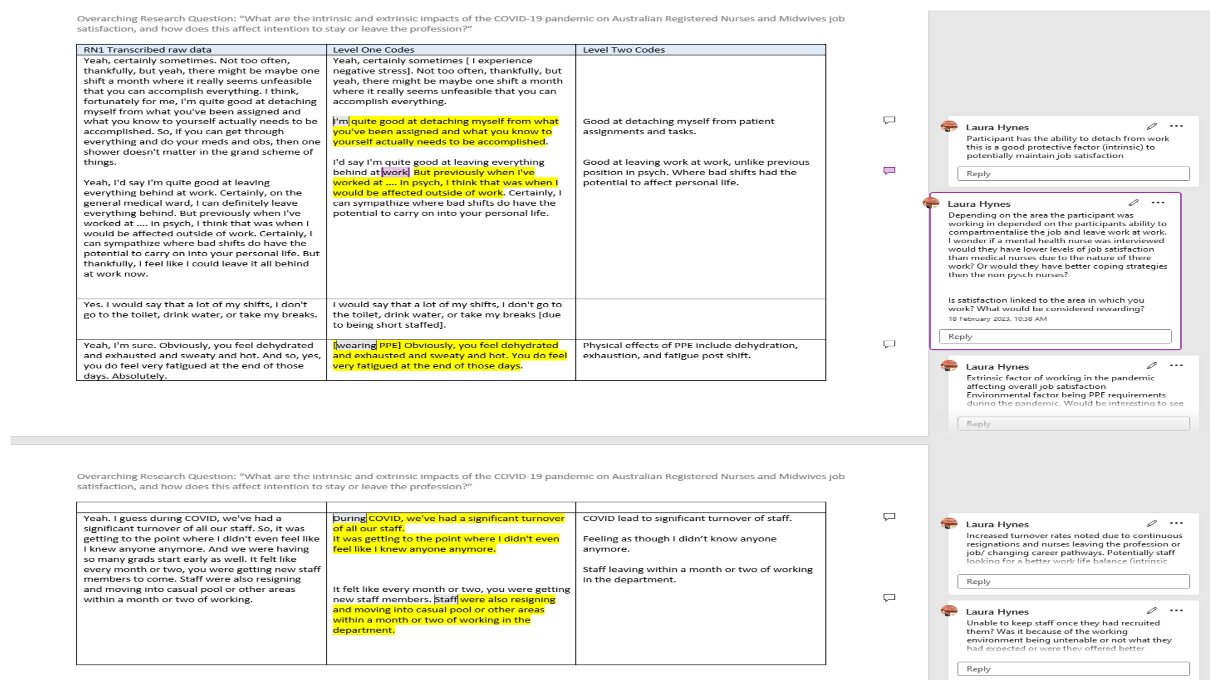


Figure 31. Example of Field Notes Post Interview

In a bid to constantly maintain the integrity and reliability of the study process, I prominently positioned a copy of the Research Audit Trail Checklist and the research questions and sub questions in my workspace, specifically above my computer. This strategic placement facilitated continual reference to the checklist and research questions, thereby ensuring the

constant adherence to the highest standards of research practice. The following tables exemplify my proficiency in coding the qualitative results effectively (Figure 32).



Overarching Research Question: “What are the intrinsic and extrinsic impacts of the COVID-19 pandemic on Australian Registered Nurses and Midwives job satisfaction, and how does this affect intention to stay or leave the profession?”

RN1 Transcribed raw data	Level One Codes	Level Two Codes
Yeah, certainly sometimes. Not too often, thankfully, but yeah, there might be maybe one shift a month where it really seems unfeasible that you can accomplish everything. I think, fortunately for me, I'm quite good at detaching myself from what you've been assigned and what you know to yourself actually needs to be accomplished. So, if you can get through everything and do your meds and obs, then one shower doesn't matter in the grand scheme of things. Yeah, I'd say I'm quite good at leaving everything behind at work. Certainly, on the general medical ward, I can definitely leave everything behind. But previously when I've worked at .... in psych, I think that was when I would be affected outside of work. Certainly, I can sympathize where bad shifts do have the potential to carry on into your personal life. But thankfully, I feel like I could leave it all behind at work now.	Yeah, certainly sometimes [I experience negative stress]. Not too often, thankfully, but yeah, there might be maybe one shift a month where it really seems unfeasible that you can accomplish everything. I'm quite good at detaching myself from what you've been assigned and what you know to yourself actually needs to be accomplished. I'd say I'm quite good at leaving everything behind at work. But previously when I've worked at .... in psych, I think that was when I would be affected outside of work. Certainly, I can sympathize where bad shifts do have the potential to carry on into your personal life.	Good at detaching myself from patient assignments and tasks. Good at leaving work at work, unlike previous position in psych. Where bad shifts had the potential to affect personal life.
Yes. I would say that a lot of my shifts, I don't go to the toilet, drink water, or take my breaks.	I would say that a lot of my shifts, I don't go to the toilet, drink water, or take my breaks [due to being short staffed].	
Yeah, I'm sure. Obviously, you feel dehydrated and exhausted and sweaty and hot. And so, yes, you do feel very fatigued at the end of those days. Absolutely.	[wearing PPE] Obviously, you feel dehydrated and exhausted and sweaty and hot. You do feel very fatigued at the end of those days.	Physical effects of PPE include dehydration, exhaustion, and fatigue post shift.

Laura Hynes
Participant has the ability to detach from work this is a good protective factor (intrinsic) to potentially maintain job satisfaction
Reply

Laura Hynes
Depending on the area the participant was working in depended on the participants ability to compartmentalise the job and leave work at work. I wonder if a mental health nurse was interviewed would they have lower levels of job satisfaction than medical nurses due to the nature of there work? Or would they have better coping strategies then the non pysch nurses?

Is satisfaction linked to the area in which you work? What would be considered rewarding?
18 February 2023, 10:38 AM
Reply

Laura Hynes
Extrinsic factor of working in the pandemic affecting overall job satisfaction
Environmental factor being PPE requirements during the pandemic. Would be interesting to see
Reply

Overarching Research Question: “What are the intrinsic and extrinsic impacts of the COVID-19 pandemic on Australian Registered Nurses and Midwives job satisfaction, and how does this affect intention to stay or leave the profession?”

Yeah. I guess during COVID, we've had a significant turnover of all our staff. So, it was getting to the point where I didn't even feel like I knew anyone anymore. And we were having so many grads start early as well. It felt like every month or two, you were getting new staff members to come. Staff were also resigning and moving into casual pool or other areas within a month or two of working.	During COVID, we've had a significant turnover of all our staff. It was getting to the point where I didn't even feel like I knew anyone anymore. It felt like every month or two, you were getting new staff members. Staff were also resigning and moving into casual pool or other areas within a month or two of working in the department.	COVID lead to significant turnover of staff. Feeling as though I didn’t know anyone anymore. Staff leaving within a month or two of working in the department.

Laura Hynes
Increased turnover rates noted due to continuous resignations and nurses leaving the profession or job/ changing career pathways. Potentially staff looking for a better work life balance (intrinsic
Reply

Laura Hynes
Unable to keep staff once they had recruited them? Was it because of the working environment being untenable or not what they had expected or were they offered better
Reply

Figure 32. Coding and Familiarisation Notes Example

Table 16 provides a detailed illustration of the process by which I discerned each primary theme and corresponding sub-theme.

Table 16. An Example of Arriving at Theme One and the Subsequent Sub-Theme

Theme
The Perfect Storm
Descriptor
The COVID-19 pandemic brought on a chaotic culmination of workplace challenges, creating what many perceived as the perfect storm. This theme relates to nurses and midwives’ descriptions and perceptions of what they thought created a perfect storm in the clinical setting.
Categories within the theme
The fabric of the employment atmosphere
(Workplace culture, organisational norms, comradery, collaboration) • This category explores the intricate and dynamic nature of workplace culture. It delves into the values, beliefs, and behaviours that shape the employment atmosphere. It examines how factors such as communication, collaboration, and organisational norms contributing to workplace culture.
Operational realities
(Working environment, material resources, effects of PPE) • This category scrutinises the tangible aspects of the work environment. It focuses on the physical, logistical, and process-oriented aspects that influence the daily work experience, including workspace layouts, equipment, health and safety protocols, and more.
Caught in a staffing riptide
(Redeployment, turnover, skill mix, patient ratios)

• This category pertains to the challenges and dynamics related to staff management. Emphasising elements such as high turnover rates, the necessity for staff redeployment, and the diversity of skills within the teams, whilst delves into the profound implications these variables can have on patient safety. Furthermore, it examines how these factors can create instability or tension within an organisation.
Examining the ethos of leadership
(Organisational cohesion, from board room to the frontline and everything in between) • This category delves into the role of leadership in creating and maintaining organisational cohesion. It considers how the values, behaviours, and decisions of leaders affect the functioning of the organisation at all levels. It also explores different leadership styles and their impact on employee motivation, efficiency, and overall job satisfaction.
Transforming education in unprecedented times
(Policies, education, roles of educators) • This category addresses the challenges and opportunities for education in changing times. It covers changes in education policies, the evolving role of educators, and the impact of societal and technological changes on teaching and learning. Areas addressed range from the shift to online learning, to the cancellation of student nurses and midwives entering the healthcare sector at the high of the pandemic affecting workforce recruitment, as well as the ongoing staffing crisis impact on professional development.

4.24 Participant Profiles

In total, a purposive sample of six registered nurses and five registered midwives working across 11 different facilities in four different states and territories, were interviewed. The demographic profiles of the participants interviewed are displayed in Table 17. Notably, ten out of the 11 participants were female.

The composition of this sample population offered a compelling blend of diverse academic credentials, employment tenure, and professional responsibilities, thereby offering a robust foundation for this research. Of those participants, the academic attainments spanned from a Bachelor degree to a Master degree, with a majority of those holding a Post Graduate Diploma qualification. The age range of the participants varied from 24 years to 57 years of age, with their professional experience varied from 3 to 23 years, illustrating the diversity in the breadth of perspectives and expertise present within the group.

In terms of employment structure, an almost equal distribution was observed between part-time and full-time positions. Interestingly, several participants working in a full-time capacity did so across a variety of roles and specialities. This provides evidence of the professional versatility among healthcare practitioners in the study cohort.

Their professional expertise spanned across an array of healthcare specialisations, namely, General Medicine, Intensive Care Unit (ICU), In Vitro Fertilisation (IVF) Fertility Clinic,

Community Palliative Care, Theatre, Education, and Maternity, thereby exemplifying a broad representation of the healthcare spectrum.

Participants were affiliated with both public and private healthcare institutions, with a few serving in both sectors simultaneously. Geographically, a significant proportion of the participants, seven in total, were from Western Australia, while others originated from New South Wales, Victoria, and the Northern Territory. This geographical distribution adds another dimension of diversity to the sample, further enriching the scope and comprehensiveness of this research.

Table 17. Participant Profiles in Qualitative Phase of Research

Participant ID	*Gender*	*RN, RM or Dual Practicing*	*Academic Qualifications*	*Age (years)*	*Years of Experience*	*Work Hours*	*Specialty Area*	*Private or Public Organisation*	*State Participant Works in*
RN1	Male	RN	Post Graduate Certificate	24	4	Part time	General Medicine	Public	WA
RN2	Female	RN	Post Graduate Diploma	38	14	Part time	ICU & IVF Fertility Clinic	Public & Private	NSW
RN3	Female	RN	Post Graduate Diploma	42	10	Full time between roles	ICU, Community Palliative Care & Tertiary Education	Public & Private	WA
RN4	Female	RN	Master's Degree	46	10	Full time	Theatre	Public	WA
RN5	Female	RN	Post Graduate Diploma	45	23	Full time	Theatre	Private	VIC
RN6	Female	RN	Master's Degree	36	11	Part time	Theatre, Education & COVID-19 Vaccination Hub	Public	NSW
RM1	Female	Dual practicing RN/RM	Post Graduate Diploma in Midwifery	34	12	Part time	Maternity & Clinical Midwifery Specialist	Public	WA
RM2	Female	Dual practicing RN/RM	Master's Degree	44	17	Full time	Maternity & Tertiary Education	Private	WA
RM3	Female	Dual practicing RN/RM	Master's Degree	57	20	Full time	Midwifery Education & Midwifery Program Coordinator	Public	WA
RM4	Female	Dual practicing RN/RM	Post Graduate Diploma in Midwifery	46	27	Full time	Maternity & Leadership and Management	Public	WA
RM5	Female	RM	Bachelor of Midwifery	26	3	Part time	Maternity & Territory Education	Public	NT

4.25 Qualitative Findings

To facilitate the principal data analysis, I engaged in a comprehensive review of all transcriptions and field notes, fostering a deep immersion in the data sets. From there, the data was compared against all applicable responses and combined to form categories, and then these categories were integrated from the primary codes to a higher-order thematic examination. I employed visual tools to facilitate the categorisation of codes into distinct themes. Within my research workspace, visual references such as the primary research questions, sub-questions, and the research audit trail checklist were prominently displayed. Additionally, while reviewing each coded transcript, an open document listing the emerging categories was consistently referred to. These visual aids provided a systematic and clear representation of the data, as illustrated in Figure 33. This aids in enhancing my engagement, expediting data comprehension, and facilitating the generation of comprehensive inferences and conclusions (Iphofen, 2009).

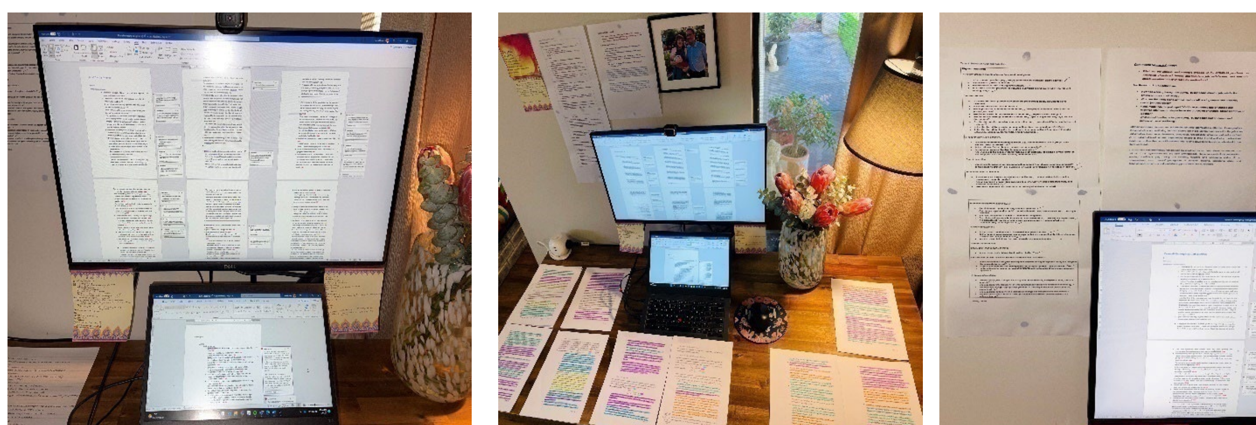


Figure 33. Evidence of Visual Representation

Subsequently, all themes were then scrutinised in relation to the extracted codes and the complete data set was again reviewed to construct a thematic map. The initial part of this process entailed examining all themes, assessing whether they were substantiated by adequate data or if certain themes could be consolidated and collapsed. The second phase involved verifying the individual themes against the data set and evaluating whether the constructed thematic map accurately reflected the inherent meaning in the data set.

Figure 34 illustrates the finalised thematic map, which includes the primary overarching themes and associated sub-themes that this chapter will explore in greater detail.

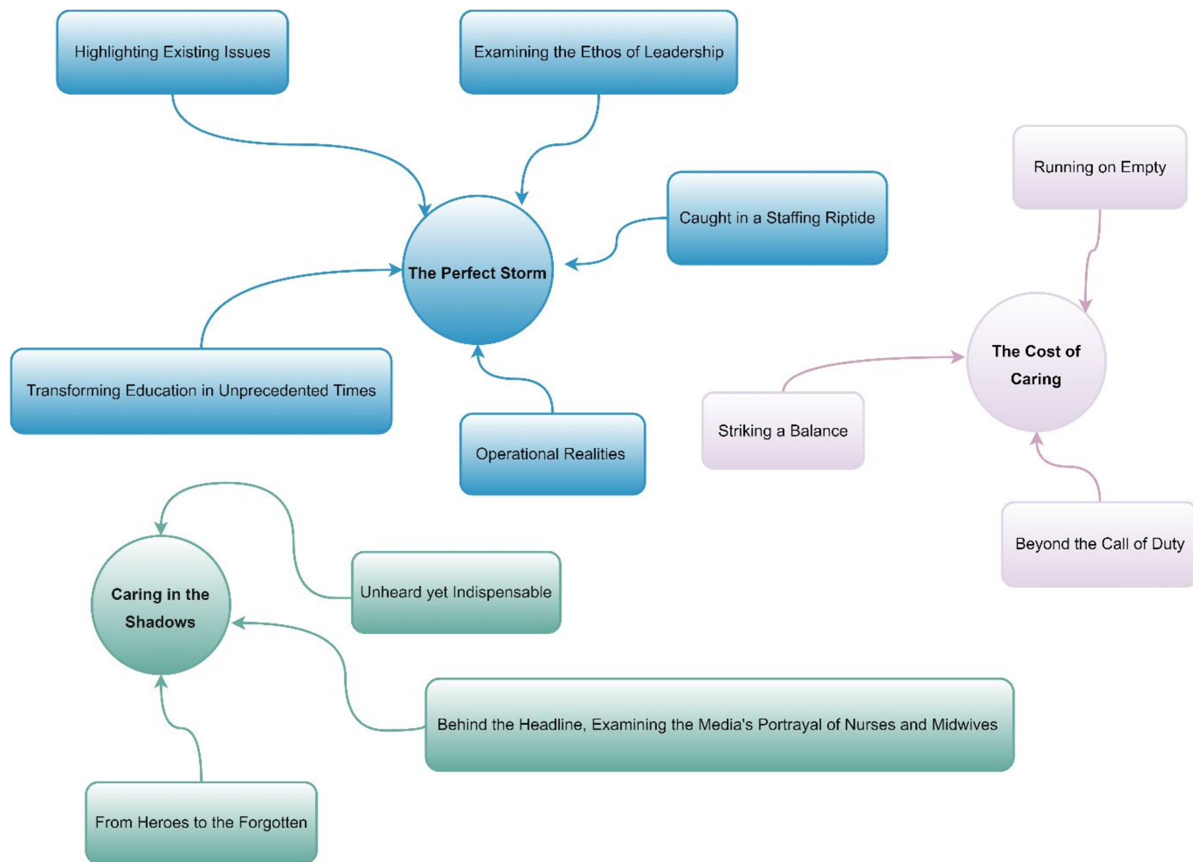


Figure 34. Thematic Map of Constructed Themes and Sub-themes

Once I had determined that the thematic map accurately depicted the dataset, the next course of action involved defining and describing each theme, aiming to unveil the inherent character of each (Figure 34). Subsequently, textural descriptions (the what) of the phenomenon were constructed from the key themes along with a structural description (the how) of the experience (Neubauer et al., 2019). These descriptions formed the integral statements of the overall core of the phenomenon, as described by the commonalities within the experiences (Braun & Clarke, 2006).

The following table, Table 18, presents the themes and sub-themes depicted in Figure 34 in more detail. These themes and sub-themes will be discussed further in the sections 4.26.1 to 4.26.3.

Table 18. Themes and Sub-themes from Qualitative Findings

Theme 1: The Perfect Storm
Sub-theme one: *Highlighting Existing Issues*
• Navigating Organisational Norms, Toxic Environments, and the Transformation of Workplace Culture • Exploring Comradery, Collegiality, Teamwork, and the Social Impact of Workplace Isolation • Collaboration, Conflict, and Hierarchies
Sub-theme two: *Operational Realities*
• Regulations, Resources, and Compliance • Working Non-Stop, Overlooking Breaks, and Health Risks
Sub-theme three: *Caught in a Staffing Riptide*
• Complexities of Staffing Ratios and Overtime • The Impacts of Staff Turnover • Navigating Skill Mix and Scope of Practice • Redeployment, Resilience, and Adaptability
Sub-theme four: *Examining the Ethos of Leadership*
• Management Disconnection • Silenced Voices in the Corridors
Sub-theme five: *Transforming Education in Unprecedented Times*
• Change in Healthcare Education and Communication • Role Reversal of Educators • Adaptation, Attrition, and Anomalies in Healthcare Policies and Practice
Theme 2: The Cost of Caring
Sub-theme one: *Striking a Balance*
• The Inflexibility of Shift Work During a Crisis • Reassessing Career Choices and Finding Work Life Balance • Shifting Priorities in the Midst of a Pandemic
Sub-theme two: *Running on Empty*
• Stress and Coping Mechanisms • Pushed to the Edge
Sub-theme three: *Beyond the Call of Duty*
• Disillusionment in Healthcare • Diverse Pathways to Job Satisfaction
Theme 3: Caring in the Shadows
Sub-theme one: *Unheard yet Indispensable*
• Ratios, Rest, and Renumeration • An Examination of Governmental Support
Sub-theme two: *Behind the Headline, Examining the Media's Portrayal of Nurses and Midwives*
• Nurses and Midwives Speak Out on Misrepresentation and Diminishing Acknowledgement
Sub-theme three: *From Heroes to the Forgotten*
• Generational Shift in Nursing and Midwifery • Public Perception and Crossroads

4.26 Theme 1: The Perfect Storm

This overarching theme sheds light on the perspectives of nurses and midwives regarding the multitude of factors that culminated to generate the perfect storm within the clinical setting.

4.26.1 Highlighting Existing Issues

This category explores the intricate and dynamic nature of workplace culture. It delves into the values, beliefs, and behaviours that shaped the employment atmosphere during the pandemic. Furthermore, it examines how factors such as communication, collaboration, and organisational norms contribute to the workplace culture.

4.26.1.1 Navigating Organisational Norms, Toxic Environments, and the Transformation of Workplace Culture

In this section, the narrative examines the ramifications of the pandemic on workplace dynamics and organisational norms within the healthcare sector. The participants' perspectives reveal the exacerbation of pre-existing toxic environments under the strain of COVID-19, alongside an analysis of the collateral effects on staff turnover, culture, and individual wellbeing.

Examining the effects of the pandemic on workplace dynamics and organisational norms, RM4 shed light on the effects of an already toxic workplace,

"I think what COVID showed me was that if you worked in a really toxic workplace [pre pandemic], then it [only became] more toxic [during the pandemic] because everyone was so incredibly stressed." RM4

Reinforcing this viewpoint with a stark observation, RM4 further emphasises the escalating severity of the situation, stating that they had,

"Never seen so much abuse of staff as I did with COVID." RM4

highlighting the significant increase in staff mistreatment during the COVID-19 pandemic. This sentiment was echoed by RM3 who discussed how during the pandemic their service employed a lot of graduate midwives from,

"Very, very different backgrounds [like] town planners, oil companies, nothing medical … The feedback I'm getting from them is they have never worked in such an unprofessional, disrespectful environment … they don't stay. Basically, the minute they realise or think they can't change the system, they quit." RM3

Additionally, one participant reflects on considering leaving their workplace due to two key factors. Firstly, the allure of other wards *"Where the staff culture and morale was reportedly better."* RN1. Secondly, the prevailing dissatisfaction stemmed from *"Staff turnover, resulting [in] not feeling like I had that same social pleasantries on the ward."* RN1. This sentiment was further echoed by RN6 who discussed how,

"There was me trying to do whatever I could to keep [the culture] my department happy [but] when I wasn't happy or coping no one was there to care for me." RN6

This narrative of personal sacrifice for the sake of maintaining a harmonious work environment, further emphasises the challenges faced by the healthcare workers. Subsequently, another participant provides a stark illustration of the endurance demanded from many staff members facing relentless conditions,

"A lot of staff members, experienced less than desirable shifts on many many occasions." RM1

Contrasting these difficult experiences, a participant offers a glimmer of hope with a narrative of resilience and adaptation, proclaiming,

"We've been forced to reflect how we practise and brought in some really great changes, and I hope that culture continues." RN3

Expanding on the theme of workplace dynamics during the pandemic, the narratives of RM1 and RN2 offer compelling, albeit contrasting, perspectives on the process of transitioning to new workplaces. RM1 underlines the reality that a change in environment does not always equate to an improvement of the professional experience, as stated in this quote,

"Just [having] changed the environment, things aren't necessarily better at a different site, that's for sure, but it just helps to give you a bit of a break from the same thing you were doing each day." RM1

In contrast, RN2's narrative traces a more complex journey in their new ICU position,

"Initially [I was] excited to learn new protocols. [However], that faded over time, leading to a sense of unfulfillment." RN2

Following the initial enthusiasm, a profound sense of listlessness began to permeate RN2's professional life, leading to contemplations of alternate paths,

"Browsing through the internet thinking what can I do…. What is the slowest paced nursing career that I could go to." RN2

The choice to depart from their long-standing role and venture into a different specialty area ultimately manifested as a beneficial shift in career trajectory. They emphasised the transformative effect that transitioning to a different specialty area had on their professional experience, stating that,

"People are nicer [in my new job]. The team's nice. The patients are very grateful. Significantly less stressful." RN2

4.26.1.2 Exploring Comradery, Collegiality, Teamwork, and the Social Impact of Workplace Isolation

In examining the experiences of nurses and midwives, the complexity of workplace relationships that developed amidst the stress of a pandemic became evident. It brought to light the significance of collegiality, teamwork, social connections, and the impact of collective trauma on these bonds.

One participant reflects on the sense of collegiality that emerged in their workplace during difficult times, stating,

*"We found that people would come to work just to see each other because they couldn't do anything else. There was a sense of collegiality. We were all f**king miserable when we were there, but we were together." RN6*

Similarly, another participant expresses the positive feelings that arise from teamwork during demanding shifts, stating,

“When you feel like you’re in a hole… you just have to pull yourself together and work as a team, it’s an incredibly good feeling at the end of [a demanding shift], thanking each other for helping each other out a really rough shift.” RN3

RN3 further emphasises the importance of having supportive colleagues, stating,

“The best feeling on a shift is when you look around and you see you’ve got a great team around you. Then you think to yourself, ‘All should be okay’. I can do it. I can get through 12 hours.” RN3

This sentiment of comradery and shared resilience is echoed by RM2, who reflects on the shared experiences and understanding amongst colleagues, noting,

*“You’re thankful for your colleagues and your friend [on those difficult shifts] you can go, ‘Well, that was f**ked.’ But no one died, we survived. Just.” RM2*

RN1 emphasises the social aspect of work, expressing the motivation to return to the workplace is purely due to the presence of friends and social connections, stating,

“Connection. I’ve got a lot of friends there so that’s what keeps me going back [it’s the] social side.” RN1

In contrast, RN2 reflects on the challenges of forming connections as a newcomer to a workplace during the pandemic, stating,

“I think because coming in as a newbie [during COVID-19], was very difficult for me to make friends because at the end of the day, everyone’s so tired, we just want to go home.” RN2

In contrast, RN6 discusses how the collective trauma they and their colleagues experienced during the pandemic, affected the interpersonal relationships and resulted in a lack of contact among them stating,

"It's a collective trauma that we are struggling to get past… speaking to people that I previously worked with at the [COVID-19] hubs, a majority of them, don't want to think about it [their pandemic experience] anymore and that's why nobody keeps in contact anymore." RN6

4.26.1.3 Collaboration, Conflict, and Hierarchies

This section uncovers the complexities of multidisciplinary communication, particularly in the high-pressure context of a pandemic. It highlights the nuanced experiences of nurses and midwives as they navigate the challenges of balancing effective teamwork, managing interpersonal conflicts, and confronting perceived hierarchies within the healthcare system.

RN2 acknowledges the importance of effective multidisciplinary communication, stating,

"Multidisciplinary [communication] between allied health, was very good [during the peak of COVID-19]. I think since then [were] a little bit more lax with communication." RN2

Furthermore, RN2 reflects on the improved relationships that have developed once the intensity of the pandemic subsided, noting,

"During the peak of the pandemic, there was really good teamwork, now everything's settled, the relationships have been better because it's not as stressful as the peak COVID." RN2

In contrast, RM2 describes challenging situations where a disconnect between midwives and doctors has arisen, particularly concerning safe staffing and elective procedures. They expressed frustration, stating,

"The disconnect from the midwives and the doctors were starting to get really not pleasant …. they want to do elective inductions/c-sections without adequate staffing. They were not listening to, [me saying] 'I can't do that.' Adding an extra caesar, that puts pressure on the postnatal ward." RM2

Furthermore, RM2 recounts instances where conflicts and tensions have arisen from diverging perspectives on safe staffing whether they have been pressured,

"You've got doctors who are wanting to do an induction and saying, "If we don't do this induction, the baby is going to die." You're like, "Don't you dare put that on me. That is not fair. I do not have staff to start that woman's induction safely." RM2

Moreover, RN4 shares distressing experiences of disrespectful behaviour from doctors and surgeons, stating,

"I've had surgeons two inches from my face, yelling and screaming, having tantrums, and there's no backup." RN4

They further express a sense of not receiving the respect they deserve, stating,

"I feel like I don't get the respect from doctors or surgeons." RN4

Additionally, RN4 recounts a heated argument with anaesthetist over PPE shortages, stating,

"They were saying only the anaesthetists and the anaesthetic techs can wear the surgical N95s. I remember having a blazing row with anaesthetists over this saying what makes you more important than me." RN4

RN4 expressing their concerns about perceived hierarchy,
"That just really got to me… You can't do a surgery without us nurses. It created a divide amongst anaesthetists, surgeons, and nurses in the theatre team. And I don't think that's ever been mended." RN4

4.26.2 Operational Realities

This category scrutinises the tangible aspects of the work environment. It focuses on the physical, logistical, and process-oriented aspects that influence the daily work experience, including workspace layouts, equipment, health, and safety protocols, and more.

4.26.2.1 Regulations, Resources, and Compliance

In this section, I delve into the profound transformation of the healthcare landscape during the COVID-19 pandemic, marked by practical, interpersonal, and systemic changes. From the poignant narratives of nurses and midwives, I explore the challenges and adaptations in patient care, the impact of stringent protective measures, and the broader implications on healthcare delivery and women's rights, all set against the backdrop of resource scarcity and stress.

The narrative from RM2 captures a significant shift in the healthcare landscape during the COVID-19 pandemic. RM2 notes,

> *"I think the stress and the restrictions and working behind masks, it was such a shock to a lot of the wards, especially ours. For someone who relies on that personable touch as a midwife does, and that connection, that compassion, that face-to-face, when you're protecting yourself behind a mask, that was really difficult to have and get that connection." RM2*

This poignant statement underlines how the necessary impersonality introduced by PPE disrupted the crucial human connection at the core of woman-centred care.

Further illustrating the practical difficulties imposed by PPE and strict protocols, RM5 elaborates on the practical issues posed by the necessary PPE and stringent protocols,

> *"It was so hard. I can barely support the woman with breastfeeding because ... I can't stay in the room for an extended period of time [due to hospital protocols]. Also, it's quite uncomfortable for the midwife to be trying to assist the woman with breastfeeding when you're covered in plastic." RM5*

Furthermore,

> *"If you've got someone who's COVID contact, then you are in and out as quickly as you can be, you're fully gowned you'll just be clustering all of your care. I think it's really awful because a lot of those women went without so much support, which is pretty horrific because realistically, you weren't actually able to necessarily be that support person because you had to work within your confinements." RM5*

These excerpts depict the evolution of healthcare service delivery during the pandemic, highlighting the constraints and frustration experienced by midwives due to the restrained nature of their roles due to the protocols and regulations employed.

The account by RM3 delivers a poignant commentary on the far-reaching societal implications of the pandemic,

"As the pandemic progressed, [my role changed] it involved working with the grads and basically processing the loss of women's rights. It almost happened overnight. It was almost like living in The Handmaid's Tale." RM3

By likening the situation to a dystopian narrative, RM3 brings attention to the systemic loss of women's rights, reflecting the severe societal regression engendered by the crisis.

RN3's quote further emphasises the dilemma experienced by the entire healthcare sector during the pandemic, as it grappled with the realities of resource scarcity,

"As well as how we achieve the best patient outcomes with the resources that we have at the time. The pandemic has shown us that we don't have all the resources that we want all the time for every single patient." RN3

This sentiment stresses the ongoing challenge of maximising patient outcomes while navigating a landscape fraught with significant constraints on physical and material resources.

RN4 and RN6 highlight the severe shortages of critical resources such as PPE. RN4 reveals the drastic measures taken when PPE supplies ran critically low, stating,

"When we were down to 400 N95 masks, because they were being stolen from theatres ... they were locked up, because [of the shortage] we could probably only keep [running the theatres] for two or three more days." RN4

RN6 echoes this concern with a palpable sense of fear, recounting how,

*“It got to the stage where COVID was so bad that we ran out of PPE … We all felt f**king terrified.” RN6*

While the immediate fear and safety concerns were primarily linked to the availability of PPE, as emphasised by RN4 and RN6, the pandemic also imposed more subtle yet impactful changes in the day-to-day workings of healthcare settings, as depicted in RM4’s account.

“The signs on the tearoom, three people in the tearoom at one time, well that’s great but where does everyone else go?” RM4

This reflection emphasised how the pandemic affected even routine aspects of work-life, disrupting social cohesion, and likely contributing to a sense of further isolation and stress.

Meanwhile, RM5 offers a different angle, illuminating the broader healthcare system implications stating that,

“The private hospital would be declining to take any patients [during labour if they were COVID positive or suspected] … they would just brush their hands off of them. The care [in the public system] isn’t what they signed up for. I mean, these women have paid five to eight grand out of pocket, it’s insane.” RM5

The pandemic’s sudden onset, and the highly infectious nature of the virus, exposed glaring gaps in hospital preparedness, particularly regarding the availability and suitability of isolation facilities. As RN5’s account suggests,

“We had separate COVID theatres. Physically, it was a long day [if you were allocated in there] … You’re in your full PPE. Isolated in one room if you were in the spotter role. The hospital I was at, the spotter person was not [positioned in] an airconditioned space. Instead, they were positioned in the aesthetic waiting bay, which used to be used for patients to be held in for only a couple of minutes and moved into the theatre.” RN5

4.26.2.2 Working Non-Stop, Overlooking Breaks, and Health Risks

This section delves into the significant physical discomfort linked with prolonged use of PPE, a factor that further complicated the pandemic experience for nurses and midwives. The

narratives highlight the physical strain, the influence on working hours, worsening of pre-existing health conditions, and resulting workforce attrition, thereby highlighting the unseen and layered costs of pandemic-related protective measures. An emphasised issue amongst participants lies in the physical exertion and discomfort associated with extensive PPE usage.

The narrative drawn from RN3 not only highlights the detrimental effects of wearing PPE for extended hours, but also highlights the influence it has on the willingness to take on additional shifts. They noted,

"The PPE wearing has in particular been a negative aspect to working in ICU … I have mild asthma it just makes for such an uncomfortable 12-hour shift." RN3

This discomfort, along with the exacerbation of pre-existing health conditions, serves as a significant deterrent to increasing work hours in ICU settings,

"Definitely a reason why I would not work extra [shifts] in ICU- RN3". Discussing how "The mask wearing means [with my asthma] I feel like you're breathing through a straw. You can't quite catch your breath, the mask just makes it worse. It's horrible." RN3

In contrast, the flexibility of RN3's community health role, where PPE can be intermittently removed, offers a respite from the constant physical discomfort experienced in ICU,

"I can take my mask off in between clients, catch my breath and drink some water, whereas in ICU, I can't." RN3

The physical distress accompanying continuous PPE use is further emphasised by RN4, particularly in the context of healthcare workers with pre-existing respiratory conditions stating,

"I had a pulmonary embolism last year and I do get quite short of breath, and I do cough a lot, towards the end of the night [following a full day wearing PPE]." RN4

Similarly, RN1 outlines the physical toll exerted by consistent PPE use, leading to heightened fatigue,

"[Wearing PPE], You do feel very fatigued at the end of those days. You're so dehydrated and exhausted." RN1

These sentiments align with the observations of RN2 and RN6, who highlight the gruelling physical toll and ensuing health risks associated with the constant requirement of PPE. RN6 recounts the development of a severe pressure injury from consistent N95 mask use, which subsequently necessitated work cover intervention,

"I developed a stage two pressure injury and I had to go on work cover." RN6

RN2 expresses the strain of being *"Wrapped in plastic for 12 hours a day is too much, it takes a great toll on you."* RN2. Whilst RN6 describes the intense anxiety brought on by the operational decisions during the pandemic, RN6 recounted the moment when the district decided,

"You're done working in the vaccination clinics. We can't use you anymore. You're going back to theatres." RN6

The implication of this decision was profound, as RN6 faced the prospect of being redeployed to COVID wards where other perioperative nurses were assigned. This sudden shift, as RN6 noted, sent their *"anxiety through the roof,"* RN6, highlighting the psychological stress induced by rapid organisational changes during the pandemic.

Shedding light on a distinct aspect of the shared experience, RM1 highlights the procedural dilemmas that intensified the physical exhaustion resulting from PPE usage. They report an increase in missed breaks during the pandemic,

"I was working four shifts a week, probably 60% of my shifts [I missed meal breaks, toilet breaks]." RM1

In addition to this, they explain the limitations on even simple personal care, such as hydration,

"If you were in with the COVID positive woman, you couldn't take your drink bottle in, you would only get relieved if there was someone to relieve you every two to four hours depending on the staff that was available." RM1

RM2 reflects on how the level of exhaustion had affected even the most basic aspects of daily life,

"Some days I didn't know what colour my underwear were because I didn't go to the toilet. I didn't drink too because [I didn't have time] taking off your mask was too hard; you couldn't have your water bottle in the station or on your trolleys where you could see it. That was all taken away because of policies." RM2

Lastly, RM1 introduced the subject of workforce attrition due to the intense conditions, thus connecting individual physical toll to broader organisational issues,

"Until there is more support and whether that's in the form of finances or more resources and equipment, then [people will continue leaving]." RM1

4.26.3 Caught in a Staffing Riptide

This category pertains to the challenges and dynamics related to staff management. Emphasising elements such as high turnover rates, the exigency for staff redeployment, and the diversity of skills within the teams, this category delves into the profound implications these variables can have on patient safety. Furthermore, it examines how these factors can create instability or tension within an organisation.

4.26.3.1 Complexities of Staffing Ratios and Overtime

The proceeding narrative highlights a mounting crisis within the healthcare sector, as recounted by multiple participants who bore witness to the repercussions of understaffing and skill shortage. Their testimonials reveal a pattern of workforce strain, risk-taking behaviours, and administrative strategies aimed at tackling this crisis, all while grappling with the personal toll caused by these demanding circumstances.

The distress of staff issues was clearly articulated with one participant stating,

“[They] constantly worry about, have we got enough staff? We’ve got staff, but are they registered midwives? No. They’re no.” RM2

This quote unearths an escalating issue about the qualifications of available staff, in which the perceived risks are not merely just about the number of staff but also, and more importantly, about the level of expertise. As RM2 remarks,

“Our maternity patients are getting cared for by enrolled nurses and registered nurses routinely.” RM2

An undercurrent of this perceived crisis is the fear of compromising patient/woman/baby safety due to the overwhelming patient/woman-to-nurse/midwife ratio. According to RM2,

“Registered midwives are having that responsibility of looking after 16 patients is just not ok ... the postnatal ward women are vulnerable.” RM2

This sentiment is underscored by the frustration and concern over witnessing enrolled and registered nurses working in maternity and practicing beyond their scope, a risk expressed by RM2,

“Why are you putting yourself at risk and in that danger zone of doing things out of your scope of practice?” RM2

From an administrative viewpoint, the strain becomes evident with coordinators transforming into,

“Mini managers ... doing what we could to survive ... stealing staff from one shift to another.” RM2

This quote elucidates the drastic measures taken to mitigate the staff shortage. When the staffing crises became unmanageable RM2 reported,

“Ringing the manager on her days off going, “We’re stuck. You’re going to have to [come in and] coordinate-.” RM2

Policy adjustments, as described by RM3, reveal attempts to adapt to these evolving challenges,

"Our policy now is flexible shifts … [however] problem is that isn't being offered in every area, this hasn't been streamlined in the hospital." RM3

Concurrently, the uptake in recruitment of interstate graduates marks a significant shift, as RM3's discussed,

"Prior to COVID, we didn't take a lot of interstate grads. We didn't need to. We had more than enough from WA, and our policy was always to take WA [grad] first. My graduate numbers have tripled." RM3

While these policy changes and strategies are crucial, they appear to unintentionally intensify the pressures on staff members. The constant call for overtime, as illustrated by RM3's statement, highlights the demanding nature of their schedules,

"The grads tell me they are asked every day; can you do a double? Can you do an extra? Can you stay for an extra four hours? … I have a grad that has done 5 overtime shifts this fortnight." RM3

Mirroring RM4's admission of routinely exceeding the contractual hours,

"I was contracted 48 hours a fortnight. On average, I was doing 70-80 … Nine times out of 10, you were doing a double." RM4

Whilst RN5 narrates how nurses accepted additional hours, driven not by desire for extra work or financial gain, but rather by a sense of duty,

"They took it, but that was out of a responsibility. Not that they necessarily wanted the hours or the money." RN5

The significant personal impact that these challenges exert on nurses and midwives is depicted by RN1, who discussed how,

"You do feel compelled [to do overtime] especially when you see the staff members coming on the afternoons, they'll be your friends and your colleagues." RN1

Furthermore, the distress was compounded when overtime work goes uncompensated, as RN2 recalls,

"The first couple of times I did it [overtime], but I did not get paid for the overtime, which happens all the time in that hospital." RN2

Another participant discusses the impact of unpaid work,

"I have to work hard [to get renumerated] sending so many emails to follow that up [on were my money is] It's just not worth it." RN2

Furthermore, the emotional and physical exhaustion of day-to-day working is expressed by RN3 who reports,

"Feeling very guilty that I don't put my hand up for extra shifts in ICU ... but I just feel so physically exhausted." RN3

The operational impact of the staffing crisis is exemplified by RN4 who states,

"We became so short staffed that we couldn't actually run three theatres." RN4

Additionally, RN6's accounts the extraordinary hours nurses were doing to ensure the general public received their vaccinations,

"You'd have people starting at 6:00 AM and [they would still be] vaccinating until 1:00 AM the following day." RN6

4.26.3.2 Impacts of Staff Turnover

The 'Revolving Door' theme highlights an ongoing issue with high turnover rates among nurses and midwives, a problem that seemingly escalated during the COVID-19 pandemic.

This concern was emphasised by RN1,

"During COVID, we've had a significant turnover of all staff. It was getting to the point where I didn't even feel like I knew anyone anymore." RN1

This sentiment articulates a deep sense of disconnection and the potential destabilising effects of high turnover rates on team cohesion and work culture. Adding a layer of complexity, RN1 also cites the rapid transition of management within the same time frame,

"We've gone through three managers in the last two years." RN1

Further insight is provided by RN2, who points to an increase in hiring, seemingly to compensate for the loss of existing staff rather than to expand the workforce,

"The only thing that they've done is hired more nurses. The reason why they hired more nurses is because they've had a lot of nurses who [have] resigned. So that's not really adding on to the numbers." RN2

Moreover, RM1's account reveals that,

"Junior staff and graduate midwives were expressing that they didn't want to continue in the chosen field anymore ... because obviously they entered the profession at a really challenging time." RM1

RN4's statement paints a concerning picture of the implications of high turnover rates for remaining staff, *"[staff turnover] puts a lot of extra burden on the permanent staff."* RN4. The testimonial emphasises the increased workload and stress borne by the persistent staff, further underscoring the ripple effects of high turnover rates.

Participant RN6 stated,

"It's just difficult. I don't know how or why we are losing staff all the time ...," RN6

recalling a period in which 17 nurses, inclusive of management, left within three months at the end of 2021,

"Everybody just up and left in a period of three months including my nurse manager, my nurse unit manager, everybody." RN6

This participant comment not only highlights the extent of the turnover issue, but also encapsulates the profound bewilderment and frustration such abrupt and frequent changes can cause within healthcare teams.

4.26.3.3 Navigating Skill Mix and Scope of Practice

The following section unveils the multi-faceted challenges nurses and midwives encountered due to staffing inadequacies, skill mix imbalances, and unfavourable workload distributions within their practice.

The frustration arising from inadequate staffing levels and its impact on patient care is expressed by RM2,

"The women are getting less care due to staffing. They are learning how to be a parent and trying to recover, and they are probably just thinking, 'Am I getting correct advice from a skilled professional who is a midwife?' More than 70% of that time they weren't." RM2

This quote underlines the concerns around the quality and adequacy of care provided to women due to staffing shortages. RM2 expresses her concern about the frequent occurrence of registered nurses and enrolled nurses working outside of their designated scope of practice. RM2 describes the situation,

"I watch registered nurses and enrolled nurses routinely working outside of their scope of practice, which scared me. It frustrated me, [it makes me think] why are you putting yourself at risk?" RM2

This firsthand observation describes a sense of fear and frustration for RM2, as she witnesses these healthcare professionals consistently undertaking tasks that exceed the boundaries of their established professional responsibilities.

The issue of skill mix, and its implications on workload distribution, becomes evident in the statement,

> *"I must admit, I never thought I would see the day that AINS and RNs were working on the maternity wards. RNs [are now] counted in the numbers." RM3*

This observation highlights the presence of non-midwifery-trained registered nurses in maternity care, potentially affecting the provision of specialised midwifery care and raising questions about the allocation of appropriate resources.

The imbalance in skill mix, and the resultant burden on junior staff members is further emphasised by RN6, who states,

> *"Essentially in perioperative nursing, we're having such a shortfall of nurses especially senior nurses … So now we've got a junior workforce that is truly bottom heavy, and it's just how do we navigate this? How do we get people up to scratch?" RN6*

This quote illuminates the challenges faced in maintaining a balanced skill mix within healthcare teams, particularly in specialised areas, and the need to address skill gaps and ensure safe and effective patient care.

Furthermore, RN2 and RN1 highlight the impact of understaffing on the delivery of basic nursing care. RN2 notes,

> *"Staffing wise, the skill mix is a problem. That's a stressor for me, the understaffing," RN2*

and goes on to express a sense of discontent over insufficient time for essential nursing tasks,

"I'm not very happy if I don't roll my patient [due to staff shortages] in about five hours." RN2

RN1 echoes this sentiment, revealing the consequences of managing excessive patient loads, stating,

"Basic nursing care is not being done because of understaffing." RN1

The cumulative effect of these challenges and the potential risks involved are further articulated by RN1,

"I would say I definitely never felt my registration [was at risk], but a sentinel event definitely could have occurred during these times." RN1

This quote underscores the critical importance of maintaining adequate staffing levels and appropriate skill mix to ensure patient safety. RM2 voices apprehensions about how these staffing and skill mix issues could potentially jeopardise their professional registration,

"I worried about my registration being compromised because of staffing and skill mix." RM2

This emphasises the significance of maintaining adequate staffing levels and appropriate skill mix to ensure adherence to professional standards.

RM3's narrative highlights the issue of patient load allocation, as she recalls graduate midwives are often assigned an overwhelming number of women and babies,

"One of my graduates quit because she had five mums and babies and an RN [to assist], because she got given an RN, she got given another four mums and babies. So, between them, they had nine and she said, 'I've got nine women and nine babies.'" RM3

This account underscores the strain imposed on midwives and the potential compromise of delivering optimal care due to excessive workloads. While RM5 recounts that,

"Staffing was almost always bottom-heavy. In 2021, I've been a midwife for two years, and at times I would be [considered to be] one of the most senior." RM5

Furthermore, RM2 contemplates and stresses,

"It's not worth the extra $1.50 an hour to be in a higher role, for all the additional stress and burden." RM2

The observation by RN4 regarding the prevalence of agency staff compared to permanent staff signals a reliance on temporary personnel,

"More agency staff [rostered than permanent]." RN4

With RN1 highlighting that,

"It was common knowledge [certain staff junior and agency] that you had to micromanage all of their patients as well as your own … Otherwise, it would be disastrous for the health and well-being of those patients." RN1

These findings shed light on the challenges posed by maintaining a consistent workforce and the implications it may have for the continuity of care.

The need to resort to recruiting student nurses for critical roles, was also subject for discussion with RN6, stressing the extraordinary measures taken to address staffing gaps during the pandemic,

"We got to the stage where we were desperate that we would recruit student nurses to vaccinate … In the pre-pandemic world, you needed to have multiple years of registration and accreditation before you could even think about doing those things." RN6

This reflects the circumstances that necessitated adapting traditional roles and responsibilities to meet urgent healthcare demands.

The accounts provided by RN1 and RN2 shed light on the consequences of an imbalanced skill mix, with a heavy reliance on junior staff members. RN1 notes the recruitment of inexperienced personnel and the subsequent need for additional support,

"They were having to draw people in from inexperienced positions ... Very junior heavy." RN1

This emphasises the challenges of maintaining an optimal skill mix and senior staff presence, potentially impacting patient care outcomes. RN2 adds that,

"I've been told by one of the team leads that some of the nurses cannot cope with two patients. It's not my fault if you've got staff members who cannot cope with two patients. I feel like I get given two sick patients all the time, that's not fair." RN2

Lastly, RM2 provides a personal account of the emotional toll stemming from staffing shortages and increased responsibilities,

"On most shifts. I would say 90% of my shift, I was crying by the end of the shift. If I wasn't crying on shift, I was crying as soon as I walked out or in the car." RM2

For RM2 these frequent experiences were the catalyst for her, *"I think it's probably what made me go, enough is enough, [choosing to leave the role as a bedside midwife]."* RM2. This poignant testimony stresses the emotional and psychological strain experienced by nurses and midwives working in such challenging circumstances.

4.26.3.4 Redeployment, Resilience, and Adaptability

In the exploration of redeployment and its impacts within nursing practice, a range of narratives collected from RN6, RN5, RN1, RN4, and RN3 were analysed, revealing a rich tapestry of interconnected and contrasting experiences.

RN6's account encapsulates a profound emotional impact associated with redeployment, describing an unprepared transition to an emergency department as a harrowing experience. Discussing how the manager had selected her for redeployment to the emergency department, RN6 recalled,

*"I can't do this. I can't do this. My mum was unwell I begged her, 'Look, I promise I will make it up to you at some point in time. Just please don't send me there. I was f****ing terrified.'" RN6*

RN6 discussed the sentiment of being *"thrown"* into various departments without seeming method or rationale,

"They just kept throwing us, Redeploying us here, there, everywhere." RN6

These quotes are an illustration of the unsettling effect of perceived disorganisation within the redeployment process.

Contrarily, RN5's narrative encapsulates a more multidimensional perspective on redeployment, despite the challenging initial stages and an unwelcoming reception in the new department,

"I was not made particularly welcome [in the new department] because people in that department were being redeployed out of that unit ... They were like 'why can't you go there instead?'" RN5

RN5's account shows that a careful match between the nurse's expertise and the new department's needs can somewhat alleviate the distress associated with redeployment. RN5's suggests having some agency in their redeployment process due to their newcomer status and orthopaedic specialty,

"I was the newest staff member in ... I at least got to stay in my area of specialty [when I was redeployed]." RN5

This contrast suggests that the process of redeployment is not uniformly experienced, but can vary significantly based on numerous factors, including the nurse's area of specialty and the specific contexts of their original and new departments.

Despite the contrasts, a common thread of apprehension and anxiety permeates both RN6's and RN5's narratives, further magnified by RN5's report of additional stress among anaesthetic nurses sent to the ICU.

> *"We have 75 nurses in my department at that point … Of the 74 of them, I was the only one who was not required to do a stint on the COVID ICU ward … I think the only reason I didn't is because I was [the] newest employee." RN5*

This indicates the broad scope of the emotional impact exerted by redeployment strategies. That was another level of anxiousness for them.

Narratives from RN1, RN4, and RN3 provide a more unsettling insight into the effects of redeployment on job satisfaction and staff retention. The observation from RN1 of staff resignations and transitions to other areas within a relatively short time frame is a stark manifestation of these negative impacts. Additionally, RN4's contemplation of leaving, feeling fed up with management, and considering alternative, less stressful occupations further highlight these concerns,

> *"I had a look at [leaving for] fly-in fly-out work. They get paid a lot more, and they're not responsible for anyone's lives." RN4*

The narrative from RN3 offers a slightly different perspective, with the decision to reduce ICU working hours *"I definitely still want to be working in ICU, but it won't be my full-time job,"* RN3, demonstrating an attempt to achieve better work-life balance in response to the stress and dissatisfaction.

4.26.4 Examining the Ethos of Leadership

This category delves into the role of leadership in creating and maintaining organisational cohesion. It considers how the values, behaviours, and decisions of leaders affect the functioning of the organisation at all levels. It also explores different leadership styles and their impact on employee motivation, efficiency, and overall job satisfaction.

4.26.4.1 Management Disconnection

This section uncovers a universal sense of disillusionment and alienation from the decision-making divisions within healthcare organisations, as reported by the participants. It further explores their experiences with administrative structures, leadership visibility, and communication challenges, and how these aspects influence the overall work environment.

A common theme emerged around feelings of disillusionment and marginalisation from the decision-making members of the healthcare organisation. RM2 observed,

> *"Our organisation … our leadership and management team have no midwife, there is no midwifery representation in our leadership inside the team … they don't understand the perspective of caring for our types of patients, I guess, and they're not able to help, especially the afterhours." RM2*

This sentiment was also reflected in the perception that staff efforts to address issues with skill mix and ratios were being pacified rather than addressed,

> *"They put on a meeting with the CEO, the DON, Deputy Director, the Director of Medical Services, the Head of Obstetrics and Neonatology/Paediatricians … It was a food and wine night. It's like, 'Put on food and wine and that'll shut us up.'" RM2*

Among the participants, the recurring concern around inadequate staffing emerged distinctly. *"We have been fighting that for a very long time, capping inductions."* RM2. RM2 noted, expressing the struggles around achieving adequate staffing levels. This struggle was further exacerbated by administrative bottlenecks, as RM4 described,

> *"Exec are always focused on budget, I'm down about eight FTE, full time equivalents [on the maternity ward I manage], and I've been trying to get staff through, and unfortunately, they keep telling me 'You're using too much agency and too much casual,' and I'm just like, 'Yeah, but every time I put in a contract [to employ someone], it takes three months to process the contract … it's a vicious circle.'" RM4*

Leadership visibility and communication were themes that participants also dwelled on. As one participant put it,

"Previous CEOs at the hospitals I have worked at I couldn't remember their names or what exactly they did. I could tell you what the name of our CEO during the pandemic because of his presence ... He was doing a face-to-face video every week. You could send him questions and they would be answered, which you would not necessarily expect." RN5

RM3 agreeing,

"As a hospital, the exec, I believe, did try. They had all staff forums and things like that. That is a positive. The negative is clinical staff on the floor can often not sit down and watch those." RM3

This speaks to the positive impact of open, consistent communication on staff morale.

RN3 indicates that their ICU adopted a team-based approach for communication during the COVID-19 pandemic, adopting the use of digital tools to provide real-time updates and facilitate scheduling for staff,

"The ICU I work in uses teams to communicate about extra shifts. There's a COVID channel on there where they [management] are sharing of information about COVID." RN3

RM1 goes on to discuss how,

"Having a continuous strong leadership team who aren't interchanging and taking other roles and stepping up to cover other positions [would have helped]. I want to be able to go to the same person who has done the role and that you're familiar with, I guess, instead of having different faces in the role." RM1

This highlights the desire for consistent leadership and the instability caused by frequent role changes within the leadership team.

RM4's quotes further highlights the pressure of managing an under-resourced team during the pandemic,

"I'm really glad I wasn't a manager during the pandemic because I think that would have been so incredibly difficult. I know my stress level now as a manager rises when I have multiple sick calls and things like that, and trying to fill my roster now is difficult, but it would have been absolutely catastrophic back then… some shifts we had only four midwives on." RM4

RN4 expressed their dissatisfaction, with the existing top-down decision-making processes, advocating for a more collaborative approach,

"There is no discussion [about scope of practice, duties], there is no collaboration with management in these decisions. These decisions are passed without speaking to the nurses." RN4

Despite various attempts at communication and leadership presence, the persistent issues of administrative disparity, and the lack of collaborative decision-making continued to contribute to a disheartened and overburdened staff.

4.26.4.2 Silenced Voices in the Corridors

This section explores how the disconnect between management and the workforce has led to immense frustration. While the previous subsection focused more on the issues of leadership disconnect, this theme delves deeper into the emotional and psychological impact of these challenges and sensed disconnection.

RM2 noted the disconnection between the leadership's celebratory events and the harsh realities faced on the ward,

"We do have quite big Christmas parties and the hospital does try … This is all well and good to have the bells and whistles and the biggest Christmas party but come and see us on the ward when we're at breaking point … they just don't." RM2

However, RM3 also voices concerns about the efficiency of these efforts at all levels of the organisation,

"I believe our executive truly, truly wants to do everything they can but doesn't always filter out across the entire organisation." RM3

However, these instances of positive leadership were contrasted by negative experiences with higher management, with RN6 noting,

"We had whips cracked by executives within the district ... they [all] had different agendas ... [there was] rampant bullying and harassment by leadership teams. It just got really, really bad." RN6

RM2 echoes this sentiment saying,

"When the chips are down and say an incident does happen, do they really have our back? or are they going to put us out as the excuse or the problem?" RM2

This paints a concerning picture of a hostile work environment that can significantly impact staff wellbeing.

RM1 highlights a shared sense of frustration in the face of challenges,

"I guess [bad days at work] probably not necessarily any different to any other time, more frustration I think, I think everyone was in the same boat, you just didn't want to put more pressure on the manager who couldn't really do anything anyway." RM1

This sentiment reflects the challenges faced by healthcare staff when there is perceived lack of effective leadership. RN2 discusses their perceptions of stagnation in management practices regardless of the pandemic context,

"I've been told by other people that it's pretty much the same [management wise pre and during covid]. They [management] are set in their ways. I've been there for over a year now, and I've not seen any changes and some issues have been recurring and nothing has been done." RN2

RM4 elaborates on the influence of senior leadership visits, noting that these interactions could shift the manager's mood swiftly,

"Exec could come down, and it would always put her [the manager] in an even worse mood." RM4

Despite the manager's inherently strong personality and genuine care for her staff, RM4 observes that the pressures of managing during COVID-19 resulted in noticeable changes in her managers demeanour and stress levels, leading her to become "*quite a toxic manager*." *RM4.*

RN4, describing the aftermath of serious events, states,

"In less than 24 hours, I had two major SAC [Severity Assessment Code for clinical incidents, SAC 1 being serious harm or death] 1 events. Again, no debriefing for any of those. I followed up with EAP [Employee Assistance Program] for counselling and I got told I was having a trauma response and had PTSD from those [experiences], but I had no support from my manager other than their corridor saying you can contact EAP. Not even a team debrief [after the events]." RN4

This quote underscores the emotional toll such events can have on healthcare staff, and the importance of psychological support in the workplace,

"We're the second biggest emergency hospital in the state, and therefore the major trauma centre … there is no time to breathe and debrief [between cases]." RN6

RN6 goes on to discuss the effects this has on their emotional health,

"There's already that nursing trauma and then on top of that there is the pandemic wreaking havoc nobody knows how to debrief, nobody bothers to checking in on anybody else unless you do it amongst your peers." RN6

These quotes highlight the collective trauma faced by healthcare staff, further pointing to a need for structured support mechanisms, particularly for debriefing and checking in on the mental health of nurses and midwives.

In contrast, there were some participants who also shared positive views and experiences regarding management and leadership within their organisations.

RM3 shares mixed sentiments about the effectiveness of the executive leadership. On a positive note, RM3 concedes that,

"Yes, without a doubt our executive team provided and funded additional [education] support at the beginning of COVID ... Introducing a clinical facilitator role for grads. That has now increased [in terms of hours allocated to that role] and has now become permanent." RM3

RM3 commends the introduction of an OSH wellbeing team as a significant and beneficial initiative,

"... introduced an OSH wellbeing team. Best thing they could have done. That team needs to win every award going because they are phenomenal." RM3

4.26.5 Transforming Education in Unprecedented Times

This category addresses the challenges and opportunities for education in changing times. It covers changes in education policies, the evolving role of educators, and the impact of societal and technological changes on teaching and learning. Areas addressed range from the shift to online learning, to the cancellation of student nurses and midwives entering the healthcare sector at the high of the pandemic affecting workforce recruitment, as well as the ongoing staffing crisis impact on professional development.

4.26.5.1 Change in Healthcare Education and Communication

The following exploration unveils a complex interplay of challenges and adaptations in healthcare education and training, specifically within nursing and midwifery, as shaped by the COVID-19 pandemic. This in-depth probe elucidates the struggles and adaptations within this professional sphere, highlighting the impact on educators and students, as narrated by the participants.

RM3 observes,

"I think COVID had a significant impact on midwifery education ... You cannot teach this job that way." RM3,

thus, expressing concerns about the disruption of traditional face-to-face education models. This sentiment was echoed by RN1, who notes, *"It was a year and a half to two years, before I had my first annual mandatory training complete,"* RN1, a statement that alludes to the potential delays in training due to logistical challenges brought by the pandemic.

In contrast, quotes from RN2 and RN4 suggest that during the peak of the pandemic they experienced an increase in educational support and opportunities. With RN2 stating,

"There has been a lot more education. Recently [the organisation] adding an after-hours nurse educators ... that's actually really helped a lot." RN2,

while RN4 mentions,

"Upskilling, teaching the people that are going to be there for maybe 12 weeks [in casual positions] and then they're going to go again ... puts extra pressure on the permanent staff." RN4,

underscoring the initiatives taken for continuous learning and upskilling, noting that can be burdensome on the existing permanent staff to provide that continual upskilling.

The adaptation to online platforms brings its challenges. As RM3 describes,

"I think we're much, much better using online technology, but ... you sit in meetings online and you can see the emails rolling in and you begin to zone out from the meeting." RM3,

which shows the distractions and increased workloads accompanying this shift. This notion of escalating workloads is further emphasised by this participant,

"The number of emails has quadrupled. To the point now that some days, literally my whole day is trying to get through my email." RM3

This rise in electronic communication represents a stark shift from pre-pandemic practices when the immediacy of face-to-face interaction was commonplace,

“I would simply knock on someone’s door and say, ‘I need a chat’ [RM3]. It got to a point RM3 accounts that “a whole policy [came out about email etiquette] ... Along with the executives sending out a statement because of this issue saying, ask yourself, ‘Is this email necessary?’” RM3

Simultaneously, capacity issues to support students and junior staff due to high workloads were central concerns for many participants,

“The patient to staff ratio was really high and we just didn’t have the capacity to teach and support the students and junior staff ... I feel really sorry for the students and the grads and junior staff, they did not get support [during the pandemic] because we couldn’t provide it.” RM1,

while another participant expresses a sense of frustration with students’ expectations not aligning with the realities of the pandemic,

“The COVID cohort of students who just came through are very entitled ... I tried my best [to support and educate them on the placement] whilst having to support the permanent staffs’ needs and help with patient care ... They would still say [on their evaluations], I hated my placement.” RN6

This statement by RN6 underscores the challenging dynamics presented by the new cohort of students during the COVID era, revealing a sense of entitlement and dissatisfaction despite dedicated efforts to provide them with support and education. It provides a snapshot of the intricate balance required to cater to both the needs of permanent staff and patient care, amidst dealing with the often challenging expectations of the new entrants in the profession.

4.26.5.2 Role Reversal of Educators

The following narratives provide insightful perspectives on the shifting roles and responsibilities of newly graduated midwives and nurse educators during the pandemic. They

illustrate the significant mental toll and practical challenges introduced by COVID-19, particularly with respect to patient care and educational commitments.

RM3 describes a shift in focus for newly graduated midwives,

"What a lot of our time was spent doing [as educators] was actually counselling them on what they were witnessing, ... particularly the new grads, they come in very holistic very woman centred however every single right was taken away from these women [during the pandemic] and there was nothing they could do." RM3

Here, the emphasis is on the psychological burden faced by new graduates, who may feel powerless in the face of the pandemic's drastic changes.

RM3 and RN1 share common ground in discussing the practical implications of staffing issues due to the pandemic. RM3 mentions,

"Staff development educators were frequently used to care for patients instead of providing education because of short staff, this was occurring far more frequently than prior to the pandemic and is still very much an ongoing issue post COVID peak." RM3

Similarly, RN1 reinforces this point stating, *"almost every shift the SDN [Staff Development Nurse] would have had to work with a patient load instead of helping out with the juniors."* RN1. Both quotes underscore the strain on staff resources during the pandemic, which has led to a shift away from educational and supportive roles to more direct patient care.

4.26.5.3 Adaptation, Attrition, and Anomalies in Healthcare Policies and Practice

The following excerpts highlight the varied challenges faced by nursing and midwifery students and professionals amid the COVID-19 pandemic. They underscore the constant modifications in policy, the ensuing uncertainties, and the palpable disconnect between management decisions and the experiences of nurses and midwives on the frontline.

RM3's quotes focus largely on the implications for midwifery education and how students navigate hospital environments during the pandemic. RM3 emphasises the vital importance of allowing students in hospitals for their training,

"If you do not allow students in the hospital, then they will not graduate. The repercussions are significant." RM3

In a following remark, RM3 addresses the need for new policies for midwifery students in relation to patient support, highlighting the adaptability required in this context,

"We then had to make sure that ... we dealt with it quickly. We wrote a policy that midwifery students were not [considered as] support people ... We made it very clear. That policy then became a Statewide policy." RM3

These quotes contrast with RM5's recounting of the constant changes and the profound uncertainty experienced by both healthcare providers and patients. RM5 comments on the pervading uncertainty and fear, indicating the emotional toll the pandemic has imposed,

"Things were constantly, always changing ... everybody's essentially scared." RM5

RN4's quotes delve into the repercussions of these constant changes on the morale and professional satisfaction of nursing staff. The constant shifts in responsibilities and policies appear to cause frustration and attrition,

"We would raise objections, but we got steamrolled ... I feel like we have lost a lot of staff from that," and "nurses are getting fed up [with all the additional duties and responsibilities] and just going, you know what? I can go stack shelves at Coles and earn the same money and be happier." RN4

RN4 further elucidates how shifting roles and responsibilities exacerbate nursing duties, thereby leading to further dissatisfaction,

"Another reason why people are leaving is whenever PCA [Patient Care Assistant], techs or now CSA [Certified Surgical Assistant] say, 'that's not my responsibility' it increases the nurse's role." RN4

Lastly, RN4 sheds light on the sense of disconnect between decision-making and practicality in the frontline experience,

"[Decisions and policy making] came from the doctors … nursing staff would be like, 'Hang on, that's not even following basic infection control principles." RN4

4.27 Theme 2: The Cost of Caring

In this theme, the journey of nurses and midwives grappling with the complexities and challenges brought forth by the COVID-19 pandemic are explored. Through the dissection of these interwoven sub-themes, this section endeavours to provide valuable insights into the pressures experienced by these healthcare professionals during the pandemic.

4.27.1 Striking a Balance

This category dissects the multifaceted intricacies of shift work in nursing and midwifery during the pandemic. It explores the interplay between shift work, career progression, and the associated risks and benefits, while emphasising its impact on health and wellbeing. In the face of these heightened challenges, the necessity to strike a balance emerges as a key theme. This balance serves a dual purpose. It is integral both for personal preservation thereby maintaining physical and psychological wellbeing, and for bolstering the efficiency and resilience of healthcare systems.

4.27.1.1 The Inflexibility of Shift Work During a Crisis

The ensuing results examine the paradoxical resilience of nurses and midwives, particularly those trained during the height of the COVID-19 pandemic, whilst also highlighting the systemic challenges that undermine this resilience. Aspects such as annual leave scarcity, the rigidity of shift work, and its intersection with personal life and family obligations are explored, emphasising a shift in attitudes across generations.

The perceived resilience of nurses and midwives who were trained during the peak of the COVID-19 pandemic emerges as a central theme, as highlighted by this participant's observation,

"Most of them are fairly resilient that trained through the peak of COVID. I do think that their expectations of this career are a little bit skew-whiff in the sense that … I'm not sure that they all realise it's shift work." RM3

Contrary to this resilience, the reality of limited annual leave availability highlights the significant challenges that threaten to undermine such resilience, as this participant indicates,

"Leave for this year is gone. So, anybody who goes to apply, there's no leave available. There is no other job [where] that would be the case." RM3

This contrast intensifies when considering the shifting attitudes of the younger generation towards shift work. This participant observes,

"We actually don't need to stay in this one anymore. We don't actually have to keep doing this. What I'm finding is with the younger ones, they won't … They have no intentions of doing shift work. They're very aware of what the damage it does to their health." RM3

This comment underscores a generational divergence. Here, an increased awareness and rejection of the health risks associated with shift work deviate from the earlier resilience narrative. Adding depth to the conversation around shift work, this participant states,

"I'm on my own with the two kids, so to do shift work with them with not very much family support, it was pretty chaotic …" RN5.

This emphasises the impractical implications of inflexible scheduling on family life. RM5 discusses the implications of moving away from shift work,

"The best thing that my manager did for me was let me work in antenatal clinic primarily … because of the hours. It was hard because I was like, 'I'm always in antenatal clinic and I don't have any skills in other areas, but there was no flexibility to work anywhere else [because you must do shift work in those areas].'" RM5

The connection between shift work, family responsibilities, and the struggles it entails reinforces the theme of inflexible structures and its negative repercussions.

Echoing the sentiments about leave scarcity, *"It was difficult to book in leave. I think it's been a year and a half since I've taken any leave." RN1* reaffirms the lack of accommodation for personal needs in the system.

4.27.1.2 Reassessing Career Choices and Finding Work Life Balance

The theme of self-examination and professional reassessment, stimulated by the unique conditions brought about by the COVID-19 pandemic, was unveiled with the motivation for revaluation captured in RM1's candid revelation,

"When I was away from work, I definitely questioned what I was going to be doing and how I can change to have a work life balance and be happier in my role." RM1

This inward reflection and questioning, as expressed by RM1, is not an isolated sentiment. As RN3 affirms, these circumstances have led many to critically question their professional path, motivations, and long-term aspirations,

"It made a lot of people question what they do, why they're doing it, and is this something I want to be doing for the rest of my career?" RN3

This sentiment prompts a reassessment of professional contribution, as encapsulated by RM1's subsequent proclamation,

"I'm looking into how I use my skill and still contribute to midwifery, but without as much stress … whether that exists or not, I'm not sure." RM1

Furthermore, the beginning of the pandemic served to reinforce these sentiments of discontentment and catalysed the desire for change, as illustrated by RM1's poignant statement,

"When the pandemic hit, I think it really just reinforced that I needed to do something different … I was really ready for a change." RM1

This narrative for reassessment and re-evaluation then pivots towards potential exit strategies, encapsulated by this participant's statement,

"There are so many jobs out there that I don't need to try 100%. I've actually had one grad say that to me you can earn more at Costco and have a lot more job satisfaction." RM3

Amid this context, RM4's reflection adds an interesting perspective on the economic realities and job security of healthcare professionals during the pandemic,

"I used to have this joke that only COVID could make midwives and nurses more of the most affluent people around at the moment, because people were losing their jobs and mines were shutting down." RM4

Despite this economic narrative, the appeal of direct patient care is evidently still significant,

"I had been missing direct patient care working in a non-clinical role [prior to COVID] … I wanted to be involved with that direct patient care … We knew that vaccinations were just around the corner. I thought it would be a great time to make that clinical decision to come back." RN5

The significant push towards a career change was also conveyed,

"COVID has 100% changed my opinion about the profession … I was about to quit if I didn't get this job recently … I think I was desperate enough in that 18-month period to try and get out … I did 15 interviews." RN6

Despite the intensity of RN6's initial push for a career change, there's a noteworthy shift in perspective when this participant acknowledges the unexpected opportunities brought about by the pandemic,

"If anything, one thing I suppose I should be grateful for is the fact that the pandemic allowed me to get into education like I wanted to for 5, 6 years ago." RN6

4.27.1.3 Shifting Priorities in the Midst of a Pandemic

This section delves into the emotional struggles of nurses and midwives during the COVID-19 pandemic, as they wrestled with significant internal conflict and concerns. The narratives provide a portrayal of the struggle to balance personal well-being with professional responsibilities. These accounts are dominated by prevailing fears and a shift in life priorities, yet there's a subtle but persistent fondness for their professions amidst these complexities.

The narratives presented illustrate the internal conflict and concern experienced by nurses and midwives during the COVID-19 pandemic. One participant elucidates to the concern and reconsideration of the balance between personal life, physical and mental health, and professional commitment, stating,

"Staff were just realising that [their job] might not be worth the compromise to their physical and mental health." RM1

This sentiment is reaffirmed by their personal anecdote of going to work every day amidst the uncertainty of the pandemic,

"A lot of my friends were working from home during the pandemic and felt very safe, I didn't have that luxury." RM1

The psychological toll of the pandemic is further highlighted by another participant who voices a prevalent fear amongst healthcare professionals,

"I'm always constantly worried I'm going to bring COVID home ... I have two small children, so it was always, if I get it, what's going to happen? Are they going to be, okay? ... Will I be able to care for them? Who will care for them if I can't care for them?" RM5

In the pursuit of equilibrium between professional obligations and personal well-being, another participant delineates their approach towards work-life balance, especially within the demanding environment of the ICU,

"[I couldn't work] 40 hours every week [in ICU]. Until I'm 67. No. I'll do a shift a week, a shift a fortnight, if it suits me ... I'll get balance in my life from having other roles that aren't so exhausting." RN3

This pragmatic approach extends to maintaining a part-time role in ICU, a decision grounded in a profound respect for the exhaustive nature of full-time commitments as RN3 remarks,

"I do have a lot of respect for my colleagues that are still working full-time hours there on the floor at the bedside, looking after patients because it's incredibly physically, emotionally, mentally exhausting." RN3

These concerns extend to the broader healthcare community, as RN4 articulates, highlighting the widespread fear among colleagues,

"People who were legitimately terrified of what this could mean to them and their families." RN4

This fear, along with the pandemics' unpredictability, leads to a transformative shift in values, encapsulated by RN6,

"I just want peace. With COVID, you really learned to re-evaluate what are your values in life ... It's no longer my career. It is actually peace." RN6

However, despite these concerns and shifts, a nuanced sentiment of longing and attachment to their role is evident in the experiences of some healthcare professionals. RN1 expressed a sense of missing the work environment while working part-time,

"I'm working only part-time. I do actually find strangely enough that I miss it." RN1

This illustrates the complex emotional dynamics that characterise healthcare professions during unprecedented times.

4.27.2 Running on Empty

This category delves into the profound issue of burnout among nurses and midwives. It highlights the immense physical and emotional exhaustion, the occurrence of PTSD, and the deficiency of support mechanisms and restorative leave during the peak of the pandemic. It also explores various positive and negative coping strategies employed by participants to manage these demanding circumstances.

4.27.2.1 Stress and Coping Mechanisms

In these narratives, the focus shifts to an intimate exploration of the physical and emotional toll experienced by the participants during the pandemic. Their experiences highlight, their battles with overwhelming pressure, the growing importance of resilience, their various coping mechanisms, and the profound impact these experiences have had on their lives and sense of self.

One participant indicates a sense of being pushed to the edge of endurance, emphasising the physically and mentally draining nature of their work. As expressed,

> *"It feels like we skated on the thinnest of ice for that entire seven-and-a-half hours. I couldn't breathe, I didn't eat … because I couldn't stomach anything." RM2*

This intense pressure sometimes led to moments where RM2 discussed having to put their personal well-being first, as indicated by the painful admission of having to step away from emergency situations that occurred at the end of their shift,

> *"To walk away from an emergency situation [that occurred at the end of my shift], which I did probably three times, and my God, did I beat myself up about it. But I could not physically give any more … That broke me, I am not a person that would leave anyone in the lurch." RM2*

Among the narratives, another participant highlighted how resilience was an essential trait that has become crucial for survival in the healthcare profession, stating,

> *"I think at the present moment, they [nurses and midwives] need to have a great deal of resilience to be in this position." RM3*

Yet, the need for such resilience also indicates the substantial strain experienced by these professionals.

When coping mechanisms are considered, several strategies emerge. One approach is emotional detachment, as described by RN1,

"I'm quite good at detaching myself from what you've been assigned and what you know to yourself actually needs to be accomplished. I'd say I'm quite good at leaving everything behind at work." RN1

In contrast, one participant reveals the reliance on substances like alcohol and cigarettes for stress management, with their admission,

"It takes me a long time to wind down when I get home, usually you think, what could I have done better? How could I have done that differently? … I've tried to quit smoking. I've never been much of a drinker, but I do drink at least if I wanted to drink at night after working." RN4

Simultaneously, the importance of emotional support within the workplace is highlighted by RM4's frustration over restrictions on expressions of comfort,

*"You're so stressed, everybody's so stressed and then they tell you, you can't hug each other [because of restrictions]. I mean, as a unit, we just went, f**k that. You can't be under this amount of stress … And then have no release." RM4*

The persistent impact of stress permeates into personal lives, creating a sense of isolation, as RN6 describes,

"I'm alone on the front line. If you don't work in health care. You don't understand. I just felt so isolated. My anxiety was just crawling." RN6

Despite active efforts to manage their well-being through professional help and physical exercise, a deep sense of personal transformation is acknowledged,

"It's not to say that I'm not getting help … but I know this [pandemic] has fundamentally changed me as a person." RN6

4.27.2.2 Pushed to the Edge

The following theme delves deeper into the repercussions of the ongoing pandemic on the physical and psychological well-being of nurses and midwives. These firsthand accounts

describe exhaustion, burnout, and psychological distress stemming from high-intensity workloads, and the domino effect these strains have on personal lives and future prospects in the profession. The implications of relentless workload and enduring stress on nurses and midwives' overall well-being are profoundly embodied in the firsthand accounts shared.

A common theme that resonates through these narratives, was primarily articulated through the words of RM1: *"I couldn't keep doing what I was doing everyday [during the pandemic] I was just so exhausted, and I felt that I couldn't give the women the support I wanted to."* RM1. This sense of professional inability is paralleled by RN2, who expresses the physically debilitating repercussions of her routine position doing shift work, stating,

> *"I do six long days a month and six-night shifts. Basically, I do day-night, day-night, ... Physically, it was so tiring ... I didn't have much life after work ... On my days off, either I stay in bed all day or ... because I'm so exhausted, I would say 'I'm sorry, I can't go out today [to friends or family] because I'd rather stay in bed because I'd like to recover.'" RN2*

The narratives collectively illustrate a disturbing picture of a work environment ripe for burnout. Specifically, both RM2 and RN2 take a decisive step back due to exhaustion and burnout,

> *"Since the 28th of January, I haven't worked at the hospital and taken extended leave for three months using some long service leave. I'm six weeks into that now and I don't miss it, and that's really sad. I don't miss the stress and I don't miss ending up being in tears after each shift." RM2, and "I'm one of the people who has actually left due to burnout." RN2*

RN6, on a more distressing note, recounts the severe psychological impact, to the extent of contemplating suicide,

> *"Unfortunately, and sharing this on a more deeper level, the anxiety and depression got so bad that I did contemplate suicide a couple of times." RN6*

Amidst this emotional turmoil, RN6's mental distress manifested in her sleep too, further exacerbating her suffering. She details,

"I started having really bad dreams about war time scenarios. They're so vivid that I can still remember them quite emphatically. It was just so bad." RN6

The effects of stress seeping into interpersonal relationships of participants, evidenced by one participant's acknowledgement about altering family dynamics experienced during the pandemic,

"My family, they've watched me go through this roller coaster. My sister has said to me, "Look, I don't know what mood you're going to come back home in. It's hard to be around you." RN6

RM4 also discusses the amplified emotional volatility they experienced,

"I've probably cried the same amount in the last three years at work than I've probably cried in my entire career." RM4

The narratives from this participant, further highlights a perceived decline in compassion within the healthcare system and a disappointing realisation of staff reduction due to burnout,

"I think one of the negatives is we lost compassion [towards relatives and patients at times with staff saying] Nope, they can't do that. No, they can't come in, which is fine that was the rules … Whilst the processes we had in place to protect the hospital were brilliant, some of the reactions [from staff towards patients and relatives] were not so." RM3

The notion of an overwhelming workload is manifested in the experiences of RM1 and RM3, both of whom convey a sense of relentlessness,

"You're already [booked] on shift and you get three texts before seven o'clock in the morning asking for staff to do overtime, it set you up for that mindset that you're not going to get breaks." RM1

Whilst another participant recounts,

“I can remember saying to one of my colleagues recently who does extra shifts, ‘Why is your phone constantly pinging?’ She said, ‘There’s like 10 double shifts needing to be filled.’” RM3

A parallel connection emerges through another participant’s recollection, further underscoring the intensifying pressure,

“Nurses have had to deliver and work so much harder and get so much more done. Often nurses will be looking after more patients than they would normally have been allocated, and they haven’t gotten more financial benefits for that.” RN3

The resultant stress, as explained by a participant escalating to unprecedented magnitude,

“Every nurse and midwife, I think, will say the same thing. As far as your stress levels [they] became astronomical [during the pandemic].” RM4

This stress is highlighted by a related incident from the same participant, revealing emotional vulnerability under the constant pressure,

“Something that might normally be water off the duck’s back like I remember one midwife in particular ... she’s really quite a stoic person ... She got yelled at by a family ... It wasn’t like her to cry, but she was in tears.” RM4

These accumulated stressors culminate in doubts about the future, as expressed by other participants,

“I think that’s one of the reasons why I’ve decided to leave for a bit was to fill my cup again, because COVID basically emptied my cup.” RN2

Whilst another participant contemplates what their future looks like,

"Well, I was hoping [nursing] was going to be my lifelong [profession] but if things continue [this way], I'm not really sure." RN4

Both reflect on the diminishing sustainability of the profession under such conditions, indicating a potential long-term impact on healthcare services.

Lastly, RM4 and RN6's narratives contrast interestingly. While RM4 cites a reduction in stress levels and improved sleep after transitioning into a management role, RN6 paints a poignant picture of the personal transformation following the pandemic,

"There was a before COVID me and an after COVID me. I'm still trying to figure out who she is and how to find that sense of peace." RN6

This highlights the heterogeneity in responses to similar stressors in the healthcare profession.

4.27.3 Beyond the Call of Duty

This category critically examines the factors contributing to disinterest and dissatisfaction among nurses and midwives, amidst the pandemic.

4.27.3.1 Disillusionment in Healthcare

These participant responses collectively focus on the various challenges encountered by nurses and midwives in private and public hospitals, highlighting disparities in patient/women's expectations, patient acuity, recognition and utilisation of the full scope of practice, remuneration, patient gratitude, and workload. They highlight the differing viewpoints and experiences that lead to feelings of dissatisfaction and disempowerment amongst nurses and midwives.

The perspective of one participant emphasises the connection between the high cost of private healthcare and patients' expectations. The quote,

"A lot of people, choose to come to a private hospital because they want continuity with their doctor ... It is that expectation that you're going to get looked after by a midwife. You feel that you've let your women down when that doesn't happen." RM2,

underscores the inherent expectation of personalised and quality care in private healthcare. RM2 also acknowledges an increase in patient acuity, stating, *"It's just the acuity of our patients over the years … has changed significantly"* RM2, thereby establishing a relationship between higher patient acuity and the demand for more comprehensive healthcare provision. Amid these changing dynamics, RM2 further emphasises the alignment of service delivery with patient expectations, particularly in the context of private healthcare costs,

"They're paying a lot of money to come to a private hospital. Their expectations should be met and the scoring that the hospital evaluation score must reflect that. You just think, they can clearly see that the ward was understaffed, and everyone rushed, and my bell didn't get answered on time." RM2

One participant points out the discrepancies between healthcare providers' qualifications and their remuneration, with the quote,

"I've got five university qualifications. We are really poorly paid for what we do." RM3

This observation is further extended to the underutilisation of midwives' skills, highlighting systemic issues that limits the full recognition and utilisation of midwives' competencies,

"We are not allowed to practice to our full scope of practice because it is controlled by doctors." RM3,

RM3 indicating one of the causes of dissatisfaction is,

"That we're not recognised as the experts in normal pregnancy." RM3

The statements of RM5 emphasise the influence of external factors on health care delivery due to changes in health care policy and procedures during the peak of pandemic. RM5 highlights

the effects of the COVID-19 pandemic, which compromised women's rights to the basic pain relief of nitric oxide due to the route of administration.

"I guess watching so many women go through such instability … like, how are you taking away basic pain relief from women?" RM5,

RM5 goes on to highlight the affect that has on patient outcomes,

"They either got no pain relief or a high intervention pain relief, so they might go straight to morphine, which they might not be what they would have wanted … or they go for an epidural, which is another trail of interventions." RM5

Participant responses illustrate the sentiment of dissatisfaction within nursing, particularly in dealing with challenging patient populations,

"The clientele that we get are not very grateful for the help. So, I don't go home feeling satisfied that I've helped someone." RN2

This underscores the contrast in care attitudes when nurses feel their efforts are unappreciated,

"Sometimes when all the patients are well and it's just the long stays, then that's when I get disinterested. Or when we get a lot of psych specials. That makes me feel a bit more disinterested." RN1.

In contrast, *"It was like a conveyor belt of patients in and out, in and out of the ICU"* RN2 presents a different perspective, highlighting a high turnover of patients as an issue rather than a solution. This quote indicates impersonal, mechanised patient care, implying the potential dehumanisation that can occur with rapid and relentless patient flow.

This sentiment of disillusionment is further emphasised in RN2's subsequent quote,

"My initial motivation was like, it's a new workplace, it's challenging, but it's the same crap in a different hospital." RN2

Here, RN2 suggests that the challenges and disappointments experienced are not unique to a specific workplace, but are instead inherent to the hospital environment.

Another participant echoes these sentiments by suggesting the pandemic has intensified these feelings, with the quote,

"I think COVID has exacerbated a lot of those feelings [of disinterest] for myself and other nurses that have probably been there for a long time ... [the disinterest or being disheartened stems from] the appropriateness of a particular patient cohorts admitted to the ICU." RN3

Lastly, this participant highlights the broader systemic issues that cause attrition within the field, stating,

"In New South Wales, why people are leaving I know for a fact is because the bad wages, unsafe workloads, patient ratios." RN6

4.27.3.2 Diverse Pathways to Job Satisfaction

In this section, the experiences of nurses and midwives are explored in relation to how they derive satisfaction from their challenging roles amidst a global health crisis. Their accounts reveal the complex facets of job satisfaction, showing how it emerges from resilience during the pandemic, a focus on patient-centred care, the act of mentoring others, and the ability to adapt to the inherent unpredictability of the healthcare field,

"Satisfaction came from [COVID] not being as bad in Australia as other places." RM1

and RN4's reflection,

"[The pandemic has taught us] we can handle what we didn't think we could and that things aren't as scary as we thought." RM4

Both of these participants articulate a sense of satisfaction drawn from resilience in the face of the COVID-19 pandemic. These quotes emphasise an inherent connection between overcoming challenging circumstances and gaining professional fulfilment.

Contrasting with the crisis-driven satisfaction is the emphasis on the value of patient/woman-centred care and more control in the nursing and midwifery roles,

"That job satisfaction would come if midwives had more midwifery group practice, if we had more midwifery led care, not all women actually need a doctor." RM3

This sentiment highlights a desire for more autonomy and recognition of the skills that midwives bring to maternal care.

Similarly, a nurse participant finds satisfaction in being able to go beyond basic care, saying,

"When I can get through all of my daily tasks and then provide that extra level of care, which you don't get those opportunities anymore to actually spend time with your patients [that's satisfying]." RN1

This sentiment echoes RM3's quote, underlining the value of holistic, patient-centred care to job satisfaction. Furthermore, RN1 also points out that assisting medical staff, especially juniors, is a source of fulfilment, stating,

"I get a lot of satisfaction from being able to help others, not just within the nursing team, but also if the medical staff need anything." RN1

This extends the notion of satisfaction from patient care to encompass mentoring and supporting junior staff. One participant also states that the potential to influence and inspire others offers a reason to stay in the profession, saying,

"What makes me stay in the profession is the hope that I get to impact somebody and inspire them to be a great peri-op nurse." RN6

This quote extends the theme of mentorship and shows a direct contrast to the more task-focused aspects of job satisfaction mentioned by others.

Finally, one participant addresses the immediate gratification of seeing physical improvements in patients,

"The satisfaction of being able to do those [elective theatre cases for] patients [who have had to wait due to covid restrictions], we can physically see the difference. It's really rewarding." RN5

Bridging these contrasting perspectives, it is intriguing to consider RN1's statement,

"It would be that unpredictability of everything that keeps me wanting to come back to work." RN1

This suggests that while RN5 derives satisfaction from the tangible outcomes of their work, RN1 finds the uncertainty and variety inherent in healthcare equally compelling, demonstrating the multifaceted nature of job satisfaction in this field.

4.28 Theme 3: Caring in the Shadows

This theme explores the viewpoints of nurses and midwives regarding the external perception of their profession. Through the narratives of the participants, it emerges that a significant divergence exists between public understandings and the concrete realities of the nursing and midwifery roles.

4.28.1 Unheard yet Indispensable

This category explores factors contributing to nurses and midwives' distrust of government handling during the COVID-19 pandemic. The working conditions for healthcare professionals in this period have been challenging, with participants reporting long hours, increased workloads, and heightened risk of exposure to the virus impacting their physical and mental well-being. Participants also identified inadequate access to PPE, insufficient staffing, and limited resources that appeared to further compound the difficulties faced by nurses and midwives in delivering care to COVID-19 patients. Patient ratios and safe working conditions have emerged as key concerns in this study, contributing to participants reporting decreased job satisfaction, fear of compromising patient safety and care quality, and the potential for legal consequences and professional deregistration in case of adverse events.

"It's very difficult when you have critical staff shortages and you know that you have people that want to come [internationally and nationally], and the government has made it so difficult for them to come with a lot of unnecessary logistical red tape." RM3

4.28.1.1 Ratios, Rest, and Renumeration

The following section provides an exploration into the pivotal themes of adequate staffing, appropriate patient ratios, and sufficient institutional support reported by participants in the study. It also probes into the experiences surrounding the utilisation of financial incentives like retention bonuses, illustrating both their potential benefits and shortcomings in maintaining workforce motivation during challenging times.

The significance of adequate staffing and reasonable patient ratios is a shared concern across the various testimonies. One participant identifies the unique complexities of midwifery, highlighting the problem of undercounting the number of patients in their care,

"What would keep us in it? Nursing patient ratio. But for midwives, it's even more significant, as the babies [are not] counted. I have got grads who will tell me that they've looked after seven women and seven babies. I go, 'Oh, my God.' The babies don't count [in the government regulations]." RM3

One participant raises concerns over the lack of institutional support during the challenging times of the pandemic, stating,

"No, the government did not adequately address the needs and concerns of nurses and midwives during the pandemic. They paid us. But there was no additional mental health support ... [They didn't think] How can we make sure that we support them? There was none of that." RM4

Resonating with RM3's sentiment, a nurse participant underscores the need for reasonable patient ratios and sufficient rest, stating,

"I just want to have decent patient ratios ... I want to have a decent break between shifts. I want to have a 10-hour break between shifts. I want to be able to know that I'm not going to be exhausted and fatigued." RN4

Highlighting the impact of targeted incentives, a participant recounts the effectiveness of retention bonuses by the Victorian Government,

"We had some additional payments that we were offered through the middle of winter last year if we were willing to stay … There would be a bonus $500 paid in September. Then if we stayed another three months, there was another $500 bonus [the government implemented these strategies] because there were a lot of people leaving." RN5

While RN5's experience underscores the potential benefits of retention bonuses, contrasting opinions emerge when examining the real-world implementation of such strategies. With one participant pointing out the discrepancy between the nominal and the effective bonus after taxation, stating,

"We got our so-called bonus of the $3,000, but you've got taxes. I got $800. Two months of $800 over the last 21 months, because it was taxed so ridiculously." RM2

4.28.1.2 An Examination of Governmental Support

The quoted experiences present a tapestry of viewpoints on the governmental handling of healthcare professionals during the pandemic, revealing both the shared and unique struggles within this critical sector.

As noted by a participant, there is a distinct feeling of disappointment among nurses and midwives, and a sense of disillusionment with the government post pandemic,

"Coming out of [the pandemic] with the EBA [Enterprise Bargaining Agreement] and the pay increase request not being heard has been a real kick in the face to the midwives and nurses." RM1

This statement indicates a deep-seated discontent tied to a perceived lack of governmental support and respect for the profession.

Adding another layer to the narrative, one participant provides a recount of the hardships faced by healthcare workers relocating during the pandemic, stating,

"We had seven [registered midwives] who came all at once from the East Coast—Our Government changed the rules [initially] they were all allowed quarantine in the houses [they rented] ... suddenly that changed in a night, [they were told] you have to go to hotel quarantine, you have to pay $3,000 dollars. Half of them didn't even have the money to pay for it. Their parents and grandparents and everyone had to cough up to get them over." RM3

This experience for those midwives coming from the other states was laden with unexpected financial burdens and policy changes, causing a participant to intervene and advocate for these staff, highlighting,

"When I contacted the department and said, 'They're coming over here as essential workers most of them don't have money to pay for these unexpected cost'. They said well there's no funding to pay for these additional requirements. So, our hospital actually coughed up the money and paid them because they were paying rent as well as [having to complete] this quarantine [whilst not earning an income], so we did cover their quarantine costs." RM3

Expanding on the profound challenges brought on by these circumstances, RM3 highlights the psychological consequences these healthcare professionals endured,

"The impact that those two weeks in a hotel room on their own ... When we're talking about [midwives] in their early 20s, ... it has actually been quite a traumatic experience for them. Even for us getting them into this state when we were so short-staffed, was horrendous. I cannot underestimate the amount of work that involved for us." RM3

This participant goes on to discuss the psychological impact of being quarantined being so significant that,

"One of them [only] lasted three months, and I don't think they have ever recovered from that time." RM3

This testimony underscores the financial burdens, quarantine difficulties, and emotional toll amplified by bureaucratic hurdles and shifting regulations. Further elaborating on these

issues, RM3 highlights the consequential impact on workforce shortage and recruitment, remarking,

> *"It's very difficult when you have critical staff shortages and you know that you have people that want to come, and we've made it so difficult for them to come ... definitely a lot of unnecessary logistical red tape." RM3*

In contrast, another participant presents an unfavourable stance on the government's actions. While acknowledging the initial positive measures to ensure safety, RM4 points to a diminishing respect for service positions, asserting,

> *"The way he's [Government leader] treated nurses and midwives and ENs and teachers and police and everyone at the tail end of [the pandemic] it really does actually show ... I think that he damaged everything at the end, and I think he's probably broken a lot of nurses. Because people are burnt out anyway, then to get that lack of respect and that disdain at the end, I think that's made people walk away." RM4*

However, another participant presents a more understanding viewpoint towards the difficult decisions made by the government, acknowledging,

> *"They did what needed to be done with the information that they had. Right, wrong, and it'll all be judged from this day forward ... They were trying to protect the community. They were trying to make a health system be in existence when it needed to be and protect us as staff by doing what they did, especially with things like lockdowns." RN5*

4.28.2 Behind the Headline, Examining the Media's Portrayal of Nurses and Midwives

This theme delved into the complex narrative woven by the media regarding nurses and midwives during the formidable challenges of the COVID-19 crisis. It critically assessed the changing representation, which at first hailed these healthcare professionals as heroes, only to later cloak them in negativity and allegations of greed. Through this exploration, I sought to unravel the realities behind the headlines during the crisis.

4.28.2.1 Nurses and Midwives Speak Out on Misrepresentation and Diminishing Acknowledgement

The comments from participants illustrate a striking discrepancy in the media and public portrayal of healthcare professionals. At the onset of the pandemic, they were praised as heroes,

"I think that the positive media and public response was very short-lived." RM3

However, RM3 alludes to the changing narrative as the pandemic progressed commenting,

"We strike, and we are made out by the media and the government to be the worst people on earth to the point that the government tried to deregister our union." RM3

Other participants delve deeper into this perceived negative portrayal, noting that nurses and midwives *"are very much being sold now as [being] really greedy"* RM3, and accused of betraying their calling for better working conditions. One participant points out the underlying expectation,

"You do something as like strike for better working conditions and it is like, how dare you ask for a pay rise. You do your job because you love your job. Well, yeah, I do love my job, but I'm a highly trained professional with a university degree and I deserve to be paid well." RM4

This sentiment seems to stem from the societal notion that these roles are rooted more in altruism than professional value,

"It's that public perception of well, you chose to be a nurse, you knew you weren't going to get paid a lot of money, so suck it up." RM4

Further underscoring this perspective, another participant highlights the societal expectation that healthcare should be seen as more of a calling than a profession requiring fair compensation,

"I think they feel like it's a vocation, it's a calling, and you should do it because you want to. Why do you think you should get more money?" RN5

The media's role in the said negative portrayal is further stressed by a participant, who states,

"I think the media is a lot to blame. I remember them naming and shaming student nurses because they came to their placements with COVID, ... often blaming nurses for being super spreaders." RN6

Such stigmatisation feeds into the broader issue of misunderstanding the healthcare professionals' demands. A participant elaborates on this, indicating that the media's focus on the requested pay rise overlooked the broader plea for improved conditions,

"They focused on the pay rise, not the [working] conditions." RM4

In contrast to these experiences, another participant provides a somewhat counter narrative,

"I think the media portrayal has been positive overall." RN5

However, even in this perspective, the image of healthcare as a selfless 'calling' persists, echoing the critique raised by the other respondents.

4.28.3 From Heroes to the Forgotten

Initially hailed as heroes, their coverage diminished over time, leading to a sense of being forgotten by the greater community. Social media was reported by participants as exacerbating the situation, exposing nurses and midwives to trolling and criticism, particularly regarding vaccination policies, even from close friends and family.

This exposure to online abuse and criticism added to the challenges faced by nurses and midwives working in already trying circumstances.

"We feel downtrodden, underappreciated, overlooked. Overlooked is a big one, I think. All people would say is, 'Oh, that sucks,' and 'So sorry you are going through that.'" RN6

Furthermore, with similar under tones to RM6, RM2 explained,

"I think now more than ever, we need it back [the publics support that was there at the start of the pandemic]. Now is when we need that help, because there has been a lot that have left the profession because of exhaustion and feeling unsupported." RM2

In the context of nurses and midwives striking for improved working conditions, patient ratios, and fair wages, it was observed that some participants perceived the general public's response as dismissive, suggesting that they should perform their duties out of a sense of calling or vocation, rather than advocating for their rights. These viewpoints reflected a perception that nursing, and midwifery are inherently altruistic professions and that concerns related to working conditions and remuneration should be secondary to the dedication to the profession.

4.28.3.1 Generational Shift in Nursing and Midwifery

Participants depict the feeling of personal and professional marginalisation experienced during the pandemic.

One participant describes a disillusionment, not only with societal responses, but also with her immediate family's perceptions,

"We were expected to get on with it back then, but everyone was supportive. Whereas now we're still expected to get on with it, and even from my immediate family [have said], 'Well, where do you think the money is going to come from to give you a pay rise? It's actually really like a massive slap in the face. You just sit there going, right, well, my own family are questioning why I deserve a pay rise and they watched how stressed I was." RM4

Such interactions amplify the feeling of being overlooked and indicates a misalignment of expectations and understanding, even within close circles. These sentiments are echoed from one participant who recounts the legitimate fear and terror nurses had for what this could mean for them and their families,

"I think that was very underrated by management and by the public at large. My family were even like, 'I don't want you to be a nurse anymore. Just quit.'" RN4

The lack of emotional support coupled with the intense pressure of the profession contributes to the growing disenchantment among healthcare professionals.

Delving deeper into the complex ramifications of the pandemic on nurses and midwives, one participant's experiences describe social ostracisation and isolation. Amid her tenure at a hospital, that became the pandemic's epicentre in New South Wales, she found herself grappling with not only professional challenges but also personal ones. She describes the experience feeling as though,

"The rest of Sydney and New South Wales Health viewed us [working at this hospital] as lepers." RN6,

recounting how even her partner and extended family, expressed discomfort with her visiting due to her perceived risk of infection,

"Look, I don't think it's safe for you to come and visit me anymore. I don't feel comfortable with you being around…I still hold that resentment [for those comments]." RN6

These comments emphasise the toll the pandemic has taken not only on nurses and midwives' professional lives but also their personal relationships.

One participant recounts personal anecdotes, involving both her family and younger healthcare professionals, that depict a contrast between the economic realities of healthcare roles and other vocations. She highlights the prospect of a nurse or a midwife earning the same or even less than what an apprentice might earn,

"Mum, you could go and do an apprenticeship and earn the same amount of money that you're earning now- RM4" or "you could go to the mines and earn the same amount of money with a lot less stress." RM4

This underscores the disproportionate financial remuneration considering the extensive training, skill, and emotional labour that nursing and midwifery entail. This economic imbalance has resulted in career shifts among younger healthcare professionals who prioritise higher earnings and less stressful working conditions,

"They spent all this time doing their nursing degree and then gone on to do their midwifery and then turn around and drive trains for a mine." RM4

This divergent mindset from previous generations, who were generally more inclined to stick to their careers despite challenges, posits a potential crisis for the healthcare system in the future,

"That is then going to be a massive problem in 10 to 15 years… Then who's going to look after everyone." RM4

4.28.3.2 Public Perception and Crossroads

The subsequent participant's quotes provide an exploration into the diverse public attitudes towards healthcare professionals during the pandemic, depicting a range from admiration to criticism. It also delves into the influence of the prevailing societal climate on career decisions within the healthcare sector and outlines concerns over future workforce sustainability.

Public sentiment towards healthcare professionals, as suggested by these narratives, oscillates between admiration and vilification,

"I think social media was helpful with the adopt a healthcare worker [aspect]. The thing that did come out, that there were people willing to cook your food or do something for a healthcare worker. They were very appreciative of our role." RM2

This narrative of appreciation is counterbalanced by the personal experience of another participant. Finding herself at the centre of public attention,

"I got my picture taken by the media at the vaccination clinic when the vaccines were rolled out … I was proud of what I was doing. People were noticing that I was on TV, and I started getting attacked on my social media because you're propagating misinformation … Some of these people were friends I couldn't believe it … I just had to let it go. My friend circle has dwindled but I am alright with that it is more qualitative rather than quantitative." RN6

Interestingly, this climate of controversy and division was noted to extend into personal relationships of nurses and midwives as well,

"I guess the only time you ever hear anything negative is from anti-vaxxers, and some [of those antivaxxers] from my own family. I've got a brother who is not wanting to vaccinate." RN5

The source of the contention is more ideological than health-oriented,

"It's not so much about not being vaccinated. It's about being told what to do, which is why I think it's been okay, and the alternative positions have been respected because it hasn't been so much about a health-related topic … If you're on the other side of that political fence, it didn't matter what they did and what they told people to do. They were never going to do it." RN5

In parallel with these societal responses, the pandemic also appears to be exerting considerable influence over career decisions within the healthcare sector. Two participants voiced concerns over a potentially dwindling future workforce,

"Students begin dropping out, and those that may have been interested in the profession before are probably second guessing whether this is the profession for them. You already know that you're stepping into a sinking ship." RM5

"I think the pandemic just made people want to leave. We're not necessarily attracting new people." RN5

Contrastingly, as one participant alludes to the government incentives attempting to attract people to the nursing and midwifery field,

"A colleague I met up with this morning, his daughter is starting year 12 this year. She was thinking about doing nursing or teaching. The fact that it [the university nursing degree] is going to be paid for [by the government] has swayed her to decide to do nursing." RN5

4.29 Summary of the Qualitative Findings

Collectively, participants reported on the distinct exacerbation COVID-19 imposed on an already overstretched healthcare system. The findings offer an in-depth exploration of the myriad of challenges faced by nurses and midwives in Australia. Participants notably highlighted the interplay of workplace culture, physical and psychological stresses, tangible and intangible working conditions, leadership influence, educational paradigms, and the challenges of shift work. These factors coalesced to amplify the perceived risk of burnout among participants, significantly influencing their professional trajectories and shaping their experiences throughout the pandemic.

The qualitative results identified a range of themes and sub-themes that highlight both parallels and contrasts between the qualitative and quantitative findings in this study. In the Discussion chapter that follows, the points of convergence and divergence noted will be explored in greater detail, contextualised within the existing literature, and the relevance and clinical consequences of these findings will be elaborated upon.

CHAPTER 5 DISCUSSION

5.1 Introduction

In this discussion chapter, the wide-ranging effects of the COVID-19 pandemic on job satisfaction amongst Australian registered nurses and midwives are explored in detail. The significance of both quantitative and qualitative findings is examined and contextualised within the existing body of knowledge. This chapter further assesses the broader implications of these results on nursing and midwifery practice, workforce retention, and healthcare policy development. The central findings of my study derived from the quantitative results, are presented, and analysed alongside the corresponding qualitative findings, in a manner consistent with Creswell's (2014) triangulation convergence model design. Integrating both quantitative and qualitative data was crucial for assessing the efficacy of the mixed methods approach adopted in my study. This evaluation process involved examining how effective these two combined data forms were in achieving the specific aims and objectives of the study.

As outlined in the results chapter, the data analysis has revealed numerous factors and repercussions related to job satisfaction in the context of the pandemic. These findings significantly enrich the existing knowledge on this subject, providing a context-specific, in-depth perspective to the current body of evidence. Prior research has explored ways to enhance job satisfaction and retention amongst nurses and midwives, primarily before the onset of the COVID-19 pandemic (Nei et al., 2015; Roche et al., 2015; Sasso et al., 2019; Wan et al., 2018). These studies have identified various factors contributing to reduced job satisfaction, including emotional exhaustion (Dilig-Ruiz et al., 2018), suboptimal management and organisational support (Lu et al., 2019), and internal and external migration (El-Jardali et al., 2009). Moreover, investigations have highlighted both individual and organisational determinants of job satisfaction.

At the individual level, resilience and psychological capital have been explored as a means of enabling nurses and midwives to navigate periods of adversity or significant stress (Yörük & Güler, 2021). Ways to reinforce resilience in nurses and midwives has been explored in an effort to mitigate the risk of burnout and enhance personal and professional satisfaction (Epstein & Krasner, 2013; Hart et al., 2014; Q. Huang et al., 2019; McAllister & McKinnon, 2009).

From an organisational standpoint, key policies, procedures, and system management factors, including staffing, workload modelling, human resource management, logistics, work climate and culture, and support services, have also been explored and identified as key contributors to job satisfaction (Cusack et al., 2016; Hind et al., 1996; Rees et al., 2015; Taylor et al., 2019; Yörük & Güler, 2021). It is worth noting however, that much of this research was conducted prior to the pandemic. Meanwhile, the context in Australia, particularly during the COVID-19 era, remains largely unexplored.

In this discussion chapter, I aim to interpret and contextualise these results within the broader context of existing literature on job satisfaction in nursing and midwifery. With the objective being to discern the significance of these findings and to establish connections to the overarching research question. This explores any impacts the COVID-19 pandemic may have had on job satisfaction, subsequently influencing the intention of nurses and midwives to either stay in or leave their professions.

In my study, I provided a comprehensive analysis of the pandemic's impact on job satisfaction among nurses and midwives, addressing a highly relevant issue given the unprecedented challenges faced by them during the global health crisis. Utilising the validated NWSQ, combined with demographic and contextual data, I developed a robust framework for assessing job satisfaction among Australian registered nurses and midwives in the COVID-19 era. The survey incorporated intrinsic, extrinsic, and relational factors, providing a comprehensive perspective of the determinants and components that shaped job satisfaction within this professional cohort. Intrinsic factors, such as job enjoyment and perceived job significance, were investigated to understand internal psychological states affecting job satisfaction and the emotional rewards arising from nurses and midwives' practice. Extrinsic factors, including workplace support and the effect of workloads on learning opportunities, were scrutinised to uncover external conditions influencing job satisfaction. Relational aspects underscored the importance of interpersonal dynamics, a sense of belonging, and social support within the workplace as key contributors to job satisfaction.

The qualitative findings offer an invaluable perspective into the lived experiences of nurses and midwives during the pandemic, revealing a complex interplay of factors such as workplace culture, physical and psychological stressors, tangible and intangible working conditions, leadership influence, educational paradigms, and shift work challenges that collectively

contributed to their job satisfaction. The thematic analysis of the qualitative data highlighted the underlying dynamics that shape the perceptions and experiences of nurses and midwives who participated in the study.

It is crucial to acknowledge that job satisfaction extends beyond individual or abstract notions, as it holds significant consequences for healthcare delivery, patient/woman outcomes, and health system resilience. The decision of nurses and midwives to either remain in or leave their positions has immediate consequences for the quality of patient/ woman care, the sustainability of healthcare services, and the overall efficacy of healthcare systems, particularly amidst a global pandemic.

The discussion chapter begins with an examination of the intricate interplay among the three themes, identified as determinants affecting job satisfaction and retention levels amongst Australian nurses and midwives during the pandemic, addressing the overarching research question. The dynamic relationship between these findings and the quantitative results will be integrated into the discussion of these delineated themes. The chapter will conclude with a detailed examination of the clinical consequences of the study's findings and contemplate prospective strategies for improving job satisfaction and promoting retention within the nursing and midwifery sector in Australia.

5.2 Theme 1: The Perfect Storm

This theme embodies the nuanced perspectives of nurses and midwives as they navigated through a complex and demanding healthcare environment. The accounts of their experiences reveal a multifaceted exploration of the elements, circumstances, and dynamics that played a role in creating a challenging and potentially chaotic setting. By exploring their insights, a deeper understanding of the complex interplay among these factors was achieved, highlighting their substantial impact on the experiences of nurses and midwives.

In this theme, the participants' observations identified a variety of contributing elements that coalesced to create what they referred to as a 'Perfect Storm' scenario within the clinical setting. The metaphor 'Perfect Storm' refers to an unusual intersection of factors that dramatically worsens an existing situation (Stevenson, 2010). Within the context of my study, it is used to represent the merging of various interrelated factors that amplified the difficulties encountered by nurses and midwives in their professional roles. These interrelated factors

manifest themselves in various ways, such as workload pressures, resource constraints, interpersonal conflicts, and systemic shortcomings.

The analysis and construction of this theme offers a comprehensive examination of the diverse factors that contributed to a demanding and potentially tumultuous environment within the clinical setting. The perspectives offered by nurses and midwives helped to enrich the understanding of the interrelated factors impeding healthcare provision and highlight the essential need for comprehensive strategies to address the inherent complexities in the field.

The participants' perceptions into this Perfect Storm theme are especially insightful for a number of reasons. Firstly, they provide an insider's view on the tangible challenges faced by nurses and midwives within a constantly changing and evolving healthcare environment. These first-hand accounts offer a rich source of data, contributing to a deeper understanding of the factors involved and their complex connections. Secondly, the participants' portrayals vividly illustrate the profound effects at play, emphasising the complexities of healthcare delivery and the need for a comprehensive approach to address these challenges. Furthermore, the nurses and midwives' experiences demonstrate their enduring resilience and adaptability in the face of these challenging conditions. Their experiences emphasise the imperative of cultivating and fostering a work environment characterised by support and adaptability, one that enables nurses and midwives to effectively navigate and manage the myriad of challenges inherent in their roles. The insights derived from this theme are instrumental in informing strategies that seek to strengthen the resilience and well-being of the organisation and the nurses and midwives under its care. These strategies could potentially lead to enhanced quality and sustainability in the delivery of healthcare services.

Nurses and midwives in my study described incidences of intimidation and toxic workplace culture. This conduct resonates deeply with the historical backdrop in the Australian healthcare sector where dysfunctional behaviours like bullying, intimidation, and information withholding have been repeatedly documented, particularly within health services across Queensland (Van Der Weyden, 2005), Western Australia (Mclean & Walsh, 2003), and New South Wales (Faunce & Bolsin, 2004). The variances in the extent of this toxic workplace culture were significant across different organisations (Catling et al., 2017; Davies et al., 2000). My findings were consistent with those of the 2012 SWAB study (Farrell & Shafiei, 2012). The SWAB study revealed that healthcare staff, particularly nurses and midwives, faced more

distress from bullying by colleagues than from patient aggression. This finding echoes the results of my study, where nurses and midwives reported experiencing workplace aggression mainly from their colleagues or superiors. This trend of workplace hostility is also well-documented in the existing literature to date. These patterns of behaviour suggest that these hostile environments were firmly established before the COVID-19 pandemic (Farrell & Salmon, 2010; Gifford et al., 2002; Hutchinson et al., 2006; Kelly et al., 2012; Parzefall & Salin, 2010).

The COVID-19 pandemic has significantly increased hostility towards nurses and midwives with the addition of complexity to professional challenges. In my study, I discovered that nurses and midwives felt significantly isolated from their community, including family, friends, and the public, due to fears of possibly transmitting the disease. One expression from a participant described this sentiment as feeling like 'lepers in the eyes of the public'. This spike in adverse behaviour, as shown in studies by Somani et al., (2022) and Wild et al., (2022), was largely driven by pandemic-related anxieties (Somani et al., 2022; Wild et al., 2022). Despite nurses and midwives being widely regarded as some of the most trusted healthcare professionals globally (International Council of Nurses, 2020a), the initial phase of the pandemic brought about a significant increase in violence, discrimination, and stigma towards them, as observed in my study. This negative treatment, rooted in fears of them being virus carriers, not only led to social distancing from family and friends but also adversely affected the mental and physical health of some of the participants in my study. Recognising the severity of these issues, the WHO responded with an urgent call for protective measures in April 2020, highlighting the need for such measures to be implemented to safeguard frontline healthcare workers in times of crisis (World Health Organization, 2020h).

The pandemic has notably escalated workplace tension in healthcare settings, leading to increased stress and consideration of career changes among nurses and midwives, as evidenced in my study. This trend is reflected in reports of participants in my study feeling pressured to cover overtime shifts and experiencing guilt for taking necessary breaks. Additionally, anecdotal evidence from my study highlights that junior staff, particularly recent graduates, often face pressure from managers to work additional hours, detrimentally impacting their health and well-being. Leadership participants noted that these junior staff members frequently experienced burnout due to consistently meeting such demands. This is attributed to their perceived willingness to comply, making them primary targets for overtime requests. Notably, my study revealed that bullying was more common in hierarchical contexts rather than between peers at

the same level, with participants often feeling marginalised and ignored when raising safety concerns within the leadership and medical hierarchy. This highlights a significant issue of hierarchical pressure in healthcare organisations during the pandemic.

Throughout my study, I discovered several unique perceptions among nurses and midwives during the pandemic. Contrary to existing literature that points to prejudice and discrimination based on gender, race, migrant status, and age, my research revealed that these factors were not prevalent during the COVID-19 pandemic. This finding provides a distinct perspective on the experiences of nurses and midwives in contrast to commonly reported issues in the field. Rather, my study identified dissatisfaction in the intensified power dynamics within the healthcare system, particularly the traditional hierarchy favouring physicians over nurses and midwives. This sentiment was so profound that many of my study's participants felt heightened discontentment towards the medical team and healthcare leaders, a strain which remains evident.

In the findings from my study, it was observed that nurses and midwives reported experiencing threats and verbal/physical intimidation, primarily from physicians and surgeons. This behaviour was often linked to situations where fulfilling certain requests, such as conducting surgical procedures or inductions, was not possible due to shortages of nurses and midwives with the necessary skills or an overall lack of staff to care for patients or women's safely. In these instances, participants often felt coerced into compromising safe work environments to meet these demands. This perceived pressure was often due to explicit or implied threats that they would be held responsible for any harm, including possible fatalities, that might occur to the patient or woman under their care if they didn't meet their requests. Consequently, many expressed significant concerns regarding the potential risks to their professional registration. They were often faced with a dilemma in these situations, either to comply with these unsafe demands, thereby jeopardising patient safety and their professional integrity, or to refuse and face possible professional repercussions. This situation often left the participants burdened with the anxiety of potentially facing serious consequences, regardless of their decision which was seemingly out of their control. Adding to this tension, a significant proportion of the nurses and midwives said that they felt they had inadequate time to deliver good care. This finding reinforces the precarious environment nurses and midwives find themselves in, where they might be under unjustified pressure, and yet are still expected to uphold the highest standards of patient/women care. A distinctive aspect from my study, which currently appears underrepresented in broader literature, is the prevailing notion among nurses

and midwives that they were a convenient scapegoat, should any adverse outcomes arise during the pandemic. This led to heightened concerns about the risks to their professional registration.

Drawing parallels with my study, a comprehensive analysis of responses from Australian healthcare workers further underlines the problematic organisational culture (Ananda-Rajah et al., 2020). There were several accounts in the literature, where senior managers were advising staff to be more resilient and to 'toughen up'. While other respondents reported infection control nurses publicly dressing down and criticising emergency department nurses treating potential COVID-19 patients for using N95 masks, suggesting they should be using surgical masks instead (Ananda-Rajah et al., 2020). Additionally, when frontline staff requested to use higher-grade PPE, infectious disease specialists discouraged it, arguing it might establish an unwanted standard (Ananda-Rajah et al., 2020). When these professionals raised valid concerns, it frequently led to workplace victimisation and organisational rebukes. This resonates with the findings of my study, where participants recounted escalating toxic environments during the pandemic. Many participants in my study shared experiences of heightened stress levels, often attributed to bullying or intimidation. They frequently faced an unfairly challenging patient workload, as others in their teams lacked the capability or were less equipped to handle complex situations. This imbalance in workload led to feelings of resentment among the participants, stemming from a sense that they were constantly compensating for their colleagues' shortcomings. Some individuals candidly revealed how even changing workplaces during COVID-19 did not necessarily promise better work conditions. They described the challenges brought about by continually evolving hospital policies and its implications on day-to-day operations, patient relationships, and interactions within their professional circle.

Participants I interviewed expressed a sentiment that resonates with nurses and midwives globally, where nurses and midwives described being often bullied into submission or stigmatised as 'troublemakers' when they questioned policy and procedure changes that might jeopardise the safety of patients or themselves. Shifting attention to a more global perspective, healthcare systems across the world, already grappling with the stress of the unfolding pandemic, faced heightened difficulties. Healthcare professionals reported feelings of vulnerability, frequently finding themselves in precarious conditions without adequate safety provisions. Voicing these apprehensions often led to instances of workplace bullying and formal disciplinary measures by the organisation, as highlighted by Jarden et al. (2023). Similarly, a study by Jackson (2022) illustrates the pervasive issue of workplace rudeness, which has tangible

consequences. The study highlighted heightened stress levels, a sense of injustice, and lingering negativity even after leaving such organisations (Jackson, 2022). The research also addressed the incivility nurses encountered not just from peers, but from patients and their families. These observations are consistent with the narratives from participants in my study, where I discerned an escalation in aggression from patients and their family, further compromising their job satisfaction.

In scenarios like PPE rationing, nurses and midwives who participated in my study felt undervalued and expendable. The PPE rationing issue in my study is just one example that highlights unbalanced power dynamics, as the conversations surrounding who ‘qualified’ for PPE subtly shifted into a question of who ‘was deserving’ of it. This led to reported divisions among healthcare professionals across various sectors. For a significant number of participants, access to PPE, became a tangible representation that symbolised their safety and worth, serving as a critical indicator of their perceived value within the healthcare system. Their stories suggest an overwhelming sentiment of being undervalued, not just in their professional roles, but also as human beings. Many felt that their families and dependents were inadvertently being put at risk due to these allocation decisions. This was intensified by a prevailing sentiment that decision-makers were compromising their safety through PPE rationing, increasing their potential exposure to the virus. Supporting these findings, other research has indicated similar sentiments among nurses and midwives. Studies conducted in the UK (Hoernke et al., 2021), and the USA (Iheduru-Anderson, 2021) found that healthcare workers, particularly nurses and midwives, felt a sense of betrayal, anger, and disposability surrounding PPE rationing. A study from New Zealand echoed my findings regarding trust and safety, with respondents indicating concerns over communication and a perceived lack of transparency when their safety was compromised (Wild et al., 2022). Moreover, despite nurses and midwives being at the frontline of COVID-19 care, testing, triaging, and management, they were placed in positions of heightened risk. Some participants of my study stated they reluctantly walked off shift, refusing to return until they were granted access to adequate PPE. Reports from various countries revealed that PPE allocation was often decided based on medical hierarchy, sidelining the immediate needs of healthcare workers directly interacting with patients (Liu et al., 2020). This preferential medical hierarchy treatment extended even to the administration of vaccines in countries like the UK, Italy, and Spain (Llop-Gironés et al., 2021). Such global findings further validate the sentiments and experiences highlighted in my study.

Participants in my study reported heightened anxiety due to PPE being securely locked away. Interestingly, participants in my study did not express having to buy their own PPE due to shortages. However, they did underline how close their institutions came to depleted PPE stocks, to the point where halting theatre operations became a conceivable option due to the severe depletion. Moreover, participants in my study voiced deep concerns about their own safety and the safety of those close to them, encompassing family and friends. However, the findings did not distinctly reflect concerns about participant's own potential fatality resulting from the disease. This may be due to the extent of PPE reusage and degree of patients being COVID-19 positive being substantially less than these other countries. In support of these findings, a substantial 75% of participants surveyed by de Cordova et al., (2022) expressed a lack of confidence in their organisation's ability to procure sufficient PPE during COVID-19 to safeguard staff. It has been widely observed in certain nations that healthcare professionals, including nurses and midwives, had to resort to supplying their own PPE or even repurposing old ones due to shortages (American Nurses Association, 2020; Llop-Gironés et al., 2021; Tiefenthäler, 2020).

In the findings from my study, it was evident that nurses and midwives who were actively working clinically were often excluded from the process of formulating policies and procedures. Nurses and midwives reported that the directives were predominantly drafted by those in non-clinical roles or within the medical hierarchy. Furthermore, those who expressed concerns about changes in clinical practices often felt they were forcefully silenced or overridden. Nurses and midwives also highlighted that the recommendations in clinical procedures frequently deviated from established infection control guidelines and protocols. When new policies were introduced in response to the pandemic, there was a consistent oversight of the environmental layout and the specific nuances of patient/woman care. Supporting these findings, other studies have reported that policies and procedures were not widely known across various settings and sectors. At times, these procedures conflicted with existing infection control advice, corroborating with the current literature (Fernandez et al., 2020). This external evidence underscores the observations from my study, further indicating that proposed changes in clinical practice often diverge from well-established infection control guidelines and protocols.

Nurses and midwives participating in my study emphasised how pre-existing professional relationships within their organisations were instrumental in navigating particularly demanding shifts characterised by fear, anxiety, increased workload demands, staffing shortages, and skill-

mix challenges. Supporting the sentiment of duty shared from nurses and midwives in my study, Hewlett and Hewlett (2005) described the exceptional dedication inherent within nursing and midwifery, especially during life-threatening situations, where participants expressed significant distress due to the persistent shifts in government restrictions, and evolving hospital protocols. The inconsistency, coupled with a perceived lack of clarity in communication regarding procedural amendments, fuelled feelings of uncertainty and a diminishing sense of job satisfaction. In line with these personal experiences, statistical data also highlights the magnitude of strain the healthcare system endured during this period. The surge in patients presenting with severe COVID-19 symptoms overwhelmed hospital systems, adversely affecting the overall healthcare delivery (Haldane et al., 2021). This strain was evident in the Australian emergency department presentations numbers. During the 2020-21 period, there was a significant 6.9% rise in presentations, rising from 8.23 million in 2019–20 period to 8.81 million (Australian Institute of Health and Welfare, 2022). As a result, several institutions had to adapt to a 'crisis level of care' due to constraints in hospital capacity, workforce, and essential medical provisions (Schmitz et al., 2022). In the face of escalating COVID-19 patient numbers, the focus of health care institutes swiftly moved to realign their priorities. As a result, preventive services and elective procedures were subsequently suspended (Ghosh et al., 2022; Schmitz et al., 2022).

The findings from my study uncover a previously undocumented shift in maternal healthcare dynamics during the pandemic. Specifically, the redirection of pregnant women from their chosen private sector facilities to public health settings, based on their COVID-19 exposure or diagnosis. This is an important revelation, as it highlights the pronounced disparity between public and private healthcare sectors amidst the pandemic's challenges. The potential implications of this finding could span from psychological impacts on mothers, to broader systemic issues of equity and quality of care. My study also investigated how job satisfaction amongst nurses and midwives could vary depending on the sector of employment and potential exposure to COVID-19 patients and higher workloads. Within the realm of my study, the specific employment sector did not appear to markedly influence intrinsic job satisfaction. However, it exerted a notable effect on both extrinsic and relational job satisfaction. Notably, nurses and midwives employed in dual sectors both public and private, typically reported diminished extrinsic and relational job satisfaction in contrast to their counterparts exclusively working within either the private or public sector. For nurses and midwives who worked across both the public and private sectors, the complexities, and challenges inherent in navigating the two sectors might contribute to the reported reduced satisfaction. In contrast, those working exclusively

within a singular sector either private or public appeared to have a more uniform experience, possibly due to more consistent organisational cultures, forged relationships, operational guidelines, or expectations. This consistency could translate to clearer role definitions, expectations, and potential rewards, thereby enhancing both extrinsic and relational job satisfaction.

The Australian National Cabinet's response to the pandemic marked a swift pace of systemic transformation in healthcare (Parliament of Australia, 2022). Hospitals in Australia stopped using nitrous oxide during childbirth in an attempt to reduce COVID-19 transmission. My study's midwifery participants also drew parallels between the stringent changes in healthcare protocols during the pandemic, such as limited pain relief options and restrictions on birthing partners' presence. They associated these changes with a loss of women's rights, likening the situation to the oppressive, dire circumstances often depicted in fiction, like 'The Handmaid's Tale' by author Margaret Atwood. This particular finding is new and has not been previously reported or documented in the existing literature to date. The body of literature, instead explores the effects of withholding nitrous oxide on maternal and neonatal results, particularly focusing on the prevalence of epidurals, opioid usage, and adverse outcomes as a result of withholding nitrous oxide on morbidity and mortality rates during the pandemic (Froessler et al., 2022). A study conducted by Cooper and King (2020) echoed the sentiment of contention, revealing that over half of birthing women surveyed felt obliged to reconsider their birthing plans, primarily attributed to shifts in health protocols (Cooper & King, 2020). However, what my study explored, that these other studies did not, was the subsequent compromise in the autonomy of birthing women and the psychological ramifications stemming from the use of more intensive interventions like morphine, which can result in a cascade of subsequent interventions. Moreover, the exclusion from certain health services due to a potential or confirmed COVID-19 diagnosis further compounds this psychological burden.

The pandemic-induced guidelines, coupled with the heighten utilisation of PPE, seemingly amplified a sense of disconnection between midwives and the women in their care, a sentiment that seemingly was more profound than that experienced by registered nurses. This disparity may stem from the inherent nature of midwifery, which traditionally relies heavily on personal touch, face-to-face communication, and a deep personal connection with women. Woman-centred care, as emphasised in contemporary research, is founded on principles including flexibility to offer tailored care, the facilitation of informed decision making, advanced communication skills

encompassing listening and reflection, supportive presence including touch and modification of the environment to suit the woman, authentic relationships and respect, freedom for midwives to make choices, and self-determination, and the delivery of evidence-based care (Bradfield et al., 2019; Brady et al., 2019; Davis et al., 2021). The necessary health protocols introduced significant barriers to these aspects of care, leading to a profound sense of disconnection for midwives in my study. These health protocols had an adverse effect on midwives' conscience as they grieved the loss of women's rights. Further research is warranted to fully understand the differential impacts on various healthcare professions and to develop strategies for mitigating such effects in any future health crises.

Organisational resilience, is defined as an institution's ability to counter and navigate challenges through attributes such as flexibility, adaptability, and compassion, while simultaneously preserving the well-being and resilience of individual members (Gröschke et al., 2022; Taylor et al., 2019). It is evident in my study that participants relied on individual resilience to adapt to organisational shortcomings during the pandemic. This was particularly evident when it came to staffing crises where many participants were redeployed within and beyond their primary organisations. Notably, requests for such redeployments predominantly originated from departments where services were restricted or completely ceased due to imposed restrictions. However, many studies suggest that resilience should not be considered merely an attribute of individuals (Hind et al., 1996; Mallak, 1998; Rangachari & Woods, 2020; Taylor et al., 2019). These studies suggest that organisations should be able to proactively adjust their resources and services to reinforce resilience in times of crises, as opposed to placing the burden on individual members to adapt independently. Organisational resilience is not only a requisite for the success of an organisation, but it also acts as a fail-safe for preventing catastrophic organisational failures. These failures directly impact the psychological health, resilience, engagement, and retention of the staff, ultimately leading to poor patient outcomes as reported by participants in my study. In line with this, my study reported that poor organisational resilience contributed to participants experiencing increased feelings helplessness and anxiety, often fearing making mistakes or not being able to do enough for patients/women due to organisational shortcomings.

In my study, when participants transitioned to new departments, they were met with distinct distain. Their arrival to the ward necessitated the reshuffling of established nurses, which created an atmosphere of tension. Compared to other healthcare professionals, nurses exhibit heightened susceptibility to stress and anxiety (Greenberg et al., 2021; Shechter et al., 2020).

Furthermore, in situations where patients lack their usual support systems, these professionals are more exposed to vicarious trauma as they frequently become the primary source of emotional and social support for patients (Lam, 2020). The experiences of participants in my study regarding redeployment varied widely, influenced by factors relating to their nursing or midwifery specialty, and the distinct contexts of both their original and reassigned departments. The difficulties that arose from COVID-19 were primarily entrenched by organisational or systemic structures. These challenges frequently involved navigating through unfamiliar clinical settings and were further intensified by the lack of consistent support from organisations during the pandemic.

Participants of my study emphatically expressed their deep unease and distress regarding redeployment, even resorting to desperate pleas. These participants described the profound emotional toll and significant impact on job satisfaction and staff retention that redeployment can create, and much of this emotional turmoil was attributed to the uncertainty surrounding their new roles and potential exposure to COVID-19. Furthermore, the quantitative data from my study highlights the emotional strain expressed by the participants, with 33.7% of participants indicating that they felt isolated from their colleagues at work (Q12). This isolation, combined with the stresses of redeployment, contributes to the comprehensive understanding of the substantial challenges faced by these professionals during the pandemic. These observations align with the findings of Ballantyne and colleagues study, where 90% of participants reported experiencing stress and/or anxiety during their reassignments (Ballantyne & Achour, 2023). It was apparent from my study that numerous nurses and midwives were not adequately prepared for the sudden possibility of redeployment, and their distress was heightened by the perceived absence of a systematic decision-making processes, leading them to believe that these decisions were haphazard and lacked thorough consideration. My study reflected the need for nurses and midwives to be involved with discussions regarding the emphatic need for robust, supportive, and transparent redeployment processes in healthcare settings. The sentiment of being ‘thrown’ into various departments without seeming method or rationale being a striking illustration of the unsettling effect of perceived disorganisation within the redeployment process. Considering these findings, my study identified the challenges faced by nurses and midwives with only some strongly believing that they received adequate support from colleagues. This emphasises the crucial need for robust systems of support, both from an organisational and collegial perspective, to navigate the complexities and uncertainties of redeployment. As previous research has alluded, the apprehension associated with being redeployed to an unfamiliar environment may

be considered to be a greater source of anxiety than the anxiety of any pandemic pathogen (Considine et al., 2011).

The participants in my study indicated to me that had they been involved in pre-pandemic preparedness plans and had been adequately informed about potential redeployment, their sense of readiness might have been enhanced, lessening the shock of sudden redeployment directives. Current research emphasises the importance of middle and senior leaders engaging with staff in early pre-pandemic formal conversations. This engagement ensures staff are consciously aware that cancellation of certain services may lead to redeployment of staff, as part of an acknowledged strategy for workforce management during a pandemic (Ballantyne & Achour, 2023). Unpreparedness of staff regarding redeployment was recently researched by Couper and colleagues who reported that when respondents had adequate redeployment training, there was no associated probability of PTSD. However, individuals who were redeployed without adequate training faced the risk of developing PTSD (Couper et al., 2022). Ryder and colleagues also explored the preparedness of the nursing workforce during the COVID-19 pandemic in Ireland, emphasising the firsthand experiences of nurses and midwives mobilised during the first wave of the pandemic. Their research highlighted that three critical actions needed to be executed nearly concurrently to facilitate the successful mobilisation of nurses and midwives (Ryder, Gallagher, et al., 2022). These were referred to as the three 'R's': Reconfiguration of resources, Redeployment to specialised areas, and Re-skilling for pandemic-specific care (Ryder, Gallagher, et al., 2022). Given the profound insights and recommendations from other research, it is even more pressing to consider the findings from my study. Considering that redeployment is a crucial aspect of pandemic preparedness (Ryder, Gallagher, et al., 2022), and the importance of training in reducing the likelihood of PTSD (Couper et al., 2022), it's unsurprising that participants in my study expressed unease about being uninformed regarding their redeployment.

In my study, there was minimal variance in overall job satisfaction between nurses and midwives. However, it was discernible that midwives demonstrated higher levels of relational job satisfaction, which encompasses their perception of their ability to make friends amongst colleagues, feeling a sense of belonging, and enjoying the company of the people they work with. However, they reported a lower level of extrinsic job satisfaction when compared to their nursing counterparts. The disparities in extrinsic and relational job satisfaction between nurses and midwives can potentially be attributed to their distinct professional roles and environments. Extrinsic factors, such as decision-making and leadership interactions, may manifest differently

for nurses, influencing their perceptions of the work environment. In contrast, the inherently personal nature of midwifery, emphasised by the strong bonds and interactions with the women in their care, might foster deeper relational bonds among colleagues, explaining their elevated relational satisfaction scores. Interestingly those participants practising as both a nurse and a midwife generally reported higher satisfaction scores in each domain. To address nurses and midwives concerns when working in unfamiliar settings with distinct patient groups/women and equipment, healthcare organisations should prioritise early communication between redeployed nursing and midwifery staff and middle and senior management. Providing consistent access to the management team through formal redeployment policies, coupled with the visible presence of nursing leaders, would be a positive recommendation in preparation for any future pandemics.

Perceptions of management responses to the pandemic appear to have created a deep sense of disconnection between decision-making entities and the participants of my study who provided direct patient care. The sentiment is further emphasised by the fact that 44.9% of nurses and midwives in my study expressed dissatisfaction with how wards or units were managed. The results of my study also reflected a dichotomy in professional recognition. While a majority of nurses and midwives, 62.3%, believed their work allowed them to demonstrate their value, this sentiment was not universal, with 25.1% feeling otherwise. This suggests that while many nurses and midwives feel empowered in their roles, there remains a significant subset who feel their contributions might be overshadowed or undervalued amidst top-down medical model approach to health care directives and policy making. Moreover, as evidenced by the data, even though a considerable 77.7% of nurses and midwives felt a sense of belonging to a team, the implications of policies and procedures formulated without their direct input may undermine this perceived cohesion.

My study highlights the importance of active representation, open communication, transparency, and prompt resolution of staffing issues within healthcare management. The findings revealed that deficiencies in these areas substantially affected morale and job satisfaction among nurses and midwives. In open letters to the Australian government during the pandemic, healthcare workers voiced a pronounced lack of trust in leadership, citing bureaucratic barriers to safety (Ananda-Rajah et al., 2020). The perceived dismissal of concerns about high-risk situations and the sense that leadership frequently compromised on safety measures, further erodes trust. Such top-down directives, often without healthcare worker consultation, diminishes morale, leading some to consider exiting the nursing and midwifery profession due to perceived

systemic deficiencies in leadership, support, and respect (Ananda-Rajah et al., 2020). Globally, hospitals have been criticised for suppressing staff who voiced concerns about PPE, staffing, or working conditions during the COVID-19 pandemic (Iheduru-Anderson, 2021; Thompson & Darbyshire, 2020; Whiteing et al., 2023). Furthermore, participants in my study emphasised that during the COVID-19 era, their work experiences were deeply influenced by organisational leaders who demonstrated adaptability, authenticity, responsiveness, and transparency. Additionally, as noted by the Australian and New Zealand Council of Deans of Nursing and Midwifery, there was a notable strain within medical hierarchies due to differing professional and philosophical perspectives on certain elements of maternal care during the pandemic (Jomeen et al., 2023). A 2020 survey by Catling and colleagues involving Australian midwives, revealed that 72% of participants did not perceive their workplace as supportive, positive, or one that fostered collaboration, with 70% of participants feeling that leadership inadequately addressed inappropriate behaviours during the pandemic (Catling & Rossiter, 2020). Research to date has shown that nurses and midwives have reported lower levels of stress and a sense of support when leaders are visible and accessible. Given the unpredictable nature of COVID-19, there was a pressing need for leaders to demonstrate adaptability and maintain a positive organisational environment. Prior studies have similarly emphasised the value of both adaptive and genuine leadership in the context of the pandemic (Aquilia et al., 2020; Ion et al., 2021). In my study, participants reflected upon the influences of diverse leadership styles. Some emphasised the challenges posed by the departure of trusted leaders at crucial junctures of the pandemic, which consequently led to a cyclical pattern of leadership changes resulting in profound implications on staff morale and retention. Contrastingly, a distinct segment of participants in my study conveyed feelings of strong support from senior management, due to their increased visibility throughout the pandemic, commending their efforts under the given constraints.

Participants of my study expressed concern over staff operating beyond their scope of practice. Within the midwifery sector, the findings of my study suggested an increased recruitment of registered nurses, enrolled nurses, and midwifery assistants to aid in the midwifery staffing crisis. This alteration to staffing composition contributed to an increased women/baby caseload for midwives. When these additional staff were included in workload calculations, it led to a perceived reduction in women-centered care, and a reduction in the job satisfaction for midwives. Furthermore, my quantitative results show that only 8.8% of the nurses and midwives surveyed strongly believed they had adequate opportunities to discuss patient or woman-related

problems with colleagues. This highlights the difficulties faced by nurses and midwives during the COVID-19 crisis. Amid staffing challenges, they had to quickly adapt to new government guidelines and evolving evidence, often learning new skills in unfamiliar work settings due to being redeployed.

The findings of my study revealed that job satisfaction among midwives was closely linked to their ability to work to their full professional capacity. A persistent blending of midwifery with nursing leaders to oversee midwifery teams creates misconceptions regarding the midwife's role, responsibilities, and needs. The participants of my study voiced their discontent in the lack of representation of midwives in both the health care leadership and after-hours executive teams. Such sentiments were evident among the midwives in my study who expressed their dissatisfaction with not being acknowledged as experts in normal pregnancies. Supporting this, current studies consistently demonstrate that the understanding of midwifery expertise is frequently inadequate among various stakeholders, including governments, hospital administrators, obstetricians, and the general public (Kruger & McCann, 2018; Matthews et al., 2022; McKellar et al., 2019). Ambiguous role descriptions stand out as a major obstacle, preventing midwives from fully realising their professional potential (Kruger & McCann, 2018; Matthews et al., 2022; McKellar et al., 2019). However, the findings of my study indicated that, unlike their midwifery counterparts, the nursing participants did not discuss the discrepancies in their scope of practice, nor its implications on their job satisfaction. Instead, nurses in my study frequently expressed concerns and frustrations about receiving directives on policies and procedures from medical teams without prior consultation regarding the impact on their practice. In examining the quantitative results in my study, it is evident that while 17.1% of nurses and midwives strongly felt that their work had grown more interesting in the past year, this might be attributed to their inability to work to their full scope of practice. Contrastingly, a significant 72.7% of nurses and midwives felt it was worthwhile to continue in their roles. Despite perceived challenges in their roles, the majority still see the value and significance in their contributions, emphasising the need to address the underlying causes of this disparity to boost job satisfaction.

A concerning observation from my study was the movement of many participants away from direct patient care, especially in settings with constrained resources. My study explores the largely uncharted implications of the new AIM/EN/RN/RM-to-women-and-baby ratios introduced during the pandemic. It specifically examines the potential impact of these ratios on midwives' job satisfaction and the risks to women's care when midwives are stretched beyond

their recognised scope of practice. This investigation is supported by existing literature, such as Cramer and Hunter (2019), Homer et al., (2009), Lundgren and Berg (2007), and Proctor (1998), which highlight the importance of midwives forming deep connections with women and their families (Cramer & Hunter, 2019; Homer et al., 2009; Lundgren & Berg, 2007; Proctor, 1998). Additionally, my study aligns with recent findings by Callander et al., (2021a), Donnellan-Fernandez et al., (2020), Gamble et al., (2021), and McGrory et al., (2022), suggesting that midwifery continuity of care models could be a viable solution to mitigate burnout and stress (Callander et al., 2021a; Donnellan-Fernandez et al., 2020; Gamble et al., 2021; McGrory et al., 2022). This shift of ratios and staffing skill mix poses a risk, potentially leaving a void in the provision of holistic and comprehensive patient care. The interviewed participants of my study stated that, over time, nurses have begun to perceive fundamental care as outside their primary responsibilities. This shift in mindset has been influenced by the emergence of healthcare assistants and advancements in their training. It is vital to highlight the changing roles of nurses and midwives, while simultaneously re-emphasising the enduring importance of having enough nurses and midwives within the health care system to provide foundational care. Such foundational care, deeply linked to patient dignity, plays a key role in shaping patient and family satisfaction, their perception of healthcare encounters, and their overall engagement with healthcare services (Dickson et al., 2017; Ryder, Kitson, et al., 2022).

My study identified a disparity between the public perception and the actual professional status of nurses and midwives. All interviewed participants of my study unanimously expressed a concern that the general public seems largely unaware of the significant professional evolution that has occurred in the professions of nursing and midwifery. Participants stated that the public perceive them as lesser educated professionals that simply change sheets and provide very basic care, and highlighted that the roles, responsibilities, and scope of practice in these fields have expanded considerably in the modern age, transforming them into areas of specialised expertise and knowledge. Many participants suggested that raising awareness among the health professional community and the broader public about the evolving roles of nurses and midwives may improve their prestige in the eyes of the public. The participants expressed that for these changes to be realised, proactive policy advocacy and public awareness campaigns are crucial. Interdisciplinary collaboration and mutual respect between medical professionals will enhance patient care, and public education about the capabilities of nurses and midwives can further solidify their key role in healthcare delivery. Such changes can also boost job satisfaction among nurses and midwives, possibly reducing turnover rates.

During the initial wave of the pandemic, the decision-making processes in many countries affected both current nursing and midwifery practitioners as well as students. My study highlighted that, amidst the first wave of the pandemic, nursing and midwifery students were denied practical or clinical placements. This decision risked delays in graduation and registration for these students. Additionally, when these students finally returned to their placements, they faced a host of challenges, as highlighted by my study's findings. The absence of these students compounded the workload for experienced nurses and midwives, as they assumed roles usually performed by students. My study also found that those involved in educational roles navigated difficult governmental procedures, adapting policies to enable student clinical placements. Participants underlined significant time constraints and a lack of capacity for education and teaching due to staffing shortages, unsafe skill mixes, severe fatigue and burnout among existing staff. Amidst these challenges, a significant proportion of the respondents expressed the sentiment that their performance would improve with reduced busyness on the ward or unit. Furthermore, while some of the participants surveyed felt they could still learn on the job, others disagreed, pointing to potential systemic barriers to maintaining continuous clinical education amidst the prevailing pandemic. Supporting these findings, the AHPRA appealed to over 32,000 nurses who had left practice in the preceding three years, aiming to reintegrate them during the first wave of the pandemic, noting that an uptake of even 5-10% would have been significant (Scott et al., 2020). In a survey conducted by Hartz et al. (2022) spanning healthcare associations and universities, over half revealed an absence of governmental consultation on the decision to prevent students from clinical placements. This limited influence on policy creation, around how to adapt to the placement deficit, had the potential for ramifications for workforce future planning (Hartz et al., 2022). Current literature recognises the critical role of nursing and midwifery students during their clinical placements (Carolan et al., 2020; Kuliukas et al., 2021; Rasmussen et al., 2022). Given the amplified challenges presented by the pandemic, as illustrated by my study, there is a pressing need for comprehensive post-pandemic research to understand its long-term implications on mentoring. It is noteworthy that dissatisfaction is the leading reason early career nurses and midwives contemplate exiting the profession (Department of Health, 2019), especially as these challenges could significantly impact job satisfaction and retention rates among students and junior staff within the nursing and midwifery profession.

Within the unique framework of the pandemic, participants in my study shed light on an uncharted observation, student nurses being actively recruited for essential roles in hospitals and

vaccination clinics that would usually require multiple years of experience and additional credentials. This extraordinary move had substantial implications for the well-being of both student nurses and the existing nurses and midwives. Compounding the strain was the media's portrayal of these student nurses. Participants pointed out that student nurses often faced public scrutiny, with media outlets unjustly accusing them of attending their placements whilst infected with COVID-19. Additionally, by unjustly labelling students, nurses, and midwives as potential "super spreaders," the media worsening the challenges and stigmatisation they encountered during these challenging times. To date, there has been no research examining the psychological and emotional impacts on healthcare professionals who have been accused or blamed by the broader community and media for spreading COVID-19, and the wide-reaching affects this has, not only on their psychological wellbeing, but also their level of job satisfaction and intention to remain in the profession.

While the long-term implications of the COVID-19 pandemic on those who transitioned to practice during the pandemic and even in the immediate post pandemic period remains challenging to delineate, my study has shed light on certain immediate challenges they faced. My study found that the pandemic notably caused widespread changes and challenges to education and training, role changes, increased nurse-to-patient midwife-to-woman-baby ratios, and the constant instability in policies and procedures further compound the challenges novice nurses and midwives face. While my study did not have any interviews with novice nurses and midwives with less than three years of experience, it is important to highlight that a significant proportion of participants in the online survey (33%) fell within this demographic, having less than three years of experience. During the study's interviews, experienced nurses, midwives, and educators conveyed anecdotal insights about their interactions with novice colleagues amidst the pandemic. They emphasised the need for additional psychological support for these new graduates, whilst empathising with the challenges these new graduates faced entering the clinical setting in such tumultuous times. Pre pandemic research indicated that up to 48% of novice nurses leave within the first year of practice due to heightened stress, mainly due to the reported gap between education and practice (Labrague & McEnroe-Petitte, 2018). Similar to nurses, existing research highlights that graduate midwives encounter comparable challenges often grappling with feelings of being out of their depth and being overwhelmed (Avis et al., 2013; Fenwick et al., 2012). Participants of my study further highlighted the challenges stemming from skill mix imbalances, which led senior staff to often assume some of the junior staff's workloads to help them cope or to provide close monitoring and assistance in task completion. These

complexities were further magnified by the strain of trying to support these newcomers in an environment impacted by acute staffing shortages. Such anecdotal evidence, coupled with the survey responses, provides a comprehensive perspective on the experiences and challenges faced by this cohort.

Within my study, disruption to education and training emerged as a prominent sub-theme. Participants discussed and considered the obstacles of transitioning students and graduates into clinical settings amid the pandemic. They further highlighted organisational limitations including structural and organisational constraints such as the subsequent skill mix imbalances, staffing deficiencies which obliged educators to assume patient care responsibilities, and the transformative roles of educators in conjunction with shifts in instructional delivery. These findings are evident in the current literature to date, with changes to the structures in healthcare education and the partnership and transparency between university settings and the clinical setting impacting the transition experience of recent graduates (García-Martín et al., 2021; Jackson et al., 2020). Furthermore, the challenges brought forth by the pandemic in nursing and midwifery education has resulted in interruptions to clinical placements for students and graduates. This period saw a significant shift in education and training methods, introducing unforeseen financial burdens placed on students and graduates due to government and organisations policy changes, as well as heightened concerns about potential graduation delays and the subsequent effect on integration into the workforce (Dewart et al., 2020; Dos Santos, 2020; Lin et al., 2021). Participants in my study emphasised their concerns over educators taking patient loads as an institutional enforced policy due to staffing crisis at the expense of foundational training for nurses, midwives, and recent graduates, including undergraduate and postgraduate students. Moreover, participants and educators in my study indicated that health services lacked technological readiness for the abrupt transition to online teaching, requiring educators to develop online content promptly. The shift to online platforms led to reduced social engagement during the learning process, exacerbating feelings of isolation among participants. Current research highlights the role of face-to-face support from health service providers and colleagues as essential mediators assisting novice nurses and midwives in navigating the occupational challenges presented by the pandemic (Iheduru-Anderson & Foley, 2021; Wynter et al., 2022). In my study, a concern arose as some participants noted that their organisations have not resumed face-to-face learning, with most of the training still being conducted online. The importance of feeling valued, being an integral team member, and receiving mentorship and support from fellow nurses and midwives is fundamental for the well-being of novice nurses and

midwives (Jarden et al., 2021). The insights gathered in my study not only echo existing literature but also deepen our understanding of the profound impacts of the pandemic on nursing and midwifery education and practice. These findings highlight the urgent need for a re-evaluation of educational strategies and support systems to ensure the resilience and effective integration of emerging professionals into the healthcare workforce.

During the pandemic, many facilities were ill-prepared to manage COVID-19 patients, imposing additional physical and psychological strains on nurses and midwives. In my study, participants highlighted the lack of designated rest spaces, attributed to social distancing guidelines, which often forced them to seek alternative locations, such as their vehicles, for breaks or miss their breaks all together. Hospitals faced shortages of space and resources to treat COVID-19 patients while also addressing the needs of patients with mild symptoms or those asymptomatic, who presented infectious risks to healthcare professionals and other patients. Consequently, nurses and midwives faced intensified stress, deprived of respite from their clinical duties and opportunities for peer interactions. This sentiment aligns with the observations of Ananda-Rajah et al., (2020) where respondents critiqued the Australian government's oversight in ensuring a conducive work environment for healthcare professionals. Such findings underscore the complexities of ensuring optimal patient care amidst significant material and physical resource constraints. My study's findings emphasise how the pandemic further exacerbated pre-existing infrastructural and organisational issues within healthcare settings, emphasising the pressing need to update and redesign current facilities.

The theme 'The Perfect Storm' emerged as a fitting title for the position the participants of my study found themselves in during the pandemic. This term was used to describe a convergence of challenges resulting in unprecedented instability. The Perfect Storm aptly captured the complicated difficulties these healthcare professionals faced. The escalating staff turnover, discernible shifts in workplace culture due to stress, skill mix imbalances, alterations in educational models, variations in leadership, breakdowns in trust and communication, coupled with constrained resources, policies, and procedures, all converged to create a turbulent work environment. The discussion of this theme provided a reflection on the resilience of nurses and midwives who navigated this storm.

5.3 Theme 2: The Cost of Caring

This theme examines the intricate dynamics of workplace challenges, highlighting the consequences on job satisfaction, health, and overall well-being amidst a global pandemic. Through the narratives of the nurses and midwives who have grappled with these challenges, we gain a comprehensive insight into the multifaceted nature of the obstacles specific to the pandemic. The term 'Cost of Caring' reflects the immeasurable physical, emotional, and social sacrifices made by nurses and midwives during this period. The toll of caring is further exacerbated by the demands of shift work, which placed additional stress on their physical and mental health, disrupted their work-life equilibrium, and negatively impacted upon job satisfaction.

My study investigated the roots of burnout, underlining the significant burden borne by the professionals in focus. The results suggests that these participants experienced a broad range of symptoms, from physical and psychological fatigue and exhaustion to more serious manifestations, including depression, anxiety, post-traumatic stress disorder and even suicidal ideation. The participants experiences highlight the significant stress encountered by nurses and midwives, offering an insight into the potential short to long term ramifications of sustained exposure to such challenging circumstances on an individual's physical and mental health.

The observations of the participants working shift work emphasise the limited support systems available to them, a finding that stands in contrast to the resilience demonstrated by these professionals. My study reveals a variety of coping mechanisms individuals employed to navigate the obstacles presented by the pandemic. The contrast of adversity and adjustment presents a nuanced and diverse portrayal of resilience in the face of substantial challenges in both professional and personal realms.

The motivations that drove nurses and midwives to persist, despite the unprecedented challenges they faced is recognised in this theme. The pandemic's impact included heightened workloads, emotional distress, and personal risk, that placed additional strain on professionals. Examining the factors that influenced their decisions to either persist or depart from the profession provides valuable insights into the necessary incentives that could promote retention within these crucial roles. The accounts provided by participants enrich our understanding of the factors shaping their work environment and emphasise the need for targeted strategies to address the inherent complexities and challenges associated with the pandemic.

The findings of my study revealed that during the period of the COVID-19 pandemic, nurses and midwives encountered intensified psychological challenges. Factors such as heightened workloads, tending to critically ill COVID-19 patients, an increased risk of virus contraction, along with prevailing uncertainties, societal stigmatisation, lack of PPE and essential medications, and working in infrastructures unprepared for the influx brought about by the pandemic, collectively amplified their psychological strain. The pandemic also deepened their risk of experiencing moral injury, as they were often forced to 'cope' and 'be more resilient'. This was particularly evident when making ethically challenging decisions about patient or women care delivery.

Resilience and coping mechanisms are highlighted as essential, serving as a protective factor, in managing occupational stress. The results from my study highlight the importance of interpersonal relationships and team dynamics in the workplace. Participants reported having a strong camaraderie with their colleagues, describing feelings of belonging and appreciation, which highlight that relational mediators can influence job satisfaction and overall wellbeing of nurses and midwives.

Participants in my study also discussed the unhealthy or unsustainable coping mechanisms they resorted to in managing and mitigating the effects of the COVID-19 pandemic. These included avoiding food due to intense work anxiety, turning to alcohol and cigarettes to aid in unwinding post shift, and facing sleep issues and disturbances because of ruminating on their shifts at night. Moreover, in the absence of social support from friends and family, often due to fear, stigmatisation, and ostracisation, participants experienced heightened feelings of isolation and anxiety. This is supported by other research, which emphasised a connection between social support and the mental wellbeing of healthcare workers (Besirli et al., 2021; Conolly et al., 2022; Nie et al., 2020; Xiao et al., 2020; Yörük & Güler, 2021). Participants in my study detailed the numerous challenges to their resilience, such as having to reconsider current practices, relying on innate resilience and camaraderie to navigate tough situations, and facing the stressors of no available leave, increased workloads, longer working hours, and high turnover rates without foreseeable relief. They emphasised the significance of self-compassion, especially when assessing their responses to challenging scenarios or when adjusting their roles to find or restore balance. It was also found that participants consistently felt obligated to push through, only acknowledging their own limitations upon reaching intense exhaustion and burnout, prompting many to re-evaluate their work/life balance. For some, this evaluation led to them leaving their

current position or even their profession. Supporting the results of my study, prior research indicates that before the pandemic, nurses and midwives were already experiencing challenging working conditions, being regularly exposed to unsociable working hours, interprofessional conflicts, and various levels of vicarious trauma. These factors placed them at risk for occupational stress and burnout (Happell et al., 2013; Hsieh et al., 2016; Mealer et al., 2017). COVID-19 further transformed nursing and midwifery, amplifying the psychological stress experienced by these professionals globally (Chowdhury et al., 2023; Maunder et al., 2023; Murat et al., 2021; Winnand et al., 2023; Zhang et al., 2021). Many researchers, including those who originally coined the term, describe resilience as a largely reliable trait that facilitates individuals ability to have an adaptive response to ever-evolving life challenges (Block & Kremen, 1996). Recent studies, mirroring the findings from my study, highlight the importance of self-compassion in reducing anxiety, stress, and the probability of compassion fatigue and burnout (Andrews et al., 2020; Dev et al., 2018; Montero-Marin et al., 2016). Andrews et al., (2020) found that nurses often felt the need to seek external and internal permission to practice self-care. This inability to allow self-care had profound implications on their well-being and their capability to extend compassionate care to others.

Participants of my study consistently exhibited a dichotomy of emotions, reporting an unwavering commitment to their professional duty of care, with profound concerns about their individual health and safety, as well as that of their immediate family and close relations. Participants revealed how the emotional turmoil stemming from internal conflicts led them to reconsider their worth and inherent risks associated with their job and profession. Their professional identity, inflexibility or inability to take leave, and work/life balance were all exacerbated during the pandemic. Together, these elements highlight the profound demands and challenges nurses and midwives faced, particularly emphasising the routine sacrifices made to care for their patients/women throughout the pandemic.

The quantitative findings from my study highlight a notable disparity in extrinsic job satisfaction scores between participants who expressed satisfaction and fulfillment in their roles, and those who reported discontentment. Furthermore, the relational satisfaction scores failed to compensate for this disparity among the discontented participants. These results emphasise the key interplay between interpersonal workplace relationships have, as well as coping mechanisms on job satisfaction. This finding is supported by research conducted by Nowicki et al., (2020), which highlighted the role of support from peers, family, and friends in helping individuals

maintain emotional equilibrium amidst hostile and stress inducing situations (Nowicki et al., 2020). This key insight highlights the necessity of examining the interplay of extrinsic and relational factors, as their combined influence is critical in understanding the overall job satisfaction of the participants in my study.

Within the research I conducted, it was discovered that when extrinsic job satisfaction decreased among participants, there was a compensatory increase in relational job satisfaction. This suggests that in the face of declining external job rewards or conditions, nurses and midwives increasingly rely on interpersonal relationships and team dynamics for job satisfaction. Drawing from participant feedback, many acknowledged a strengthened sense of camaraderie during the COVID-19 pandemic and yet they also observed a decrease in workplace civility. This decline can be attributed to factors like escalating workloads, increased staff turnover, and heightened burnout. When the relational elements of job satisfaction could not offset the decrease in external job satisfaction, it resulted in a more significant overall decrease in job satisfaction. Prior research supports my findings, reporting that individuals without mitigating factors (such as resilience and coping mechanisms) and supports in place are more susceptible to detrimental psychological outcomes (Duncan, 2020; Labrague et al., 2018). Past research looking at nurses' experiences during outbreaks of influenza, MERS-CoV, and SARS-Cov1 documented that strong professional solidarity and relationships helped to mitigate other compounding factors like higher workloads (Ives et al., 2009; Kim, 2018; Liu & Liehr, 2009). Nurses likened these shared experiences to fighting together in a war. Likewise, during a SARS-Cov1 epidemic in Hong Kong, Tam et al., (2004) found that nearly 70% of nurses felt their relationships with colleagues grew closer and more supportive during this period (Tam et al., 2004). In the context of the COVID-19 pandemic, research has consistently shown that psychological resilience, coping strategies, and social support serve as protective factors, enhancing the mental health and well-being of healthcare workers treating COVID-19 patients (Blanco-Donoso et al., 2021; Chew, Chia, et al., 2020; Ferreira et al., 2020; Foster et al., 2020). Additionally, other studies during the pandemic have underscored the direct link between social support and the mental wellbeing of healthcare workers (Besirli et al., 2021; Conolly et al., 2022; Nie et al., 2020; Xiao et al., 2020; Yörük & Güler, 2021). My study has highlighted the intricate balance between extrinsic and relational job satisfaction is crucial, particularly in high-stress environments like healthcare during the COVID-19 pandemic, underlining the need for comprehensive social support systems.

In my study, I found that the pandemic had led participants to place a renewed focus on self-preservation, prompting them to reconsider and re-evaluate their work-life balance and their core values. Several participants chose to decrease their working hours or alter their workplace setting as a strategy for self-preservation. These changes resulted in reported increases in job satisfaction for many. One participant expressed a new-found eagerness for their work, noting they even missed it during their time off work. Yet, they also mentioned that such enthusiasm might diminish if their working hours increased again. Other research has indicated that nurses and midwives involved in shift work are notably more prone to burnout than those with regular office hours (Fenwick, Lubomski, et al., 2018; Mollart et al., 2013). The constraints of inflexible and unpredictable schedules reduce an individual's sense of personal control, a key psychological element linked to burnout (Harvie et al., 2019; Pugh et al., 2013). Yayla et al., (2021) have also highlighted that compromises in work-life balance can yield negative outcomes, including increased stress levels, general dissatisfaction, and the potential to harm the mental and physical health of individuals. Such imbalances can adversely impact both social engagement and work performance. Ensuring a balanced work-life relationship is key for job satisfaction and overall well-being. A balanced lifestyle not only improves psychological and social health but also elevates self-esteem and broadens life perspectives (Kil et al., 2019; Shin & Cho, 2021). Moreover, even amidst adversity, nurses and midwives in my study who maintained an adequate level of work-life balance, found greater satisfaction in their roles and could adapt more easily to workplace changes, which may in turn increase their psychological well-being. Echoing these broader findings, results from my study reinforces the significance of work-life balance in ensuring job satisfaction, adaptability, and psychological well-being, especially during challenging times like a pandemic.

The work environment significantly influences the burnout experienced by nurses and midwives. The COVID-19 pandemic has seen a mass exit within the nursing profession, not necessarily due to waning passion or alternate career pursuits, but largely attributed to feelings of burnout, undervaluation, and disenchantment. Even before the pandemic's onset, Australian research had illuminated the marked levels of stress and burnout experienced by nurses and midwives. These factors directly influence midwives' job dissatisfaction and express intentions to depart from their profession (Davis & Homer, 2016; Jordan et al., 2013; Newton et al., 2014). My study, consistent with these findings, further reveals the complex facets of job satisfaction. Of the respondents in the survey, 61% (N = 222) considered, or took steps to leave their current role, the profession, or transitioning to an alternative career. Among these, there was a

demonstrated decline in satisfaction scores across all aspects, with a pronounced drop in extrinsic satisfaction (25%) from those who reported they were content. Participants discussed the consequences of occupational stress, moral distress, and burnout on their physical and psychological wellbeing, often resulting in a sense of reduced accomplishment and loss of professional identity. Moral distress has been linked to diminished self-esteem, decreased job satisfaction, burnout, and intent to resign from a position or even exit the profession entirely (Čartolovni et al., 2021; Epstein et al., 2019; Kröger, 2020). My study highlights the profound impact the work environment, occupational stress, and absence of organisational support on the professional satisfaction of nurses and midwives amidst the Perfect Storm. Reinforcing these highlighted issues, recent studies provide evidence of the significant role of the work environment in predicting nursing and midwifery burnout. My study found that poor work environments contributed to both burnout and a decline in job satisfaction, heightening worries about the quality and safety of care provided. The COVID-19 pandemic has seen unparalleled upheavals in the healthcare sector, leading to increased occupational burnout rates among nurses and midwives, surpassing those observed in other healthcare professions (De Kock et al., 2021). Such trends displayed pose a clear risk to workforce sustainability unless timely systemic interventions are implemented.

Participants of my study recounted times when their mental well-being deteriorated to the point where they considered suicide on several occasions. Moreover, the pandemic's influence extended to the sleep patterns of certain participants. Some recounted nightmares, likening them to wartime scenarios. Current research also supports these findings, identifying two factors that can result in sleep disturbances if occupational stress, moral distress, and burnout are not addressed. The first being the significant workload, increased work hours, and effects of shift work, particularly night shifts which disrupt circadian rhythms, and the second being sleep issues provoked by heightened levels of occupational stress (Lucchini et al., 2020; Salari et al., 2020). Participants of my study also conveyed experiences consistent with moral injuries, a phenomenon which research has indicated is associated with detrimental mental health consequences such as profound feelings of guilt and shame (Nazarov et al., 2015) and increased symptoms of anxiety (Protopopescu et al., 2021; Williamson et al., 2018), depression (Currier et al., 2015; Ray et al., 2021), post-traumatic stress disorder (PTSD) (Protopopescu et al., 2021; Ray et al., 2021; Williamson et al., 2018) and suicidality (Bryan et al., 2018; Griffin et al., 2019; Levi-Belz et al., 2022). Supporting my findings, the literature presents evidence that nurses and midwives have a suicide risk approximately twice that of other occupational groups, a risk that

is largely under-recognised (Petrie et al., 2023). One Australian study highlighted that, compared to doctors and other allied healthcare providers, nurses and midwives were notably more prone to experience symptoms of anxiety (Holton et al., 2021). Furthermore, Bismark et al., (2022) discovered that one out of every ten Australian healthcare workers reported suicidal ideation or self-harm during the COVID-19 period. Furthermore, it is evident from previous research that sleep disturbances are commonly linked with conditions like anxiety, depression, and PTSD and vice versa, with mental health disorders also associated with sleep disturbance (Geoffroy et al., 2020; Salari et al., 2020; Sanghera et al., 2020). The strain of the pandemic has significantly challenged the mental resilience of nurses and midwives, pushing them to unprecedented demands over an extended period. The experiences and accounts from the participants give a deeply personal insight into the struggles faced by nurses and midwives that worked during the COVID-19 pandemic in Australia.

My study highlights the widespread and significant psychosocial ramifications of the COVID-19 pandemic on nurses and midwives. While Australia's COVID-19 impact has been less severe than many other countries in terms of cases, deaths, and hospitalisations, studies have found that Australian nurses have shown a higher prevalence of emotional distress linked to COVID-19 compared to that of the broader Australian population (Neill et al., 2020; Rossell et al., 2021). Drawing from insights during the SARS-Cov1 and Ebola outbreaks, it is evident that nurses and midwives are susceptible to psychological distress amidst the COVID-19 pandemic, irrespective of the case numbers or fatality rates (Chan & Huak, 2004; Chew, Wei, et al., 2020; Maunder et al., 2008). My findings align with the appeals made by nursing and midwifery unions and organisations, which emphasise the need for an enhanced focus and increased research efforts into exploring the mental health of this professional cohort (Callander et al., 2021b; Ho et al., 2020; International Council of Nurses, 2020b; World Health Organization, 2022).

The theme 'The Cost of Caring' expressed the ramifications of theme one 'The Perfect Storm' on nurses and midwives. Just as a storm leaves an aftermath in its wake, so too has the challenges exposed in the previous theme taken a toll on the personal and professional well-being of our participants. The continual demands and pressures translated into manifestations of burnout and compassion fatigue, with both psychological and physical repercussions evident in the respondents. These strains often prompted diverse coping mechanisms, some of which were beneficial, while others were unhealthy. When burnout was not addressed, it spiralled into heightened anxiety, an increased intention to exit the profession, and for a few, severe

manifestations like depression, PTSD, and suicidal ideation. This theme has exposed the emotional, mental, and physical costs that nurses and midwives endured during the pandemic.

5.4 Theme 3: Caring in the Shadows

This theme provides an in-depth examination of the perspectives of nurses and midwives regarding how their profession is perceived externally during the tumultuous period of the COVID-19 pandemic. The participants' narratives reveal a significant divergence between public understanding and the realities of the nursing and midwifery roles, highlighting the disparities between the portrayed image and their lived experiences.

This theme investigates the underlying factors that have fostered a climate of distrust and disdain among nurses and midwives towards the government's approach to the pandemic. The conditions under which these healthcare professionals worked during this period were nothing short of formidable. Participants reported enduring long hours, bearing the weight of increased workloads, and facing heightened risks of exposure to the virus. Such conditions inevitably impacted their physical and mental well-being as discussed in theme two.

Patient ratios and safe working conditions emerged as paramount concerns, revealing the cracks in the healthcare system. Contributing to participants' reporting decreased job satisfaction, these factors have fuelled fears of compromising patient safety and quality of care, as well as the looming potential for legal consequences and professional deregistration if something were to go wrong. Additionally, this theme ventures into the complex territory of financial incentives, such as retention bonuses, aimed at maintaining workforce motivation during these challenging times. Through a thorough exploration of the participants' experiences, both the potential benefits and inherent shortcomings of these incentives are revealed, demonstrating their effectiveness in addressing the broader issues faced by nurses and midwives. By exploring the complexities of their employment conditions and the external perception of their roles, this theme adds depth to our understanding of the obstacles confronting these professionals in their day-to-day practice and discusses the implications for the future of the nursing and midwifery professions.

This theme's discussion examines the narrative presented by the media regarding nurses and midwives during the COVID-19 crisis. A critical assessment of this changing representation exposes the initial portrayal of these healthcare professionals as heroes, only to later be overshadowed by negativity and allegations of greed. This exploration aims to unravel the

realities behind the headlines, offering a comprehensive understanding of the challenging conditions these professions navigated during the crisis.

In 2016, the WHO declared that achieving the aim of universal health coverage, as outlined in the Sustainable Development Goals, would be infeasible without globally enhancing nursing and midwifery education, increasing the numbers of educated nurses and midwives employed, empowering them and the system to allow them to practice to the full scope of practice, involving them actively in health policy decisions, and recognising them as crucial leaders in health and healthcare sectors (World Health Organization, 2016b, 2017). Building on this, in early 2019, the WHO declared 2020 to be the Year of the Nurse and Midwife (YONM), highlighting the instrumental role that these approximately 21 million healthcare professionals hold in promoting the wellbeing of communities and nations (World Health Organization, 2020f). The bicentenary of Florence Nightingale's birth in 2020 further strengthened the significance of the YONM, with a dual purpose, to honour Nightingale's enduring legacy in healthcare, while also revealing the invaluable contributions of nurses and midwives. Thus, highlighting how their roles are paramount in promoting universal health coverage and in achieving health-related sustainable development objectives (Mason, 2020). Simultaneously, the year was intended to highlight the impending worldwide shortage of these crucial healthcare professionals (Al-Mandhari et al., 2020). The COVID-19 pandemic has not only upended healthcare, cultural, financial, and government systems worldwide, but it has drawn greater attention to the complex and demanding work conditions of nurses and midwives in achieving health care for all.

During the pandemic, many governments and health systems exhibited significant shortcomings in planning, preparedness, organisation, and leadership (Alami et al., 2021; World Health Organization, 2021). This was evident in their inability to maintain sufficient stockpiles of essential medical supplies, particularly PPE for healthcare professionals (Cohen & van der Meulen Rodgers, 2020). Moreover, the situation was further complicated as some leaders politicised and capitalised on the crisis (Turale et al., 2020). A year after the outbreak's onset, even as vaccines were being rapidly distributed, the control of the COVID-19 pandemic was still largely hinging on Non-Pharmaceutical Interventions (NPI) set by governments (Gostin & Wiley, 2020; Haushofer & Metcalf, 2020; Hunter, 2020; Wang et al., 2023). These interventions, seen globally, encompass measures like school closures, travel curbs, bans on public gatherings, and mandates to stay at home. The primary objective of these policies was to enforce physical distancing or mitigate the spread of COVID-19, often supplemented by testing and contact

tracing efforts of differing intensities. The extent and promptness of these interventions have varied considerably across governments. Existing literature has highlighted the impact of distinct government policies, regulations, and legislation introduced in various countries due to COVID-19 often drawing comparisons (Adams & Wannamaker, 2022). However, until my study, research on how these variables affect the job satisfaction and retention of nurses and midwives has been largely underexplored.

Considering this, I sought to examine the existing literature to discern if any previous studies had compared job satisfaction among nurses and midwives across different states and territories in Australia during the pandemic as reported in the literature review (CHAPTER 2). Such research direction seemed crucial, given the unique challenges and experiences these nurses and midwives faced, ranging from diverse lockdown government protocols, varied exposure to COVID-19 positive cases, to region specific quarantine regulations, especially when compared to WA. These differing circumstances could potentially lead to variations in job satisfaction and, consequently, differences in retention across states and territories.

At the beginning of my study, this specific research area was largely uncharted, and the quantitative results surprisingly did not unveil any significant disparities in overall job satisfaction across states and territories. This finding is interesting, especially given the various factors that had the potential to affect participants experiences. This novel angle introduces a fresh perspective, which has been largely overlooked in current research narratives. Participants involved in the qualitative aspect of the study highlighted the challenges arising from variations in guidelines across states and their resulting impact on the nursing and midwifery profession. Notably, there was an apparent neglect in addressing the genuine concerns and apprehensions voiced by nurses and midwives. This was further compounded by significant bureaucratic hurdles, both on a national and international scale, making the recruitment process arduous, particularly when attempting to alleviate staffing shortages. Moreover, the inconsistency in guidelines and ever-evolving benchmarks only served to increase the recruitment challenges. Such conditions not only intensified the workload for those tasked with recruitment but also heightened the anxiety levels of professionals seeking to relocate and practice within different states.

Participants conveyed a profound sense of burnout as the pandemic neared its conclusion. This exhaustion was further exacerbated when participants perceived a marked lack of respect

and apparent disdain from the government. Such sentiments were particularly intensified as the government attempted to deregister the nursing and midwifery union, which was actively championing for fair working conditions, amendments to the Enterprise Bargaining Agreement (EBA), and advocating for pay rises. Many participants of my study felt that this move might have been the tipping point, prompting nurses and midwives to reconsider their positions and potentially walk away from the profession because of feeling unseen, unvalued, and disrespected by the government. These findings resonate with a Canadian study by Ménard et al., (2023), which discovered that registered nurses felt an increasing lack of support and respect from their government as the pandemic evolved. Ménard et al., (2023) respondents discussed how the stripping of their rights, coupled with an absence of adequate compensation or financial incentives, emphasised a perceived inherent devaluation of nursing roles throughout the course of the pandemic (Ménard et al., 2023). In my study, it was clear that all these issues led to a deep feeling of disappointment and made many nurses and midwives consider changing their careers.

My study's midwifery participants highlighted the necessity to recognise what is deemed a reasonable expectation of midwives in terms of their duties and responsibilities, both during public health crises and in routine practice. The idea of improving ethically grounded expectations about what the government, employers and public can reasonably expect from nurses and midwives during public health crises has been previously discussed in existing research prior to the COVID-19 pandemic (Johnstone & Turale, 2014; Tigert Walters, 2010; World Health Organization, 2007). While the prevailing narrative in much of the current research herald's nurses and midwives as 'heroes,' this perspective is not without contention. As highlighted in my study, this heroic portrayal, though well-intentioned, is emphasised by participants of my study to inadvertently mask their struggles and vulnerabilities as they discuss feeling invisible and forgotten about as the pandemic progressed. Consequently, such narrative as emphasised in the research to date could lead groups like the general public to neglect nurses and midwives' challenges, struggles and result in them holding unrealistic expectations of their roles and duties.

Participants in my study underscored their professional concerns, emphasising the necessity for establishing uniform post-pandemic standards in the profession. These standards should be universally applied, rather than varying according to state regulations. This includes revisions to the EBA to ensure fair working conditions, pay increments that reflect forecasted cost of living rises, and safer nurse/midwife patient/woman/baby ratios. Historically, collective

bargaining through unions and networks has allowed nurses and midwives to effectively lobby for better employment and working conditions (Büscher et al., 2009). Yet, in certain jurisdictions, these efforts are hampered by insufficient legal protections (Gunn et al., 2019). Interestingly, participants of my study expressed concerns regarding their collective bargaining rights, referencing the government's attempts to legally deregister their professional unions as a form of intimidation for speaking up about working conditions. This observation is particularly striking since Australia, unlike third world countries with authoritarian leadership, it is not traditionally associated with such forceful governmental interventions and measures restricting unions and networks of free speech. In low to middle-income countries, a lower nurse-to-patient ratio or increased nurse workload correlates with increased in-hospital deaths, hospital acquired infections, and medication errors (Assaye et al., 2021). Furthermore, nurses in these settings frequently experienced increased burnout rates, work related injuries, absenteeism, and a higher turnover rates (Assaye et al., 2021). In Australia, both public and private health, including maternity services, gauge their workforce based on Equivalent Full-Time (EFT) metrics, which represent the required working hours rather than actual staff numbers (Australian Bureau of Statistics, 2021). Among midwifery participants in my study, there was an emphasised concern regarding the minimum midwife-to-woman-baby ratio. This concern was raised because, in Australia's practice, both mothers and babies are counted as one entity for ratio calculations. Furthermore, participants noted that during the adaptation of the midwifery care model in response to COVID-19, registered nurses and midwifery assistants became included in the midwife-to-woman-baby ratio. This change intensified the number of women and babies that a single midwife could potentially be responsible for, resulting in participants describing registered nurses who were allocated to work in the postnatal areas practicing outside of their scope of practice resulting in an increased number of near misses.

To date, midwifery research offers limited evidence on the influence of a dilutional skill mix and its impact on women and babies outcomes in the postnatal setting (Matthews et al., 2023). Most existing research highlights that increased staffing levels lead to better outcomes for both mother and babies, however these studies are based on labour setting, and outcomes are measured within the first hour after birth (Clapp et al., 2019; Turner et al., 2021). In contrast, nursing studies highlight that compromising the skill mix can negatively impact patient care and outcomes (Aiken et al., 2017; Griffiths et al., 2018). My study has highlighted the effects of a diluted skill mix within nursing during the pandemic, emphasising both its potential professional consequences, as previously mentioned, and its implications for patient outcomes. Midwifery

participants of my study emphasised the pressing need to re-evaluate the current midwife-to-women-baby ratios in postnatal ward settings, advocating for the inclusion of babies in the ratio calculations. They also stressed that increasing rates of medical interventions and the heightened complexities of the mothers and babies they are caring for should be factored into midwives' ratio. Previous literature strongly supports this view that the implementation and funding of continuity in midwifery models would not only strengthen job satisfaction of midwives but also result in a reduction of burnout and turnover rates within the workforce (Dixon et al., 2017; Fenwick, Sidebotham, et al., 2018; Newton et al., 2014; Sandall et al., 2011). Participants of my study highlighted the union's efforts to regulate this matter, emphasising the potential repercussions on retention if it was not addressed in the EBA with the government. Participants stressed their experiences of burnout because of unsafe ratios, with some anecdotally reporting that the excessive ratios led to colleagues exiting the profession during the COVID-19 crisis.

The topic of fair wages in line with cost-of-living increases and compensation for risking their health and wellbeing were a topic of discussion in my study. Several participants acknowledged the benefits of the financial and educational incentives rolled out by the government. Yet, they pointed out that these were not introduced until late 2022, when staff were already beginning to leave the profession. Additionally, they highlighted the need to evaluate the true impact of these incentives, as substantial taxation resulted in a considerable dilution of the intended benefits for many participants. During the interviews, participants highlighted the variability in financial and educational incentives across different states (Australian Nursing and Midwifery Federation, 2021a; Department of Health Victoria, 2022; Government of Western Australia, 2023; South Australian Employment Tribunal, 2022). Such disparities have led participants to report that nurses and midwives are contemplating relocating to other states to leverage these incentives.

The participants of my study highlighted the disproportionate financial remuneration considering the extensive training, skill, and emotional labour that nursing and midwifery entail especially considering the pandemic. Traditionally, in health systems, power dynamics and societal perspectives have often placed medical doctors in a more esteemed position compared to nurses and midwives (Buchan & Black, 2011; Nimmon & Stenfors-Hayes, 2016; Wright, 1997). This imbalance is highlighted by the financial incentives provided to healthcare professionals during the first wave of the COVID-19 pandemic in specific European nations. In such scenarios, nurses and nursing aides often received considerably less compensation, or none,

in contrast to their allied health and frontline worker counterparts (Goniewicz et al., 2023; Government of the United Kingdom, 2020; Gray et al., 2021). Interesting, participants conveyed in Ménard et al., (2023) study that inadequate compensation and financial incentives were perceived as an inherent underestimation of the contributions and risks made by nurses during the pandemic (Ménard et al., 2023). Participants of my study did not focus on the financial discrepancies between different professions noted in other research to date. Instead, they discussed the importance of viewing financial remuneration and incentives not merely as standalone measures to improve extrinsic motivation and job satisfaction. Interestingly, as noted by Pahlevan Sharif and colleagues, those who were risking their lives during the pandemic, viewed the monetary incentives as holding little value or effect on job satisfaction (Pahlevan Sharif et al., 2023). Instead, organisational support emerged as the key factor in enhancing nurses' life satisfaction that ensured job retention rates (Pahlevan Sharif et al., 2023). Current research suggests financial incentive schemes should be integrated with other extrinsic interventions to retain experienced nurses and midwives effectively (Alnuaimi, 2021; Catton, 2020; Cunningham et al., 2022; International Council of Nurses, 2020a; World Health Organization, 2019). While the participants in my study acknowledged an imbalance in financial incentives, they expressed greater concern about the improvement of their working conditions.

My study draws critical contrasts and connections, between the under-recognition of nursing and midwifery during the COVID-19 pandemic, and the role that social media and media outlets have played in this context. At the heart of these experiences lies a stark disconnection between the substantial personal and societal sacrifices made by these nurses and midwives and the lack of professional recognition and remuneration they received in return. Prior to the COVID-19 pandemic, nurses and midwives were largely unseen in the media, and played a quiet but respected role, both within the broader society and their own institutions (Crisp, 2018; Shahbaz et al., 2021). Since the emergence of the pandemic, the media has been saturated with finger-pointing, the dissemination of misinformation, medico-political discourse, and conspiratorial beliefs, intensifying the stress for healthcare workers and the wider community (Ritter et al., 2021; Turale et al., 2020; Wen et al., 2020). While healthcare providers have faced stigmatisation in past pandemics (Maunder et al., 2003), the phenomenon of 'infodemics' was worsened during the COVID-19 pandemic (World Health Organization, 2023a). WHO (2020d) Situation Report highlights how the surplus of information given during the first wave, ranged from accurate to misleading, which could have potentially resulted in people finding it hard to trust the guidance given and by whom (World Health Organization, 2020d). This overflow of

information, prevalent during the COVID-19 pandemic, resulted in the fuelling of panic and distrust.

Digital platforms, such as YouTube, Twitter, and Facebook, have revolutionised the way information is accessed, allowing individuals to gain knowledge passively without resorting to conventional media channels (Carvalho et al., 2021; Clavier et al., 2019; Lefebvre et al., 2020; Rolls et al., 2016; Wang et al., 2019). Simultaneously, instant messaging applications, like WhatsApp, foster immediate peer-to-peer communication. Studies have examined the utilisation of social media by nurses during the pandemic, not only as a conduit for professional promotion, but also as a medium for disseminating information, sharing resources, facilitating education, and serving as a key social communication tool (Carvalho et al., 2021; Clavier et al., 2019; Lefebvre et al., 2020; Rolls et al., 2016; Wang et al., 2019). For many healthcare professionals, these platforms have become instrumental in relaying and discussing their stressful experiences during the COVID-19 pandemic (Fontanini et al., 2021; Kang et al., 2020).

The findings of my study indicated a distinct climate of mistrust and misinformation, potentially correlating with the amplified incivility observed by nurses and midwives. Participants experienced personal attacks and profound animosity from family, friends, and strangers on social media. They were accused of spreading misinformation, acting as carriers for the disease, perpetuating a hoax, and endorsing vaccine conspiracy theories. Many participants of my study were subject to online harassment, societal alienation, and marginalisation. To cope with the effects of online bullying and harassment, they often chose to ignore online 'trolls'. However, as a result, many were compelled to alter their digital presence by setting accounts to private, limiting online interactions, blocking specific users, or avoiding social media engagement altogether. Such adaptations, while protective, can notably impact an individual's psychological well-being and their professional satisfaction (El Ghaziri et al., 2022). Supporting these findings, research from Bradshaw and Howard (2017) and Bautista et al., (2021) underscored the vulnerability of social media platforms to trolls perpetuating cyberbullying, pack mentality attacks, hate speech, and threats of intimidation and violence (Bautista et al., 2021; Bradshaw & Howard, 2017). It was disconcerting to discover that participants of my study experienced episodes of cyber-incivility. Participants reported being targeted on social media platforms, mainly from strangers but also from friends and family, who accused them of spreading misinformation and propaganda. These accusations have had discernible effects on the participants' interpersonal relationships, their own sense of professional reputation, and overall

job satisfaction. This finding aligns with those of a Canadian study, where respondents highlighted experiencing additional stress due to encountering COVID-19 denial and vaccine resistance, not only from patients and their families, but also from their own family and friends (Ménard et al., 2023). My study introduces new insights into an area that has been relatively under-examined in Australian literature, addressing cyber-incivility in the nursing and midwifery profession and its implications beyond the workplace. These findings emphasise the importance of further exploration and research on this topic within the Australian context.

The findings of my study revealed an increase of both verbal and physical mistreatment towards nurses and midwives in the wake of the pandemic. Furthermore, participants of my study reported a significant change in media portrayal of them. The portrayal of nurses and midwives as selfless heroes, framed within war and military imagery, mirrors findings from a media analysis of the SARS-Cov1 crisis (Hall et al., 2003). Once celebrated as 'unsung heroes,' at the start of the pandemic, participants in my study described facing criticism, being labelled as the 'worst people on earth' simply for seeking safer working conditions and fair pay. This observation underscores the participants' perception of a paradoxical reaction towards their professions during the pandemic. This shift in sentiment was not only noticeable in the media but also within the personal circles of the participants. Many participants shared that despite their families and friends witnessing firsthand the stress they endured during the pandemic's peak, they still questioned their demands for better pay and improved work conditions. Such attitudes compounded the distress felt by the participants, leading them to reconsider their career choices, their professional identity and resulted in a diminished sense of job satisfaction. These findings resonate with previous research. For instance, Harvie et al., (2019) found a lack of professional recognition to be a significant factor prompting Australian midwives to consider leaving their profession even before the pandemic. In my study, more than half of the midwives expressed their frustration with their profession's undervaluation as the main reason behind their intentions to leave. The results of my study emphasise that the pandemic has further worsened this sense of underappreciation in the profession. This sentiment is evident not only among the general public, but also in the media and within the regulatory governmental bodies overseeing the profession. Furthermore, media reports have indicated that healthcare workers encountered incivility and hostility from the broader public (White, 2020). Instances such as being yelled at by strangers in public places, getting denied service in stores, and even avoidance by family, friends, and acquaintances have been reported (Bagcchi, 2020; Kim et al., 2022; White, 2020). Other international research, by Dye et al. (2020) and Lee et al. (2021), have confirmed these

sentiments, pointing out that experiences of stigma, hostility, and ostracism within both the community and personal support networks can lead to intentions of leaving the profession and reduced job satisfaction (Dye et al., 2020; Lee et al., 2021).

The roles of nurses and midwives have undeniably evolved over time, now demanding tertiary education and an intricate skill set. Existing research, which aligns with the findings from my study, emphasises that the broader public remains largely uninformed about the contemporary academic, scientific, and professional capacities of nurses and midwives (Hoeve et al., 2014; Norman, 2015; Woods-Giscombe et al., 2020). Their key role in delivering holistic and comprehensive care often goes unnoticed or is mistakenly attributed to other healthcare professionals. This societal perception may stem from media portrayals that often depict the nursing and midwifery profession as secondary or passive, with limited capabilities (Crisp, 2018; Elmorshedy et al., 2020; Glerean et al., 2017). Such portrayals fail to showcase the true expertise of nurses and midwives, rendering their skills either unseen or unacknowledged. Despite the challenges and threats posed by social media and traditional media platforms, it is important to note the inherent credibility and expertise of these professionals. The public's perception of a profession is integral to its professional identity (Hoeve et al., 2014). My study has discovered that when such perception is diminished or undervalued, it can have a negative influence on an individual's professional identity and job satisfaction. Participants of my study recognised this, noting that the pandemic was a missed chance to strengthen a positive image of their professional identity.

The insights provided by participants in my study about their self-perceptions of professional identity and societal recognition are striking. If not promptly addressed, these perceptions could significantly impact Australia's future healthcare workforce. Additionally, the direction of health services may be affected if nurses and midwives are not made more visible and recognised in society for being the professional healthcare experts they are. Understanding these factors could lead to tailored strategies and interventions that aim to rectify the stereotypes associated with the nursing and midwifery profession in Australia.

This theme 'Caring in the Shadows' has explored on an often-overlooked facet of the nursing and midwifery professions, their professional identity, and society's evolving perception of them. The COVID-19 pandemic presented them with immediate challenges and unexpectedly placed them at the centre of public discussions, scrutiny, and at times, even disdain. The shift

from being celebrated as heroes to facing criticism, influenced by governmental stances, social media, and sensationalist media, further compounded the challenges of their already demanding roles. The weight of this theme lies not just in recounting their struggles during the pandemic but also in probing the question 'Where to from here?'. This theme's exploration into the nuances of their identity, societal perception, and the interplay of external forces underscores the pressing need for recognition and reform in the future of the nursing and midwifery professions.

5.5 Summary of Discussion

This discussion aimed to examine the effects of the COVID-19 pandemic on the job satisfaction, retention, and career trajectories of nurses and midwives in Australia.

From the turbulent conditions outlined in 'The Perfect Storm', detailing numerous workplace challenges, to the consequential emotional, mental, and physical toll as depicted in 'The Cost of Caring', the resilience of these healthcare professionals has been extraordinary. Importantly, 'Caring in the Shadows' explored the societal dynamics, identifying shifts in professional identity and perception of nurses and midwives.

As the pandemic relentlessly tested the limits of these healthcare professionals, the experiences of nurses and midwives reaffirm the importance of understanding job satisfaction not merely as a matter of individual welfare, but as an imperative for sustained, holistic patient/woman centred care, and healthcare resilience. Beyond the detailed narratives, the findings of my study underscore a need for healthcare policy reforms, workplace strategies, and societal acknowledgements that recognise the invaluable contributions and challenges faced by nurses and midwives. With the pandemic amplifying pre-existing challenges and introducing new ones, it is paramount to advocate for systemic changes that encourage job satisfaction, enhance workforce retention, and promote a more supportive environment for our frontline warriors.

Chapter 6 will explore the potential avenues for further research, offering insights into areas that have yet to be explored. This chapter will offer a critical evaluation of the repercussions of my research findings on contemporary practices. It will reflect on the potential influence these findings may have in directing transformative changes in the workforce reform, strengthening sustainable workforce strategies that will aid in supporting and retaining nurses and midwives within the Australian healthcare sector. Furthermore, it will critically assess the constraints and limitations inherent in this study.

CHAPTER 6 CONCLUSION

6.1 Introduction

This chapter begins by highlighting the primary contributions of this research to the existing literature, followed by a reflection on its limitations. In subsequent sections, the implications of the findings for policy formulation and clinical application are explored, and potential avenues for future research are outlined. Insights highlighted in my study demonstrate the critical role of job satisfaction in nursing and midwifery. By identifying factors that adversely affect job satisfaction, the aim is to foster greater attraction and retention rates of nurses and midwives, which in turn, can lead to improved patient/women outcomes and inspire the broader community to contemplate a career in nursing and midwifery. Consequently, this will help safeguard the nursing and midwifery workforce and better prepare us to manage future health system crises, including pandemics and epidemics. This chapter draws to a close by outlining the intended strategy for disseminating the research and its findings, accompanied by concluding remarks.

6.2 Summary of Thesis

In Chapter One, an exploration into the background and context of the research topic was conducted, highlighting the historical trajectory of nurse and midwife retention, with a focus on both Australian and global perspectives. This included a deep dive into the repercussions of previous pandemics and their effects on the retention rates of these healthcare professionals. The primary objective of my study was to examine the intrinsic, extrinsic, and relational determinants, triggered by the COVID-19 pandemic, that have impacted job satisfaction levels among Australian Registered Nurses and Midwives. At the same time, this study sought to understand how these factors influenced nurses and midwives' decisions to either stay in their current roles or contemplate a shift either within or out of their respective profession. This understanding was produced from a combination of both quantitative and qualitative findings. The overarching research question underpinning this thesis was "How has the COVID-19 pandemic influenced the intrinsic, extrinsic, and relational factors of job satisfaction among Australian Registered Nurses and Midwives, and what effect does this have on their decision to continue or leave their profession?"

Chapter Two offered an in-depth review of global literature that focused on job satisfaction and retention within the nursing and midwifery workforce amidst the COVID-19 pandemic. The

literature review highlighted a notable gap. It revealed that the research was limited in pinpointing how a combination of intrinsic, extrinsic and relational factors influenced nurse and midwife retention during the pandemic. Despite the global significance of this crisis, the literature review revealed a distinct lack in studies specifically looking into the lived experiences of nurses and midwives in Australia and the influence of related factors during this health crisis. This further highlights the justification behind conducting this research study.

Chapter Three provided a critical review of the research study design, offering a justification for the selected methodology. Within this chapter, the use of the validated NWSQ survey instrument and the utilisation of one-on-one semi-structured interviews, were discussed as the most appropriate approaches for collecting both quantitative and qualitative data and answering the overarching research question.

In Chapter Four, including both part one and two, the quantitative and qualitative results were presented. The quantitative results offered a comprehensive perspective on job satisfaction across various nursing and midwifery roles, highlighting the intricate and complex interplay amongst various facets of job satisfaction. To complement the statistics in the quantitative section, the qualitative findings offered deep meaningful insights. This offered a more profound exploration of the complex nature of the participants' reality with the phenomenon, through rich insights, thus providing a balanced perspective to the statistical analysis discussed in part one of the results chapter.

Chapter Five describes and discusses the quantitative and qualitative findings, in relation to the existing body of literature. The study explored the complex connections/relationships between the three primary themes identified as factors influencing job satisfaction and retention amongst Australian nurses and midwives during the pandemic, directly addressing the central research question of this thesis.

Chapter Six offers a discussion on the implications of the findings for the nursing and midwifery professions. Additionally, it presents recommendations aimed at promoting the sustainability and growth of the workforce.

6.3 Implications and Considerations for Practice

In order to improve nursing and midwifery retention in Australia, stakeholders must be acutely aware of the 'Perfect Storm' that has hit the profession. Stakeholders also need to understand the ramifications of the pandemic on the health and wellbeing of nurses and midwives, particularly if these concerns continue to go unaddressed. The findings from this study highlight the significant 'Cost of Caring'. Regardless of the case numbers or mortality rates, as evidenced by this study, nurses and midwives are prone to psychological distress due to the inherent nature and demands of their professional role and identity/duty. When nurses and midwives' resilience is pushed to breaking point, these professionals may find themselves 'Caring in the Shadows'. This shift is driven by challenging and often hostile workplace conditions and a disconnect between the public's perception and expectations of the profession and the actual experiences these nurses and midwives face daily. This research significantly contributes to the existing literature on job satisfaction and retention among nurses and midwives in Australia.

Retention challenges for nurses and midwives have long been anchored on the premise that maintaining adequate staffing will aid in improving job satisfaction. While previous research has focused on this singular solution, my 'Perfect Storm' theme offers new insights into the more deep-rooted challenges affecting job satisfaction, and consequently, retention. These results build on existing evidence of systemic issues in the healthcare field, leading many experienced nurses and midwives to reconsider their commitment to their roles.

My study sheds light on the necessity of proactive strategies in confronting complex challenges that are brought on by pandemics. To navigate such events, organisations and health systems need to not only anticipate, prepare, and handle disruptions, but also prioritise the well-being and resilience of their workforce. Beyond the immediate repercussions of the pandemic, there is a call for adaptability in addressing the dynamics of healthcare.

In recent pre-pandemic research, it has been argued that resilience, historically viewed as an individual attribute or construct, should not solely be the responsibility of the individuals in the organisation to adapt (Taylor, 2019). Instead, it should be the organisation's responsibility to adapt its resources and services to be resilient in times of crisis. Central to organisational resilience is proactive risk management. Attaining this requires substantial stakeholder engagement, advocating a bottom-up approach. In this suggested model, potential threats to the

resilience and job satisfaction of nurses and midwives are discerned firsthand by those immersed in patient/woman care. My study clearly shows that participants depended on their personal resilience to cope with organisational deficiencies during the pandemic.

The findings of this study reinforce the recent initiatives being undertaken by the Commonwealth and Victorian Government, in conjunction with all states and territories, in response to post-pandemic workforce challenges. In the upcoming year, active engagement with stakeholders will be facilitated through workshops and consultations, with the aim being to formulate a comprehensive national nursing workforce strategy (Department of Health and Aged Care, 2023). This strategy aspires to ensure that nurses can fully utilise their skills to meet the evolving health and aged care demands in Australia (Department of Health and Aged Care, 2023). An area that remains relatively unexplored in research is the recent introduction and implications of the new AIM/EN/RN/RM-to-women-and-baby's ratios during and post pandemic. My study offers fresh insights into this important aspect, whilst highlighting the potential challenges associated with its introduction. Specifically, my research explores the implications of these ratios on midwives' job satisfaction and the potential risks to women's care when other healthcare providers (AIN/EN/RNs) are pressed to work beyond their conventional scope of practice.

The results of my research also build on recent recommendations by the Council of Deans of Nursing and Midwifery Australia and New Zealand that suggest the need for the collaboration in developing and strengthening leadership skills within the nursing and midwifery workforce (Council of Deans of Nursing and Midwifery, 2023). The recommendations suggested that the leadership initiative should span from entry-level education to senior executive roles and be executed in partnership with key nursing and midwifery organisations in order to enhance both organisational and individual resilience (Carragher & Gormley, 2017). Collaborators should encompass representatives from both public and private hospitals, the Council of Deans of Nursing and Midwifery, the Australian College of Midwives, the Australian College of Nurses and the Congress of Aboriginal and Torres Strait Islander Nurses and Midwives.

Incorporating clinical nursing and midwifery representation at governance levels within organisations is also crucial. Closer collaborations with nurses and midwives on the front line, especially during critical situations like PPE shortages, is imperative. Transitioning to a collaborative, rather than a top-down managerial system with transparent and honest

communication, can foster trust during times of crisis. When faced with system failures, the focus should be on addressing systemic issues rather than assigning individual blame or requesting individuals to show greater resilience. Amplifying the availability and reach of welfare and wellbeing services during crises, actively listening to and addressing nurses and midwives' concerns, and treating them as integral and respected members of the organisation are further crucial components to improve job satisfaction and retention of nurses and midwives.

The 'Cost of Caring' findings highlights the significant physical, emotional, and social sacrifices made by nurses and midwives during this time. Addressing the root causes of occupational burnout is crucial. While individual experiences may vary, this research highlights several consistent factors across the profession that contribute to burnout. These include excessive workload, job insecurity, hostile working conditions, interpersonal communications and conflicts within a workplace, challenges in maintaining work-life balance, a sense of diminished control or autonomy in one's role, medical hierarchy conflict manifesting in various ways, and ambiguity regarding job roles and responsibilities. Recognising and mitigating these common stressors is essential for the well-being and productivity of the nursing and midwifery professionals.

Navigating beyond the immediate challenges of the COVID-19 pandemic requires more than just recovery to the previous Status Quo prior to the onset of the pandemic. The findings in 'Caring in the Shadows' call for a dynamic and adaptive response to address the ever-evolving landscape of nursing and midwifery. My research introduces new insights into an area that has been relatively under-examined in Australian literature which is cyber-incivility in the nursing and midwifery professions and its implications beyond the workplace. My findings emphasise the importance of further exploration and research on this topic within the Australian context. The gap between the governmental and public perceptions of the nursing and midwifery professions and the day-to-day challenges faced by nurses and midwives during the COVID-19 pandemic represents a novel insight that has been largely absent from existing research. The implications of my findings stretch beyond the present moment, provoking reflection and thought about how best to bridge the perception gap, leading us to ask, 'where do we go from here?'. By exploring the complexities of nurses and midwives' professional identities in the context of changing societal perceptions, my study emphasises the immediate need for recognition, appropriate remuneration, and public education about their essential roles. Furthermore, my study highlights the need for open discussions and key governmental reforms

to support nurses and midwives in their commitment to patient-centered and women-centered care.

6.4 Acknowledgement of the Limitations

The constraints of my study should be acknowledged, so that recommendations can be made for addressing and rectifying them in later studies. These limitations were related to the research design and the sample.

My study employed a convergent parallel mixed method design, encompassing both quantitative and qualitative data collection simultaneously. While this method facilitates a richer understanding of the phenomenon under investigation, it is not without its challenges. Navigating both data sets concurrently required a heightened level of proficiency and can be particularly demanding in terms of methodology. Furthermore, simultaneously conducting two research streams can be resource intensive, both in terms of time and expert knowledge needed. I mitigated these challenges by consistently collaborating with and seeking guidance from experts in mixed methods research, my supervisors. Although a convergent parallel design typically emphasises concurrent data collection, the early planning stages were staggered to ensure each method received its due focus. Furthermore, by setting clear timelines with specific milestones for both the quantitative and qualitative components, and factoring in buffer time for unforeseen delays, I ensured that my time and data were managed effectively.

The quantitative sampling utilised the snowballing technique, which inherently poses representational challenges. The referral-based nature of this method might not provide a comprehensive representation of the broader population, thereby limiting the generalisability of the results. Biases are unavoidable, as seen with the underrepresentation of registered midwives compared to registered nurses in the survey response rates. Moreover, the potential homogeneity resulting from such referrals can restrict the diversity of perspectives, which is critical for a multifaceted understanding. While the qualitative phase's reliance on purposeful sampling comes with generalisability concerns, it enabled me to counter the imbalance of nurses to midwives numbers by selecting participants which met specific criteria. These participants were selected using criteria established in collaboration with my research supervisors (who were both Registered Nurses and Registered Midwives), which aimed to counterbalance the inherent bias associated with the snowballing technique. I acknowledged the potential for unintentional bias due to the selectivity of the approach. To address this, I underwent ongoing consultations with

my research supervisors and maintained a keen focus on the study's research questions, aims, and data to ensure objectivity.

One notable challenge of the convergent parallel design is aligning quantitative and qualitative data sets during the analysis and interpretation stages. To counter this challenge, I consistently grounded the study to its core objectives, routinely referring to the research questions. Regular supervision meeting discussions provided varied perspectives, assisting in achieving a unified understanding for data synthesis. Additionally, maintaining a visible research workspace was essential with the overarching research question, sub-questions, and the research audit trail checklist were clearly displayed in my study space, to ensure consistent alignment and focus throughout the research process. Maintaining a balance between the quantitative data's inherent reliability and the qualitative data's subjectivity is vital to ensure the study's overarching validity and reliability. This was achieved by consistently engaging in reflective practice throughout the analysis and interpretation process. Documenting assumptions, challenges, and decisions to maintain transparency ensured the harmonious integration of the two data sets.

In terms of sample selection, the study specifically excluded enrolled nurses, nursing assistants, midwifery assistants, and nursing and midwifery students who were directly supervised by registered nurses or midwives. During the recruitment phase, many individuals from these categories expressed interest in participating but were unfortunately turned away due to the set inclusion criteria. By not incorporating their perspectives, the research might have overlooked the diverse experiences and challenges faced by these professionals during the pandemic. Their unique insights could have provided additional depth to the overall findings. Each role within the healthcare sector has unique responsibilities and degrees of patient/woman engagement, factors that can significantly influence job satisfaction among the nursing and midwifery community. With such a specific participant focus, it does potentially limit the findings' applicability and generalisability across the broader nursing and midwifery sectors. The decision to exclude certain groups might have resulted in an incomplete picture of the diverse experiences that could have deepened my grasp of the pandemic's impact on the healthcare sector.

As I was based in WA and have established professional connections here, it naturally led to a more significant participant representation from this state. This imbalance in participant distribution across states hindered my capacity to conclusively address the sub-question 'How

does the extent of COVID-19 exposure and the corresponding policies, procedures, and lockdown measures in a healthcare professional's practicing state influence their job satisfaction and retention intentions in the fields of nursing and midwifery?' This affects the results' ability to be generalised, as I could not compare individual states, but instead had to group states and territories for comparison to WA.

The small sample size of some of the demographics also restricted some statistical analysis. Therefore, for some bivariate statistics, it was necessary to merge some of these smaller groups with others to form larger groups. This approach enabled me to overcome the statistical constraints imposed by the smaller sample sizes. As a result, the findings for these demographics may not be fully representative of the specific population in some areas, and conclusions drawn should be considered with caution.

Furthermore, the survey did not examine the nuances of participants' personal experiences during the pandemic, such as the intensity of their fears related to COVID-19 or the specific stresses arising from varied lockdown measures potentially burdening their personal lives. Additionally, the survey did not assess the impact on their given clinical area. For instance, was there a shift in their 'core business' because of the COVID-19 pandemic, such as turning a surgical ward into a COVID-19 ward? Given these factors, I acknowledge that there would have been a large degree of heterogeneity across the sample and even between groups. To address these limitations, during the qualitative stage, there was a deliberate effort made to incorporate participants from all states and territories. This strategy sought to capture a broad spectrum of lived experiences, considering distinct factors for each state or territory, such as COVID-19 case numbers, varying lockdown regulations, changes in 'core business' or roles, and healthcare guidelines.

Given these limitations, the findings from my study should be interpreted with caution when considering their broader generalisability and relevance in various contexts and environments. It is essential to note that my study's sample specifically targeted registered nurses and midwives. Consequently, the results might not extend to or be relevant for other groups, such as student nurses, midwifery students, healthcare workers and enrolled nurses, during and after the pandemic.

6.5 Recommendations for Further Research

In reflecting upon my study, it becomes apparent how future work can build on areas that my research was unable to address comprehensively. Future research is warranted on the public's perceptions of the nursing and midwifery profession to better inform leadership of the profession in their external engagement efforts with community stakeholders. This research is timeless and extends beyond the context of the pandemic. Furthermore, a fundamental consideration for suggested subsequent studies would be the distinct challenges and experiences encountered by student nurses, enrolled nurses, midwifery students, and assistants in both nursing and midwifery. Their perspectives might differ significantly from those of more established professionals, highlighting the need for their inclusion.

To enhance the reliability and generalisability of the findings, it is suggested that future studies address the limitations in my survey's ability to capture the nuanced personal experiences of participants during and post the pandemic. A more in-depth exploration into their emotional responses, particularly their fears towards COVID-19 and the unique stresses from lockdown measures, using the appropriate validated survey instruments tailored for such exploration would provide a richer understanding.

Further research is needed to establish a more balanced representation of participants considering the sampling technique employed. Addressing the inherent representational challenges of the snowballing method would significantly enhance the credibility and generalisability of the findings. An innovative approach to addressing this challenge could be forged in collaboration with organisations like Australian Health Practitioner Regulation Agency (AHPRA). It is worth noting that AHPRA already includes a question in their current processes, asking how long individuals intend to be in their profession. By integrating the NWSQ survey into the annual registration renewal process for nurses and midwives, it could be streamlined to improve participation rates. Such an integration promises a truer representation of job satisfaction across the expansive and diverse landscape of nurses and midwives in Australia.

6.6 Dissemination of Research Findings

The findings of this study will be shared through the initial recruitment avenues, which include social media platforms such as X (formerly known as Twitter), Facebook, and LinkedIn, as well as Nursing and Midwifery Speciality Peak Body Support groups and the University of

Notre Dame Alumni website. Due to the anonymity of the surveys, it is unfeasible to provide individual participants with the results directly. Instead, the initial snowballing method will be employed to circulate the information back to the participant community. The research outcomes are also planned to be published in high quality, peer-reviewed journal articles and through the PhD thesis. Additionally, the findings will be presented at both national and international nursing and midwifery conferences in 2024, ensuring participants' confidentiality is maintained throughout.

6.7 Conclusion

In this study, I explored job satisfaction among nurses and midwives during the challenging times of the COVID-19 pandemic, with a specific focus on intrinsic, extrinsic, and relational factors influencing their lived experiences. During the pandemic, nurses and midwives faced unprecedented challenges, including isolation from their communities and families and an increase in workplace bullying, which significantly affected their sense of value. Such challenges were further amplified by societal perceptions, deeply impacting their job satisfaction.

My research highlighted the critical factors that influence intrinsic job satisfaction among nurses and midwives. Central to this was individual resilience, which played a key role in navigating the challenges posed by organisational failures, shortcomings, and emotional distress. A significant correlation was found between poor organisational resilience and a range of mental health issues, including feelings of helplessness, anxiety, burnout, depression, suicidal thoughts, and post-traumatic stress disorders. The emotional toll was further compounded by redeployment anxiety, which for many was a more significant concern than the direct impact of the pandemic itself.

My study revealed critical insights into the extrinsic job satisfaction of nurses and midwives, particularly emphasising the intensified power dynamics within the health system. A significant finding was the prevalence of bullying in hierarchical contexts, often leaving nurses and midwives marginalised when they raised safety concerns. This bullying was more common from higher-level medical staff than between peers, highlighting the traditional hierarchy that tends to favour physicians over nurses and midwives. Participants frequently faced dilemmas where they either had to comply with potentially unsafe demands, risking patient safety and their professional integrity, or refuse and face professional repercussions. This predicament often led to heightened discontentment towards the medical team and left the participants burdened with

anxiety and a sense of powerlessness. Many participants felt pressured into submission or were labelled as troublemakers for questioning policy changes, a factor significantly detrimental to their extrinsic job satisfaction.

Throughout this study, an exploration of the factors influencing relational job satisfaction has revealed numerous significant insights. These findings highlight the ways in which interpersonal relationships within the workplace profoundly affect job satisfaction and retention. Midwives showed higher relational job satisfaction yet were more adversely affected by pandemic guidelines and increased PPE use, which deepened the sense of disconnection between the women and babies they cared for. In contrast, those who navigated dual roles as both nurses and midwives had statistically significant higher levels of relational job satisfaction. Relational job satisfaction was often a driving force keeping the participants in their professions, with many participants reporting that they stayed in the jobs because their colleagues depended on them, and they didn't want to let them down. Conversely, those participants lacking strong interpersonal relationships and sufficient social support reported searching for, or opting to leave their positions in search of, a workplace with better culture and camaraderie. My study's findings on relational job satisfaction are critical, as they highlight the importance of maintaining strong interpersonal connections in nursing and midwifery, even in the face of challenging circumstances like the pandemic.

This research project makes a significant contribution to the body of knowledge in several ways. This study has revealed a dynamic interplay between job satisfaction factors, where an increase in relational job satisfaction partially compensated for lower extrinsic job satisfaction. However, when relational job satisfaction was insufficient to counterbalance poor extrinsic job satisfaction, it led to a notable decline in overall job satisfaction. This highlights the complexity of these factors and their collective impact on overall job satisfaction levels. Notably, nurses and midwives in Western Australia showed almost identical overall job satisfaction to their counterparts in other regions, despite less COVID-19 exposure, pointing to organisational responses as key factors attributing to their sense of job satisfaction. The findings call for a reassessment of organisational systems, structures, and policies, to improve workplace conditions for nurses and midwives in Australia. These systemic improvements should focus on both professional and personal well-being of nurses and midwives, ensuring that they are equipped with the necessary resources, support, and respect to not only manage the challenges of their roles but also to thrive in their careers.

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APPENDIX A INVITATION TO PARTICIPATE

Calling Nurses and Midwives

Invitation to participate

How has the COVID-19 pandemic affected job satisfaction, retention and career pathways of nurses and midwives? If you are a registered nurse or registered midwife with experience working through the pandemic in Australia, we are interested in hearing your views and experiences. By identifying key factors or barriers exacerbating the existing workforce, this crucial research can help to formulate strategies to strengthen the existing workforce that has worked tirelessly and selflessly to protect the greater community.

Please consider participating in a 15-minute online survey and/or a 40-minute online interview.

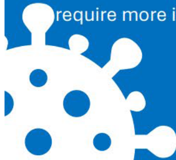
Further information can be found via the QR code or via contacting the principal researcher Laura Hynes at laura.hynes@nd.edu.au

The online surveys and interviews are open to all registered nurses and registered midwives in Australia. This project has been approved by the University of Notre Dame Australia HREC No. 2022-114F

Please don't hesitate to let me know if you have any questions or require more information.

https://notredame.qualtrics.com/jfe/form/SV_0fHwewp1sXh0OKa

15 mins



Principal Researcher: Laura Hynes
School of Nursing and Midwifery
The University of Notre Dame Australia
1 Mout Street, Fremantle WA 6160
Email:

APPENDIX B INFORMATION LETTER FOR PARTICIPANT – PARTICIPANT INFORMATION SHEET: SURVEY

Information Letter for Participant

Principal Researcher: Laura Hynes
School of Nursing and Midwifery
The University of Notre Dame Australia
1 Mouat Street, Fremantle WA 6160
Phone:
Email:

Participant Information Sheet: Survey
Study Title: An Investigation into the Effects of the COVID-19 Pandemic on Nursing and Midwifery Job Retention and Career Pathways in Australia
Approval Number: 2022-114F
Principal Researcher: Laura Hynes

You are invited to participate in the research project described below.

What is the project about?
The research project will investigate nurses and midwives' lived experiences of working through the COVID-19 pandemic. There is currently a significant gap in research concerning how to retain the existing nursing and midwifery workforce here in Australia. This project aims to identify the key factors and barriers impacting job retention in the existing workforce. To understand the factors affecting job satisfaction, retention and career pathways of nurses and midwives, it is necessary to seek the perceptions and lived experiences of those who deliver the care. Given the global nursing and midwifery response to the pandemic, there is an opportunity to build, strengthen and protect the existing workforce which has worked through the pandemic to protect the greater community. By identifying key factors or barriers exacerbating the workforce, crucial research, strategic policies and interventions, and reviews can be made to formulate strategies to strengthen and improve nurses' and midwives' experiences and safeguard patient / woman safety. Consequently, a sustainable health workforce, which is better prepared for future pandemics, can be fostered. In addition, this research may act as a basis for future research.

Who is undertaking the project?
This project is being conducted by Laura Hynes and will form the basis for the Doctor of Philosophy Degree at The University of Notre Dame Australia. The principal researcher Laura Hynes is under the direct supervision of Professor Sadie Geraghty, Associate Professor Aisling Smyth, Associate Professor Rosemarie Hogan and Professor Karen Clark-Burg.

What will I be asked to do?
If you consent to take part in this research study, it is important that you understand the purpose of the study and what you will be asked to do. Please make sure that you ask any questions you may have and that all your questions have been answered to your satisfaction before you agree to participate. This study involves participants completing an online survey that should take no longer than 20 minutes. Please consider your responses whilst working during the last 3 years through the COVID-19 pandemic.

Are there any risks associated with participating in this project?
There are no specific risks anticipated with participating in the online survey. However, if you find that questions asked bring up difficult feelings, or you become distressed as a result of the questions asked, we can arrange for you to access support from counselling or other

appropriate services such as your medical practitioner, Beyond Blue, Lifeline or free counselling through your employer provided counselling service. You are also free to withdraw from the study during this time.

What are the benefits of the research project?
There is no immediate benefit to the participant. However, it is hoped that the outcome of this study will contribute to a greater understanding of the barriers and facilitators to job retention and job satisfaction of nurses and midwives in Australia. Ultimately, the goal is to understand the lived experiences of nurses and midwives who have worked tirelessly to care for the greater community through the pandemic. It is hoped that as a result of this crucial research, strategic policies and interventions can be made by organisations to improve ways to retain nurses and midwives in their professions and safeguard patient / woman safety.

What if I change my mind?
Participation in this study is completely voluntary. Even if you agree to participate, you are free to withdraw from further participation at any time without giving a reason and with no negative consequences. The survey will be anonymous with no identifiable data recorded. Once the information has been submitted, there will no ability to withdraw your data from the study due to the anonymous nature of the survey as data is already de-identified. Your decision to take part, or to take part and later withdraw, will not affect your relationship with the research team.

How will you keep my information private and confidential?
By completing the consent form, you are granting the research team permission to collect and use data for the purpose of the study. As the survey is anonymous there are no identifiable features on the survey. Your information gathered will only be used for the purpose of this study and will not be released by the researcher to a third party unless required to do so by law. It is anticipated that the results of the study will be published and or presented in a variety of forums and formats. The data may be used in future research, but you will not be identifiable. Once the study is completed, the data collected from you will be stored securely as per university policy for research data management. All data collected will be kept on a password protected computer for five years as required by ethical approval of the university. Only the researchers will have access to this information during the project. After five years all data will be destroyed in accordance with university guidelines and procedures.

Will I be able to find out the results of the project?
The results of this research are intended to be made available through publications in several journal articles and via a PhD thesis. The confidentiality of participants will be protected at all times. Given the majority of outcomes associated with this study are participant-reported and confidential, additional feedback will not be provided to participants. However, participants will be provided with a final project summary upon request.

Who do I contact if I have questions about the project?
If you have any questions about this project, please feel free to contact the following people:

Principal Researcher: Laura Hynes
School of Nursing and Midwifery
Phone:
Email:

Principal Supervisor: Sadie Geraghty
Professor, National Head of Discipline (Midwifery), The University of Notre Dame Australia.
Email:

2nd Supervisor: Aisling Smyth
Associate Professor of Nursing, The University of Canberra
Email:

3rd Supervisor: Rosemarie Hogan
Associate Professor of Midwifery, Charles Darwin University
Email:

4th Supervisor: Karen Clark-Burg
Professor, National Head of Nursing, Midwifery, Health Science & Physiotherapy, The University of Notre Dame Australia.
Email:

What if I have a concern or complaint?
The study has been approved by the Human Research Ethics Committee at The University of Notre Dame Australia (approval number 2022-114F). If you have a concern or complaint regarding the ethical conduct of this research project and would like to speak to an independent person, please contact Notre Dame's Research Ethics Officer at or research.ethics@nd.edu.au. Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

How do I sign up to participate?
If you decide you want to take part in the research project, you will be asked to sign a consent form.

By signing the form, you are telling us that you:
- Understand the information you have read;
- Consent to participating in the described research project;
- Give your consent for the indicated use of your personal information.

Once you have read the participant information form, please click next to be taken through to the consent form. Once you have agreed to consenting to the survey by clicking on the tick box on the consent form you will then be taken to the start the survey.

Please consider your responses whilst working during the last 3 years through the COVID-19 pandemic.

Thank you for your time. This sheet is for you to keep for future reference.
Yours Sincerely,

Laura Hynes
Principal Researcher

APPENDIX C INFORMATION LETTER FOR PARTICIPANT – PARTICIPANT INFORMATION SHEET: INTERVIEW

Information Letter for Participant
Principal Researcher: Laura Hynes
School of Nursing and Midwifery
The University of Notre Dame Australia
1 Mouat Street, Fremantle WA 6160
Phone:
Email:

Participant Information Sheet: Interview

Study Title: An Investigation into the Effects of the COVID-19 Pandemic on Nursing and Midwifery Job Retention and Career Pathways in Australia
Approval Number: 2022-114F
Principal Researcher: Laura Hynes

You are invited to participate in the research project described below.

What is the project about?

The research project will investigate nurses and midwives' lived experiences of working through the COVID-19 pandemic. There is a significant gap in research currently, with respect to how to retain the existing nursing and midwifery workforce here in Australia. This project will look to identify the key factors and barriers aggravating the existing workforce. For an organisation to understand the factors affecting job retention and career pathways of nurses and midwives, it is necessary to seek the perceptions and lived experiences of those who deliver the care. Given the global nursing and midwifery response to the pandemic, there is an opportunity to build, strengthen and protect the existing workforce which has worked tirelessly through the pandemic to protect the greater community. By identifying key factors or barriers exacerbating the workforce, crucial research, strategic policies and interventions, and reviews can be made to formulate strategies to strengthen and improve nurses and midwives' experiences and safeguard patient / woman safety. Consequently, a sustainable health workforce, which is better prepared for future pandemics can be fostered. In addition, this research may act as a basis for future research.

Who is undertaking the project?

This project is being conducted by Laura Hynes and will form the basis for the Doctor of Philosophy Degree at The University of Notre Dame Australia. The principal researcher Laura Hynes is under the direct supervision of Professor Sadie Geraghty, Associate Professor Aisling Smyth, Associate Professor Rosemarie Hogan and Professor Karen Clark-Burg.

What will I be asked to do?

If you consent to take part in this research study, it is important that you understand the purpose of the study and what you will be asked to do. Please make sure that you ask any questions you may have and that all your questions have been answered to your satisfaction before you agree to participate.

Participants will be invited to participate in one on one interviews about your views and experiences of how the COVID-19 pandemic has affected your intention to stay or leave your profession, with the principal researcher. The interview will be conducted via an online video meeting platform such as Zoom® or Teams®, for approximately 40 minutes.

The interview will be video recorded, and the researcher may make notes during the interview as well. The researcher's notes and your insight will be used for the intention of analysing and interpreting your experiences. After the interview, the researcher may need to contact you again to clarify key concepts and or the meaning of your responses from the initial discussion. This follow up contact may take place in the months after the initial meeting.

Are there any risks associated with participating in this project?

It is possible that you may experience some level of anxiety or stress during the interview session because of the nature of some of the questions being asked. You will be monitored closely during the interview session, and you are free to withdraw at any time during the session. If you become upset as a result of participating in the study, the research team can arrange for you to access support from counselling or other appropriate services such as your medical practitioner, Beyond Blue, Lifeline or free counselling through your employer provided counselling service.

What are the benefits of the research project?

There is no immediate benefit to the participant. However, it is hoped that the outcome of this study overtime will contribute to a greater understanding of the barriers and facilitators to job retention and job satisfaction of nurses and midwives in Australia. Ultimately, the goal is to improve the lived experiences of nurses and midwives who have worked tirelessly to care for the greater community through the pandemic. It is hoped that as a result of this crucial research, strategic policies and interventions can be made by organisations to improve nurses and midwives' experiences and safeguard patient / woman safety.

What if I change my mind?

Participation in this study is completely voluntary. Even if you agree to participate, you are free to withdraw from further participation at any time without giving a reason and with no negative consequences. You are also free to ask for any information which identifies you to be withdrawn from the study. However, once the information has been transcribed and a unique identification code assigned the researcher will not be able to withdraw your information from the study as it is no longer identifiable.

How will you keep my information private and confidential?

By signing and returning the consent form, you are granting the research team permission collecting and using your data for the purpose of the study. All information attained in connection with this study might identify you will remain confidential and no information about your place of work will be recorded or utilized in the study. De-identification of your data will take place at the point of transcribing your responses, this is when a unique code will be assigned. Your information gathered will only be used for the purpose of this study and will not be released by the researcher to a third party unless required to do so by law.

It is anticipated that the results of the study will be published and or presented in a variety of forums and formants. In any publication and or presentation, information will be presented in a way that you cannot be identified. The data may be used in future research, but you will not be identifiable.

Once the study is completed, the data collected from you will be stored securely as per university policy for research data management. All data collected will be kept on a password protected computer for five years as required by ethical approval of the university. The video recording from the interview will also be transcribed and stored on a password protected

computer for five years. Only the researchers will have access to this information during the project. After the five years all data will be destroyed in accordance with university guidelines and procedures.

Will I be able to find out the results of the project?

The results of this research are intended to be made available through publications in several journal articles, and via a PhD thesis. The confidentiality of participants will be protected at all times. Given the majority of outcomes associated with this study are participant-reported and confidential, additional feedback will not be provided to participants. However, participants will be provided with a final project summary upon request.

Who do I contact if I have questions about the project?

If you have any questions about this project, please feel free to contact the following people:

Principal Researcher: Laura Hynes
School of Nursing and Midwifery
Phone:
Email:

Principal Supervisor: Sadie Geraghty
Professor, National Head of Discipline (Midwifery), The University of Notre Dame Australia.
Email:

2nd Supervisor: Aisling Smyth
Associate Professor of Nursing, The University of Canberra
Email:

3rd Supervisor: Rosemarie Hogan
Associate Professor of Midwifery, Charles Darwin University
Email:

4th Supervisor: Karen Clark-Burg
Professor, National Head of Nursing, Midwifery, Health Science & Physiotherapy, The University of Notre Dame Australia.
Email:

What if I have a concern or complaint?

The study has been approved by the Human Research Ethics Committee at The University of Notre Dame Australia (approval number 2022-114F). If you have a concern or complaint regarding the ethical conduct of this research project and would like to speak to an independent person, please contact Notre Dame's Research Ethics Officer at (+61 8) 9433 0943 or research.ethics@nd.edu.au. Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

How do I sign up to participate?

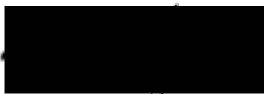
If you decide you want to take part in the research project, you will be asked to sign a consent form. By signing the form, you are telling us that you:

- Understand the information you have read;
- Consenting to participating in the described research project;
- Give your consent for the indicated use of your personal information.

Please sign both copies of the consent form, keep one for yourself and please email a signed copy of the consent form to

Thank you for your time. This sheet is for you to keep for future reference.

Yours Sincerely,



Laura Hynes
Principal Researcher

APPENDIX D PARTICIPANT CONSENT FORM – PARTICIPANT CONSENT FORM: SURVEY

Participant Consent Form

Principal Researcher: Laura Hynes
School of Nursing and Midwifery
The University of Notre Dame Australia
1 Mouat Street, Fremantle WA 6160
Phone:
Email:

PARTICIPANT CONSENT FORM: SURVEY

Study Title: An Investigation into the Effects of the COVID-19 Pandemic on Nursing and Midwifery Job Retention and Career Pathways in Australia
Approval Number: 2022-114F
Principal Researcher: Laura Hynes

- I agree to take part in this research project.
- I have been provided with a copy of the Information Letter for Participants, explaining the research study.
- I have read and understood the information provided.
- The researcher has answered all my questions and has explained possible risks that may arise as a result of the online survey and how these risks will be managed. I am aware if I have additional questions at any point, I can contact the research team.
- I freely agree to participate in the study.
- I understand that participant in the research project will involve:
    - An online survey which takes approximately 20 minutes to complete.
- I understand that I do not have to answer specific questions if do not want to and may withdraw from participating in the project at any time without prejudice.
- I understand that all information provided by me is treated as confidential and will not be released by the researcher to a third party unless required to do so by law.
- I agree that any research data gathered for the study may be published provided my name or other identifying information is not disclosed.
- I understand that data will not be able to be removed once the survey is started.
- I understand that research data gathered may be used for future research.

Name of participant			
Signature of participant		Date	

- Approval to conduct this research has been provided by the University of Notre Dame Australia Human Research Ethics Committee, approval number 2022-114F, in accordance with its ethics review and approval procedures.
- I confirm that I have provided the Information Sheet concerning this research project to the above participant, explained what participating involves and have answered all questions asked of me.

Signature of Researcher		Date	

APPENDIX E PARTICIPANT CONSENT FORM – PARTICIPANT CONSENT FORM: INTERVIEW

Participant Consent Form

Principal Researcher: Laura Hynes
School of Nursing and Midwifery
The University of Notre Dame Australia
1 Mouat Street, Fremantle WA 6160
Phone: +
Email:

PARTICIPANT CONSENT FORM: INTERVIEW

Study Title: An Investigation into the Effects of the COVID-19 Pandemic on Nursing and Midwifery Job Retention and Career Pathways in Australia
Approval Number: 2022-114F
Principal Researcher: Laura Hynes

- I agree to take part in this research project.
- I have been provided with a copy of the Information Letter for Participants, explaining the research study.
- I have read and understood the information provided.
- The researcher has answered all my questions and has explained possible risks that may arise as a result of the online survey and interview and how these risks will be managed. I am aware if I have additional questions at any point, I can contact the research team.
- I freely agree to participate in the study.
- I understand that participant in the research project will involve:
    - The opportunity to be considered for online one on one interviews with the principal researcher and supervisors for approximately 40 minutes. After the interview, the researcher may need to contact you again to clarify key concepts and or the meaning of your responses from the initial discussion.
- I understand that I will be interviewed and that the interview will be conducted and recorded via an online video meeting platform such as Zoom® or Teams®.
- I understand that I do not have to answer specific questions if do not want to and may withdraw from participating in the project at any time without prejudice.
- I understand that all information provided by me is treated as confidential and will not be released by the researcher to a third party unless required to do so by law.
- I agree that any research data gathered for the study may be published provided my name or other identifying information is not disclosed.
- I understand that data will not be able to be removed once transcribed or published.
- I understand that research data gathered may be used for future research, but my name and other identifying information will be removed.

Name of participant			
Signature of participant		Date	

- Approval to conduct this research has been provided by the University of Notre Dame Australia Human Research Ethics Committee, approval number 2022-114F, in accordance with its ethics review and approval procedures.

- I confirm that I have provided the Information Sheet concerning this research project to the above participant, explained what participating involves and have answered all questions asked of me.

Signature of Researcher		Date	

NWSQ Questions and Calculation Formula

A. What is your gender?

- Male (1)
- Female (2)
- Non-binary / third gender (3)
- Prefer not to say (4)

B. What is your age?

- 18-25 (1)
- 26-35 (2)
- 36-45 (3)
- 46-55 (4)
- 56-65 (5)
- Over 65 (6)

C. Please indicate your current practising role

- Registered nurse (1)
- Registered midwife (2)
- Both a midwife and a practising registered nurse (3)

D. Which sector do you primarily work in?

- Public (1)
- Private (2)
- Both (3)

E. Please indicate your current role

- ◯ Acute care bedside (ward) registered nurse (1)
- ◯ Community registered nurse (2)
- ◯ Staff development and education nurse (3)
- ◯ Staff development and education midwife (4)
- ◯ Leadership and higher management role (5)
- ◯ Research nurse or midwife (6)
- ◯ Labour and birth suite midwife (7)
- ◯ Antenatal and or postnatal midwife (8)
- ◯ Specialist nurse practising in critical care (ED, CCU, HDU, ICU) (9)
- ◯ Mental health nurse (10)

F. Please indicate the years of nursing or midwifery experience you have since initial registration

- ◯ 0-3 years (1)
- ◯ 4-10 years (2)
- ◯ 11-15 years (3)
- ◯ 16-20 years (4)
- ◯ Over 21 years (5)

G. What is your highest completed level of education?

- ◯ Bachelor Degree in Nursing (1)
- ◯ Entry to Practice Master of Nursing (2)
- ◯ Bachelor of Midwifery (3)
- ◯ Entry to Practice Master of Midwifery (4)
- ◯ Postgraduate Certificate (5)
- ◯ Postgraduate Diploma (6)
- ◯ Master Degree (other) (7)
- ◯ PhD (8)

H. What state or territory are you currently practicing in?

- Victoria (1)
- New South Wales (2)
- Queensland (3)
- South Australia (4)
- Tasmania (5)
- Northern Territory (6)
- Australian Capital Territory (7)
- Western Australia (8)

End of Block: Demographic Data

Intrinsic nursing job satisfaction items:

Q1. My job gives me a lot of satisfaction

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q2. My job is very meaningful to me

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q3. I am enthusiastic about my work

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q4. My work gives me the opportunity to show my worth

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q5. In the last year, my work has grown more interesting

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q6. It is worthwhile to make an effort in my job

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Each item scores from 1 to 5 where 1= strongly agree and 5= strongly disagree

Creating an intrinsic nursing job sat domain score: Add the scores from items 1, 2, 3, 4, 5 & 6. The best score possible is 6 and the worse score possible is 30.

Extrinsic nursing job satisfaction items

Q7. I have enough time to deliver good care to patients/women

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q8. I have enough opportunity to discuss patient/woman problems with my colleagues

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q9. I have enough support from colleagues

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q10. I would function better if it was less busy on the ward/unit

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q11. I feel able to learn on the job

- ◯ Strongly agree (1)
- ◯ Somewhat agree (2)
- ◯ Neither agree nor disagree (3)
- ◯ Somewhat disagree (4)
- ◯ Strongly disagree (5)

Q12. I feel isolated from my colleagues at work

- ◯ Strongly agree (1)
- ◯ Somewhat agree (2)
- ◯ Neither agree nor disagree (3)
- ◯ Somewhat disagree (4)
- ◯ Strongly disagree (5)

Q13. I feel confident, clinically

- ◯ Strongly agree (1)
- ◯ Somewhat agree (2)
- ◯ Neither agree nor disagree (3)
- ◯ Somewhat disagree (4)
- ◯ Strongly disagree (5)

Q14. I like the way my ward/unit is run

- ◯ Strongly agree (1)
- ◯ Somewhat agree (2)
- ◯ Neither agree nor disagree (3)
- ◯ Somewhat disagree (4)
- ◯ Strongly disagree (5)

Each item scores from 1 to 5 where 1= strongly agree and 5= strongly disagree. Creating an extrinsic nursing job sat domain score: Add the scores from items 7, 8, 9, 11 and 12 (reversed). Item 12 is the only item that requires reversing. The best possible score is 5 and the worse, 25.

Item 10 is not used in the domain calculation as it is accounted for by item 7 and is used as a reliability test. Item 13 and Item 14 are conceptually viewed separately as correlates of interest.

Item 13 in particular is often an important independent correlate of both intrinsic and extrinsic job sat. Item 14 is summative and reflects a subjective view of the local ward/unit management approach. It may or may not be used in any analysis.

Relational nursing job satisfaction items:

Q15. It is possible for me to make good friends among my colleagues

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q16. I like my colleagues

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q17. I feel that I belong to a team

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q18. I feel that my colleagues like me

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Each item scores from 1 to 5 where 1= strongly agree and 5= strongly disagree

Creating a relational nursing job sat domain score: add the scores from items 15, 16, 17 & 18. The best score possible is 4 and the worse score possible is 20.

Overall or total nursing job satisfaction

Add the 3 domain scores. The best score possible is 15 and the worst score possible is 75.

Note: A low score is a indicates high job satisfaction on the NWSQ.

APPENDIX G SEARCH STRATEGY – KEYWORDS AND TERMS

Ovid MEDLINE(R) ALL < 1946 to October 23, 2023>

Search Number	Search terms	Number retrieved
1	exp Nurses/	(99187)
2	exp Nursing Service, Hospital/ OR exp Nursing/ OR exp Nursing Staff/ OR exp Nursing Services/ OR exp Nursing Staff, Hospital/ OR exp Nursing Stations/	(352607)
3	"nurs*".ti,ab.	(528344)
4	exp Midwifery/	(21377)
5	exp Nurse Midwives/	(7548)
6	"midwi*".ti,ab.	(29473)
7	1 OR 2 OR 3 OR 4 OR 5 OR 6	(734823)
8	exp Coronavirus/ OR exp Coronavirus Infections/	(265744)
9	exp COVID-19/	(242936)
10	exp Severe Acute Respiratory Syndrome/	(5736)
11	exp SARS Virus/ OR exp SARS-CoV-2/	(163616)
12	(Coronavirus OR Coronavirus infections OR SARS-CoV-2 OR COVID-19 OR COVID19 OR COVID2019 OR COVID 2019 OR COVID* OR 2019 nCoV OR 2019-nCoV OR 2019nCoV OR Novel CoV OR nCOVID OR nCoV2019 OR nCoV19 OR 19nCoV OR nCoV OR CoV OR CoV 2 OR CoV2 OR hCoV OR hCoV19 OR hCoV-19 OR hCoV2019 OR hCoV-2019 OR severe acute respiratory syndrome coronavirus 2 OR severe acute respiratory syndrome corona virus OR Severe acute respiratory syndrome OR SARS virus OR SARS coronavirus OR SARS Co V 2 OR SARS CoV 2 OR SARSCoV2 OR SARSCoV 2 OR SARSCoV-2 OR SARS-CoV2 OR SARS-CoV-2 OR SARS-CoV OR SARSCoV OR SARS 2 OR SARS2 OR Corona virus* OR Coronavir* OR Beatacoronavir* OR Corona pandemic* OR Corona virus pandemic OR Corona virus outbreak OR Coronavirus pandemic OR Coronavirus outbreak OR Wuhan coronavirus* OR Wuhan virus).ti,ab.	(398299)
13	8 OR 9 OR 10 OR 11 OR 12	(412043)
14	exp Job Satisfaction/	(28809)
15	exp Personal Satisfaction/	(24864)
16	exp Burnout, Psychological	(17967)
17	exp Burnout, Professional/	(17267)
18	exp Occupational Stress/	(20701)
19	exp Career Mobility/	(12067)
20	exp Personnel Turnover/	(5972)
21	(intent* adj3 (stay* OR remain* OR resign* OR leav* OR quit* OR chang* OR move* OR trans*)).ti,ab,kf.	(7776)
22	(retention adj3 (staff OR nurs* OR midwi*)).ti,ab,kf.	(2532)
23	(attrition adj3 (staff OR nurs* OR midwi*)).ti,ab,kf.	(315)
24	(turnover adj3 (staff OR nurs* OR midwi*)).ti,ab,kf..	(2538)
25	(Change adj3 (job or work OR career OR profession OR occupation OR employment OR hospital OR position OR department OR organisation OR organization OR institution)).ti,ab,kf.	(11188)
26	(job retention OR work retention OR skill* retention OR personnel retention OR employee retention OR staff retention OR retain* staff OR retain* employ*OR job satisfaction OR work satisfaction OR employ* satisfaction OR burnout OR burnt out OR burn-out OR career burnout OR staff burnout OR employ*burnout OR occupational burnout OR professional burnout OR psychological burnout OR career mobility OR career pathway* OR career intention* OR personnel turnover* OR staff turnover* OR employee turnover* OR job securit* OR employment securit* OR job redundanc* OR staff redundanc* OR employment redundanc* OR career ladder OR job ladder OR quit* job* OR quit* career* OR quit* work* OR quit* profession* OR mov* job* OR job trans* OR work trans*).ti,ab,kf.	(30246)

Search Number	Search terms	Number retrieved
27	14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26	(115504)
28	7 AND 13 AND 27	(1477)
29	limit 28 to (yr="2018 - 2023" AND english AND journal article)	***1381***

APPENDIX H PERMISSION TO USE THE DEVELOPMENT AND VALIDATION OF NURSING WORKPLACE SATISFACTION QUESTIONNAIRE FROM THE PRINCIPLE AUTHOR, DR GREG FAIRBROTHER

From: Greg Fairbrother (Sydney LHD)
To: Laura Hynes
Subject: RE: Development and Validation of Nursing Workplace Satisfaction Questionnaires
Date: Thursday, 21 July 2022 10:15:36 AM
Attachments: image001.png
image002.png
Scoring the NWSQ.pdf

Caution: This email originated from outside of our University. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Laura

Thanks for this. Yes you have my permission to use the tool. Ive attached here a scoring guide which might help when it comes to analysis time. Re adding in extra q's, yes I have done that myself many times. Open-ended ones are often particularly useful depending on context. Its good though to keep the integrity of the intrinsic/extrinsic/relational domains intact in your analysis. If you run into any problems or have any questions, im happy to respond to your q's. btw I am planning on doing a large international validation study on this tool next year. If you'd like to contribute de-identified data to it, you would of course be included as a co-author on the resultant article. Let me know if you have an interest, as convenient.

Best wishes Greg

From: Laura Hynes [redacted]
Sent: Monday, 18 July 2022 5:03 PM
To: Greg Fairbrother (Sydney LHD) <[redacted]
Subject: Development and Validation of Nursing Workplace Satisfaction Questionnaires

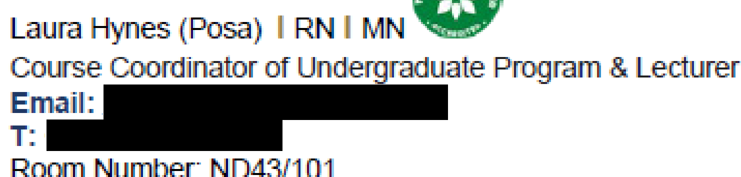
You don't often get email from [redacted] Learn why this is important

Dear Dr Fairbrother,

I am looking to undertake a study in the field of nursing and midwifery job retention and satisfaction. I have read and loved your work titled 'Development and Validation of Nursing Workplace Satisfaction Questionnaires'. I am really interested in the questionnaire used. I would like to adapt your questionnaire and potentially add a couple of questions that are specific to my research. I am hoping to obtain your approval in regards to this. Please do not hesitate in contacting me if you need further clarification about my intentions. My mobile is [redacted]

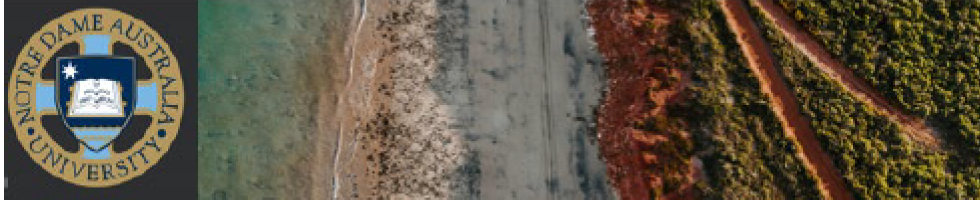
I hope you have a lovely day, thank you for your time.

Kind Regards,



Laura Hynes (Posa) | RN | MN
Course Coordinator of Undergraduate Program & Lecturer
Email: [redacted]
T: [redacted]
Room Number: ND43/101

1 Mout Street, Fremantle 6160
The University of Notre Dame Australia
National School of Nursing, Midwifery, Health Sciences and Physiotherapy
Faculty of Medicine, Nursing and Midwifery & Health Sciences



I acknowledge that this land that I live and work on is Whadjuk country and that the Whadjuk Noongar people are the traditional owners and custodians, who have a rich social, spiritual and historical connection to this country, which is as strong today, as it was in the past.

Disclaimer

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