

How Do Doctorally Prepared Clinical Nurses Add Value to Nursing Practice and Healthcare in Aotearoa?

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For Sheila the first registered nurse I ever knew, and the best mother a woman could
hope for. I miss you.

Abstract

Introduction

Doctorally educated nurses are few but play a vital role in nursing science, translating research into practice, and contributing to the professionalisation of nursing. Most doctorally prepared nurses work in academia, however a small percentage choose clinical work. Knowledge about the experience, perceptions, and contribution of doctorally prepared clinical nurses has increased, but requires further exploration to understand how to maximise their advanced skillsets. The aim of this research was to understand the value contribution of doctorally prepared clinical nurses in Aotearoa and to offer recommendations to support their contribution.

Methods

This study used an Interpretive Descriptive methodology to approach the question of how doctorally prepared clinical nurses add value to nursing practice and healthcare in Aotearoa. Research involved in-depth individual interviews with 18 doctorally prepared clinical nurses working, or recently working, in clinical practice. Data was collected between November 2021 and November 2022. The analysis was informed by Braun and Clarke's Reflexive Thematic Analysis.

Findings

The research identified five key mechanisms doctorally prepared clinical nurses used to contribute value: being a knowledge expert; an enhanced approach to nursing practice; increased credibility/prestige of the doctorate; holding valuable conversations; and new opportunities and collaborations. The analysis also identified challenges to doctorally prepared clinical nurses' value contribution of: tumultuous identity transitions; negative external perception; fragmented mentorship; lack of a post-doctoral pathway; and little recognition from nursing leaders and healthcare managers.

Discussion

This research corroborated and extended the data about the contribution of doctorally prepared clinical nurses by providing new knowledge on the underlying mechanisms that produce value. The research also identified that participants experienced ‘othering’ by some non-doctorally prepared clinical nursing colleagues and disinterest from nursing leaders, both of which reduced their value impact. Lack of a common post-doctoral pathway for doctorally prepared clinical nurses – who were often advanced nurse clinicians – meant each nurse had to forge their own path through a liminal post-doctoral period. This research highlighted that the wider discipline of nursing appeared complicit in limiting the impact of doctorally prepared clinical nurses in the field.

Recommendations

A set of recommendations were presented to better support the integration of doctorally prepared clinical nurses into the clinical environment and enhance their value contribution to healthcare: disseminating this research; integrating a doctoral qualification into early nursing career planning; voluntary registration of doctorally prepared clinical nurses for easier identification; developing a post-doctoral clinical pathway (including the introduction of a clinical scientist role); improving collegial relationships within the nursing field; mentoring for doctorally prepared clinical nurses; and brand work to improve the public image of both doctorally prepared clinical nurses and the profession of nursing.

Conclusion

Doctorally prepared clinical nurses in Aotearoa contribute important value to nursing and healthcare through specific mechanisms that should be supported and enhanced. Doctorally prepared clinical nurses face challenges that limit their contribution which appear to be, at least partially, related to the culture in the profession of nursing.

Keywords: Nursing education, doctorally prepared nurse, doctorally prepared clinical nurse, doctorate, PhD.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated, and referenced, along with the purpose of use), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signature

Date 30 April 2024

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Ethics Approval

This research (21/335) received ethical approval from the AUT Ethics Committee on Sept 20th, 2021.

List of Abbreviations

APN	Advanced Practice Nurse
APNR	Advanced Practice Nursing Role(s)
AUT	AUT university
AUTEC	AUT Ethics Committee
CINAHL	Cumulated Index to Nursing and Allied Health Literature
CS	Clinician Scientist
DHSc	Doctor of Health Science
DNP	Doctor of Nursing Practice
DPCN	Doctorally Prepared Clinical Nurse
FNE	Fortnight Equivalents
ID	Interpretive Description Methodology
PhD	Doctor of Philosophy
RTA	Reflective Thematic Analysis
TPS	Tall Poppy Syndrome

Chapter 1 Introduction

Most doctorally prepared nurses work in academia (Andreassen & Christensen, 2018; Jack, 2019). However, a percentage of doctorally prepared nurses remain or choose to return to clinical practice. There is an increasing, but limited, amount of research about doctorally prepared clinical nurses (Cleary et al., 2013; Rugs et al., 2020). In particular, there is scant research on how doctorally prepared clinical nurses (DPCN) incorporate their academic skillsets into practice and the value this brings to nursing practice and healthcare. Additionally, there is little research on DPCNs in Aotearoa. Information about DPCNs in Aotearoa is needed to better understand their experiences, role, and contribution to nursing practice and healthcare. This thesis presents an Interpretive Descriptive (ID) exploration by analysing the value contribution of DPCNs in Aotearoa and how this value is created with common mechanisms. This unique knowledge will contribute not only to Aotearoa but to the international data on DPCN's value and impact.

The following chapter outlines the thesis goals, contextualises the problem, and explains the research approach. The remaining chapters offer an in-depth review of the existing literature; a description of methodological approach used for data collection and data analysis; a discussion of the study data; and recommendations derived from this research.

1.1 How I Came to this Research

Like many of the participants in this research, I came to doctoral education late in my professional career. I was already working as an advanced practice nurse and the thought of a doctoral degree had never crossed my mind. Then one day I attended a pharmacology workshop conducted by a registered nurse who was also doctorally qualified. Somehow, that interaction planted a seed that I, too, could become doctorally qualified. I mentioned my plan to several of my clinical nursing colleagues who responded with, “why bother?” That was such a frequent response that I considered naming the thesis after that quip. Others asked, “what will you do with the degree?” as they assumed I would leave my clinical role after qualifying. But after

more than 25 years of nursing, I still enjoy helping people achieve their health goals just as much as I did at the start of my career.

So, why did I bother to pursue a higher education? What value would a doctorate bring to me, my practice, my patients, and to the healthcare team? As my plan to study became concrete, I looked for funding to pay for the tuition. My initial application was declined by the Health Workforce Directorate who fund clinical nurses' post-graduate education in New Zealand because it did not fund education above master's level. Next, I applied to a local healthcare charity headed by a medical doctor I had known for many years. When I explained how the usual pathway didn't fund above a master's degree, the response was, "what do you mean above a master's? What degree are you doing?" (this email is contained in Appendix F). I was perplexed by their question and by the intimation from healthcare funders that there was no value in a clinical nurse receiving a doctoral level education. I was also perplexed by my nursing colleagues' confusion over why I would 'bother' with a doctoral education. As I considered all these negative reactions, I pondered what value a doctoral degree would bring and how I might use a doctorally acquired skillset in my practice. That questioning was the genesis for the research you are about to read.

1.2 Background to the Research

1.2.1 Doctorally prepared nurses

Doctoral education refers to obtaining a doctoral degree, which is the highest university degree (Rees et al., 2019). In Aotearoa doctoral degrees are primarily research focused (New Zealand Qualifications Authority, 2023). The core intent of a research doctorate is to produce a robust piece of original research which contributes to the student's professional or social community (New Zealand Qualifications Authority, 2023). Research doctorates focus on the development of scientific critique, data collection and analysis, organisation of data into outcomes and a thoughtful discussion of the findings and limitations of the research. These competencies have associated skills of gaining and synthesising knowledge, academic skills (speaking and writing), organisation, determination and resilience (Durette et al., 2014). Research showed that doctorally prepared nurses could enhance nurses' involvement in service development, research translation, and evidence-based patient care initiatives

(Baldwin, 2013; Dunn & Yates, 2000; Henly et al., 2015; Lucci, 2019; Smith, 2013). However, the value of doctoral education has traditionally been limited to academia and was difficult to ascertain for clinical nurses (Borbasi & Emden, 2001; Gijbels et al., 2010; van Oostveen et al., 2017). Although patient outcomes did appear to benefit from highly educated nurses, irrespective of years of experience (Audet et al., 2018), much of the data stops when nurses reach the master's level (Gijbels et al., 2010). Master's degrees have a recognised place in clinical practice as a requirement for advanced practice roles, such as clinical nurse specialist (Cotterill-Walker, 2012; Watkins, 2011). Clinical nurses with a master's education showed improved clinical knowledge and skills, delivery of patient care, better translation of research into practice, and competent leadership skills (Abu-Qamar et al., 2020; Cotterill-Walker, 2012; Ge et al., 2015; Gijbels et al., 2010). However, nurse leaders and healthcare managers are unclear on the practical benefit of a doctoral education for clinical nurses since they often view a nurse's value through a narrowly defined lens (Gijbels et al., 2010; Met et al., 2022; Porter, 2010; Welton & Harper, 2016).

Doctorally prepared nurses are essential to developing a robust scientific base for nursing practice and for shaping the profession of nursing (National Academies of Sciences Engineering and Medicine, 2021; Stanfill et al., 2019; van Dongen et al., 2021). Despite these positive outcomes, nurses tend to pursue doctoral education later than candidates in other science disciplines (McKenna, 2005). The demographic for a nursing doctoral candidate is mid-career, 45-years-old, and predominantly female (Heinrich, 2005; Jackson & Cleary, 2011). A delayed doctoral qualification leads to a shortened post-doctoral career and therefore reduced knowledge production and impact. A further constraint is the low number of doctorally prepared nurses globally (Andreassen & Christensen, 2018; Falkenberg-Olson, 2019; Orton et al., 2022; Stanfill et al., 2019), and those that become doctorally prepared frequently transition into the academic environment (Andreassen & Christensen, 2018; Jack, 2019). The percentage of doctorally prepared nurses in several Global North countries, Australia, and Aotearoa is presented in Table 1. The number of doctorally prepared nurses doubled in the US in the last decade (Falkenberg-Olson, 2019) primarily due to the doctoral qualification becoming a recommended qualification for American Nurse Practitioners, (National Academies of Sciences Engineering and Medicine, 2021; Stanfill et al., 2019). However, a similar increase has not been observed in other developed countries.

Table 1*Percentage of Doctorally Prepared Nurses by Country*

Country	Percentage
US	2%
Denmark	< 0.3 %
Sweden	1%
Australia	No data identified
UK	<1%
New Zealand	<0.2%

Note. (Data from Falkenberg-Olsen, 2019; Andreassen & Christensen, 2018; Kim et al., 2022; Orton et al., 2021; Wilkes and Mohan, 2008; R. Savvidou-Strudwick, personal communication, 17 Aug, 2020; N. Pruthi, personal communication, 6 May, 2021). *Note.* Percentages = number of doctorally qualified registered nurses.

1.2.2 Doctorally prepared clinical nurses

Nurses require flexible, ever-evolving practical skills to meet the challenges of an increasingly complex mix of healthcare treatments, genetic advances, and diagnostics (Ge et al., 2015; Gerard et al., 2014). Doctorally prepared clinical nurses can contribute to developing new essential, evidence-based and flexible skills. An evidence-based practice is also critical since nurses have never had such high levels of accountability to patients and to the public as they do today (Gerard et al., 2014). Although nurses need reassurance their care is safe and effective, the translation of research into practice has been inconsistent and slow (Grimshaw et al., 2012; Squires et al., 2011). A greater number of DPCNs could increase the output of nursing science and quicken the translation of that knowledge into everyday healthcare delivery. Attracting and retaining people into the profession of nursing is also affected by outdated stereotypes of nurses as subservient, maternal, obedient, passive and not contributing to healthcare policy or delivery (Gill & Baker, 2021; Price & McGillis-Hall, 2014; van der Cingel & Brouwer, 2021). Doctorally prepared clinical nurses can alter these stereotypes simply by displaying a viable alternative career choice for advanced clinical nurses, thereby attracting more people into the profession and slowing attrition rates. Doctorally prepared clinical nurses could also strengthen the profession of nursing by bridging the perceived academic-clinical division, which seems specific to nurses (Dunn

& Yates, 2000; Florczak et al., 2014; Huston et al., 2017; Jack, 2019; Staffileno et al., 2013).

Many researchers recommended that doctoral education could encourage nurses to not only translate research into practice, but also to lead service development and improve patient care initiatives (Baldwin, 2013; Dunn & Yates, 2000; Henly et al., 2015; Lucci, 2019; Smith, 2013). However, the roles and expectations of DPCNs in clinical practice are poorly understood and often incongruent (Andreassen & Christensen, 2018; Chavez et al., 2021; Dobrowolska et al., 2021; Elgaard-Sorensen et al., 2019; McNett, 2006; Orton et al., 2019; Rugs et al., 2020). Additionally, DPCNs are often hidden in clinical practice. During my doctoral journey, I instigated a support group for doctoral students in my healthcare institution. However, the institution kept no record of doctorally prepared nurses or of those studying for a doctoral qualification. This anecdotal finding led me to suspect doctorally prepared nurses were invisible in clinical environments unless they self-promote as a DPCN. This suspicion was supported by the literature which found that research was complicated by the difficulty of identifying doctorally qualified nurses who were working in clinical environments (Dobrowolska et al., 2021; Met et al., 2022; Rugs et al., 2020). Additionally, DPCNs often held responsibilities that were the same for non-DPCNs (Orton et al., 2019) which meant a DPCNs' unique skillset was not being adequately used in clinical practice environments. My experience, along with the experience of this study's participants and the experiences in the nursing literature, suggested that a doctoral education was considered outside traditional clinical nursing expectations. For nurses in universities, a doctoral degree had a recognised position and purpose. However, a doctorally prepared nurse in a clinical environment was an enigma. This research aimed to clarify the value of a DPCN and how that value is created.

1.2.3 Doctorally prepared nurses in Aotearoa

Aotearoa has one of the lowest numbers of doctorally prepared nurses identified by this research. Of the 52,083 practicing nurses registered on the Nursing Council of New Zealand for 2019 (Nursing Council of New Zealand, 2019), 93 self-identified as doctorally prepared (R. Savvidou-Strudwick, personal communication, 17 Aug, 2020). Of this already miniscule number, a mere 3.2% identified as Māori (R. Savvidou-Strudwick, personal communication, 11 May 2021). The Nursing Council holds no

further data on the roles of these doctorally prepared nurses, and the requirement to report a doctoral qualification is voluntary. Additionally, there was no data on whether doctorally prepared nurses in Aotearoa are employed in either academic or clinical environments, or both. This lack of insight highlighted an urgent need for more and better data about DPCNs in Aotearoa. Healthcare in Aotearoa has struggled for years with unequal health outcomes, shortages of healthcare providers, and the ramifications of the COVID-19 pandemic (Chalmers, 2020; Harris et al., 2022; McBride et al., 2021; Reid et al., 2022; Walker & Clendon, 2018) and DPCNs have essential analytical skills that could help solve these critical challenges. Doctorally prepared clinical nurses are also ideally situated within the clinical environment to develop a holistic view of healthcare issues. It is vital to understand what these skilled professionals are doing and how they can be better supported.

1.3 Research Aim

The central aim of this research is to understand how DPCNs contribute value to nursing practice and healthcare in Aotearoa. I was interested in the experiences, perceptions, and contribution from DPCNs in Aotearoa to nursing practice and healthcare. The research question asked: How do doctorally prepared clinical nurses add value to nursing practice and healthcare in Aotearoa? This question was carefully designed to illuminate patterns of value contribution from the study cohort of practicing DPCNs to: understand how this value is created; to replicate and strengthen that value; and learn the conditions in which DPCNs can provide the highest possible value. Understanding the contribution of DPCNs would provide an argument for better support, funding, and access to doctoral level education for more nurses in Aotearoa. The recommendations in the final chapter help address the challenges reported by DPCNs, while optimising their value contribution.

1.4 Research Design

An ID approach to inquiry was chosen as the best approach to achieve the research objective. Identifying common patterns in the data to inform practice is a central tenet of an ID methodology (Clark, 2011; Thorne, 2016; Thorne et al., 2004; Thorne, 1997). An ID approach encompassed the flexible and practical nature of the profession of nursing and held an immediate and familiar synergy for me as the researcher. Reflexive Thematic Analysis (RTA) was used as a congruent data analysis tool to provide

interpretive depth underpinned by solid philosophical principles, while also allowing for flexibility of approach. Due to the COVID-19 pandemic's disruption to healthcare services during the research period, a pragmatic and flexible approach was vital for the research's success. A reflection on the impact of COVID-19 for this research is presented in Appendix H.

1.5 My Position in the Research

It is first important to understand my position in relation to the presented data, particularly when a methodology included the researcher as an essential part of the research. The idea of knowledge as co-created is a central ID axiom which also aligns with the RTA approach. Reflexive Thematic Analysis does not assume that analytical outcomes are hiding in the data waiting to be found, as with a grounded theory methodology. Instead, the researcher constructs knowledge through their engagement with the data (Braun & Clarke, 2022; Terry & Hayfield, 2021). It is important for a researcher to be cognisant of their thoughts, knowledge, and perceptions prior to engaging with an analysis. To understand how my position impacted the construction of the analysis, I wrote a positionality piece early in the study to examine my place in healthcare, in nursing, as a European female, and as a clinical nurse undertaking doctorate studies. The following section unpacks my personal journey as a registered nurse who has traversed the nursing environment in Aotearoa.

My experience of the healthcare environment as a nurse began in the early 1990s and has influenced my perspective of the literature, data, and analysis. My personal history also affected how I interpreted the stories shared during the data collection phase. My experience of sexism – such as being asked in a job interview by a male medical doctor how I would manage my workload if my children were sick – affected how I perceived the participants' stories. My influences, perspectives, and experiences are a valuable part of the ID methodology because it uses what is known by the researcher as the framework for approaching the data, which affects the research result. Therefore, these experiences should be acknowledged and purposefully incorporated into the methodology (Thorne, 2016). However, insider research may introduce a risk of limiting an analysis through unconscious acceptance of assumptions (Greene, 2014; Thorne, 2016). As a registered nurse and a doctoral candidate, I was researching my future self. However, I had no experience working clinically alongside a DPCN and little

understanding of the phenomenon outside my assumptions of nursing in general. This distance, coupled with my reflexivity and my supervisors' feedback, allowed for enough separation to produce an ethically sound study, while also considering my position as a researcher with a background in clinical nursing practice.

The remainder of this chapter outlines the organisation of the research. The thesis is structured into chapters that address specific aspects of the process, recording an argument for each decision. An explanation for such organisation is provided in the following section.

1.6 Organisation of the thesis

Chapter one presents an overview of the research project including the background, problem, and research aim. It discusses how the research began and acknowledges the influence of my background and experiences. Background on DPCNs is presented to locate the research problem in the international and national contexts. Research on doctorally prepared nurses has primarily focused on academic settings, however, a newer focus on DPCNs in clinical environments has emerged. The aim of this chapter is to present the research question: How do doctorally prepared clinical nurses contribute value to nursing practice and healthcare in Aotearoa?

Chapter two provides a critical analysis of contextual information in the development of the nursing profession and in nursing education. Outdated stereotypes of nurses as women, of nursing as a vocation, and of the profession's subservience to the profession of medicine are still commonly applied. These stereotypes impact nurses' ability to contribute value to practice settings and to the wider healthcare system. This chapter outlines the most common stereotypes and examines how they have contributed to the development of the profession of nursing, to nursing practice, and to nursing education. This context is required to appreciate the interpretation of this research.

Chapter three presents an extensive literature review of the knowledge about DPCNs that led to the development of the research question. This helped to identify what was unknown and positioned the research to contribute unique knowledge on the value contribution of DPCNs for nursing practice and healthcare. The review was conducted on knowledge about DPCNs published between 2000-2024. A thematic analysis of the

literature, informed by Braun and Clarke's RTA method (Braun & Clarke, 2022), identified six themes: difficult identity transitions; external perceptions of the DPCN; perceived value contribution of the DPCN; ambiguity of roles, expectations and responsibilities; lack of mentorship, role models, and leadership; and production and utilisation of research by DPCNs. A critical appraisal of the literature provides a framework for the ID methodology to approach the research question. The literature review identified further insight into the value contribution of DPCNs was required to better leverage their rare skillsets, and to appreciate their potential challenges.

Chapter four explores the ID methodology, method of data collection, and data analysis approach. The approach to inquiry was chosen for its internal congruence and to align with the disciplinary focus of this research. An ID methodology has a relativist ontology and a constructivist epistemology but allows considerable flexibility in data collection and analysis (Thorne, 2016). Individual semi-structured in-depth interviews were chosen to capture the experiences of DPCNs. Braun and Clarke's RTA (Braun & Clarke, 2022), was used to honour the stories of participants while interpreting patterns from the data that could be applied to similar situations and enhance the contribution of other DPCNs. The methodology and methods chapter presents an extensive rationale for each methodological choice in the research process. The chapter also outlines the process of data analysis to ensure any results were trustworthy.

Chapter five provides a brief presentation of the study cohort and defines the concept of value in the context of clinical nursing. The chapter then presents novel findings that highlight five mechanisms of value contribution. The first mechanism highlights the DPCN as a knowledge expert that produces and uses knowledge to enhance clinical practice, healthcare policy, and to strengthen the wider healthcare team. The second mechanism illustrates an enhanced approach to practice. The third mechanism discerned an increased credibility and prestige for a DPCN as a result of the doctoral qualification and title. The fourth mechanism shows how doctoral learning manifests as valuable conversations which provide impact locally, nationally and internationally. The final mechanism reveals the increased opportunities and new collaborations due to the DPCN's doctoral qualification and skillset.

Chapter six explores the first of several challenges identified during the data analysis. Shifting identity and self-perception were reported across the dataset and affected the value contribution of DPCNs. Identity tensions were exacerbated by the absence of a recognised place for DPCNs in clinical practice environments, and by lack of acknowledgement from nurse leaders and healthcare managers of the DPCN in their teams. Essentially, when DPCNs were unable to add doctoral activities into their clinical work, they lingered in a liminal space between being a clinical nurse and being a doctorally prepared clinical nurse.

Chapter seven discusses the challenge created by diverse negative perceptions of the DPCN. Negative perceptions were reported primarily from nursing colleagues, who appeared threatened by DPCNs, along with disinterest from nursing leaders. Participants described experiences which indicated that being doctorally qualified was the cause of some workplace tension. Anti-intellectualism and oppressed group behaviour were perceived to contribute to DPCNs feeling alienated in some clinical nursing teams. Some DPCNs deliberately omitted telling colleagues about their doctoral qualifications to avoid the experience of being 'othered' in clinical practice environments.

Chapter eight highlights data on the impact of mentorship, role modelling and leadership for DPCNs. Mentorship was reported to be present prior to and often during the doctoral degree but appeared to be fragmented at best in the post-doctoral period. Lack of both mentorship and role models created an isolative experience for many DPCNs, forcing them to forge their own individual post-doctoral pathways. Value contribution was impacted by the length of time it took some DPCNs to understand how to incorporate their new skillset into clinical roles. Some participants were unable to incorporate their new skillset and continued to struggle to understand how to consolidate their doctoral learning.

Chapter nine discusses the unique knowledge offered in this research by examining the mechanisms of value contribution in chapter four. Patterns of value are identified and interpreted into common mechanisms used by participants to create value. Using these mechanisms, supported by examples from the dataset, provides evidence of how DPCNs contribute value and reveals pathways through which the contributions of DPCN can be recognised, enhanced, and supported. Each of the

mechanisms is explained and the value contribution is explored and discussed. The mechanism of a Knowledge Expert is presented first. This mechanism incorporated the DPCN as both a clinical expert and an expert in the creation and translation of knowledge. The DPCN holds a pivotal role in addressing clinical practice problems and enhancing the evidence base of practice. Critically, DPCNs in clinical practice impacted the wider healthcare team by providing opportunity and support for all the healthcare team to be part of knowledge creation. Next, an enhanced approach to practice discusses the value of a doctorally-acquired rigorous approach to problem solving and an expanded lens through which DPCNs considered health. The next mechanism explores why there is often a perception of increased credibility and prestige among DPCNs with a doctorate title and explores how this perception improved their ability to influence significant decision-making groups. Next, is presented the participants' experience of holding valuable conversations which were reinforced by the culmination of being a knowledge expert, data creator, credible clinician, and healthcare leader. Finally, it outlines the mechanism of increased opportunity and collaborations that give DPCNs a unique way to positively represent the profession of nursing, build networks, and extend their influence far beyond the local clinical environment.

Chapter ten discusses the challenges to DPCN value that contributed to the complexity of the DPCN's post-doctoral experience, such as: difficult identity transitions; diverse external perceptions of the DPCN; lack of mentorship and role-models, and disinterest from nursing leaders; and no common post-doctoral pathway. The data provided evidence that suggested the profession of nursing may be complicit in limiting DPCNs value contribution through an inability to recognise, acknowledge, and appropriately leverage the skills of DPCNs. This chapter situates the study within an existing body of literature. Confirming and extending the data on the limitations of the value of DPCNs is important for identifying ways of mitigating these challenges while increasing the opportunity for value.

Chapter eleven concludes the thesis. This chapter provides a set of eight recommendations for supporting and enhancing the value contribution of DPCNs. The recommendations are designed to address some of the challenges to value contribution unearthed by this research and to address outdated images of nurses and

nursing practice among the public and in healthcare more broadly. The chapter also suggests future research topics, acknowledging the limitations to this study's design, interpretation, and application of knowledge.

1.7 Summary

The present chapter provided an overview of the research aim and the research question. The significance of DPCNs and their value contribution was introduced, and the research background was explored, both nationally and internationally, to provide context for the data analysis, research results and recommendations. Doctorally prepared nurses were discerned to be few in number, and the quantity of those in clinical practice is likely to be smaller still. Value of DPCN was suggested in the literature but remained ill-defined by previous research. The experience of DPCNs in Aotearoa was under-researched. Systemic challenges to the wider healthcare system mean every available human resource is critical for success, including optimising the use of DPCNs. The thesis organisation was also outlined, and the key content of each chapter briefly introduced.

The next chapter provides further context of the historical shaping of the nursing profession and of nursing education to provide a lens through which the research data can be understood. While it is outside the scope of this thesis to present a critical appraisal of all societal influences, it highlights the most pertinent to this research.

Chapter 2 Historical Development of the Profession of Nursing

Nursing has a complex religious, gendered, racialised, and classed history and has transitioned from a vocation into a profession over the past 150 years in Aotearoa. The following section explores some of the societal influences which shaped the history of nursing and nursing education in Aotearoa and the Global North. The purpose of this exploration is to contextualise this research within the development of the profession of nursing and nursing education. Understanding the context of the tensions surrounding the differing nursing identity claims illuminates some of the contributing factors to the tension a DPCN holds for many in the healthcare environment including DPCNs themselves.

2.1 An outdated view of nurses

The profession of nursing has been shaped by historical societal influences, such as: societal demands for healthcare; gendered constructs; religious doctrine; and dominance of the profession of medicine in healthcare decision-making (Brown et al., 1994; Carryer, 2020; Gill & Baker, 2021; Nelson, 2001; van der Cingel & Brouwer, 2021). Nursing education reflects these societal influences creating an environment in which what nurses do, what they need to know, and how they should be taught are contentiously debated and were often decided outside the nursing profession (Baer, 1985; Squires et al., 2011). An example of this debate is the lack of international consensus about the entry-to practice qualification for a registered nurse (Nursing Council of New Zealand, n.d; United Kingdom Nursing and Midwifery Council, 2023). The following section explores some of the key ways societal images have shaped the profession of nursing.

2.1.1 Nurses as women

Nurses have historically been women (Burton, 2020; Gill & Baker, 2021; Price & McGillis Hall, 2014; van der Cingel & Brouwer, 2021). The broader social position of women is a well reported influence on the evolution of the nursing profession (Bramadat & Chalmers, 1989; Gill & Baker, 2021; Price & McGillis Hall, 2014; Reverby, 1987). Historically, early nursing care was often provided within the home and considered a female domestic responsibility (Egenes, 2017; Reverby, 1987). Early

nurses were untrained and considered innate carers who required no specialised knowledge or expertise (Brown et al., 1994; Walker & Holmes, 2008). Nursing care was considered “...more gendered behaviour than true profession...” (Burton, 2020, p.268). The historical image of the nurse as female reflected societies’ expectations of women in the 20th century, effectively preventing nurses from participating in healthcare development.

Gendered social expectations that men’s roles were to lead and make decisions, while women’s roles were to support and follow impacted the development of the profession of nursing and nursing education through the image of nurses as women (Burton, 2020). Gendered role divisions were reflected within healthcare systems from the inception of the nursing profession; men, as doctors, made decisions about treatment, and nurses, as women, provided care, comfort, and followed orders (Burton, 2020; Corser, 2000; Reverby, 1987). Another example of the influence of the gendered image of nurses is the persistent consideration of a nurse’s value as the discreet patient-nurse interaction with value rarely recognised outside this dimension (Gijbels et al., 2010; Met et al., 2022; Porter, 2010; Welton & Harper, 2016). The image and expectations of nurses as females serving others may explain the tensions, noted in the literature, when nurses step outside the bounds of care and service into autonomous roles and leadership. The image of nurses as female servers was compounded further by another societal influence, that of nurses who were nuns. Their influence on nursing and nursing practice are addressed in the next section.

2.1.2 The influence of vowed women

Nurses who were European Christian nuns, referred to by Nelson (2001), as vowed women, made an important contribution to the development of nursing and healthcare (Nelson, 2001; Wall, 2012). However, the self-imposed expectation of vowed women as nurses was to be silent, take no recognition for their work, and to consider nursing as a service to God that required no earthly reward (Anthony, 2016; Nelson, 2001; Wall, 2012). The vowed women image of nurses as virtuous and self-sacrificing created an ideal of nursing as a vocation rather than a profession (Egenes, 2017; Fealy, 2004; Nelson, 2001; Price & McGillis Hall, 2014). An excerpt from a New Zealand national nursing magazine editorial in 1909 provides an example of the

virtuous expectation of nurses in the early 1900s (New Zealand Nurses Organisation, n.d):

A nurse must be a woman, working, not in the first place for the sake of money-making, but for the good of her fellow creatures, to alleviate suffering when she can and help towards the health of those who need her care.

The influence of vowed women contributed powerfully to the images and tropes of nurses and nursing practice as based on kindness and caring, rather than critical analysis of the patient condition and application of knowledge gained from science (Anthony, 2016; Nelson & Gordon, 2004; Price & McGillis-Hall, 2014). These images were further reinforced by the vowed women's ethos of 'say little, do much' (Nelson, 2001), which made nurses invisible, denying the public an opportunity to understand and appreciate the essential expertise required for nursing practice. The 'say little do much' ethos (Nelson, 2001), is projected into modern nursing practice environments as well through the marginalisation of nurses within the healthcare teams (Carryer, 2019). The image of nurses as servers, rather than leaders, was also influenced by the dominance of the profession of medicine in healthcare. The next section addresses the influence medical doctors exerted over the nursing profession and nursing education that persist to the present

2.1.3 The influence of the profession of medicine

The medical profession held hierarchical power over nurses, nursing practice and nursing education, which continues into the present day, despite women outweighing men in terms of overall numbers in medicine (Carryer, 2020; Corser, 2000; Daiski, 2004; Fitzgerald et al., 2012). The dominance of the profession of medicine over the profession of nursing is endemic in the literature. From the inception of formalised 'Nightingale style' training in the mid-1800's, clinical care has been decided by medical doctors who delegate nurses' work (Egenes, 2017; Gill & Baker, 2021; Keddy et al., 1986; van der Cingel & Brouwer, 2021). History showed that many doctors initially thought nurses needed only the most basic knowledge and skills to carry out their orders (Anderson et al., 2020; Brown et al., 1994; Egenes, 2017; Fealy, 2004), and to simply follow medical instructions, not contribute to patient treatment plans (Egenes, 2007). The United Kingdom, United States, Australia, and Aotearoa had longstanding

patriarchal social structures that influenced the relationship between the professions of medicine and nursing, creating an unequal power dynamic between doctors and nurses was evident throughout historical nursing literature. Patients perceived nurses as maternal carers providing a helping hand with hygiene and delivering medications, while doctors were the font of essential knowledge who made important healthcare decisions (Corser, 2000; Gordon, 2005; Price & McGillis-Hall, 2014). The public has long seen nursing care through a two-dimensional lens that informs an image of nurses carrying out doctors' orders and providing simple care, rather than appreciating the complexity of the nursing care (van der Cingel & Brouwer, 2021).

Nurses are at times complicit in reinforcing these disempowering stereotypes (Burton, 2020; Nelson & Gordon, 2005; van de Cingel & Brouwer, 2021), rather than encouraging realistic, contemporary representations of their profession. The image of nurses whose role was to follow orders and provide maternally inspired care for patients created a contentious space within which nursing education was debated. The following section outlines how nursing education has reflected outdated images of nurses and nursing practice.

2.2 Nursing Education

Historical influences that focused on nursing as women's domestic work, following doctors' orders, and being virtuous (Ehrenreich & English, 1973; Gill & Baker, 2021; Price & McGillis-Hall, 2014; van der Cingel & Brouwer, 2021), contributed to anti-intellectual tensions within the nursing discipline that negatively impacted the development of doctoral education for nurses. This section outlines the impact of the previously presented images and tropes of nurses and the influence on nursing education.

Prior to the 1850s, hospitals were for the poor and provided a bare minimum of care, usually by untrained women entitled 'nurses' (Reverby, 1987). However, during the late 1800s when England and the United States were experiencing the Crimean and Civil wars, respectively, the need for well-trained nurses became expedient. Mortality rates among the armed forces were high, in part due to poor nursing care (Bramadat & Chalmers, 1989; Egenes, 2017). Florence Nightingale's success in reducing mortality rates in the Crimean war provided the impetus to create a formal learning

environment for nursing students (Egenes, 2017). The Nightingale Training School for Nurses opened in 1860 at St. Thomas Hospital in London (Brown et al., 1994). The school provided classroom-based learning alongside closely supervised clinical experience. Brown et al. (1994), notes Florence Nightingale's goal was to inculcate intelligent obedience among nurses rather than complete obedience. However, history showed that complete obedience became the expectation in many training schools. Student nurses could be dismissed for disobedience or insubordination (Brown et al., 1994), and nurses followed militaristic rules and regulations (Brown et al., 1994) that continue to impact nurses in the present (Carryer, 2019).

The first formal nursing school in the United States, The New England Hospital for Women and Children, opened in 1873 (Bramadat & Chalmers, 1989; Egenes, 2017). Nursing students worked as free or cheap labour in hospitals in exchange for supervised training (Reverby, 1987). When formal nursing education began in both the United Kingdom and the United States, nurses initially controlled the education of new nurses (Bramadat & Chalmers, 1989). However, social forces eventually placed this control under the jurisdiction of hospital managers and medical doctors instead (Baer, 1985; Brown et al., 1994). Until the 1970s, competing priorities between education and clinical care created an inconsistent experience in a hospital-based training system that valued learning clinical tasks over critical thinking (Bramadat & Chalmers, 1989; Brown et al., 1994; Egenes, 2017). Nursing education in the late 19th and early 20th centuries promoted the centrality of clinical care over other nursing activities such as research or learning. The theme of valuing direct patient care over other healthcare activities continues to shape the perceived value of nurses which is reflected by the narrow definition of nurses' value in the literature (Gijbels et al., 2010; Met et al., 2022; Porter, 2010; Welton & Harper, 2016).

The international literature suggested that nursing education in the first half of the 20th century was not designed as a foundation to develop a nursing science, or for advancing nursing roles. Instead, nursing education produced efficient nurses who could follow orders and complete clinical tasks. Nursing education and nursing knowledge remained under the direction of the medical profession for most of the 20th century (Brown et al., 1994). As the 20th century advanced, medical knowledge and treatments improved significantly with the discovery of antibiotics (Nicolaou & Rigol,

2018), advances in virology (Hollingsworth, 2002), and treatments for communicable diseases (Krampitz, 1983). Patient care became more complex, requiring advanced nursing knowledge and skill. This new complexity demanded an expanded nursing education and a diversity of healthcare experience (Duffield et al., 2009; Krampitz, 1983). In the early 20th century, nursing leaders agitated for the evolution of the roles and scope of nursing, pointing out the value of nursing to improve patient outcomes, irrespective of the medical profession's input (Gortner, 2000). Various policy reports also emerged, including: the 1923 Goldmark Report; the 1932 Lancet Commission on Nursing; the 1948 Future of Nursing Report; and the 1948 Brown Report. These reports recommended an overhaul of the nursing educational system and separation from hospitals (Bramadat & Chalmers, 1989; Goldmark, 1923; Krampitz, 1983; Ruby, 1999; The Lancet, 1932). As a result of these reports, the second half of the 20th century saw a slow and tortuous transformation for pre-registration nursing education that continue to the present day. However, the focus of nurses' value remained encapsulated within the patient care dynamic.

2.3 Nursing education in Aotearoa

In Aotearoa, colonisation spread the educational attitudes and hierarchical structures of healthcare from Britain to New Zealand (McKillip et al., 2012; Walker & Holmes, 2008). Colonisation meant nursing education followed a similar pathway to the United Kingdom and the United States. Pre-existing Māori healing methods were outlawed and westernised medical care, including nursing traditions, were enforced (Stephens, 2001). Formal nursing education began in Aotearoa in the 1890s based on the Florence Nightingale apprentice style of learning and was located within the hospital environment (Brown et al., 1994). Aotearoa became the first country to create a register of qualified nurses in 1902 (Ministry for Culture and Heritage, 2020). Similarly to the international experience, in Aotearoa, nursing education and knowledge was provided by medical doctors until the end of the 1960s (Brown et al., 1994). Nursing training constituted task-oriented patient care coupled with copious amounts of cleaning. A study by the New Zealand Health Department in 1956, found the ward sister (charge nurse) spent 1.6 hours in direct patient care, the staff nurse (registered nurse) 3.5 hours and the student nurse 2.5 hours, the rest of the time was spent cleaning (Brown et al., 1994).

The apprenticeship style of hospital-based education continued in Aotearoa until the Director General of Health commissioned the 1971 Carpenter Report, which initiated a significant transition period for nursing education (Adlam et al., 2009; Brown et al., 1994). The Carpenter Report recommended a bachelor's degree qualification as the entry to practice for registered nurses. However, the New Zealand government decreed that a three-year diploma from a polytechnical institute was adequate (Adlam et al., 2009), reflecting the wider perception that a nurses' contribution to healthcare was still undervalued by decision-makers. Following the Carpenter Report, nursing education moved from the Department of Health to the Department of Education in 1971 and nursing education in Aotearoa began a 20-year transition, towards a tertiary diploma qualification taught, within a nursing education paradigm, by nurses (Brown et al., 1994). The final hospital training programme closed in 1990 (Brown et al., 1994). Bachelor of Nursing degrees were introduced in the 1990s, and by 1996, 84 years after it was first recommended (Brown et al., 1994), the entry to practice qualification for nurses in Aotearoa became a bachelor's degree (Lusk et al., 2001).

Tensions around the entry-to-practice qualification permeated into post graduate education for nurses. In the following section the development of post graduate education for nurses in Aotearoa is explored.

2.4 Development of Post-Graduate Nursing Education in Aotearoa

Post-graduate study for nursing has been no less convoluted, politically charged, and economically driven. Graduate nursing education began in Aotearoa in 1928 with the School of Advanced Nursing Studies in Wellington (Brown et al., 1994). The school was the only option for post-graduate until the 1970s. In a time well before distance learning, this meant an extremely limited number of nurses could attend the school, and married female nurses found it logistically impossible to leave their families to pursue education (Brown et al., 1994). However, the Victoria and Massey universities began offering post-graduate courses for registered nurses in 1973. And in 1978, the Advanced Diploma in Nursing was offered by several polytechnic institutes (Brown et al., 1994; Gage & Hornblow, 2007). Internationally, a focused development of advanced practice nursing roles intensified from the 1980s and into the 21st century making post-graduate nursing education a global focus (Duffield et al., 2009; Gray et al., 2000; Jacobs & Boddy, 2008; Jokiniemi et al., 2012; Sheer & Wong, 2008; Wheeler

et al., 2022). In Aotearoa, a 1998 Report by the Ministerial Taskforce on Nursing (Ministry of Health, 1998), addressed the educational needs for advanced practice roles. The report recommended a master's level education for nurses wishing to pursue an advanced practice role (Ministry of Health, 1998). The recommendation echoed the International Council of Nurses' guidance on master's education for advanced practice nurses (Sheer & Wong, 2008) which remains in place today (Schober et al., 2020).

The 1990s saw further initiatives to make post-graduate education more accessible in Aotearoa, including limited funding provided by the then Clinical Training Agency, and the publication of the Framework, Guidelines and Competencies for Post-Registration Nursing Education in 1998 (Jacobs & Boddy, 2008). However, legacy hospital-based and task-oriented training made some nurses question how professional development could improve their practice and promote their influence within healthcare (Carrier, 2020; Hakvoort et al., 2022). Nurses and clinical nursing education decision-makers appear to perceive the benefit of post-graduate education for clinical nurses adjourns at the master's level. Doctoral education for nurses has been primarily orientated to those wishing to move into academia and remains unusual in the clinical environment (Andreassen & Christensen, 2018; Jack, 2019). The qualification required for a Nurse Practitioner, the most advanced clinical role in Aotearoa, is a master's degree (Ministry of Health, 2017) which indicated that little relevance was attached to the doctoral knowledge and skills for advanced clinical nurses. The New Zealand Health Workforce Directorate, which provides current funding for post-graduate nursing education, also stops at master's level (Health, 2024). Absence of clinical funding for doctoral level education reinforces the perception that master's level is sufficient for clinical nurses and a doctoral degree offers no extra value in the clinical environment.

That education had caused such contention seems out of proportion to its intended effect. However, a female dominated profession with a history of subservience, harsh punishments for dissent (Brown et al., 1994), and an ethos of doing without speaking (Anthony, 2016; Fealy, 2004; Nelson, 2001; Wall et al 2012) created an environment that dissuaded nurses from advancing their education or contributing to the development of healthcare in Aotearoa. Currently in Aotearoa, the profession of

nursing is developing, separately from the profession of medicine, new scopes of practice and is inclusive of all genders and ethnicities.

2.5 Summary

This chapter presented a brief view of the history of the nursing profession and of nursing education. The development of nursing education against the backdrop of social change in the 20th and 21st centuries revealed outdated societal images of nursing and nursing practice. Nurses' control over their own education was impossible for much of the 20th century, which impacted what, how, and when they received education. Early nursing education reinforced the expectation that nurses would be silent and morally righteous women, who delivered medically directed care. While the lowest entry to practice qualification in Aotearoa is a bachelor's degree, there is no international agreement on the basic qualification for a registered nurse. Rapid expansion of advanced practice nurse roles in the later 20th century and ongoing into the present has influenced the development of post-graduate education. However, for many clinical nurses, the focus is still limited to a clinical master's degree with little impetus to proceed to doctoral level. The next chapter provides further context for this study by exploring what is currently known about DPCNs. An extensive literature review was conducted prior to beginning this research and is presented next.

Chapter 3 Literature Review

This research investigated the following question: How do doctorally prepared clinical nurses (DPCNs) add value to nursing practice and healthcare in Aotearoa? To begin to answer this question, one must first understand what is known about DPCNs. An Interpretive Descriptive (ID) approach to the question would begin with a thorough search of the available literature to provide an analytical framework (Thompson Burdine et al., 2021; Thorne, 2016). Thorne (2016), the principal proponent of ID, noted how the purpose of a literature review was critical reflection on the literature and comprehension of limitations of conduct and methodology that impacted relevance of the literature. For this study, a literature review was conducted prior to data collection to provide an appropriate starting place at the edge of what was known and what was yet to be known. The following chapter is a detailed review of the literature and a synthesis of the pertinent literature on DPCNs. The review explored the data on DPCNs internationally and in Aotearoa/New Zealand, while examining how DPCNs, their colleagues, nursing leaders, and healthcare managers perceived the relevance and contribution to clinical practice and healthcare from a DPCN's qualifications.

3.1 Literature Review Methodology

The literature review was performed across the databases CINAHL Complete, Scopus, and Google Scholar primarily in 2020, continuing periodically until March 2024. Search terms and date parameters used are outlined in Table 2. The initial search produced 4294 articles. Therefore, inclusion criteria were developed to better quantify pertinent papers on the phenomenon of a doctoral qualification for nurses remaining in the clinical environment.

Table 2*Literature Search Terms*

value OR worth OR contribution OR effect OR quality OR impact OR result OR outcome OR influence OR consequences

AND

nurses OR nurse OR “registered nurse” OR “staff nurse” OR “nursing staff” OR RN

AND

“doctoral qualification” OR doctorate OR doctoral OR PhD

AND

“clinical setting” OR bedside OR practice OR “nursing practice” OR “patient care” OR outcomes

AND

2000 - 2022

Written in English

3.1.1 Inclusion and exclusion criteria

Inclusion criteria

To qualify for inclusion in the review, an article needed to be a qualitative or quantitative study, literature review, systematic review, or meta-analysis. The cohort needed to include DPCNs and be published between Jan 2000 and March 2024, in English. This timeframe appropriately captured the breadth and depth of present knowledge and any changes to that knowledge over time. Studies were included if the cohort represented both academic and clinical doctorally prepared nurses (Appendix D).

Exclusion criteria

Articles were excluded if they focused on comparing types of doctorates or the experience of undertaking doctoral study. Articles were excluded if the cohort consisted exclusively of doctorally prepared nurses in the academic environment. Articles were also excluded if they were dedicated to the historical development of doctoral learning for nurses or were opinion pieces or editorials. Finally, articles were excluded if they were solely about the American Doctor of Nursing Practice (DNP). The DNP qualification is a practice doctorate focused on translating research into practice,

rather than creating research (Idzik et al., 2018; National Academies of Sciences Engineering and Medicine, 2021; Wilkes et al., 2015). In Aotearoa, both the traditional PhD and the new professional doctorate, focused on the production of research. Therefore, studies with a cohort of DNP participants only were excluded to ensure findings were relevant to the Aotearoa context.

3.2 Findings of the Literature Review

After applying the inclusion and exclusion criteria and searching the reference lists of included articles for suitable papers, 25 articles were eligible. Most of these were published in the last ten years, reinforcing the relevance of the chosen timeframe. A thematic analysis was then conducted, informed by Braun and Clarke's Reflexive Thematic Analysis (RTA) steps (Braun & Clarke, 2022). Identified themes were: identity tensions for DPCNs; changes in external perceptions of a DPCN; perceived value or clinical benefit of the doctorate; ambiguity of clinical roles, expectations, and responsibilities for DPCNs; mentorship, role-modelling, leadership and institutional support for DPCNs; and the production and use of research by DPCNs. These themes are explored in-depth in the remainder of this chapter.

3.2.1 Identity transformation tensions for doctorally prepared clinical nurses

While the literature reported the doctoral process as transformative, many DPCNs struggled to fit back into clinical practice after graduating. The literature highlighted the common experience of DPCNs trying to transition from clinical nurse into doctorally prepared clinical nurse in clinical environments that held no defined place for them. Participants in the literature also experienced isolation from their clinical nursing groups, despite reporting increased confidence, credibility, and empowerment. Although no studies examined the experience of DPCNs identity transition in Aotearoa, two international studies explored how DPCNs tumultuous identity transformations exacerbated their struggle.

In the first study, Heinrich (2005), undertook a phenomenological, longitudinal exploration of the development of doctoral identity during the first five years of post-doctoral practice. The study followed 16 nurses working in clinical or academic settings who had graduated in one cohort from a single American university and held either academic, administrative, or research roles during the study period. Participants

described identity change as a gradual process rather than a single event that occurred at conferment. Heinrich (2005), proposed a lack of a common pathway in the post-doctoral period produced variable experiences and meant each nurse had to forge their own path towards a doctoral identity. All participants reported feeling overwhelmed and overcommitted trying to prove themselves through producing scholarly research. Participants described a sense of being time-poor to achieve everything they perceived was required of a doctorally-qualified nurse. Some participants hid their doctoral identity from colleagues to prevent being seen as elitist. Others revealed their doctoral qualification selectively to provide contextual influence. Two participants reported a lack of any doctoral identity at all as they perceived they did no doctoral activities. The Heinrich (2005), participants reported a sense of disconnectedness from the clinical nurse group and felt unsure of their future direction. However, participants also reported increased confidence, increased credibility, and a feeling of empowerment within clinical practice, despite the tensions. Heinrich's (2005), research appeared to place the DPCN within a liminal space, advanced in confidence and academic credibility, yet overwhelmed by the need to prove themselves, empowered yet still unsure of their path or how they fit into the wider nursing team.

Doctorally prepared clinical nurses could readily experience themselves as outsiders when among nursing colleagues. In the second study (described in more detail later in this chapter), Met et al. (2022), investigated the roles and perceptions of DPCNs and nurse doctoral candidates working in hospitals in France. Similarly to Heinrich's (2005), findings, participants in the Met et al. (2022), study also reported feeling isolated and struggled to fit back into clinical nursing. Met et al. (2022), suggested this isolation was due to stepping outside of the traditional French image of a nurse, which included wearing a uniform, direct patient care, and being involved in patient handovers. Participants stated they had lost these nursing elements and therefore perceived they no-longer held a place in the clinical nursing team.

Alongside DPCNs' internal identity tensions, the literature also highlighted tensions in how others perceive a DPCN. The next section examines the reactions and actions of nursing and non-nursing colleagues and the effect on a DPCNs' practice, confidence,

and inclusion within the healthcare team, all of which impact their ability to contribute.

3.2.2 External perceptions of the doctorally prepared clinical nurse

The literature highlighted clinical nurses, including nurse leaders, had diverse expectations and views of a DPCN's purpose and value. The literature identified that DPCN were often an enigma to non-DPCN colleagues who were unsure of their purpose and clinical competencies. However, the experience of non-DPCNs working alongside DPCNs was limited, which likely contributed to the confusion around the purpose of DPCNs in clinical settings. Two studies drew attention to challenges for the DPCN due to divergent perceptions.

Colleagues may be unaware of or even discredit the value that DPCNs add to a clinical team. A study by Cheraghi et al. (2014), investigated non-DPCNs' perceptions of the DPCN in Iran. The researchers interviewed 43 clinical nurses (without doctoral qualifications) using a combination of oral semi-structured interviews (30 participants) and written interviews (13 participants). Participants held a variety of clinical roles including ward nurses, supervisors, and head nurses. Some participants were unsure of the role of a DPCN and had little idea of what a doctorate could offer to nursing practice. However, others considered the role of a DPCN was to provide solutions to practice problems and empower non-DPCNs in clinical practice. Collegial doubt about credibility was also highlighted as some non-DPCNs perceived a DPCN as less clinically competent due to reduced time spent in direct patient care. The researchers noted that DPCNs in Iran were primarily in teaching roles with nursing students on clinical placement, rather than in direct clinical care. This may have affected non-DPCN perceptions as their exposure to, and understanding of, a doctoral qualification in the clinical context was difficult to quantify.

Studies demonstrated that colleagues prioritised clinical skills as evidence of an expert practitioner. In the second study, Moghadam et al. (2017) used a qualitative approach to investigate the acceptance of newly qualified doctorally-prepared nurses as clinical educators. The study included 13 participants, eight of whom were doctorally-prepared nurses employed by universities but working in clinical placements with students, three nursing heads of department, one educational vice chancellor, and one

nurse (not further defined). Similarly, to Cheraghi et al (2014), Moghadam et al.'s (2017), DPCN participants perceived reduced acceptance on the ward by the clinical nursing teams and students due to a perceived lack of practical skills. Doctorally prepared clinical nursing participants perceived they were expected to be an expert nurse, by which participants appeared to mean an expert clinical nurse, rather than an expert nurse scholar. When the ward and student nurses realised the DPCN could not perform clinical tasks, such as insert an intravenous line or interpret imaging reports the DPCN perceived their credibility was damaged in the eyes of their students and other non-DPCNs ward nurses.

Moghadam et al. (2017), and Cheraghi et al. (2014), both provided an alternative view to the findings about increased credibility reported by Heinrich (2005), but this counterpoint could be explained by two differing doctoral roles. Participants in the Iran studies (Cheraghi et al., 2014; Moghadam et al., 2017), were educators for clinical nursing students on clinical placement, while participants in the Heinrich study (2005), held diverse clinical and academic roles. Alongside external perceptions of the purpose of a DPCN, tensions arose about the perception of their value to clinical practice. The next section explores in further detail the perceived value or clinical benefit of a doctorally-prepared nurse for clinical practice.

3.2.3 Value of doctorally prepared clinical nurses is obscured in clinical practice

Researchers described diverse views of DPCN value in clinical settings. The diversity appeared due to an outdated image of nursing value as related to patient clinical interactions only. The literature highlighted how inflexible healthcare structures obscured or prevented DPCN value contribution in environments where clinical priorities outweighed research. Significant value was identified in one study that allowed DPCNs to work within recognised research roles and contrasted with poorly defined value in studies where the DPCN held ill-define roles. Most importantly research highlighted that little had changed for DPCNs in 20 years. Their value contribution remained constrained by ill-defined roles, poor understanding of the doctoral skillset by leaders, and outdated views of how nurses produce value in clinical practice. Several studies explored the perceived value that DPCNs offer the clinical environment. Studies were diverse both in their reports of value from DPCNs and in their cohorts. Each study is presented in the following section.

Borbasi and Emden (2001), facilitated a small qualitative exploratory survey of five potential employers' views of the value of DPCNs in Australia. Data were collected by structured interviews through email or fax. Participants were asked to comment on three areas: the value of doctoral education for clinical nurses; workplace relevance of skills provided by a doctoral degree; and perceived value between a professional (coursework) doctorate and a PhD doctorate. Borbasi and Emden (2001), found that participants often held conflicted views. Some participants reported perceived benefit from doctoral education such as identifying desirable personality traits for employees (motivation and commitment) and advanced analytical and critical thinking skills. Some participants stated that more benefits were likely but there were too few DPCN to evaluate. Some participants determined value only if the DPCN was an advanced practice nurse while others considered a DPCN was overly educated and a "good master's degree" was sufficient for a clinical nurse (Borbasi & Emden, 2001, p. 191). Participants who held more cautious views of benefit pointed to doctoral specialisation as a problem and seemed unaware of the transferable doctoral skills such as public speaking, research evaluation, and knowledge production. Several participants perceived a doctorate held little value beyond the thesis topic. The inability to perceive the value of DPCN by nurse managers and leaders indicated a conflict within the nursing discipline which was evident throughout the literature review and this research.

The value of DPCNs was also obscured by the focus of managers and leaders on clinical interactions as the only function of nurses in practice. This limited concept of value has changed little over time. Almost a decade after the Borbasi and Emden (2001), study, Wilkes and Mohan (2008), undertook a descriptive mixed methods evaluation of the relevance of a PhD degree for nurses in Australia working in clinical practice after obtaining a PhD qualification. The researchers sent out 152 surveys with 19 respondents. Of the 19 respondents, 13 also took part in an in-depth interview. Participants deemed the doctoral qualification had improved their career prospects, increased their credibility, personal confidence, and enhanced patient care through production of new research knowledge. However, as in the findings of Borbasi and Emden (2001), the Wilkes and Mohan (2008), participants reported that nursing leaders still considered a doctoral education did not contribute to clinical outcomes. A

nurse's value was what they offered the employer/organisation in direct clinical care, rather than the ability to create, direct, and evaluate care and health policy. Additionally, Wilkes and Mohan (2008), also identified clinical work competed with research work which reduced time for DPCNs to produce knowledge.

The literature focused on the value of DPCNs in practice environments in terms of direct patient outcomes and did not consider the wider system contributions of DPCNs. The research was also often obscured by DPCNs being a small part of a larger cohort that included differing types of post-graduate education. Gijbels et al. (2010), completed a systematic review to examine the impact of post-registration nursing education on nursing practice. The study was part of a national review of post-graduate nursing education in Ireland and included 61 articles from Australia, New Zealand, the United States, Canada, Ireland and the United Kingdom. All levels of formal post registration education, such as post graduate certificates, diplomas, master's, and doctorates, were included. The studies evaluated the impact of post-graduate education on practice, however, only three studies evaluated specific patient-focused measures. Lack of patient-focused outcome research was connected with the challenge of identifying the specific nursing contribution to patient outcomes. Gijbels et al. (2010), reasoned the difficulty was due to the dynamic nature of the healthcare environment and nursing structures. The researchers cited confounding variables including: number of hours the nurse looked after the patient; impact of other nurses' care; input of the multidisciplinary teams; nurse-to-patient ratios; the patient's impact on their own outcomes and care; hospital policies and characteristics; and even what was happening in the world that day. Instead, many articles were opinions or descriptive research from a student's perspective. While the Gijbels et al. (2010), approach limited applicability to the post-doctoral nursing experience in clinical practice, the review provided insight into the perception of education from both inside and outside the profession of nursing. In addition, Gijbels et al. (2010), also acknowledged a dearth of research about the doctoral-level educational effect for nurses and nursing practice. Evaluation of the doctoral impact on practice was constrained by the range of research methodologies, outcome measures, and sometimes undefined cohorts of studies in Gijbels et al.'s (2010), review. The researchers summarised nurses who undertook post-graduate education benefitted

from changes in “attitudes, perceptions, knowledge and in skill acquisition” (p. 64), but concluded there was little evidence to support direct positive impact on patient care, organisational outcomes, or care delivery.

Nurse leaders and managers appeared unable to envision a place for DPCN in clinical practice environments. A qualitative study in the Netherlands by van Oostveen et al. (2017) examined attitudes of nurse academics and other invested parties to the value of a combined academic/clinical role for doctorally-qualified nurses. Data were gathered using 24 individual interviews and two focus groups, totalling 14 participants. Interviewees were a mix of nurse academics, educators, directors of nursing and physicians. The focus groups consisted of senior nurses, nurse academics, and advanced practice nurses of whom approximately 50% held a doctoral qualification. All participants were given an outline of a combined clinical-academic position and related questions prior to data collection. Van Oostveen et al. (2017), also interviewed two nurse academics from the United Kingdom with experience with clinical academic roles. Participants stated that a clinical academic role could improve nursing career options and boost the reputation of their respective hospitals. However, some of the nurse academic participants held a perception that medical doctors were surprised that a clinical nurse would obtain a doctoral degree, which intimated that medical doctors failed to perceive doctorally derived value for the nurse, nursing practice, or patient care. In similar findings to Cheraghi et al. (2014), and Moghadam et al. (2017), decreased clinical competence was inferred if the DPCN worked a reduced time in clinical practice (i.e. one day a week). Conversely, others worried that DPCNs who were involved in clinical teams may lose their academic research skills. A minority of participants indicated there was no need to combine research and clinical practice and the two should be kept separated.

Van Oostveen et al.'s (2017), participants reported that direct patient care was considered more important than research activities by nurse leaders and organisational managers. This corroborated the findings of Borbasi and Emden (2001), and indicated how little had changed over the 20 years between the two studies. Van Oostveen et al.'s (2017), participants also reported how DPCN value was negatively impacted by the hierarchy of hospital structures which placed medical doctors in charge of planning and budgets. The negative impact reportedly related to decreased

perception of autonomy and authority of DPCNs in both clinical and research activities. Van Oostveen et al. (2017), reported that a doctoral degree was not required for any advanced clinical nurse roles and there was no common vision for nurses which included DPCNs. Van Oostveen et al's (2017), findings highlighted an inability of senior nurses and healthcare leaders to envision the positive contribution DPCNs could provide to clinical practice or healthcare.

The literature review highlighted the role of DPCNs was ill-defined and often undervalued. However, more recent research suggested this perception may be changing. Abraham et al. (2021), undertook a review of the American Veteran Association Quality Scholars programme (VAQS). The VAQS programme was a two-year fellowship across 12 healthcare facilities. Fellows could be pre- or post-doctorate and spent their fellowship in an 80/20 research/clinical split. The primary purpose of the fellowship was to make quality improvements to the provision of patient-centred services. The programme's existence and the inclusion of nurse fellows indicated there was great value in scholastic nurses. The programme review took place in 2020 and involved evaluation surveys, assessments of fellow development plans, number of improvement projects, and educational endeavours. At the time of the review, nurses had held 23% of fellowships. Of these nursing fellows, 81% held a doctoral qualification, with 50% holding a PhD and 50% a Doctor of Nursing Practice (DNP). Abraham et al. (2021), found that nurse fellows significantly enhanced clinical care delivery, transition of care programmes, and identification of critical clinical issues, such as cognitive impairment. The researchers also noted the programme was a pipeline for nurses planning to enter combined academic/clinical roles. A difference in perception of a fellow compared to a DPCN may explain the alternative finding of Abraham et al. (2021), to previous researchers, (Borbasi & Emden, 2001; Gijbels et al., 2010; van Oostveen et al., 2017; Wilkes & Mohan, 2008)), where a doctoral degree was seen as unnecessary for clinical nursing. Perhaps it was the expectation of new research and the implementation within the fellowship role that changed the lens through which a DPCN was considered.

In the next study, findings returned to the perception of the doctorate as redundant for clinical nurses. Hampshaw et al. (2022), conducted an online survey using Twitter for nurses with doctoral qualifications to understand how their doctoral degrees had

added value to their nursing practice and careers. The researchers received 47 responses from nurses in a mix of academic and clinical positions. Participant's highlighted that their doctoral learning was valued by medical colleagues but not by nursing leaders. Some participants reported their doctorate had been detrimental to their careers since the academic role paid less than their pre-doctoral clinical role. Others agreed that doctorates were not reflected in clinical nursing pay bands. However, participants also reported increased confidence, improved critical thinking, and enhanced clinical practice, but didn't define any improvements further. Overall, participants reflected a doctorate had limited applicability for career advancement in clinical practice, due to inflexible nursing structures.

There remain unanswered questions that require further investigation including: defining roles and expectations; clearer evaluation of clinical benefit; and how best to engage DPCNs to maximise their clinical and organisational contribution. In the next section, the literature theme of ambiguity of DPCN roles, expectations and responsibilities is examined and provides data on the difficulties of assessing DPCN value.

3.2.4 Ambiguity of roles, expectations, and responsibilities

The literature about the roles, responsibilities and expectations provided consistent reports of diversity and confusion. Research cohorts lacked transparency over who they contained, where they DPCNs employed because of their doctoral degree, or DPCN who held an incidental doctoral qualification? Expectations of DPCNs by leaders, managers, and colleagues were intense and included reports of doing research, translating findings into practice, leadership, mentoring, role modelling, and shepherding the nursing profession into the future. However, protected time to achieve indicators outside of the discrete clinical nursing practice was limited. Participants often appeared to have few examples to follow and needed to define their own roles and responsibilities. The roles of DPCNs have received extra research focus with numerous studies exploring DPCNs' activities and responsibilities. The following section will look at the research about DPCN roles, expectations, and responsibilities.

McNett (2006), explored DPCN clinical roles using a descriptive qualitative methodology. In-depth individual interviews were conducted with five DPCNs working

full time in clinical practice in the United States. Participants included four clinical nurse specialists and one nurse practitioner. Participants were asked to define their roles by responding to five pre-specified questions. Data were analysed using content analysis and distilled into two broad themes of leadership and bridging the practice/research gap. Participants described research as a primary function of a DPCN. However, four of the five participants had no allocated time for research in their roles and had to conduct research in the short spaces between their clinical obligations. Perhaps the clear value defined from the Abraham et al. (2021), fellowship review, discussed in the previous section, existed because those nurse fellows were allowed dedicated research time. In the McNett (2006), cohort, dedicated research time was unavailable and therefore value less visible.

McNett's (2006), participants stated that doing independent research (rather than doing others' research) was a cardinal benefit of a doctorate. All participants said critiquing and incorporating (or rejecting) evidence into practice was expected at the doctorate level. Their leadership function manifested in assumed roles in formal and informal decision-making entities, such as membership on committees, representing nurses' opinions, and contributing directly to changes in nursing practice and healthcare delivery. Participants claimed the doctorate and title were significant factors in their credibility and helped to influence healthcare practices. This was an intriguing juxtaposition to the Heinrich (2005), study where some participants felt it necessary to hide their identity and title, perhaps denying themselves the influence reported by the McNett (2006), cohort. The McNett (2006), participants articulated an expanded view of their healthcare organisation's needs due to their doctoral experience, which may be an under-investigated benefit that came from the doctoral lens. However, study findings were limited by the descriptive nature of the analysis and brevity of interviews (20-40 minutes). Additionally, the data were not audio recorded making it impossible to check the raw data for accuracy and overlooked insights.

The literature reported that a diversity of roles and expectations put DPCNs in a tenuous space where no-one, including the DPCNs, was clear about how they should be used. Andreassen and Christensen (2018), examined the roles and responsibilities of DPCNs in Denmark in a qualitative exploratory study with individual in-depth

interviews of six PhD qualified clinical nurses, nine non-DPCN colleagues (chosen by the DPCN participants), and six clinical nurse leaders. Similarly to McNett's (2006), findings, participants in Andreassen and Christensen's (2018), study described a key responsibility was the translation of research to inform clinical practice. Participants identified connectedness with clinical practice was vital, particularly to guide research focus. However, the DPCNs also reported a sense of insecurity due to the lack of employment prospects and a fear of being laid-off in lean economic times. This uncertainty reflected the tenuous space some DPCNs occupy about their perceived contribution to clinical care outcomes.

Andreassen and Christensen (2018), found that DPCNs struggled to balance their competing research and clinical expectations when clinical practice persistently encroached into their time. The difficulty of maintaining the research/practice balance was also reported by Heinrich (2006), and McNett (2006). Andreassen and Christensen's (2018), findings supported the supposition that nursing value was defined as direct patient care only (Cheraghi et al., 2014; van Oostveen et al., 2017; Wilkes & Mohan, 2008). The function of nursing appeared to be more important to healthcare organisation leaders and managers than the creation of knowledge and the advancement of nursing practice. Andreassen and Christensen (2018), reported non-DPCNs expected that DPCNs would provide relevant and critiqued clinical research reports; research and clinical practice mentorship; and improve clinical patient care. The nurse leader cohort envisioned the DPCN's role as mentorship, role-modelling, and translating research into practice. Nurse leader also expected DPCNs to engage, not only in their own research, but to evaluate other's research and improve professional nursing practice. However, whether DPCNs should work in direct patient care, in-direct patient care, or through an intermediary was debated. The study noted that DPCNs had the "intangible task of changing nursing culture" (p. 1915), through an expectation they would increase nurses' responsibility, contribution, and recognition in clinical care; a herculean expectation for such a small number of DPCNs. Simultaneously, there was little agreement on how DPCN performance should be measured and how to use DPCNs to their full potential. The researchers concluded that DPCNs needed clearly delineated clinical roles with structured career pathways.

Inconsistency of roles and expectations for DPCNs is a global phenomenon. Elgaard-Sorensen et al. (2019), used a descriptive cross-sectional study to investigate the prevalence of roles and careers of PhD qualified nurses in university hospitals. An electronic survey was sent to 246 PhD qualified nurses in six Nordic countries with a response rate of 67%. Participants were asked about their current role, career pathway, and ideal role in a series of quantitative and qualitative questions. Elgaard-Sorensen et al. (2019), found significant diversity in the roles and responsibilities of their cohort, of whom approximately 24-36% of participants worked in a clinical setting. Participants reported spending half their time in administration, supervision, and teaching. However, research time varied widely, from 20% in Sweden, Iceland, and Finland, to 51% in Norway. Additional roles were held by 61% of participants, with just over half employed in an academic position as well as a hospital position. The number of DPCNs working in research roles varied between less than 60% in Finland to 97% in Denmark. Elgaard-Sorensen et al. (2019), corroborated previous research findings that roles for DPCNs varied across countries and institutions (Andreassen & Christensen, 2018). The study also highlighted the difficulty of knowing if a research population included nurses employed because they have a doctoral qualification or who were employed and happened to have a doctoral qualification, or both.

Literature around DPCN was impacted by difficulty identifying DPCN within clinical practice environments. There were no clinical roles that reported the doctorate as a requirement, and DPCN often held the same job title and nursing role as non-DPCNs, contributing to the former's invisibility. In another Nordic study, Orton et al. (2019), undertook a qualitative content analysis of the roles and responsibilities of DPCNs working in clinical care in Sweden. The researchers identified three Swedish hospitals likely to employ nurses with PhD qualifications in either a clinical setting or managerial clinical role. It was difficult to identify DPCNs as there was no record of nursing qualifications in local or national databases. However, using a snowball technique, 13 participants consented to the research. Orton et al.'s (2019), participants reported their presence added value to colleagues, managers, and other health professionals due to their experience in nursing science production. However, their clinical work was often the same as a non-DPCN's. Scarce managerial support, particularly from direct reporting managers, was a barrier to fulfilling the DPCN's potential largely because

those managers did not know what to do with them. The conundrum of a DPCN for managers was widely reported (Andreassen & Christensen, 2018; van Oostveen et al., 2017; Wilkes & Mohan, 2008).

Orton et al.'s (2019), participants indicated continuing in clinical practice was necessary for understanding clinical research needs and to confirm a DPCN's clinical authority. However, participants found it difficult to maintain clinical competencies. It was unclear from the study report what the difficulty was, but perhaps was due to the DPCNs spending less time in direct patient care and more time in teaching, research and administrative activities. The concern over DPCNs' clinical competence was repeated in several other explorations (Cheraghi et al., 2014; Moghadam et al., 2017; van Oostveen et al., 2017), however no actual assessment of clinical competence was evaluated. Orton et al.'s (2019), participants undertook activities such as: evaluating care practices; introducing new practices; relegating old practices; educating colleagues on research critique; developing new healthcare policies; and teaching. As in previous research (McNett, 2006; Andreassen & Christensen, 2018), participants reported their time to undertake research was limited, and the academic value that DPCNs brought to the clinical team was sometimes questioned by colleagues. Some participants also reported they were frustrated in their desire to improve patient care due to a lack of a mandate to conduct research.

The literature identified DPCN had difficulty balancing the various expectations of doing research, teaching, mentoring, and providing clinical care. A principal contributing factor to this conflict was the lack of a post-doctoral pathway. Rugs et al. (2020), in their cross-sectional survey of DPCNs employed in the Veterans Health Association (VHA) in the United States, reported wide diversity of roles and expectations. As previously highlighted by Orton et al. (2019), Rugs et al. (2020), found identifying DPCNs challenging. The researchers discovered although the VHA employed 96000 nurses, educational qualifications were not recorded. Rugs et al. (2020), used several strategies to guesstimate who may have a doctorate and sent an online survey invitation to 2403 nurses, receiving 1015 responses. Of these responses, 929 nurses had doctoral degrees. The researchers' intent was to identify how DPCNs divided their time between clinical, research, teaching, and administration, and if the type of doctoral degree affected this balance. The American nursing education system

contained two distinct types of nursing doctorates. A clinical or practice doctorate, such as the Doctor of Nursing Practice (DNP), designed to advance clinical knowledge, skills, and research utilisation, and the traditional PhD or Doctor of Nursing Science (DNS) which had a research production focus (Dobrowolska et al., 2021; Rugs et al., 2020). In the Rugs et al. (2020), survey over half the respondents held a clinical doctorate, 13 % did not identify the type of doctorate and one participant held both clinical and research doctorates, the remainder held a PhD.

Rugs et al. (2020), highlighted a wide variety of roles were held by DPCNs, with some working across all four areas of education, clinical practice, research, and administration. Participants with a research doctorate were more likely to be involved in research than nurses with a practice doctorate. However, the researchers' pre-determined definition of what research engagement meant appeared somewhat arbitrary. Literature reviews were excluded from research activities but being a study coordinator on another's research (i.e., no influence on the research protocol) was considered engaging in research. Rugs et al. (2020), recommended the VHA organisation clearly align DPCN expectations to the type of doctoral degree held to make best use of DPCN skills.

In a further evaluation of the same dataset, Chavez et al. (2021), focused on the open text responses, of the survey which examined the functions and role perceptions held by participants. Chavez et al. (2021), noted the VHA was unique both in the number of DPCNs and the role complexity of DPCNs who often held multifaceted responsibilities across all four areas of research, teaching, administration, and clinical practice. Participants conveyed the idea of doctoral nurses as "...systems level thinkers integrating clinical expertise with knowledge of healthcare administration to optimize healthcare provision..." (Chavez et al., 2021, p. 125). Participants wanted role complexity to be reflected in position descriptions and career pathways, and for protected research time within roles. Chavez et al. (2021), indicated participants reflected a lack of clarity around utilisation of DPCNs and sought consistency for recognition of DPCNs accomplishments. This lack of clarity around utilisation of the DPCN was a recurring theme throughout the literature (Andreassen & Christensen, 2018; Elgaard-Sorensen et al., 2019; McNett, 2006; Orton et al., 2019; Rugs et al., 2020). Chavez et al. (2021), suggested several ways to provide more consistency for

DPCNs: developing career pathways; providing financial incentives (loan repayment schemes and scholarships); developing collaborations; and establishing annual measurement of role satisfaction, fit, and meaningfulness.

The literature continued to highlight a lack of a post-doctoral career pathways for DPCNs leading to inconsistent post-doctoral experiences. Dobrowolska et al. (2021), published a scoping review using the PRISMA-ScR framework to summarise career opportunities and roles for DPCNs. The researchers examined the literature from January 2009 to December 2019 using the CINAHL Complete, SCOPUS, and Medline databases. They searched combining the terms 'clinical academic career,' nurses, doctorate, 'doctorate of nursing,' and 'clinical career' and identified 10 articles for inclusion. Studies included populations across the Nordic states, the United States, the United Kingdom and Iran. Dobrowolska et al. (2021), noted that role confusion and absence of a career pathway was reported in all 10 studies, (note: the review included the Andreassen & Christensen., 2018; Elgaard-Sorensen et al., 2017; Moghadam et al., 2017; Orton et al., 2019; Rugs et al., 2020; and van Oostveen et al., 2017 studies). However, the researchers also identified three broad areas of common activity for DPCNs: practice influencer, clinical leader, and clinical teacher.

Dobrowolska et al. (2021), suggested DPCNs improved care delivery by translating evidence into practice, being practice change agents, mentoring, introducing new models of care, evaluating care services, and redesigning care delivery. This finding corroborated Abraham et al.'s (2021), finding of significant clinical impact of DPCNs working in fellowship roles and reflected the same value may be present in clinical roles. Dobrowolska et al. (2021), also identified two studies showing a possible positive financial impact of DPCNs through improved evidence in clinical practice and decreased clinical error. However, the financial impact was a suggestion rather than an evidence-based finding. Dobrowolska et al. (2021), reported how a perceived invisibility of research skills devalued the DPCN's work while competing priorities between direct care and research caused tension in the clinical environment. The study concluded that DPCNs are important, but their roles required greater clarity and support from managers.

While a diversity of roles was widely reported, there was also evidence that DPCNs were beginning to define their own expectations in clinical practice despite a lack of recognition from leaders and managers. Adding to the growing body of literature on DPCN roles, Rocafort (2020), produced an adapted grounded theory study to investigate DPCNs' perception of their roles. This American study included 13 nurses with a 50/50 split between PhD and DNP qualifications. Participants had semi-structured in-depth individual interviews by Skype, telephone, or in person. The interviews were recorded and transcribed in 2015. Over 70% of participants were aged 45 years or older which was in line with demographic data on nurses pursuing doctorates – predominantly female with median age of 40-50 (Heinrich, 2005; Jackson & Cleary, 2011). In addition, Rocafort (2020), held a focus group with five participants who were either experts on doctoral nursing roles, or who were deemed a significant part of the international discussion on doctoral nursing roles. The DPCN cohort were asked to describe their role as a doctorally-qualified nurse, their opinion of having two distinct doctorates (PhD versus DPN), and what meaning formation of two distinct doctorates held for them.

Rocafort (2020), identified the basic social process of 'following the path,' which was supported by four main categories; advancing, collaborating, transforming, and stewarding. Despite the intended aim of exploring DPCNs' perceptions of their roles, the study also assessed the roles between PhD qualified nurses and DNP qualified nurses. Rocafort (2020), reported participant data drew attention to the forward momentum and adaptive strength that a doctoral qualification provided for participants and the wider profession of nursing. Rocafort's (2020), findings provided evidence the DPCNs believed the profession of nursing was slowly moving forward in terms of professionalism and influence. Rocafort (2020), surmised nurses no longer waited to be defined from outside the profession but were defining their own adaptive practice internally. Nursing practice defined from within the profession may mitigate some of the previously reported role confusion (Andreassen & Christensen, 2018; Dobrowolska et al., 2021; Elgaard-Sorensen et al., 2019; McNett, 2006; Orton et al., 2019; Rugs et al., 2020). However internal definition was not a widely reported finding in the literature.

Orton et al. (2022), conducted an expansive literature review of the roles and functions of DPCNs, with a particular focus on their clinical contribution. The review included articles published between 1986 and 2020 that contained descriptions of DPCN clinical roles, duties, and work. Unlike the Dobrowolska et al. (2021), review which included both PhD and DNP nurses, Orton et al. (2022), focused only on PhD qualified nurses. The review identified 12 articles for inclusion. The study found that DPCN roles were divided primary into two roles: researcher or advanced practice nurse. The researcher's analysis identified three themes: bridging the theory/practice gap; leadership; and professional tradition. Orton et al. (2022), reported DPCNs actively promoted evidence-based practice; provided support and acted as a resource for colleagues around research utilisation; and either performed their own research or, more often, supported others' research, corroborating the findings of Dobrowolska et al. (2021).

Orton et al. (2022), reported that DPCNs led quality improvement projects, acted as role-models for colleagues, and improved the professional status of nursing. However, the literature presented conflicted findings about DPCN credibility. The DPCN's degree of visibility in the clinical environment appeared to be linked to their level of perceived credibility. As previous research has identified, DPCN are not readily visible in clinical environments (Chavez et al., 2021; Orton et al., 2019; Rugs et al., 2020). Credibility of DPCNs was conflicted in other literature. One study explicitly identified increased credibility of DPCNs (Heinrich, 2005), while other studies identified a lessening of clinical credibility (Cheraghi et al., 2014; Moghadam et al., 2017; van Oostveen et al., 2017). Orton et al. (2022), pointed out nursing tradition has been based in a clinical care paradigm which supported the subservience of nurses to medical doctors and historically limited the DPCN's authority and ability to work outside the tradition. Orton et al.'s (2022), supposition perhaps suggested a causation of the previously reported role confusion as DPCNs struggled to work outside this tradition (Andreassen & Christensen, 2018; Dobrowolska et al., 2021; Elgaard-Sorensen et al., 2019; McNett, 2006; Orton et al., 2019; Rugs et al., 2020).

By stepping outside the traditional expectations of a clinical nurse, DPCN's lost some acceptance by the clinical nursing team. Met et al. (2022), investigated the practice roles and experiences of DPCNs and doctoral nursing students in France's healthcare

system using a mixed methods approach. The researcher's stated the development of doctoral education for nurses in France lagged behind the rest of the world with no nursing-specific doctorate available. Nurses in France who desired a doctoral education needed to obtain a qualification in another scientific discipline. As other researchers had found, identifying doctoral nurses in clinical practice was reported as difficult (Orton et al., 2019; Rugs et al., 2020). There was no French register of nurses with doctoral qualifications. However, participants were identified through personal connections of the researchers and a snowballing technique. A questionnaire was sent to 165 potential participants with 79 responses. In addition to the DPCN questionnaire, the researchers also conducted 45 semi-structured interviews with DPCNs, ten interviews with health managers and chief nurses, and 27 hours of direct observation with research nurses (study coordinators). It was important for context to understand the research nurse participants interviewed were research nurse coordinators working to support others' research and to implement research findings into practice and not all research nurses interviewed were doctorally qualified or a doctoral candidate.

It appeared that doctorally prepared nurses in France had two options, they could move into a university or become research coordinators in hospitals. Met et al. (2022), pointed out that nursing departments in universities did not exist in France, therefore university positions were rare. Met et al. (2022), described the relationship between some medical doctors and participants as pivotal for developing nursing research and DPCNs. However, nursing in France followed a medically orientated paradigm which could explain this support. Indeed 36% of interview participants had one or two years of medical training prior to relocating into a nursing qualification. As one participant said, "Nursing was Plan B" (Met et al., 2022, p. 22). Exposure to previous medical training may also have affected the cohort's reported experiences. DPCNs in France wanted the same status as medical doctors and desired combined teaching, research, and clinical roles. Unlike other research populations where the clinical roles of participants were often unclear (Andreassen & Christensen, 2018; Elgaard-Sorensen et al., 2019), none of the participants in the Met et al. (2022) cohort held direct patient care roles. Met et al. (2022), stated that participants were compelled to leave direct clinical roles to work in research once they had completed their doctorate. In a similar finding to Dobrowolska et al. (2021), Met et al. (2022), also posited the work of DPCNs

was largely invisible. In France, traditional nursing roles were based at the bedside which meant that DPCNs no longer fit the traditional mould, creating tension in the clinical hospital setting.

Difficulties understanding how DPCNs fit into clinical practice was not isolated to the Global North. Kim et al. (2022), undertook a qualitative descriptive analysis of the practice experiences for PhD qualified nurses working in clinical practice in South Korea. The researcher's enrolled 15 nurses in full-time direct patient care roles who also held a PhD degree or had completed course work towards a PhD. The average time from doctoral qualification to entry into the study was 24 months, and the average age of the nurses was 44. The age of DPCNs indicated the Korean DPCN demographics match those in other parts of the world (Heinrich, 2005; Jackson & Cleary, 2011; Rocafort, 2020). Data were collected in 2019 using in-depth individual interviews and field notes, along with pre-existing diaries from two participants.

Kim et al. (2022), highlighted several areas where DPCNs contributed value to nursing clinical practice, including: evidence-based, patient specific education; proactive communication with patients; reflexive thinking and questioning nursing practice and nursing care; providing holistic care; involving the multidisciplinary team; advocating for the patient; producing nursing science; a conscious understanding of patients as people; and as role models for nursing colleagues. However, participants also reported obstructions to their contributions such as internal and external conflict over remaining in a clinical position, expectations and judgemental remarks by colleagues, and perceived unfair delegation of work. Kim et al.'s (2022), findings corresponded with those of other researchers who identified DPCNs struggling to balance work priorities and fit in doctoral activities (Andreassen & Christensen, 2018; McNett, 2006). However, Kim et al. (2022), was the first study to identify an unfair delegation of work as a result of the doctoral degree and no other study explicitly noted a change to the lens through which nurses viewed the patient as a consequence of the doctoral qualification.

Research on the roles and expectations of DPCNs was a particular focus in the literature, particularly since 2020. The research is unanimous in reporting diversity of roles from both DPCN, their colleagues, and nurse leaders. Part of the confusion over

roles and expectations may be due to the limited mentorship and role modelling available for DPCNs. The next section explores the findings in the literature on the availability and impact of mentors and role models for DPCNs.

3.2.5 Mentorship, role-modelling, and leadership support

The role of mentorship, role modelling, and leader support are an important factor in attracting nurses to a doctoral degree, supporting them in the post-doctoral period, and for developing a post-doctoral research career (Avery et al., 2022; Hafsteinsdóttir et al., 2017; Met et al., 2022). However, support was fragmented and informal. Additionally, there was no research about the Aotearoa experience for DPCNs working in the clinical environment and little understanding of available mentorship. Mentorship has been a long-established practice in clinical nursing but was reported as missing for DPCNs. A paucity of mentorship and support for DPCNs was the pervading trend across the literature.

In the Heinrich (2005), qualitative study examining the first five years of post-doctoral nurses in clinical practice (see previous section), the researchers reported participants needed mentorship but found it fragmented at the post-doctoral level. Some of the participants reported that mentorship greatly helped in their identity transition to DPCN. Other participants highlighted little or no support, describing their transition as painful. Institutional and nursing leaders were also identified as essential but missing for DPCNs (Andreassen & Christensen, 2018; Borbasi & Emden, 2001; Heinrich, 2005; van Oostveen et al., 2017; Wilkes & Mohan, 2008).

In a systematic review of leadership and mentoring for post-doctoral nurses, Hafsteinsdottir et al. (2017), identified 15 research papers covering 3855 post-doctoral nurses across the United States, Australia, Jordan, and the United Kingdom. Two of the articles evaluated formal mentorship programmes, while the rest reported mentoring in general. As found by other researchers (Heinrich, 2005; van Oostveen et al., 2017), Hafsteinsdottir et al. (2017), found a notable lack of leadership for DPCNs and indicated that this was an area of underdeveloped knowledge. In the review, 12 out of 15 articles reported a positive association between mentoring and a range of outcomes, including: nursing research outputs, grant writing, publications, health and wellbeing, collaboration, leadership skills, and career advancement. Limitations to the

Hafsteinsdottir et al. (2017), study were the reported diversity in the quality of research design and the poor transparency of study cohorts.

The literature highlighted how leadership support, despite being a necessary factor in a DPCNs' contribution, was often limited. Avery et al. (2022), evaluated the development of a research careers for nurses, midwives, and allied health professionals in the United Kingdom. The researchers emailed a survey to 1072 people who were either previously successful or unsuccessful applicants for the 2017 post-doctoral fellowship position from the National Institute of Health Research. Over a quarter responded to the survey. Results revealed support, advice, and guidance from others was key for developing a research career. However, Avery et al. (2022), found that this support generally took the shape of informal advice, rather than formal mentorship. Avery et al. (2022), reported 96% of participants received advice and support in some form, with 50% reporting advice came from a mentor or other fellowship award holder. However, half of the total study participants reported that although their positive interest in research was initially piqued by talking with a person involved in research, their institutions offered them little support when they entered research roles themselves. These results illustrated the importance of role-modelling and mentorship in both the impetus to move towards, and sustain, a research career. Avery et al.'s (2022), study identified fellowship programmes have an important influence on career development, those receiving a fellowship were more likely to have ongoing involvement in research than those that were unsuccessful in their application. The findings indicated fellowships may be important in supporting nurses in the post-doctoral phase of their research careers and aligned with Abraham et al.'s (2021), positive evaluation of the VAQS fellowship programme.

The final section of the literature review explores the DPCNs impact through the production of nursing science.

3.2.6 Research production and utilisation

Research production and utilisation were widely reported in the literature as key expectations for DPCNs (Abraham et al., 2021; Andreassen & Christensen, 2018; Dobrowolska et al., 2021; Elgaard-Sorensen et al., 2019; McNett, 2006; Orton et al.,

2022). While DPCN produce research that could impact healthcare, use of that research was less clear and often depended on support from leaders and managers.

Happell et al. (2008), investigated the research output of 16 doctorally-qualified mental health nurses in Victoria, Australia. The participants held a mix of academic and clinical roles and received a questionnaire which asked about their research activities and publications. The study found the DPCNs were highly research active with almost 300 published journal articles among the cohort. Importantly, all but one participant produced research that was directly relevant to nursing and nursing care. However, the study did not evaluate effect of the output on clinical outcomes or practice.

A systematic review and descriptive synthesis by Smith (2013), examined how professional doctorate nursing graduates in the United Kingdom contributed to nursing science by reviewing five research papers and three thesis published between January 2005 and May 2012. Smith (2013), highlighted participant's doctoral research created knowledge for nursing practice in specialised areas such as palliative care, spirituality, and community mental health. Consequently, practice development recommendations were suggested around areas such as care delivery, care management, and nursing training. Smith's (2013), findings indicated the doctoral experience created new knowledge on which the DPCN could act. However, the researcher also noted the difficulty of implementing these research recommendations as doing so was considered by some institutional leaders to be outside the role of a clinical nurse. In other words, knowledge was created within a recognised context (the doctorate) but had no recognised context through which it could be implemented and was often contingent on support from management. Smith (2013), also noted the review identified legitimisation as a result of the doctoral qualification which, in turn, impacted the profession of nursing, but did not specify exactly how the profession was impacted. The finding of legitimisation appeared to be related to increased credibility, autonomy, and confidence for the DPNs.

Leadership support was widely reported in the literature to directly impact DPCN's contribution to practice environments. Disinterest from healthcare leaders led to low levels of DPCN research implementation, making a DPCN less impactful. Wilkes et al. (2015), investigated how doctoral theses contributed to nursing practice by surveying

27 doctoral graduates in both academic and clinical environments. Participants were from Australia and the United Kingdom and their doctoral topics covered a plethora of clinical and nursing problems. Over 50% of participants reported their research impacted nursing practice while 37% indicated their thesis had no impact, citing: low dissemination rates, lack of institutional leadership support, and insufficient time between completion of the research to participating in the survey. As identified in previous studies, healthcare leaders were again confirmed to be a key component of doctoral impact (Andreassen & Christensen, 2018; Avery et al., 2022; Borbasi & Emden, 2001; Heinrich, 2005; Smith, 2013; van Oostveen et al., 2017; Wilkes & Mohan, 2008).

Both Smith (2013), and Wilkes et al. (2015), highlighted the contribution of doctoral student research production to nursing, but post-doctoral research production such as that identified by Happell et al. (2008), may have a more prolonged impact on nursing practice. Therefore, keeping DPCNs engaged in research in the post-doctoral era is vital. Understanding the experience of DPCN in Aotearoa through the current research will provide information that can be used to support DPCN post-doctoral research production and implementation.

3.3 Limitations of the Literature

This literature review should be considered in the context of several limitations. Many of the study cohorts lacked clarity about the DPCN participants. For example, in the Moghadam et al. (2017), study it was unclear if the cohort were direct entry to practice doctorally qualified nurses who were employed as clinical educators because of their doctoral degree, or if they were experienced clinical nurses who had become doctorally qualified and then employed as clinical educators. A further limitation was unexplained missing data. For example, there was an unexplained loss of two participants during the Heinrich (2005) study. And in Avery et al.'s (2022), research, at least one piece of data was missing from 30% of respondents. Finally, a delay in publication led to aging data in several studies, and the timeframe of the literature review (2000 – 2024) meant some studies were several decades old (Borbasi & Emden, 2001; Heinrich, 2005; McNett, 2006).

3.4 Chapter Summary

The literature review provided evidence that DPCNs hold a tenuous and ill-defined place in clinical environments. The literature review provided examples of the value contribution of DPCNs, but also outlined the diverse ways this value was perceived. It also uncovered recommendations for further research to understand the contribution of DPCNs to both healthcare and nursing practice. Mentorship and role models were rare, particularly in the post-doctoral period, which led to the lack of a common post-doctoral pathway. These factors contributed to the struggle of DPCNs trying to fit back into clinical practice and find roles that matched their qualifications. Leadership support was critical for DPCNs to perform research and for implementing any findings into practice. Research was complicated by difficulty identifying DPCNs, by ill-defined and often small cohorts, and by diversity of types of DPCN included or excluded. Lastly, while the literature covered much of the world (the United States, United Kingdom, France, Australia, the Nordics, Iran, South Korea, China), no research touched on the experience for DPCNs in Aotearoa and their potential contribution to nursing practice and healthcare.

The literature review found several gaps in knowledge, which included a lack of data for Aotearoa DPCNs and a clearer understanding of the value contribution of DPCNs. The aim of the current research is to fill these gaps by investigating the perceptions, experiences, and contributions of DPCNs in Aotearoa by asking the question: How do doctorally prepared clinical nurses add value to nursing practice and healthcare in Aotearoa? The next chapter explains the approach to inquiry used to answer the research question. The remainder of the thesis will present a review of the data analysis and discussion of the outcomes.

Chapter 4 Methodology and Research Design

4.1 Introduction

The inquiry approach incorporates an Interpretive Descriptive (ID) methodology, with semi-structured in-depth interviews and Reflexive Thematic Analysis (RTA) as the analytical approach. Congruency between methodology and methods provided a solid foundation for conducting this research with epistemological integrity. This chapter details the approach to research, the ethical actions, data collection, analysis, and writing the thesis. I deliberately chose to write this chapter in the first person to manifestly situate myself, the researcher, in the analysis so that participants' data could be interpreted against the background of my experience. The decision to write in the first person was prompted by the philosophies that underpin both the methodology and data analysis. These philosophies are discussed throughout the remainder of the chapter.

4.2 Methodology

Interpretive Description (ID) provides the best approach to inform this study's research question: How do doctorally prepared clinical nurses add value to nursing practice and healthcare in Aotearoa? Alignment of the methodology with the research question was critical to ensure the investigation answered the research question. Thorne (2016), recommended the following questions when deciding on a methodology: where is the question positioned within the disciplinary context? What is the question asking? Why it is important? I chose an ID methodology because the ontology, epistemology, and assumptions aligned with the research question and my disciplinary and personal background. A congruent approach produced a comprehensive and trustworthy understanding of the phenomenon with a focus towards practice change (Braun & Clarke, 2022; Terry & Hayfield, 2021; Thorne, 2016).

4.3 Interpretive Description

Interpretive Description is a flexible methodology developed from an interpretive paradigm to examine people and their lives (Thorne, 2016; Weaver, 2006). Interpretive Description is intended to inform healthcare practice by identifying patterns of

experience, perceptions, and behaviours that could be applied to similar situations (Clark, 2011; Thorne, 2016; Thorne et al., 2004; Thorne, 1997). The methodology focuses on action rather than theory production (Ocean et al., 2022). Thorne, Kirkham, and MacDonald-Emes first proposed ID as a nursing methodology in the 1990s (Hunt, 2009; Ocean et al., 2022; Thorne, 2016; Thorne, 1997). Since then, the methodology has been expanded and refined to produce a philosophical yet practical research approach to answering practice questions (Thompson Burdine et al., 2021).

Interpretive Description has a relativist ontology and a constructivist epistemology. In the next section, the ID philosophies, assumptions, disciplinary relevance, knowledge building, and the definition of a flexible approach to research are all outlined.

4.3.1 Ontology

Interpretive Description is informed by Lincoln and Guba's naturalistic and relativist inquiry (Thorne, 2016). From the relativist viewpoint, the world contains multiple realities and truths concerning the same phenomenon (Braun & Clarke, 2022; Ocean et al., 2022; Thorne et al., 2004). Crotty (1998), described the ontology of relativism succinctly by stating, "we need to recognise that different people may well inhabit quite different worlds. Their different worlds constitute for them diverse ways of knowing, distinguishable sets of meanings, separate realities" (p. 64). Diversity of experience means that knowledge is not something waiting to be discovered, but rather is constructed by human points of view through their individual cultural perceptions. Multiple realities, all of which are true but contextual, exist. The ID methodology is inclusive of these divergent experiences and perceptions that may be shared, individual, or even antithetical (Clark, 2011; Thorne, 2016; Thorne et al., 2004).

Additionally, in a relativist and constructivist methodology, objectivism and subjectivism as individual and dichotic ideas are rejected. One cannot have an object without the experience of the object, and one cannot have the experience of the object without the object (Crotty, 1998). Therefore, both the phenomenon and the experience of the phenomenon are important (Crotty, 1998). An ID methodological approach acknowledges the subjective experience by investigating participants' experience of a phenomenon, and the objectiveness of the phenomenon through intentional investigation. This approach is reflected in the current study through the

collection of participants' experiences as DPCNs through semi-structured, one-to-one interviews. The next section describes the epistemological assumptions and how they aligned with the research objective.

4.3.2 Epistemology

The epistemological philosophy of ID is constructivist. A constructionist lens understands the world in relation to the social constructs of people within that world (Bradshaw, 2017; Braun & Clarke, 2022; Crotty, 1998). A researcher, approaching a question using the tenets of ID, focuses the lens on people, their behaviours, and their daily interactions with the world (Oliver, 2012). Interpretive Descriptive researchers apply an inductive and subjective approach to knowledge (Bradshaw, 2017).

Interpretive Description allows data to be gathered using flexible methods. From the researcher's interaction with both participant and data, contextual understanding is construed (Thorne et al., 1997; Thorne et al., 2004). An ID approach acknowledges common experiences from multiple realities, creating patterns to inform similar situations, while including divergent experiences (Thorne et al., 1997; Thorne et al., 2004; Thorne, 2016). It is the recognition of shared experiences that underpin the methodology's purpose (Thompson Burdine, et al., 2021; Thorne, 2016). Practically, patterns and shared experiences aid in planning a healthcare intervention, for example, while divergent experiences caution against assuming the intervention is right for everyone. Alternatively, understanding a phenomenon can highlight strategies to improve the experience of others going through a similar phenomenon.

Another epistemological axiom of ID is the co-creation of research knowledge (Thorne et al., 2004; Thorne, 2016). Both researcher and participant bring past experiences, knowledge, and beliefs to the research process, contributing to a new understanding of a phenomenon. In an ID approach, the researcher is not held apart from the research. Instead, the researcher's accumulated experience, positioned within the literature, creates a dynamic analytical framework on which the research is based (Clark et al., 2011; Hunt, 2009; Thorne et al., 1997, Thorne, 2016). When a researcher is integral to the research process, they can maintain multiple identities that all inform the research. For instance, I identify as a registered nurse, a female, a doctoral student, and a researcher. Each is relevant, identified, and incorporated into the data (Ocean et al., 2022).

For an ethical and rigorous study, the researcher's position must be clear. The next section addresses the implication of disciplinary relevance and orientation to answering the research question.

4.3.3 Disciplinary relevance

Disciplinary relevance can be separated into: relevance of the discipline (disciplinary orientation) and relevance to the discipline (Thorne, 2016). This section describes both aspects.

Relevance of the discipline is demonstrated by the evolution of the ID methodology, designed specifically for nursing practice questions (Oliver, 2012; Thorne et al., 2004; Thorne, 1997). Disciplinary relevance aligns well with the question examined in this research because it uses the same epistemological approach to knowledge creation inherent to nursing (Oliver, 2012; Thorne, et al., 1997). In an ID methodology, the researcher takes new knowledge and focuses on creating practice change from the findings (Thompson Burdine et al., 2021; Thorne et al., 1997; Thorne et al., 2004). Because I was a clinical nurse undertaking doctoral study, an ID approach incorporates my expert disciplinary knowledge and orientation (Oliver, 2012; Thorne, 2016), permitting me to recognise my membership of the researched population, with the caveat of transparency (Ocean et al., 2022). Therefore, ID is an appropriate methodology for a researcher to analyse their own discipline since it accepts the value of their personal experience inside a constructed nature of reality (Ocean et al., 2022).

The pragmatism of ID correlates well with the discipline of nursing because it emphasises disciplinary logic rather than strict adherence to methodological rules, while still creating a worthwhile interpretive analysis that can be applied to practice (Thorne, 2016). As Thorne (2016), stated, "...my discipline has relatively little use for mere description without purposeful direction" (p. 39). As described in the next section, creating new knowledge for, and through, the discipline of nursing starts with an appreciation of foundational knowledge, either pre-existing or purposefully acquired.

4.3.4 Building a Foundation of Knowledge

Understanding the pre-existing knowledge is a prerequisite for an ID methodology (Oliver, 2012; Thorne et al., 2004). Approaching the research question with some understanding is important to ensure the validity of the research question, and to create a framework for the research. For research findings to encourage change, which is the motivation for using ID (Thorne et al., 2004), foundational knowledge, often through a literature review, is required to move from one plane of understanding to the next (Ocean et al., 2022). However, because initial knowledge is limited, the framework must be dynamic and responsive to new information (Clark et al., 2011; Hunt, 2009; Thorne et al., 1997). As previously stated, in ID there is no expectation to separate the researcher from the research (Oliver, 2012; Thorne et al., 2004, Thorne, 2016) instead, the researcher's insights are considered a valuable source of knowledge (Thompson Burdine et al., 2021). Research questions are adjusted as new knowledge is gained (Ocean et al., 2022; Thorne et al., 2004) and themes develop. The way data are acquired and analysed is flexible under an ID methodology. The following section explains the advantages and precautions for this approach.

4.3.5 A Flexible Methodology

Flexibility is the potential to choose from a variety of appropriate methods of data collection and analysis. An ID methodology "shamelessly encourages borrowing from the full universe of available design techniques as appropriate to the nature of the research question at hand" (Thorne, 2016, p. 39). Using this approach, I chose the most appropriate method of data collection and analysis that was responsive to participants, equalised any power imbalances, and improved representation (Ocean et al., 2022). Specifically, the flexible design was adaptable to the geographical diversity of participants and the hectic healthcare environment of a global pandemic.

An ID methodology provided a clear and trustworthy framework that, despite the absence of prescriptive guidance, avoided method slurring (Oliver, 2012).

Trustworthiness is created through a number of tenets (table 3), that epitomise the essence of an ID methodological approach. These tenets include a respectful and ethical data collection tool that focuses on discovering experiential understanding, and a concurrent, inductive, and iterative data analysis (Hunt, 2009; Thorne, 2016). The

following section discusses how Thorne's (2016) recommendations were applied to create a credible study using ID.

Table 3

Assumptions of Interpretive Description Methodology

i.	Research is respectful, ethical and occurs in a natural context;
ii.	Knowledge is constructed through a participant's interaction with the environment;
iii.	Knowledge is contextual to person and situation;
iv.	Knowledge is co- constructed between the researchers and the participant;
v.	The researcher's experience, disciplinary knowledge, and understanding of the literature is part of the research;
vi.	Research design is flexible, allowing for multiple pragmatic approaches to data collection and analysis;
vii.	Information is gathered from participants who have experience of the phenomenon under investigation;
viii.	A subjective and inductive approach.

Note. Table created by researcher, based on Thorne (2016).

4.4 Creating a Credible Study

Several techniques are recommended to create trustworthy qualitative research. These include: credibility, transferability, dependability, and confirmability (Liamputtong, 2020). However, ID specifies alternative ways to ensure a quality outcome, such as: epistemological integrity, representative credibility, analytical logic, interpretive authority, moral defensibility, disciplinary relevance, pragmatic obligation, contextual awareness, and probable truth (Thorne, 2016). Thorne (2016), notes that researchers must keep in mind that research always has the potential to impact practice which confers a responsibility to carefully consider every research plan. Each of the quality considerations named by Thorne (2016), is discussed in the following section with examples of how they were applied in this research.

4.4.1 Epistemological integrity

Epistemological integrity requires the ontological and epistemological congruency from research question to the presentation of the analysis (Thorne, 2016). For this

study, the research question, methodology, research methods and the researcher's personal philosophy are aligned to answer the question in a theoretically consistent manner. Both the methodological approach and the research methods have compatible relativist and constructivist perspectives. Guidance for the methodology and data analysis both discouraged the use of line-by-line coding and recommends instead becoming intensely familiar with the dataset. Both consider that the goal of analysis is to construct a story from the data, rather than construct siloed themes. Both hold no expectation for the researcher to be separate from the research. Thus, the research design from question to presentation maintains epistemological integrity.

4.4.2 Representative credibility

Representative credibility is the ability of research claims to be consistent with the sampling method (Thorne, 2016). In this study, sampling of 18 DPCNs aligns with the claim of finding patterns in the data of DPCNs experiences. The richness of data gathered about the phenomenon enable the identification of patterns and alternative experiences. The sample size equates to approximately 20% of the total identifiable population of practicing nurses in Aotearoa who acknowledge a doctoral degree on their registration (R. Savidou-Strudwick, personal communication, 17 August, 2020). The sample represented a range of speciality areas, nursing roles, geographical locations, and, to a smaller extent, ethnicity and gender. Thorne (2016), recommends applying some form of triangulation to the data to enhance representative credibility. For this research, triangulation occurred between the dataset, the individual participant data, my academic supervisors and myself. Both my supervisors and myself independently read the interview transcripts and met to discuss the contents. A good representation of DPCNs in Aotearoa and the researcher's immersion in the data, coupled with triangulation, allows for this study to reasonably claim representative credibility.

4.4.3 Analytical logic

Analytical logic is the visibility of research decisions within a report (Thorne, 2016). Visibility allows readers to determine how well a study has been conducted and whether the researcher's decisions were appropriate. My research demonstrated analytical logic through two mechanisms. The first was a research journal which

outlined my decisions. An example of a research journal below shows my thinking about participant selection criteria. While a qualitative research study is a dynamic process, the journal is evidence for why decisions and adaptations were made.

What is the benefit of excluding countries? Originally, I was trying to avoid including nurses with doctorates from countries where the qualification is not equal to the New Zealand one. So, the nurses don't graduate with the same kind of critical evaluation, insightfulness and ability to autonomously investigate and evaluate. I thought it would be simplest to exclude the world except for New Zealand and Australia, but, actually, this is doing the research a dis-service by limiting the voice of many well qualified nurses with world-class doctorates. So, after consideration and discussion with Catherine and Elissa, I will include countries where the doctoral education is known to be first class, such as the UK, America (excluding the clinical doctorate of the NP), Scotland, Ireland. (24 March 2022)

The second mechanism used to support the analytical logic is the extensive use of verbatim quotes from participants. Thorne (2016), recommends using thick description to support analytical claims. In this research report, each claim is considered in relation to the evidence provided by participants. Patterns are supported with multiple quotes exploring different angles of the phenomenon.

4.4.4 Interpretive authority

Interpretive authority moved the research from a paradigm of perception, to one of interpretation. Thorne et al. (2004), stated that research is ultimately the creation of the researchers who decide what is important, how data will be structured and how to present the analysis. Interpretive authority is a way of demonstrating that data are not forced into pre-selected patterns without due consideration of experiences. Also, it is important for interpretive authority to acknowledge that the researcher is the interpreter of the data. In this study, I used verbatim quotes to highlight patterns in the dataset. I also use verbatim quotes to identify where patterns did not fit or where a participant has an alternative experience. I acknowledge in this chapter how the methodology and the data analysis aligns with the researcher as the constructor of the data analysis. Finally, I kept a research journal to document my thinking and decisions. An example of this journal is in Appendix G.

4.4.5 Moral defensibility

Moral defensibility argues for the worthiness of the research question (Thorne, 2016). In other words, one should not ask a question for the sake of asking, but rather for the benefit that answering a question may have for humanity. The moral defence of this study is addressed in the literature review chapter. Briefly, the literature review demonstrates the significance of a doctoral education for nurses regarding identity change, confidence, leadership, changes in perceptions by others and ambiguity of roles. However, the literature did not comprehensively discuss the value that DPCNs provide to nursing practice and healthcare. The current research is important because it examines how DPCNs impact their practice environments, how they are enabled and how they are constrained. Understanding how DPCNs improve human health and wellbeing is a worthwhile endeavour. Finally, a rigorous university approval process, along with a formal ethical review, was conducted to ensure the question, research plan, and participant safety were evaluated appropriately.

4.4.6 Disciplinary relevance

Disciplinary relevance refers to the degree of relevance to the wider discipline of researching a phenomenon (Thorne, 2016). For this research, the phenomenon is directly relevant to the profession of nursing and to clinical nursing practice. Chapter One outlined why the research question and subsequent answers will provide unique knowledge for nurses, their colleagues, nursing leaders, and healthcare managers.

4.4.7 Pragmatic obligation

Pragmatic obligation is the awareness that one's findings may be applied to practice without generalisations or corroborating evidence (Thorne, 2016). Therefore, it is my responsibility to act as if this research would be implemented in practice and, as such, hold to the highest standard of quality. The robustness of the research plan provides for accountable outcomes.

4.4.8 Contextual awareness

Contextual awareness relates to researchers understanding that all knowledge is contextual to time and place (Thorne, 2016), and is important for quantifying the analysis. To reflect its contextual nature, the analysis includes a section on conducting

this research during a global pandemic and during an era when DPCNs are rare in clinical practice environments. Acknowledging the contextual limitations of the analysis (Chapter 11) creates research that is honest, ethical and transparent.

4.4.9 Probable truth

The final aspect of a quality ID study relates to probable truth (that there is no absolute truth). Instead, there is a moment of truth when the participants' experience, combined with the researcher's interpretation, creates an idea of truth that may or may not be useful. This moment of truth could be quite different in another period, or with another researcher or another cohort. The limitations section in Chapter 11 draws attention to the probable truth of this research.

4.5 Summary of Methodological Approach

Interpretive Description is the appropriate methodology because it adds the experiences of DPCNs in Aotearoa to the international literature. The methodology focuses on a clinical nursing question to examine: how clinical practice may be improved; how the experience of DPCNs impacts their environments; and articulates the value that DPCNs bring to the healthcare system. I conducted the research under guidance from an AUT ethics advisor, the AUT Ethics Committee (AUTEC), the confirmation of candidature feedback, supervisors, and by reading the many descriptions of ID from Sally Thorne and others. This research was conducted in a manner that supported the integrity of design, conduction, and outcome. The AUTEC approval letter is in Appendix A.

The next chapter details the methods chosen to answer the research question, including sampling, ethical considerations, data collection, and data analysis. Each topic is discussed to identify how they fit with the question and to understand how the methodology creates congruency and ensures a rigorous study.

4.6 Research Design

The research design included data collected through semi-structured individual interviews and analysis informed by Reflexive Thematic Analysis (RTA). Research underpinned by an ID approach has no explicit requirement for choosing a method of data collection or analysis (Thompson Burdine et al., 2021; Thorne, 2016). Instead, ID

research only requires that any data collection and analysis align with the research question and the researcher's ontology (Thorne, 2016). There were three significant challenges that made a flexible approach to research design essential. The first was accessing a small and largely invisible target population. The second was a global pandemic with unpredictable periods of social isolation. The third challenge was a participant population working in pressured clinical environments due to the global pandemic. The following sections discuss the navigation of these challenges with a careful approach to inquiry. I outline the methods chosen to find and select participants, gather and analyse data, and offer an ethically sound answer to the research question.

4.6.1 Choosing the sample size

The concept of information power informed the sample size for this research. Determining sample size is controversial in the qualitative research literature (Braun & Clarke, 2022; Thorne, 2016). However, the concept of Information Power was most appropriate for this research design since it maintains that the information-richness of a group allows for a smaller sample size (Malterud et al., 2016). Participants in this study were highly educated, articulate and thoughtful, therefore a greater amount of rich data could be collected from fewer participants. Because it is unclear how many DPCNs work in Aotearoa, it was a pragmatic exercise to determine when the sample had provided patterns rich enough to be discerned (Braun & Clarke, 2022; Terry & Hayfield, 2021). However, the doctoral research submission process required at least an estimation of sample size likely to provide enough raw data to answer the research question. Therefore, using other qualitative research samples as a very general guide I planned to recruit, a completely arbitrary, 15-20 participants

4.6.2 Sampling

Finding a cohort from an almost invisible population was a challenge, so I choose to take a pragmatic 'all comers' approach. This strategy aligns with an ID methodology which allows flexibility in sampling strategies with the caveat that the cohort assists the researcher to understand the subjective reality of a phenomenon (Thompson Burdine et al., 2021). While Thorne (2016), argues that some sampling strategies may not be ideal due to homogeneity bias, because of the low total population of this

group of nurses, all those who volunteered would be considered. The eventual cohort had a diversity of clinical roles, distance from graduation, and geographical location, which mitigates some of the concerns about homogeneity.

4.6.3 Inclusion criteria

The target population were DPCNs with at least 12 months experience in clinical practice after completing a doctorate. Additionally, participants needed to be in their clinical role within the preceding five years to study entry. In this research the term 'clinical' refers to an environment where the principal focus was delivering healthcare services to patients, rather than education to students. A clinical nursing role was defined as the work of registered nurses or nurse practitioners in roles that support, provide, or organise patient care delivery within the clinical environment. Examples of such roles include: nurse leader; advanced practice nurse; clinical ward nurse; research nurse; and clinical nurse educator. Therefore, a doctorally prepared clinical nurse was defined as a doctorally qualified nurse, working in a clinical nursing role in a clinical environment, directly or indirectly providing healthcare services to the public rather than in an academic environment such as a university. Based on the definition of a DPCN, I devised an inclusion criterion to identify participants with a necessary richness of experience to answer the research question and to ensure participants had relevant experience of the phenomenon and insight into doctoral education quality (criteria reviewed in Appendix E).

4.6.4 Recruitment strategies

To find the participants, I advertised online using my personal Facebook and Instagram pages. I also placed advertisements (with permission) on professional nursing social network pages such as the New Zealand Nurses Organisation (NZNO), Nurse Practitioner, and Clinical Nurse Specialist Society of New Zealand Facebook pages. I also placed a print advertisement in the national nursing magazine, Kai Tiaki, and word of mouth spread the invitation across the profession of nursing. I sent an email invitation to any doctorally-prepared nurse with a public email address and an email was sent by the programme director to previous graduates of the AUT Doctor of Health Science programme. Each prospect had all their questions answered and verbal and written consent was obtained. There were several important ethical

considerations which impacted the informed consent process. These are discussed in the following section.

4.7 Ethical Considerations

A good quality ethical research project includes a robust ethical review process to ensure the safety and well-being of both participants and researcher. I began the ethical review by meeting with the AUT Ethics Committee (AUTEK) Ethics Advisor prior to submitting my research plan. Several ethical issues were identified.

4.7.1 Confidentiality and anonymity

Confidentiality and anonymity were a significant ethical consideration. The discipline of nursing in Aotearoa is a small population and DPCNs are an even smaller sub-set. Because of the DPCNs' uniqueness, they could easily be identified from in-vivo quotes and demographic data. Several strategies helped maintain their confidentiality: numerical identifiers, anonymised quotes, and minimised demographic data collection. The consent form also allowed participants to review their interview transcript which presented an opportunity to request the removal of any data. The informed consent process also included a frank discussion about the inability to guarantee full anonymity in any dataset, although everything possible would be done to protect their identities.

4.7.2 Participant information and informed consent

A participant information document and informed consent form was written and approved by AUTEK. Prior to study enrolment, each participant received a copy of that document and any questions were answered by email or phone. Once participants agreed to participate, each provided written informed consent. A copy of the both forms can be seen in Appendix B.

4.7.3 Institutional ethical approval

The research proposal was presented to the AUT Clinical Sciences faculty which allowed for discussion of the research plan and an opportunity to raise ethical issues. Once the proposal was approved, I submitted the plan for AUTEK review. Once ethical approval was granted in September 2021, recruitment and data collection activities began. This chapter presents the research methods used for data collection and data analysis to ensure alignment with both the method and the research question.

4.8 Data Collection

Research data were collected using individual semi-structured, in-depth interviews which were analysed by the principals of Reflexive Thematic Analysis (RTA) The following section discusses the methods of data collection and analysis.

4.8.1 Semi-structured interviews

In-depth interviews are an effective way of bringing the experience of a participant into the consciousness of the researcher (Thorne, 2016). The semi-structured nature of interviews also allowed a responsive approach to data collection (Carter et al., 2014), which aligns with the ID axiom of co-constructed knowledge. The process of asking DPCNs about their clinical practice experiences after doctoral graduation allowed me to ascertain the value of DPCNs to nursing practice and healthcare. The use of narratives is also familiar to nurses, making interviews the best approach (Wood, 2014).

4.8.2 Interview process and the impact of COVID-19

Interviews were conducted one-to-one beginning in November 2021, with the final interview conducted in November 2022. Interviews were intended to be in-person, however, due to the COVID-19 pandemic and prolonged episodes of social isolation, most interviews were facilitated by video conferencing software. Only two interviews occurred in-person.

I only had a little interviewing experience from writing a previous research methods paper, so I took an interview course provided by AUT. The first interview was reviewed by my primary supervisor, who had extensive qualitative interview experience and an interview guide was employed to help structure the interviews (Appendix C). The interview questions were developed from a brain-storming session and were intended to be flexible and responsive to the interview process. My doctoral supervisors reviewed each interview transcript and set up monthly supervision sessions for a robust discussion of the raw data.

4.8.3 Data management

Interviews were audio recorded, transcribed, and the files labelled with the participant's research number. Recognising the interview would be recorded was part

of the informed consent process. Audio recordings allowed me to review the raw data iteratively, improving familiarity with the content, and later, to check understandings.

4.8.4 Data transcription

Data transcription was guided by the technique of intelligent verbatim to remove redundant words and sounds such as 'um' and 'hmm' which make little difference to data quality (Stuckey, 2014). One early interview was transcribed using a professional transcription service with an appropriate confidentiality agreement in place (Appendix I). However, I found the process of transcription improved familiarisation with the dataset and chose to transcribe by hand using MS Word the remaining 17 interviews. Self-transcription aligned with a RTA approach to analysis as it promoted iterative engagement and familiarisation with the data (Terry & Hayfield, 2021). All data was stored on a password-protected, cloud storage provided by AUT. Printed copies of interviews were locked in a safe that only I could open. Digital copies were emailed to my supervisors for review, using a formal university email address.

In addition to data collection, the methodological and analytical approach also required reflexivity of my own experience of the research process. The following section outlines this reflexivity, and why it was important for the research.

4.8.5 Reflexivity

Reflexivity is a vital component for both methodological and analytical approaches. A reflexive approach means I was cognisant of my response to, and influence on, the data (Braun & Clarke, 2022; Palaganas et al., 2017; Terry & Hayfield, 2021). For example, my background of nursing created instant rapport with participants which influenced the richness of the data. I could picture myself in the participant's place in clinical practice, see the room and hear the patients' voices; and through this develop an understanding of participant's experience. I was also able to consider information and ask questions which may not have occurred to a non-nurse researcher. For example, when participants said their clinical practice had not changed, but then described significant changes, I could engage with them to unpack this apparent juxtaposition. A non-nurse researcher may have accepted the negative answer at face value.

Reflexivity is also the act of focusing on the data to remain self-aware (Palaganas et al., 2017). At the start of the research, I wrote a reflexive piece on my positionality which helped me to understand the lens through which I looked at the research question and at the data and to provide further lines of questioning. After each interview, I immediately reflected on the experience in my personal reflexive journal. An example of that process is in Appendix G. The journal was used extensively (almost 25,000 words) during the research process to record my thinking and to challenge myself.

A reflexive approach was an essential component of the Reflexive Thematic Analysis chosen for this study, as will be discussed in the remainder of this chapter.

4.9 Data Analysis

4.9.1 Reflexive thematic analysis

Reflexive Thematic Analysis (RTA) is a way of approaching Thematic Analysis that is theoretically flexible (Braun & Clarke, 2021b, 2022; Terry & Hayfield, 2021). The RTA's flexibility provided a congruent analytical partner to ID's constructionist and relativist methodology. Both ID and RTA allow examination of participant's experiences and perceptions from a paradigm of meaning as socially constructed. Both methodology and analytical approaches accept that multiple realities exist and that conclusions can be constructed from patterns in the dataset (Braun & Clarke, 2021a, 2022; Crowther & Grecic, 2022), that may be transferable to other groups (Braun & Clarke, 2022). To clarify, these approaches were not the only way to apply RTA but they were the intended way for this research (Braun & Clarke, 2022). An RTA approach provides structure to the analysis which allows stories in the data to be constructed systematically producing coherent and useful information (Braun & Clarke, 2021; Terry & Hayfield, 2021).

Both ID and RTA acknowledge and include the researcher as part of the production of knowledge (Braun & Clarke, 2022; Crowther & Grecic, 2022; Terry & Hayfield, 2021). My background, nursing experiences, existence as a female in healthcare and as a doctoral student all created a framework through which the research was interpreted, so I used the tool of reflexivity and an inductive stance to remain as open to the story of the data as possible (Braun & Clarke, 2022b).

Reflexive Thematic Analysis has a six phase analysis process (Braun & Clarke, 2021, 2022; Terry & Hayfield, 2021): familiarisation, coding, initial theme generation, developing and reviewing themes, naming and defining themes, and writing the report. The analytical approach was a recursive and iterative engagement with the phases of analysis, rather than following a prescriptive set of instructions (Braun & Clarke, 2021b, 2022; Terry & Hayfield, 2021). The following section outlines how I engaged with the data.

4.9.2 The six phases of Reflexive Thematic Analysis

Phase One. Familiarisation

The familiarisation phase requires non-systematic engagement with the data. This is a relaxed engagement that initiates a growing awareness of what is happening in the data. As I finished each transcript, I sat in a relaxed space reading along with the audio. When I noted something of interest, I stopped and made a note. I also documented my initial insights in my reflexivity journal. Below is an example of a journal entry:

I'm going through the familiarisation step. What strikes me, and it has been said by several participants, is that someone else suggested they do the doctorate. It did not come from within. In fact, their initial reaction is: NO WAY. So, without these mentors, the doctoral nurse would likely not exist. (22 October, 2022)

In the next phase, I began the more formal and intensive phase of coding.

Phase Two. Coding

The following section outlines the path I followed through the coding phase. In this research, a code is defined as a piece of single-faceted data, while a theme is the combination of shared patterns of meaning under one unifying concept/idea (Braun & Clarke, 2021b, 2022). Three rounds of systematic and iterative coding were completed to prevent missing key aspects in the data (Braun & Clarke, 2022). The purpose of coding is to be conscious to patterns of meaning in the data (Braun & Clarke, 2022). While there are no specific coding rules for RTA, or for ID, line-by-line coding is discouraged as the minutia can obfuscate patterns in the data (Braun & Clarke, 2022; Thorne et al., 2004).

Before and during the coding phase, I reviewed articles, websites, and videos about RTA, including Braun and Clarke's (2021) text, to ensure I stayed true to the tenets and avoided mixing up assumptions, which is a common report in the literature (Braun & Clarke, 2021b). I also carefully read each transcript and asked, "what is happening here? What is the participant saying? How does that fit with what I know?" This approach was inspired by my general readings of RTA and ID. This engagement ensured I parsed the data in a systematic, yet open way. I began by coding the transcripts chronologically from first to last, then from the middle to the first, and from the last to the middle. Finally, I randomly coded interviews to ensure equal emphasis across the dataset (Braun & Clarke, 2022; Terry & Hayfield, 2021).

I trialed several methods of coding, before settling on two methods. The first was using a MS Word table to copy chunks of text in one cell and the corresponding code label in the adjacent cell. The second method was to print out the interviews and code them using a highlighter, with margin notations. Using these differing methods kept the coding phase fresh and allowed for time efficiency as I continued to work in my clinical role throughout the research. During the first round of coding, I kept the process broad to capture as much about the DPCNs' experiences as possible since I didn't know what would be relevant as the analysis progressed. As a novice qualitative researcher, I shared all coded transcripts and lists of codes with my supervisors. As could be expected, I developed a huge number of codes around a diversity of experiences and perceptions. In my reflexive journal, I noted the following:

"I've been coding 005, 006, 007, 008. I've had a growing awareness of these nurses as complex clinicians with juxtaposed, polarised aspects, all within one psyche. They are confident and unconfident, they stand out but fear standing out, they value their skills but don't use them, they are proud of their achievements but don't want to use the title. They say there is no difference to their practice then talk about creating significant practice change. They are valued in the healthcare setting but ignored by nursing management. They create research, but implementation doesn't occur. They sit within a social space in nursing that doesn't connect the clinical and academic worlds and when they try to bridge this gap they are stretched beyond elasticity. They hold a liminal identity where no-one is sure what to do with them, yet they contribute to clinical pathways, health policy, and research. They are the point at which nursing has the opportunity for further transformation, for claiming the nursing voice, for impacting patient

care on a larger scale, and for addressing equity in a dynamic way.
(02 October, 2022)

Braun & Clarke (2022) advised that researchers be aware of coding multifaceted data as a single code label. As the first round of coding progressed, I realised I was doing this and therefore missing aspects of the reported experience. For example, the following quote from Participant 009 was initially coded as 'being a DPCN is unrecognised in clinical practice.' However, I had missed other facets such as the divide between academic and clinical nursing. I had also missed their perceived lack of change to clinical skills due to the doctorate.

My goal was to use my research skills in my clinical practice, but that then gets you into the 'oh then you must be an academic right.' So, it's a weird place because clinical skills-wise it doesn't change anything.

Becoming aware of this analytical problem early in the coding process allowed me to better separate individual meanings from data in subsequent coding rounds. Code labels were a combination of what the participant said or did, followed by my interpretation of what was happening. Essentially, I looked at what the participant said and what might lie beneath their perception. For example, in one interview I used the in-vivo text, "we're not allowed to talk about the good things we do" and the gerund code label 'being silenced.' As the coding rounds continued, I kept the research question in sight to focus the analysis and remain open to what was happening in the data. The following quote from my journal detailed my thought process during coding.

As I code, I read in the RTA book that I should read some words, create a code for the words, then read other words and decide if the codes I already have are suitable or if I need to create a new code. In step two coding I find this is not working for me. I am spending all my time reading through lists of codes trying to think is this matching and I feel like I am trying to force the codes to match the text. So, I have decided to abandon this format for round two coding and instead I am just free coding and in the next step of refining coding I will begin to group together similar codes. (12 May, 2023)

Once the dataset was coded, the next phase of initial theme generation began. Up to this point, I had made a concerted effort to avoid jumping ahead to creating themes. However, during the next phase I could begin to determine the story in the data.

Phase Three. Initial theme generation

In phase three, each code was examined and its essence considered. As codes were clustered together, initial themes emerged such as, 'Deep Thinking,' 'Doing versus Thinking,' and 'Exposure to Experts.' During this phase, I frequently referred back to the research question to keep the analysis focused on finding evidence of a DPCN's value. However, with an RTA approach it was my interpretation, as the researcher, of this value that was constructing the themes. Combining my engagement with the dataset in what I call 'insightful interpretation,' as opposed to 'wishful interpretation,' is the essence of both ID's and RTA's co-creation philosophy. Kearney (2001), explained this idea succinctly: "In general, if the findings look too similar to the analytic framework with which one entered the study, they may reflect the mind's capacity to "fit" data rather than to ask good questions and generate useful conceptualizations. Such findings offer minimal, if any, new evidence about the phenomenon", (p. 5). To avoid 'fitting' the data, I was conscious of determining data that surprised me. An example was the number of participants who described their medical colleagues as their primary or significant supporter. I had expected medical colleagues to be disinterested at best.

Phase Four. Developing and reviewing themes

Phase four began a period of refining and naming the themes. Some codes were promoted to themes while others moved to sit within a larger theme, while still others were separated into different themes. For example, the initial theme of 'Exposure to Experts' was divided into 'Opportunities and Collaborations' and 'Mentorship and Role Models.' In phase four, codes were stored in a MS Word file with the matching in-vivo quote and participant number. This allowed me to move codes without severing their connection to the original data and to return to the raw data, if necessary.

Phase Five. Refining, defining, and naming themes

Phase five defined the themes. During this phase, I realised I had essentially constructed a story that outlined a set of mechanisms reflecting how DPCNs contributed value to nursing practice and healthcare in Aotearoa. These mechanisms were small parts of the whole story that provided evidence of the value being created by DPCNs in Aotearoa. Additionally, I had constructed a set of themes that told a story about the constraints and the frustrations that impacted the ability of DPCNs to

contribute to nursing practice and healthcare. Throughout the data analysis process, I met each month with my supervisors to discuss the analysis. The purpose of these meetings was not to gain a consensus around themes, but to provide robust discussion and alternative perspectives for consideration. I found the meetings provided an opportunity to verbalise my thinking and to hear my supervisors' thoughts and questions, all of which built my internal awareness.

Phase Six. Writing the report

The process of reviewing and defining continued throughout the remainder of the analysis, moving iteratively back and forth through the earlier phases. The final phase of writing the report provided significant clarity about the definition of themes. The experience of writing was incredibly powerful in completing the data analysis and presenting practical and useful answers to the research question. One of my supervisors spoke of “writing your way into the findings,” and I discovered as I wrote that my thinking indeed expanded and developed further. Braun and Clarke (2021) noted the importance of the writing up phase describing it as a critical time when the data is still actively being analysed and deep insights can be made. For example, towards the end of writing the discussion section I began to see the theme of ‘an enhanced healthcare lens’ was actually part of the theme of ‘an enhanced approach to practice’. The enhanced lens allowed participants to radically change their clinical approaches through a contextual understanding of the human experience of illness. I also realised that the ‘Valuable Conversations’ code listed under ‘an enhanced approach to practice’ needed to be a standalone theme. The conversations DPCNs were participating in, or instigating, weren’t just clinical interactions with patients. They were conversations across healthcare, between DPCNs and patient/whānau, between DPCN and other researchers, between DPCNs and leadership groups, between DPCN and healthcare colleagues, junior nurses, and with managers. Each conversation constituted potential value and contribution. Therefore, the multifaceted concept of Valuable Conversations was promoted to a theme.

The data analysis phase took considerable time as participant recruitment was slower than expected. Additionally, there were personal and work crisis that required my attention. Thorne (2016), recommends stepping away from the data periodically to prevent “over inscription of the self” into the data (p. 196). On reflection, these

pauses, while frustrating at the time, contributed to a better understanding of the experiences of DPCNs in Aotearoa and the value they contribute to nursing practice and healthcare.

4.10 Summary

This chapter presented and justified the research methodology, its design methods, and the analysis used. The importance of methodological congruency with methods, analysis, and personal researcher ontology was emphasised, and evidence of congruency substantiated. I also discussed the challenges of identifying participants, conducting research during a global pandemic, and in learning to analyse qualitative data. The next stage of analysis is presented in the following four chapters. In Chapter Five, I present analysis about the value DPCNs contribute. Value included being a knowledge expert; an enhanced approach to nursing practice; broadening the healthcare lens; creating and utilising data; valuable conversations; and collaborations and opportunities. Each of these central ideas are explained and their evidence presented. Chapter Six outlines the shifting identity and self-perception that impacted the value DPCNs could contribute. Chapter Seven discusses the impact of DPCNs' perceptions of the reactions of peers, colleagues and nursing leaders/healthcare managers. Chapter eight explores how isolation constrained the value that DPCNs contributed. These findings tell the story of the DPCN in clinical practice in Aotearoa.

Chapter 5 Analysis of the Research Data

5.1 Introduction

How do doctorally prepared clinical nurses (DPCN) provide value to nursing practice and healthcare in Aotearoa? The research question explored the value contribution of DPCN to nursing practice and healthcare in Aotearoa. The analysis for this research is presented over the next four chapters.

This chapter presents a brief overview of the demography of the cohort, followed by an examination of the value DPCNs forged through the following mechanisms: the DPCN as a knowledge expert with clinical expertise as well as the production and use of research; an enhanced approach to nursing practice; credibility and prestige of a doctorate; holding valuable conversations; and new opportunities and collaborations. The next three chapters examine the challenges for participants in contributing unreservedly to nursing practice and healthcare in Aotearoa. Chapter Six explores participants' tumultuous identity transition and the impact on their ability to traverse the change from pre-doctoral nurse to DPCN. Chapter Seven explores the impact of outside perceptions of DPCNs, including by nursing and non-nursing colleagues, nurse leaders, and healthcare managers. Finally, Chapter Eight examines the dearth of mentorship and role models and the impact of absence of a post-doctoral pathway. Each challenge is presented with supporting evidence.

5.2 Study Participants

The study cohort was composed of 18 registered nurses or nurse practitioners. Each participant took part in a semi-structured, individual, in-depth interview either face-to-face or by video (with a mean time of 64 minutes). Study participants shared their experiences of doctoral studies and the impact they perceived the doctorate brought to their personal and professional lives and to their clinical practice. Each participant worked at least part time in clinical practice in Aotearoa, or within the preceding five years, in a range of clinical roles, from general ward nursing through to independent nursing practice and nursing leadership. Study participants were in both the North and South Islands; however, most were in the North Island (>80%). More than 80% of participants graduated from the doctoral degree between 2011 and 2020. One

participant graduated in 2021 and the remainder graduated between 1991 and 2010. At the time of conferment, participants had a mean age of 48.

Participants were primarily female and identified as European or New Zealand European. Two participants were male and one participant identified as an ethnicity other than European. Further ethnicity details are not presented to protect anonymity. While a range of clinical areas were represented, this information is also not detailed to protect confidentiality. The time between conferment of the doctoral degree and entry into the study varied between several decades and 12 months. The average time of practicing nursing after becoming doctorally qualified was 6.5 years. Demographic details can be viewed in table 4.

Table 4*Participant Demographic Details*

Participant	Age at study entry	Gender	Location	Clinical hours	Ethnicity	Banded year of graduation from the doctorate
001	55	Female	North Island	0.8 FNE	European	2011 - 2020
002	57	Female	South Island	0.2 FNE	European	2011 - 2020
003		Female	North Island	0.2 FNE	European	2011 - 2020
004	44	Female	North Island	0.2 FNE	European	2011 - 2020
005	43	Female	North Island	0.2 FNE	European	2011 - 2020
006	58	Female	North Island	1.0 FNE	European	2001 – 2010
007	58	Female	South Island	1.0 FNE	European	>2010
008	57	Female	South Island	Variable	European	2011 - 2020
009	62	Female	North Island	Variable	European	1991 - 2000
010	48	Male	North Island	Variable	Other	2011 - 2020
011	55	Female	North Island	1.0 FNE	European	2011 - 2020
012	50	Female	North Island	1.0 FNE	European	2011 - 2020
013	42	Male	North Island	Unknown	European	2011 - 2020
014	60	Female	North Island	Unknown	European	2011 - 2020
015	52	Female	North Island	1.0 FNE	European	2011 - 2020
016	52	Female	North Island	0.8 FNE	European	2011 - 2020

Participant	Age at study entry	Gender	Location	Clinical hours	Ethnicity	Banded year of graduation from the doctorate
017	64	Female	North Island	1.0 FNE	European	2011 - 2020
018	67	Female	North Island	0.2 FNE	European	2011 - 2020

Note. Clinical hours refer to the number of 8-hours shifts per fortnight termed Fortnight Equivalents (FNE). For example, 0.2 FNE would represent two 8-hour shifts per fortnight, while 1.0 would equal 10 8-hour shifts per fortnight.

5.3 Value of the Doctorate in Clinical Practice

The dataset revealed significant and important contributions by participants to nursing practice, care delivery, and to the healthcare system. These contributions were varied and condensed through data analysis into the following mechanisms of contribution: as a knowledge expert/producer and user of research; an enhanced approach to nursing practice; credibility and prestige of the doctorate; holding valuable conversations; and new opportunities and collaborations. Each mechanism is detailed in this chapter.

5.4 The Doctorally Prepared Clinical Nurse as a Knowledge Expert

Doctoral learning led to participants becoming experts in their field with the ability to create specialised knowledge through research. In-depth knowledge through research and critique was identified by participants as key to becoming an expert. The following quote illustrated how doctoral learning promoted expertise for the participant through enhanced cognition and an ability to predict potential clinical outcomes:

I think that the fact that you have done an intense piece of work and study in an area you are intensely interested in has incredible benefit for clinical practice. Because if you're in clinical practice and you want to stay there, you've most probably done it in some area of practice you want to know more about...you know what could happen, you know what could be. Your brain is getting pretty sharp, especially in the discipline of what you've done it in. You are an expert in your field. (Participant 006, Registered Nurse)

The next participant pointed to immersion in the body of knowledge, at the doctorate level, as the driver of expert knowledge. The participant also acknowledged an added benefit of their doctorate over and above their master's derived knowledge in an enhanced integration of evidence into their clinical practice:

I did [discern a difference between post-master's and post-doctoral practice] and a lot of it is that you're immersed in research So, in going to various conferences and things, you build on the skills you brought with you. But definitely it did. I did a systematic review, and obviously you're scrutinising data and research papers and ... you do integrate the evidence more robustly. (Participant 007, Registered Nurse)

Being an expert inferred a reputation for a high level of knowledge and the ability to use that knowledge to advise others. This mechanism, of the DPCN as expert is highlighted in the following quote. The participant described how their research reputation allowed them to influence local and national work on healthcare issues in their area of practice, far beyond a single patient interaction, to the wider healthcare system. It appeared the 'big picture' difference was a significant way in which DPCNs contributed value to nursing practice and healthcare:

...when policy people from the Ministry phone you and say, "can I have a meeting about your research because this is really important, and we want to be able to reference it in our policy work?". Or they see the value of you being on a project group because you come with a lot of evidence that you've been able to generate in your research or a [healthcare institution] person rings you and says "look I've heard you've been doing research about [healthcare issue], we're working on this project, can you ...?" That's when you feel like you're making a difference. So, it's that big picture difference. It's not the instant individual patient contact stuff. (Participant 008, Nurse Practitioner)

Participants revealed knowledge creation and evidence implementation was an important way their doctoral qualification contributed value to clinical practice. Several participants described how their doctoral research findings were applied within their clinical area. In the next quote, the participant outlined how a new model of care delivery was created during their doctorate and incorporated into their speciality area. Introduction of a new model of care had a significant clinical impact which affected the entire clinical team and every patient cared for in this participant's clinical area:

A lot of stuff that I've argued for is that we have been defining [population] health issues with a non-[population] tool. Not only that, but we try to manage [population] issues with non-[population] tools. So, what I've done is bring [population-specific] tools, there's this [name of a concept], there's also a [cultural] frame we call [name]. So, some of the stuff I've ... brought through and included in clinical care. So, I think that's part of it in implementing what I've learned from the doctorate into the clinical space. (Participant 010, Registered Nurse)

Another participant, quoted below, described how understanding the impact of data contributed to translation of their research into the practice environment. The

participant considered their doctorally created programme enabled the recommendations to be moved from 'a good idea,' to being implemented with the backing of quality evidence which supported introduction of a new clinical intervention:

...what it did do more than anything was that it gave me a scaffolding, when we developed this programme, to actually provide the data that [was needed]. So, it wasn't just a good idea, it was very well designed and very well researched and that's what the doctorate gave us. (Participant 009, Nurse practitioner)

Reports across the dataset indicated a significant body of research was created by participants which impacted patient care within Aotearoa. A grounding in doctoral-level research, through the rigorous doctoral process, produced clinicians who could generate quality data across their careers. The following quote described how the participant's production of locally relevant data gave them the confidence to recommend changes to support the health of communities:

...the fact that I had real data from our population. I wasn't using studies that had been done in the US or Canada and delivering that evidence. This was stuff that was real to our population. I think that excited people and made people feel they were really being informed. And any change they recommended was going to be evidenced-based and real New Zealand evidence-based. (Participant 008, Nurse Practitioner)

The next participant described presenting their research at an international conference and winning an award. This participant's work was chosen over other high-quality research for the award, a notable achievement. Winning the research prize was an acknowledgement by the international community of the quality and potential impact of the researcher's contribution to health science. This quote also highlighted that while the international community applauded this participant's contribution, locally their work remained unacknowledged. It appeared that nursing credibility through research contribution was not recognised by everyone in the healthcare environment:

But I went, a few years ago, and presented my study at an international [specialty] conference in Australia. And when I got back, I got a letter that I was the winner, and there were a whole lot of really good papers, and I was very very happy with [the award] but it was not acknowledged in my workspace, but on the international

stage. I've still got it in my workspace, and I feel very proud.
(Participant 010, Registered Nurse)

As a knowledge expert, the participant was not limited to their own doctorally acquired specialised clinical knowledge. While understanding how expert knowledge affected clinical practice, particularly to support practice change, was important, promoting and supporting inquiry were also deemed by participants to be consequential clinical contributions. In the following quote, the participant illustrated how understanding the importance of data, and being a research expert, allowed them to encourage and mentor inquiry within their clinical team. They pointed to research expertise and the ability to articulate that expertise as particularly impactful for their team. Extension of the participant's impact to a wider population resulted in expanded practice for their clinical area across the country:

I think my research got stronger, my statistical analysis got stronger, the methodology got stronger, the way I could articulate it got stronger. And what we did, and I don't necessarily always need to be lead author, somebody's had a good idea, for example somebody was going to do a survey, send out a questionnaire to medical and nursing on [clinical model] And I said "no". I said, "let's do this as a piece of research". So the person who had the idea did the literature review, and then we designed what we had to do and I found a tool that had been previously used that we needed to modify, a questionnaire, and it ended up being a piece of very good research, and published and as a result it really validated the [clinical model] and it will never, ever bedisestablished and in fact the whole model has been replicated around New Zealand. (Participant 018, Nurse Practitioner)

The dataset analysis in the current research showed how the rigorous nature of doctoral-level research could improve clinical practice. The participant quoted next stated that this academic rigour, acquired as a direct result of their doctoral supervisor's insistence on attention to detail, gave them the confidence to actively engage in clinical conversations within the multi-disciplinary team:

So, that's the sort of thing [participant had described a robust clinical discussion] I would never have had the gumption to do if I did not know that I was academically and intellectually on a level where I could do that. If that makes sense. If I didn't have the knowledge that actually, my thinking around these processes, my ability to critically engage with my own practice is equivalent to, if not better than, many of my colleagues. (Participant 013, Registered Nurse)

When questioned further on how the doctoral degree created a confident clinical practice, the participant described how the attention to detail and thoroughness of investigation demanded by their doctoral supervisor led to a rigorous clinical practice which, in turn, created clinical confidence:

Rigor. For me it's something that's very clear. I had one supervisor who was a senior Nurse Practitioner, when she was supervising me, in [specialty area]. she was one of the leading [specialty area] experts in the world and she was very cruel to me at times, about ensuring that I was being rigorous and I was being detail focused and I was not, you know, being lazy and I'm eternally grateful for her discipline and her patience in teaching me that I can be rigorous and have that level of attention to detail and have the standards, those academic standards that translate into other areas of your life. (Participant 013, Registered Nurse)

The dataset highlighted that becoming a knowledge expert was an important path through which the clinical practice of DPCNs was impacted by their doctoral degree. In addition to new knowledge, their approach to clinical care was also strengthened by their education. The next segment describes how participants approached clinical practice with critical thinking, problem-solving, persistence, and widening of the lens through which they viewed patient care and the health system.

5.5 An Enhanced Approach to Nursing Practice

The dataset indicated augmented critical thinking was a doctorally-acquired benefit. An improved ability to determine how to critically evaluate a course of action, how to assess the quality of data, and how to implement practice change were important factors of gaining a doctorate that contributed to an enhanced approach to clinical nursing practice. In the following quote, the participant reported how the degree changed their approach to clinical practice and ensured robust decision-making. This prompted the participant to address other issues which lacked the same level of critical thought:

I did a little piece of research in my master's, but it was really short. It was, get it done, get it sorted, tick some boxes, make sure you get it done, and hand it in. But you can't do that in a doctorate, and you need the thinking time. You need the deep-dive time, because as sure as eggs as soon as you take a bit of a short cut or don't quite think it through properly, if you listen to your own gut feeling which is about

'it's not quite right actually'. At master's it will be alright, but at doctoral level, no, it won't be alright and if you don't understand yourself in those sort of warning signs, then your supervisors will. So, you have to take your time, literally with just about every paragraph you are writing, or every component of your research you are doing. You really have to think it through....and I think that's evident in my practice today as a [role]. Because I don't 'band aid' and I'm often lifting band aids, so I don't allow things to go by without thinking it through or asking the questions around it. I think it very much did that. Don't make assumptions. (Participant 015, Registered Nurse)

In the above quote, the participant highlighted their capacity not to leap to a 'quick fix' that may leave core problems unaddressed. Instead, they described being able to use reflection to tolerate uncertainty on the pathway to an optimal understanding of a problem. Another participant supported the lessons of critical thinking developed during the doctorate, in the following quote, describing how the doctoral experience synthesised previous post-graduate learning and effectively created a cohesive approach to complex clinical problems that pushed the participant past awareness and into action:

The master's is very paper by paper, it was like, "I'm going to focus on pharmacology now, I'm going to focus on pathophysiology now, and at the end I'm going to do a small study", and the small study was interesting, but the doctoral study yes, it's focused on the topic and its intense inquiry, but it's the synthesis of all of that information, even if it's just thinking about the literature review, ... what are you going to do with it. It's the critical analysis skills, and we always talk about critical thinking as an undergrad, but really are they critical thinkers? It's a range of the ability to access a whole different network I suppose of thinking and evidence and rationalising a situation that's in front of you, however complex that is, because research is incredibly complex and you have to manage a huge amount of information, and you've got to; well, in my case I had mixed methods. And so, I can look at numbers differently, but I can also manage large amounts of qualitative data, and construct meaning from that and work with people to construct meaning of their experiences. (Participant 003, Registered Nurse)

The above participant highlighted what appeared to be a qualitative shift in their capacity to parse a significant volume of data rather than arriving at pre-emptive conclusions. Similarly, the next quote outlined a participant's problem-solving approach in practice adapted after gaining their doctorate. Modelling the doctorally-acquired approach, the participant illustrated how they now began problem evaluation

by first gathering perspectives of a problem, then assessing the current knowledge about the issue. This was a direct reflection on how research knowledge was created during a doctoral qualification:

Understanding that problem from different people's points of view. And then, you know, looking at what the literature says about the problem, what the research says about whatever it is. And then going from there, I think. That's ... my beginning kind of point. (Participant 016, Registered Nurse)

Participants also pointed to how the doctorate inculcated a problem-solving focus in the practice environment. The participant in the quote below showed that, prior to the doctoral degree, they may have noticed clinical problems, but only after they were armed with good research skills could they actively engage in solutions. Crafting solutions included: the capacity to generalise knowledge, the skills to lead change, and the willingness to advocate for best practice. Importantly, the participant also identified the flow-on effects for the whole clinical team when a DPCN changed their approach:

So, I was thinking about that in terms of this is a great drug, this is the best drug that we've had for ages for [diagnosis] and if someone's got [another diagnosis] do they get the same benefits? So, I might have just pondered about that before but now I went looking for it and we did a review of all of the literature and then we put it together in our team and discussed it, saw that the outcomes were really good and so discussed that as a team we should be offering it to all patients that aren't [diagnosis] if they can self-fund and meet the criteria. So that kind of led on to a bigger discussion about making sure we are equitable and not assuming that some patients wouldn't be able to afford it but ensuring that we ask everyone about that. And then that led on to someone else doing an audit about who we were offering it to in the [diagnosis] population and making sure we were equitable in accessit was [interesting] within the team how we were all doing things quite differently. And even life-style advice we looked into. And that was just a really good way to reflect on what we were doing and we kind of said as a team that we need to be doing this much better but also, we should be auditing ourselves more often in this way because it changes your practice. (Participant 005, Nurse Practitioner)

The following participant used their doctorally-acquired research skills within their practice to approach clinical problems. They discussed being engaged in structured thought processes to identify, assess, quantify, and analyse information in relation to a

clinical problem. The participant spoke of a sense of empowerment to mitigate clinical concerns which, in turn, enhanced clinical practice:

[I use the doctoral skills] all the time. I mean I learnt the tools of research. It's a methodology. It's a methodology that takes you on an incredible process of defining a very clear problem or hypothesis and then you pick up the tools, the research tools, to be able to apply... not only the literature and all of that you have to have, but also it allows you to be able to analyse. (Participant 006, Registered Nurse)

Alongside critical thinking and problem-solving, participants identified perseverance acquired during the doctorate impacted clinical practice and created confident clinicians who were prepared to assert their evidence-based opinions until it was accepted by the healthcare team. In the following quote, the participant's proposed clinical model was initially resisted by some of the medical team, but because the participant had researched the model extensively in their doctoral thesis, this gave them the confidence to insist and eventually succeed in introducing a model that improved patient outcomes:

I got a lot of support and also resistance as well.... the resistance I had was much more from my medical colleagues. Sometimes they see it as, ...going outside of the biomedical model whereas some of my medical colleagues are very medically focused. Like [diagnosis] should be treated with medication only. Where I argued for [diagnosis from an alternative perspective]. We need more [specific intervention]. So, some of the resistance was from the strong biomedical people ... But now it's okay, it didn't really put me off, I just come back, and we talked more.... I think when it first came as a new idea everybody had their own stance ... But once we got more conversation into it, then it became good. I mean the research that I had with [model of care] I run it through, I interviewed nurses, [physicians] social workers, [other healthcare workers] and then implement it through there as well. So, at the start our [physicians] were not really open to the idea. But through the whole process and then coming back to it you see the change of perceptions. (Participant 010, Registered Nurse)

The same participant quoted above, who created a significant transformation of their department's model of care delivery, also described themselves as having little vision, despite clearly being effective in encouraging change. This lack of acknowledgement of their contributions indicated that they either had little appreciation of the impact their work had on the clinical practice of their colleagues, or they felt uncomfortable about this contribution. The participant's reluctance to claim their impact perhaps

contributed to the wider struggle among nurses to conceptualise their potential for powerful change within the healthcare setting:

I'm not a very visionary person, I follow. (Participant 010, Registered Nurse)

Persistence was reported by another participant who described how they advised a colleague to keep trying when initially rebuffed by nurses in another clinical area where the participant's team could have an impact. The participant believed a better way could be found if their colleague insisted, just as the participant would have in their shoes. The participant explained that relationship building was key to advancing a clinical agenda:

There is much more engagement with [other healthcare workers] and to try and overcome the obstacles. So, instead of just "oh well... the [healthcare worker] hasn't responded to me", I'll say well walk into the [healthcare facility] and find a way in. Which has become difficult, but people are doing it. Build relationships. (Participant 016, Registered Nurse)

Enhanced critical thinking, problem-solving, and perseverance highlighted the difference a doctorally-acquired approach to practice made for participants, their colleagues, patients, and the clinical environment. The dataset also identified how the doctorate impacted clinical practice by broadening the lens through which participants viewed health and healthcare. The next section examines how the doctoral qualification changed the participants' view of health and patient care, creating better appreciation and implementation of patient-centred care.

5.5.1 Broadening the healthcare lens

Reports in the dataset indicated that a doctorate changed a participants' healthcare lens. Participants detailed a transition from focusing on their clinical concerns for a patient to authentic, patient-centred care. The following quote outlined how the participant built a comprehensive understanding of the impact that poor healthcare interactions had on their patients; how this affected patient willingness to engage with healthcare; and how the participant changed their patient interaction to mitigate the tension. The participant's quote provided a rich example of a substantive shift in beliefs and values created through the doctoral process:

I guess because my research has been with patients and their families, you know, we talk to patients, but that time is often cornered into clinical concerns and not into areas such as engagement. What the experiences with the healthcare system have been, particularly with patients who don't engage or haven't engaged and kind of dipping down into the reasons why. And I think if we don't address some of those barriers, we will never get the gains for the patient that we need to. Because for a lot of people their previous experiences in the healthcare system have meant that, they've been some really hard ones, and if we don't understand that we can't kind of break down how we can help them. And trust is a huge thing and understanding, for me, how poorly treated some patients have been and why exactly they've lost trust, means that I've changed and my first meeting with someone is purely about whakawhanaungatanga....And I think because the [doctorate] is so deep and detailed you can just really keep digging down and then build on some of those [ideas], so I built on barriers to healthcare access and by doing that it meant,...I went down lots of different avenues, and just the broader and deeper understanding because of that research. (Participant 005, Nurse Practitioner)

The participant perspective of patient care shifted as they recognised their usual approach to a healthcare interaction was no longer sufficient. Recognition was attributed to awareness of factors outside the immediate clinical concern that affected the clinician-patient relationship. The next quote outlined how the participant's doctoral learning brought considerable awareness that the clinical environment constrained or enabled healthcare in ways that were previously indiscernible. Their skills allowed the participant to step back from immersion in clinical practice and look at what impacted clinical practice. They noted that nursing was constrained through covert mechanisms. However, through awareness, perhaps one could begin to think about ways to alleviate those constraints:

What it [the doctorate] did do for me was that it gave me the opportunity to have a look and see. To start thinking in a different way. See you start thinking about what's the configuration of the buildings, for instance, or the uniforms that you wear, what does that say about enabling you to deliver nursing care? What does that say about you? Does it constrain you? Does it enable you? are you able to work beyond the constraints of the room that you work in or where nurses work? Does that help or hinder the care that they give? And is there any deliberate strategy? ... And I certainly found this in my research that there is deliberate strategy, it's not overt, it's very covert. (Participant 012, Registered Nurse)

The above quote highlighted the critical ‘unpacking’ the participant could engage in as their doctorate-level thinking was generalised into a wider critique of taken-for-granted social structures. Alongside new awareness of the mechanisms behind patient engagement and the physical environment of healthcare, participants also described a fresh genuineness to their clinical interactions. This understanding of the complexities of patients’ lives led to the realisation that some patients’ priorities may not align with the participant’s priorities, impacting the overall clinical care plan. The next quote illustrated one participant’s deeper clinical interactions by drawing from concepts such as social justice and privilege to consider the complex realities of patients’ lives:

What I’ve realised is it’s about their housing, their income because they can’t work anymore. It’s about the employment of people in the household who might be supporting them through their [diagnosis]. I’m moving out of just this healthcare space thinking into a more social justice environment, and realising that health is not just about healthcare delivery. It’s about all those other aspects, the social factors that we take for granted if we come from a privileged background. That we live in a warm house. That we don’t have to go out searching, to queue up at the City Mission at 4am to get a food box, with a child on my hip, and in the middle of winter. Which will all impact on my overall health and wellbeing. Doing the [doctorate] has ... opened my eyes and helped me really engage in those issues genuinely. (Participant 008, Nurse Practitioner)

However, the next participant tempered the ability of a doctoral degree to enhance a DPCN’s healthcare lens, explaining that while most DPCNs do examine wider contexts the topic of doctoral research could limit this benefit if it was too narrow. Therefore, a doctoral education may not change the lens of healthcare for every DPCN:

I mean I don’t know if all [doctorates] would be like this because you could do one that was very, let me think, if you did something that was to do with analysing blood gases of neonates, whatever, you may have a very different thing. But I think most nurses will be always looking at the wider context. It does depend on what you do it in. (Participant 006, Registered Nurse)

The dataset indicated that a creation of new awareness of clinical complexity, and life complexity, was significant. Participants indicated critical lens transitions happened through; understanding why patient behaviours occurred because of environmental factors; why patients made certain healthcare decisions; and the focus on patients over conditions. These changes to how healthcare and people were viewed by DPCNs

provided increased value to the clinical space and genuine patient-centred care and understanding. In the next section, I will discuss how clinical value was created by building credibility attributable to the doctorate.

5.6 Credibility and Prestige Associated with the Doctoral Degree

The dataset highlighted the doctoral degree was associated with increased credibility and prestige. In the following quote, the participant pointed to increased respect after adding their post-nominals and honorific to email communications. Respect appeared to be related to the doctoral degree and title, rather than attached to their nursing position, since the doctorate was the only factor that had changed. The participant hypothesised that a doctorate held meaning both inside and beyond healthcare, which might lead to assumptions about credibility:

I used to have my signature block, for internal emails, I would just have my name and [role]. And then somebody said to me why don't I put my post-nominals on my signature block. So, I put my post-nominals on my signature block, and I immediately noticed a change in the tone people were emailing me back with. You know, [healthcare professional role] for instance, were much more respectful in the way that they wrote to me. And then I thought that seems to be working, why don't I put 'Doctor' in front of my name in my email when I write externally as well as my post-nominals. And you do, it does give you more respect. And it shouldn't. People should be taking you for what you know and your role and the expectations that you should be delivering for the role; your responsibilities. But actually, there's prestige attached to having a [doctorate] that is respected both within the profession and externally to the profession. (Participant 012, Registered Nurse)

The next participant described a similar, although less overt, experience of respect generated by the doctoral degree that resulted in an increased sense of being listened to by the multidisciplinary team. The participant realised they could advance their clinical agenda more favourably if they leveraged their doctoral prestige:

I think well, certainly using that as an example when I took it to various quality meetings, I think because people know you have a [doctorate], not per se, it wasn't as blatant as that but that I had an interest in [sub-specialty] I think people just kind of paid attention a bit more perhaps. I'm not saying it's going to get everything over the line, but they do pay attention a bit more really. (Participant 007, Registered Nurse)

Similarly, the following participant recognised that nurses with doctorates were treated differently because of their degree. The degree created enough credibility for others that the participant felt visible in spaces they previously perceived they held no influence. They attributed being approached for help and support by other healthcare team members to the doctoral degree:

The whole system, I think, treats people with a doctorate a bit different. I mean I recognise it through my journey...when I got the [doctorate] all of a sudden you become visible in some of the spaces that you're in whereas before you were like...not really...people tend to come to you because of that doctorate that you have. (Participant 10, Registered Nurse)

Enhanced respect was identified as a key factor in the ability of participants to impact clinical practice. In the next quote, the participant confirmed respect was the precursor to influence, and influence was the driver behind clinical change:

I think it does [matter], because...if you have respect, you have influence, and if you have influence you can get traction with some of the things you want to change. So, it does matter. (Participant 012, Registered Nurse)

The same participant discerned that change in respect was related to their ability to articulate well and use the English language at an elevated level. Advanced language skills were perceived as a direct result of learning an academic lexicon through the doctoral experience. The ability to speak succinctly and intelligently created a perception of confidence which appeared to be detected by those around the DPCN:

...but one thing that PhD has done for me is I think that it forces you to use the correct language, you apply that academic lexicon to your presentations and then it starts infiltrating into your everyday interactions with people at work. So, you're pulling in that advanced language, those advanced language skills that are doing high level research and having to write it down and record it and have it critiqued by academics, you bring that lexicon into your daily work. And you don't even know you're doing it. But when you do that, people give you feedback on that and they have confidence in you. They think you know what you're talking about because you use English well. (Participant 012, Registered Nurse)

Prestige from the doctoral degree added to participants' sense of being held as credible by colleagues and others in the healthcare sector and government. Their

ability to be recognised and heard was attributed to the prestige the doctorate provided. A further mechanism of creating credibility was identified as the ability to have valuable conversations.

5.7 Holding Valuable Conversations

Valuable conversations were reported across the dataset. A valuable conversation, in the context of this research, was created in the intersection of the use of language, willingness to speak, and opportunity to be heard. Participants were recognised as people who could add value to discussions with their use of academic language and persuasive argument. Clear language drew respect from colleagues and created the opportunity for valuable conversations. Participants' arguments also transformed from emotive and anecdotal to data-driven logic, which was more persuasive, according to the participant in this next quote. The participant described a transformation when they learned to use their in-depth knowledge of research literature to voice their evidence-based practice and support their position beyond anecdote:

Particularly because I had done hospital level training, and you are taught to do; you're not really taught to think. So even though I knew, because I had been around long enough, you always have to have a rationale for what you do and to understand the science. It was only really when I was doing my master's and then my [doctorate]... I realised ... reading and being up-to-date on the science and using the literature to support your arguments is what makes the difference. Moaning and being anecdotal doesn't help. (Participant 014, Registered Nurse)

The next participant attributed their language skills directly to the doctoral process of conversations with research participants; engaging with the literature; and critique from their supervisors. In the quote below, the participant described becoming deeply immersed in language during the doctoral process; a 'deep dive' into how people used different language and concepts for the same idea, which helped them defend against the assumption that everyone would conceptualise something in the same way:

And it took me six years to do my doctorate for various reasons and immersing yourself in all of those different ways of thinking about it. It wasn't just a one-off survey, it was six years of having these conversations, whether it be in person or through survey, then writing it up. And then getting feedback from two very different supervisors. I

think it's that very in depth, deep dive, immersing yourself in the language. (Participant 015, registered nurse)

For other participants, valuable conversations came from their ability to speak with confidence to authority figures. The following quote identified this participant experienced a degree of freedom through the doctorate. They described a sense of fearlessness when initiating conversations with colleagues in high-level healthcare leadership roles. The participant highlighted no longer needing to 'stay in their box' which indicated prior to the doctorate there was a degree of self-constraint to their ability to speak out, but through the doctoral experience they were able to recognise the self-limiting imposition and choose to free themselves from it:

So, by the time I'd done all of that, [negotiated research access with top leadership], I'd gotten used to talking to some pretty high-level people. And I didn't think I had to stay in my box anymore. So, it's been good from that point of view. (Participant 017, Registered Nurse)

Similarly, the next participant illustrated an elevated confidence and trust in their own expertise, which led to speaking up confidently in meetings. This confidence was credited directly to the depth of knowledge created during their doctoral study. The depth of knowledge also gave this participant a sense of perspective for the on-going journey of nursing and the political and social factors that affected the past and continued to affect the current. Their comprehensive understanding of where the profession of nursing sits in the historical, social, and cultural landscape powered the participants' authoritative voice to advocate on behalf of nursing colleagues. It was also notable that the participant described themselves as potentially sounding 'cocky' as if having a depth of knowledge also held a negative aspect. There appeared to be a perceived sense that nurses should not have this depth of knowledge, let alone voice it:

...it has given me a huge amount of confidence because I had to research about nursing, so I know about nursing. I know about the profession, I know about the law, I know about why, I know about the history of nursing in New Zealand. I know about the evolution of it. I know about the challenges that we've had to face, and I know we're on a continuum, it's not just about the here and now, but actually it's about progressing. And so, because I've got the knowledge, the actual knowing, the practical knowledge about our history, our laws, what

the Nursing Council requires of us, what the unions do, kind of what the Ministry does, what the Crown agencies do. I know about that stuff.... I think I knew a bit about it beforehand, but the [doctorate] has really reinforced that. And I can go into a meeting now and say, "well that's not the case" or "this is the case", you know? I have full confidence. It might sound cocky but actually I feel quite confident in that, and I feel the [doctorate] has given me a huge amount of confidence that I can trust myself. (Participant 012, Registered Nurse)

Valuable conversations allowed participants to create credibility by using language to demonstrate advanced thinking and knowledge. Valuable conversations gave the participants an opportunity to add their voice to critical healthcare discussions. A further impact on clinical practice settings was the opportunity their degree gave them to collaborate with others in healthcare and research spaces.

5.8 Collaborations and Opportunities

Several participants highlighted opportunities to join healthcare organisations and create collaborations through their doctoral research, or because they held a doctoral title. Opportunities included being invited onto guidelines groups, health boards, research projects, and other initiatives. The participants perceived that the combined role of nurse and doctoral qualification established an attractive partner for collaborations. In the next quote the participant determined their inclusion in a previously homogeneous medical committee was due to the combination of nursing role and doctoral degree. It was significant that the doctoral degree opened up an avenue of contribution that were previously limited for nurses:

I tell you where it's really helped too, which is ridiculous, that being 'registered nurse comma [doctorate]', they've thought actually, shit, maybe we should include a nurse on this. Aww, here's a nurse that's got a [doctorate]. So, I'm on a [specialty] department committee which has never had anyone except for doctors on it before. (Participant 004, Registered Nurse)

The next participant also suggested that the combination of nursing experience with doctoral knowledge led to being invited onto a healthcare board. Participation in decision making made at board level gave this participant the opportunity to influence healthcare delivery which added value to clinical practice for both themselves and others:

I'm on the board of [name] and that has, I don't know whether they chose me because I had a doctorate, but I think what was really helpful was that my doctorate was in [topic], and I was a nurse and I think the combination of all of those things together was very helpful.
(Participant 011, Registered Nurse)

Nursing combined synergistically with other disciplines, which also enhanced the DPCNs' knowledge. The following participant outlined the practical value of nursing experience added to an otherwise theoretical research plan, which expanded their contribution beyond the health environment through collaboration with a non-healthcare research team because of their doctorate:

I learned a lot but why I enjoy working around [other non-health disciplines], I find [discipline] quite theoretical, and my nursing background is quite practical. It's quite, ... there's always challenges because they like to theorise stuff and I like to see stuff on the ground. But combining the two makes wonders. (Participant 010, Registered Nurse)

The same participant described how a nursing research paradigm extended research possibilities beyond the traditional positivist medical model. This participant pointed out the advantage of nurses as researchers is that they were not wedded to one model of research and could create fresh ways of knowing to answer practice knowledge questions more comprehensively:

You know the doctorate produces research, research produces evidence, evidence changes practice you know. So, we need nurses to do that. And the good thing about nurses as researchers is that we are very open minded to outside the box [thinking] and align with other people as well. And we're not confined to the conventional biomedical way of doing things. We are much more open to explore different ways of knowing, different ways of hearing as well.
(Participant 010, Registered Nurse)

In the next quote, the participant illustrated how their approach to collaboration also changed as a result of skills learned in the doctoral oral defence process. They described a sequence of events that led to an international research collaboration which had the potential for clinical practice change:

When I did the preparation for my viva, someone from [university] listened in on that and she kind of said "Oh that's interesting, it aligns with what I'm doing". So, I caught up with her post doctorate and it

did line up relatively well, and then I discussed what our plans were at a conference and someone from [Australian hospital] heard and said, "Oh I want to be in that too". So now there's a small group that's progressing that further into some research, so that's great.
(Participant 016, Registered Nurse)

However, the same participant acknowledged that DPCNs needed to be tenacious to make collaborations happen. However, this tenacity was constrained by a busy clinical role which limited their ability to contribute to collaborations. Doctorally prepared clinical nurses needed to use their personal, unpaid, time to make collaborations work:

I think it does bring opportunities, but I think you have to go and grab those opportunities and I think that rolls into the challenge of my work role is full, and so how do you, kind of, slide other things in. So, I haven't moved up from being 0.8 because on my other couple of days I am still trying to do that role outside of work, to try and progress things. (Participant 016, Registered Nurse)

Not every participant experienced increased credibility. Despite the participant, who is quoted above, successfully creating collaborations, they also described feeling no change in their perception of being listened to in their work environment after becoming doctorally qualified. This indicated that despite having some growth in personal power to collaborate outside the clinical employment area, within the clinical area they discerned no change to how their voice was heard by colleagues and leaders:

I don't think they listen to me anymore or any less. Probably a little bit sick of me banging on about the same things, but they were before the doctorate.... So no, I wonder if its organisation size, that would be interesting to have a look at. ...I can't say that I particularly notice...yeah. (Participant 016, Registered Nurse)

The data presented in this chapter outlined the mechanisms behind how DPCNs added value through national and international collaborations to their practices, other nurses, patient care, and to healthcare. The value they described related to their expert skills in clinical knowledge, research production and use, enhanced approach to clinical practice, valuable conversations, increased credibility and prestige, and in forging new opportunities and collaboration. Doctorally prepared clinical nurses also added value by their ability to engage with and understand the consequences of healthcare structures, systems, and of people. They leveraged their doctorally-acquired prestige and credibility to push their clinical agendas and integrate

themselves, by invitation or otherwise, into medically dominated healthcare structures. Participants created new knowledge both individually and collaboratively, and both nationally and internationally. They supported colleagues in knowledge creation and contributed their powerful voice to essential healthcare conversations. However, participants also highlighted challenges that impacted their ability to contribute the value described in this chapter, including: difficult identity transitions, the impact of external perceptions of the DPCN, lack of mentorship and role models, and no formal post-doctoral pathway for doctorally prepared nurses in clinical practice roles. These challenges to value contribution will be presented over the next three chapters beginning with the challenge of difficult identity transitions.

Chapter 6 Shifting Identity and Self-perception

The previous chapter outlined how DPCNs contributed value to the healthcare system and to nursing practice. However, participants indicated that there were also challenges which impacted their capacity to add value. Challenges began early in the journey to become doctorally qualified and continued into the post-doctoral period. These challenges included: identity transformations which changed their self-perception; being perceived differently by their colleagues; a lack of post-doctoral path; and a feeling of isolation due to so few role models or mentors. Each challenge is explored in detail in the following three chapters.

This chapter explores participants' often tumultuous journey to become doctorally-prepared and the transformative identity transitions experienced during and after that moment. Identity transformation began before participants entered doctoral enrolment and extended well into the post-doctoral period. Several dynamics were identified from the dataset: a struggle to identify as a doctoral candidate; an internal identity shift as the participants began to think of themselves as DPCNs; and a willingness to acknowledge their doctorate in the clinical practice space. Each aspect of this transformative experience is detailed in this chapter.

6.1 Identifying as a Potential Doctoral Candidate

A transformational identity shift began from the moment participants first engaged with the idea of undertaking doctoral study. For the majority, the decision to study was the result of a gradual realisation of their potential. Participants advanced along a continuum from belief that a doctoral education was impossible to becoming a DPCN. For a substantial part of many participants' careers, a doctoral degree was not considered as an option. Participants illustrated coming to the realisation late in their careers that they were capable of doctoral level education and began their doctoral journey. Some participants came from families with no expectation of academic achievement and so had no ability to imagine themselves as doctorally qualified. For the participant quoted below, a lack of formal education was normal in their family's social group, which made even an undergraduate degree seem impossible. The quote

drew attention to the important point that, unlike many other professions, doctoral preparedness was beyond the early imaginings of most participants:

...we came from a normal family with no university. My brother who's seven years younger than me, he went to university, but certainly when I went nursing it [university education] was never ever regarded as an option in my family. Not even considered as an option.

(Participant 018, Nurse Practitioner)

Some participants, while having no family members with tertiary qualifications, received familial and social messages around the value of education. The following quote described an early impetus towards an academic pathway due to positive reinforcement around education by a family member and through the participant's childhood schooling. This participant became one of the first degree-qualified nurses in their country which reflected the lessons learnt during childhood. Their ability to envision education as valuable early in life contrasted with other participants who came to an academic pathway well into adulthood:

He [family member] was the one who said you know education is it, you keep educating yourself. And he bought adult versions of the Encyclopaedia Britannica and literally read them, all 20 volumes of them.... he was a very clever man really. So, he fostered a desire in me to keep learning really. And I was encouraged in school as well. It was fostered at the school I went to. I think I was privileged. (Participant 017, Registered Nurse)

For this participant, the undergraduate degree was the penultimate aim at the time, rather than continuing to post-graduate study. Within the discipline of nursing, education has had a long and contentious development (outlined in Chapter Two). Educational and societal tensions, coupled with varied entry-to-practice qualifications, created a historical environment in which task-oriented training was valued over formal education. Academic advancement seemed irrelevant for many nurses. The same participant who received family encouragement to advance their education above, was effectively blocked from continuing their formal learning by exposure to attitudes from within nursing education that reinforced the ceiling on nursing educational expectations. The quote below illustrated this attitude from a senior nursing educationalist who instructed the participant and their nursing graduate cohort to consider their education completed at undergraduate level:

And I can remember coming out of university [bachelor level degree] and my ...course lead tutor said you will never need to do another qualification. (Participant 017, Registered Nurse)

The next participant highlighted that task orientated learning was perceived as valuable, while becoming educated to think critically was not. The participant outlined, that many nurses had no expectation of advancing their education and relied on newly registered nurses to bring current knowledge into practice:

I'm a general and obstetric trained nurse, I was hospital trained. And when I was trained, I wasn't educated. And there was never any assumption, or any expectation, that after I registered that I'd ever have to do any more learning at all. And it came as a bit of a shock I think...we never even had conferences, or if you did, I wasn't aware of them. Somebody newly graduated would tell us, "Oh this is what you do now" or somebody said that they'd been somewhere, and a nurse said, "this is what you do", change of practice. (Participant 012 Registered Nurse)

Participants confirmed that, in addition to historical low academic prospects, conversations about doctoral education for clinical nurses, were limited. A doctoral degree was not a traditional academic pathway for nurses and was not required for any advanced clinical role in Aotearoa. This lack of educational expectation was compounded by the lack of academic role models within the discipline of nursing. The following participant highlighted the paucity of role-modelling by DPCNs while simultaneously identifying the power of mentorship and role-modelling to create doctoral possibility. With no family or career expectation, and little mentorship or role-modelling, a doctorate was not part of the reference or experiential possibilities for ordinary clinical nurses:

...I don't hear any encouragement or any talk about doctoral studies at all and its usually people like [name] saying to me, or people like me saying to other people, "have you thought about doing your PhD or a doctorate of nursing? And this is the way that you do it, and look at these programmes and this is the way you can seek funding", you know there isn't that... (Participant 001 Nurse Practitioner)

The personal realisation that participants were capable of gaining a doctoral degree appeared to come from either an intrinsic or extrinsic motivation. The majority of participants discovered their doctoral potential through extrinsic motivations of either

role modelling and/or mentorship. A minority experienced an intrinsic motivation through the innate desire to advance their education. For those participants who pointed to an extrinsic motivation, the transition from a doctoral degree as impossible/not considered, to possible/being considered took time. For some participants, the realisation took years. Often, the initial impetus was through the suggestion of another significant nurse in the participant's environment. The mentor nurse pointed out the participant's potential and the participant began to see the doctorate as existent. In the next quote, the participant was initially reluctant to consider a doctoral level of education, but the idea seeded and eventually grew into reality when they became a DPCN. The participant began to envision the value doctoral learning could bring to their clinical practice through conversations with another doctorally qualified nurse. What is most striking about this quote is that without the initial inspiration and persistent foregrounding by the mentor, this participant may not have considered a doctoral degree:

I was right into the whole studying thing and think it may have been [Name] said "well of course you'll do a [doctorate]" and I said, "not on your nelly". But she sowed the seed. And plus, I had questions as well. We'd often, you know, have talks around, conversations around clinical practice, around [clinical specialty] and questions that I had, and she'd often say well that would make a really good research question, you know you really could do a [doctorate].
(Participant 001, Nurse Practitioner)

For other participants, the impetus for their doctoral journey was provided by other nurses who modelled educational success. In next quote, the participant explained the motivation received by observing an academically advanced nurse with a sound clinical reputation. The role model was someone who this participant felt they could aspire to be like in a clinical context:

I just saw her as someone who was still clinically grounded. I think she was still working clinically, she has been through the COVID outbreak in the [location], she's been doing clinical shifts in the [clinical area] ...I think she was an associate professor at that stage ... but she was also a nurse, with a nursing background and it's really important to meet people like that right? (Participant 004, Registered Nurse)

The participant confirmed that exposure to role models reinforced the value of advanced education for clinical practice nurses, in the following quote, adding evidence to the importance of DPCNs being visible in the clinical environment:

Gosh, mentorship is so important in nursing isn't it, because we're that whole kind of apprenticeship learning style place, it's how we learn best, we want to see other people we aspire to be, doing it well.
(Participant 004, Registered Nurse)

Role modelling was a common learning technique in the profession of nursing and therefore an important way this participant found to provide impetus towards becoming doctorally prepared. Some participants outlined an intrinsic motivation which drove them towards becoming doctorally prepared. The next participant described the desire to inform their clinical practice through knowledge gained from a doctoral degree. They planned to address clinical frustrations by creating the knowledge required to address specific clinical concerns. In addition, they wanted to inspire other clinical nurses towards becoming doctorally prepared. The participant's quote illustrated insight into how the doctorate could improve both the participant's practice and the practice of other clinically based nurses:

I went into that [doctorate] because there were a lot of frustration when I was doing post grad study, there was a lot of anecdotal evidence about [specific clinical population], and I wanted to see if I could create more evidence ... more research ... but not only that but hoping to show our [nurses] that we can do it and then hopefully inspire other people to come through. Because ... I'm an average student, but if I can do it then they can do it you know...its possible.
(Participant 10, Registered Nurse)

Some participants experienced an intrinsic, but less altruistic, desire to prove their academic capability and to grow their clinical knowledge base through doctoral learning. The next participant confirmed the doctoral degree provided them with evidence of their intellectual ability and satisfied their drive to acquire knowledge. However, it was worth noting that the participant grew into the desire to become doctorally prepared along the post graduate pathway, because without exposure to educational success at master's level, they may not have reached this realisation:

...it was within me really. I mean I think I just realised that I really enjoyed my post grad studies and when I finished my masters, I did

that at [University]. There was kind of like, I was still thirsty for new things. (Participant 006, Registered Nurse)

However, some participants described an earlier motivation to achieve doctoral success. In the following quote, the participant acknowledged their desire to become doctorally prepared existed even at undergraduate level:

Right from the start I wanted to get a PhD. Don't ask me why I don't come from an academic family at all...so I can remember doing my bachelor's degree we all had to tell where we were up to ... and where do we see ourselves going. And people got up and said "oh I've done 16 papers, and I just can't wait to finish" and I said ... I want a PhD. (Participant 018, Nurse Practitioner)

Reports from the dataset illustrated various motivations to undertake a doctoral qualification. Some participants traversed a major identity shift to begin along the path to a doctoral education, as this level of academia was beyond their own and their families' expectations. Role modelling and mentorship, both from within and outside the nursing profession, played a significant role in providing motivation. Other participants described an early understanding that they would progress towards a terminal degree without extrinsic motivation and for which the source was not readily apparent. However, despite their motivation, many lived within a disabling environment and therefore it is unsurprising a doctoral pathway disrupted the identity of many. Whether intrinsically, extrinsically, or a combination of motivation, participants were curious for knowledge and held the desire for intellectual growth without expectation of remuneration or defined benefit. They were driven to become the early adopters of doctoral education. No matter their individual motivations, participants transitioned into the role of doctoral student and acquired a new identity of doctoral candidate. Participants' self-perception evolved and extended beyond becoming a doctoral candidate and into the post-doctoral period. The next section describes the internal identify shifts that occurred after becoming doctorally prepared.

6.2 Being a Doctorally Prepared Clinical Nurse

The second aspect of internal identity change was the way participants experienced becoming a DPCN. Some participants described transitioning through, what is in effect a liminal space, where, for a while, they felt in limbo. Participants were no longer a

doctoral student but did not quite feel they were a DPCN, either. Much of the tension during this period was due to the absence of a visible change in DPCN roles; lack of acknowledgement from the nursing profession; and an inability of participants to access or participate in traditional post-doctoral fellowship programmes. In discussing this uncomfortable liminal period, the following participant said they made use of relationships cultivated during their doctoral experience to help navigate the liminal space and were one of the few participants able to do research assistant work, a recognised pathway in the post-doctoral period, to consolidate their new identity:

When I finished my [doctorate], I actually did some research assistant work on a project that one of my... [supervisors] was doing nationwide, you know a multi-site study. Actually, that helped me develop other collaborations but there was a funny period there where I was no longer a [doctoral] student or not yet an academic. (Participant 004, Registered Nurse)

Some participants reported the internal identity shift came through an expanded understanding of their capabilities. In the following quote the participant explored the novel sense of intellectual freedom that came as a result of their doctoral learning. They reported a transition during which they became acutely aware of their own potential and cast aside limiting beliefs around what they were allowed to pursue. The identity shift resulted in new intellectual pathways that became available for this participant to follow:

I guess ... it was as a result of that work [doctoral work] and at the same time ... a sense that the [doctorate] had given around, a sort of expansiveness, an awareness of my own capability that I hadn't had... that came as a result of doing the [doctorate], that I just saw other things and I became interested and thought, well I'm going to go with that, you know that's really interesting to me. (Participant 002, Registered Nurse)

Increased clinical, intellectual and personal confidence was reported across the dataset, contributing to the identity shifts participants reported. Many described developing an inherent sense of self-worth as a nurse and confidence as a clinician through the process of doctoral completion. In the next quote, the participant explicitly linked the academic challenge from their doctoral learning to an increased confidence to undertake new endeavours in clinical practice. What is pertinent about this quote is that the participant underwent a fundamental shift in self-perception:

So, I had to get my head around the post-structuralists and Michel Foucault, in deciding to do discourse analysis. Don't ask me why I did it. Oh My God. Yeah, like it was just like learning a complete other language, But, the opportunity, what it did give me, I always now have a measure which is again, excuse the French, but it works well in terms of alliteration, if I can do fucking Foucault, I can do fucking anything. I will often fall back on that way of thinking in myself, if you can do that, you can do this. So, it's become a bit of a touch point around that comparative thing. So that's one of the things it's [the doctorate] given me. (Participant 002, Registered Nurse)

The next participant corroborated this insight of the impact of completing a complex academic exercise, such as a doctoral degree. They described a shift in self-perception that gave them the opportunity to understand they had both the intellectual capacity as well as the determination to successfully complete their doctoral degree. The quote drew attention to how the participant's confidence fostered a nurse-clinician identity of someone who could create alternative evidence-based approaches to clinical problem solving. The participant's war-like metaphors point to the sense of power to take some control and shape change:

I think the doctoral programme strengthens your normal natural abilities. I think you have to do something you're really passionate about. You can't be fiddling and fluffing around with some esoteric thing. Once you get in, you're right in or you'd never get finished. It dominates your life so all it does is, when you find something, you get really passionate about,...strengthens you as a person. It strengthens you. It does. It gives you a whole lot of ammunition and armour to tackle things differently. (Participant 001, Nurse Practitioner)

The dataset pointed to the iterative nature of identity change because the doctorate was a journey of both intellectual and personal discovery. In the next quote, the participant shared the gradualness of change attributed to their doctoral experience. They illustrated the slow growth in thinking, perception of practice, and language development, that progressively moved them into a new concept of self:

It's not something you go and learn in a classroom and then apply it the next day. It's this iterative change of the way you think that happens over a relatively long period of time, you know, 5 or 6 years to do a [doctorate]. So, you come into this [doctorate] programme and when I look back, and I've actually got some of my notebooks that I occasionally look at, ... and I used to write notes all the time about my thinking when I first started on the programme. I look at those sometimes and I think there is such a naiveté around what I

was thinking I was going to do. And that's the right place to start, it wasn't wrong, it's just where you begin. Then you pop out the other side, you think differently. And even the way I talk to students, you know I supervise Master's and PhD students, I hear myself talking very differently to what I would have done prior to doing my [doctorate]. (Participant 008, Nurse Practitioner)

Alongside the identity shift that came through an immersive doctoral experience, participants described the impact specific research skills forged for their post-doctoral identity. The following participant's quote pointed to the doctorally acquired research skillset as the primary cause of clinical confidence. For this participant doctorally acquired skills supported knowledge acquisition and the ability to concisely impart one's clinical opinion, thereby created a new level of confidence to argue their view and advocate for patients:

Oh, absolutely I think I can stand in my own skin and I'm okay with it. Mainly because I never go into anything or speak up about anything that I wasn't confident that I knew and that confidence comes from the fact I read well, I get good data, I get good information, I discern information and I understand the topic well. And that's part of the research tools you learn. (Participant 001, Nurse Practitioner)

The ability to leverage doctorally acquired skills also forged a crucial change in the next participant's self-perception as they used their skills to improve other aspects of their clinical life. Their strengthened confidence added to their clinical conversations, patient care delivery, and critical engagement with nursing practice:

I felt that my practice had really stepped up to a whole other level, even though my doctorate wasn't clinically focused. The training and education around how you engage in your practice, how you think about practice, how you engage with the evidence for practice and also having the confidence around making clinical decisions. And being able to stand by that and communicate your views and be able to say well, even to senior consultants, this is not what we're going to be doing, and this is what we're going to be doing. And if you don't like it, you can go and find yourself another nurse. So, you know I think ...it gave me the confidence to act more strongly as a patient advocate and to have more independence in practice. My practice just became a lot more independent. I thought a lot more critically about the scope of my practice and I was more confident about knowing the limits around my scope of practice and also pushing those boundaries a little bit. (Participant 013, Registered Nurse)

However, not everyone experienced more confidence from their identity shift. One participant reported feeling fearful, initially of being unsuccessful in their doctoral study, and then of failing to meet the expectations of others. In the quote below, the participant explored how this fear was compounded by the isolation they experienced as the only DPCN in their organisation. The participant recounted how a dearth of role models in the post-doctoral period, particularly in smaller organisations, affected their ability to forge a pathway through the liminal space into becoming a confident clinician-researcher. The consequence of this participant's fear was to deny their clinical practice the privilege of having someone with a doctorate:

Well, I kind of just had this anxiety about how it [telling people about the doctorate] would seem maybe, or was it a fear of not achieving it? I'm not sure. I wasn't really super confident. I'm not a super confident person, particularly with academia, I think. It's a whole different level I think, and it's kind of unknown....I think if you feel like you put it there [the doctoral title] then everyone will have greater expectations than you can give them. So, I do think it's confidence. Maybe if there's a gang of you it would make a difference, but when you're the only doctorally prepared nurse in an organisation.
(Participant 016, Registered Nurse)

This same participant added that along with feeling unconfident about using their title, they also had a certain level of hesitancy about their doctoral skillset:

I have not put 'doctor' in front of my name on anything. But ... for myself I feel more confident. I feel more prepared, you know, I'm starting some research, you know, with [name of organisation]. I feel like... I mean it's... obviously I don't feel like I know everything, but I'm feeling like I'm much more prepared than I was before that [the doctorate]. Without doubt. (Participant 016, Registered Nurse)

Some of the internal struggle to identify as a new DPCN was because many participants returned to clinical roles that were essentially unchanged, even after completing a doctorate. Therefore, although they reported thinking, reasoning and questioning differently, there was no visible evidence of an identity change, making their internal identity shift intangible. Other participants noted that the absence of a discernible workplace distinction between doctoral and non-doctorally prepared nurses was reinforced by a lack of ritual or overt recognition that signalled something of substance had occurred. This paucity of acknowledgement contributed to participants' experiences of liminality in the immediate post-doctoral period, which

was eloquently described by the next participant who, although they could access an enriched level of knowledge, deploy critical evaluation, communicate well, and even help guide junior staff, those skills went largely unacknowledged in the external clinical world:

Well, I feel a little bit like a fish at sea, because I'm a registered nurse and I have the same badge as everyone else; we've all got the same name badges on our unit, but I know that I'm not the same. I know that I'm a registered nurse and I'm doing the same job as everyone around me, but I also feel there's this other knowledge that I actually am tapping into and utilising when I interact with patients, and that I am able to communicate when I'm concerned about a patient to the medical team; that I am able to utilise when I'm talking to my colleagues - these junior nurses who are asking for advice, or career advice, and that depth of experience is being utilised but it's not acknowledged in the registered nurse role. (Participant 003, Registered Nurse)

Absence of role models and mentorship was a common factor across the dataset, which contributed to the tensions of an internal identity shift. Participants emphasised that newly qualified DPCNs required support, advice, and guidance from experienced colleagues to ease their way through the liminal space. However, role models and mentorship were often absent. The following quote described the impact of inadequate mentorship for this participant with particular regard to the protracted period required to develop research opportunities:

I just stumbled along and kept trying to do my stuff. I got some small internal funding from a university, my second university job, and I got a small project off the ground. But to be honest with you it wasn't until I came to [University]...I knew I wasn't progressing my career, so I started shopping around employers. And it wasn't until I came to [University], I was able to have an honest conversation with a senior colleague and said, "Look this is where I'm at with my career, I'm really struggling, I need someone to mentor me and get me kick-started and show me how to do it". It wasn't, you know, the last 2-3 years until things started to come together and publications went up and research applications went it and all that sort of stuff. So, it took a while, it took a while. (Participant 013, Registered Nurse)

Data indicated that while mentorship for this cohort of DPCNs was reportedly deficient, participants still chose to provide their own mentorship to colleagues. The following participant identified a nurse-mentor relationship with colleagues even

though the participant's role held no formal expectation of mentorship. This quote was significant because the participant, despite their words to the contrary, appeared to indicate ambivalence about claiming a leadership role, with the self-caution around sounding "uppity" and sounding "terribly serious":

I feel like I have an identity as a mentor and am someone who represents higher education. That sounds really uppity but often my colleagues come to me and say, "I'm thinking about doing some more education, what do you think", and all that sort of stuff. Simply because people often are doing their own research or thinking about a master's degree or doing papers will come to me, and although I'm still in a clinical job that will become part of my shift. Gosh this all sounds terribly serious, but I do ... take my responsibility as a leader seriously. (Participant 004, Registered Nurse)

Ironically, participants reported providing guidance to colleagues, but were unable to access a similar level of support. The invisibility of internal identity change made an argument for formal mentorship difficult. However, the dataset provided evidence that suggested some participants were complicit in their own struggle to identify as DPCNs since many refused to use the doctoral title in their clinical practice or even amongst colleagues. However, other participants overtly claimed both the doctorate and the doctoral title. The next section outlines the decisions participants used in clinical practice environments to determine if they should use their doctoral title or acknowledge having a degree.

6.3 Acknowledging the Doctorate in Clinical Practice

Participant opinions on use of the doctoral title in clinical practice were polarised. Some participants refused to use the title in any capacity and for some it depended on the situation. Others chose to use the title to influence specific interactions, while some emphatically insisted on using the title as a rule. This section outlines the diversity of opinion and the impact of using the doctoral title for DPCNs.

Some participants rejected the idea of using the doctoral title in clinical practice. It did not matter whether the title was communicated verbally, such as during a clinical introduction; printed, such as on an identification badge; or written, such as in a letter. Even the use of post nominals in emails was repudiated by some participants. In the following quote, the participant explained that their rationale for not using the

doctoral title in their clinical practice role was due to the concern that 'doctor' meant 'medical doctor' rather than 'academic doctor' in a clinical environment. They appeared concerned they would be mistaken for a medical doctor, despite holding a nursing role. The participant appeared to hold little confidence that the public could learn to distinguish between a medical doctor and an academic doctor, in a healthcare setting. There was a strong sense of self-dismissal when the participant stated they were not 'a real doctor' (medical), despite holding a real doctoral degree. Such a rationale showed that participants could be complicit in supporting the status quo of the healthcare system and the dominance of medicine as the primary holder of power in the system:

In a healthcare setting, no I wouldn't use that [the title of Doctor]. I'm very clear in my own mind ... in a healthcare setting it's too confusing for people. After I say I'm not a real doctor, because in a healthcare setting that's what they are thinking about, they're not thinking about an academic doctor. (Participant 002, Registered Nurse)

The next participant expressed a similar concern that they could be mistaken for a medical doctor when they were in a non-academic environment. They used their post nominals in emails, but only from a sense of guilt rather than confidence as a DPCN:

I have put it on my email, on my address. The only reason I've done that was because, I remember [name] saying about titles and how hard people work for them and they shouldn't just be kind of dismissed. So, I don't put doctor, but I put my name and [doctorate]. (Participant 007, Registered Nurse)

When queried further on their decision not to use the doctoral title, the participant confirmed their belief that a nurse with a doctorate in clinical practice had less scope to use the title than a medical doctor would, for whom the title is often customary:

I think because it's an academic title and I'm not in an academic role. I think of it that way. It's not like a medical doctor title, it's subtly different. (Participant 007, Registered Nurse)

Some participants inhabited a middle ground where they acknowledged the doctorate if asked, or used the doctorate if they perceived it would influence the interaction to their advantage. The next participant also highlighted how they acknowledged their doctorate with the qualifier that they were a nurse with a doctorate, but only if asked

directly. The fear of using the title originated from a concern about misleading the public as to who the participant was, i.e., not a medical doctor. However, the participant also believed the public would be unable to understand the concept of a registered nurse who also held an advanced degree such as a doctorate:

If somebody asked, am I a doctor, I say I'm not a medical doctor, but I do have a [doctorate], so, some people do call me doctor. But I think it's too confusing for patients. Certainly, Māori and Pacific populations, I think it's just too confusing. It's a vulnerable time. I say who I am, but I don't use the name 'doctor'. (Participant 018, Nurse Practitioner)

Participants appeared to have varying degrees of willingness or comfort acknowledging their doctoral qualification. While using the title in direct patient interactions was too controversial for some participants, many requested honorifics be used in non-patient interactions and formal meetings within their organisations. However, a request to use participant titles was not always welcomed. In the following quote, the participant described how they were thwarted in their desire for their educational level to be recognised with use of their title in documentation. Instead of adding the participant's title in meeting minutes, as requested, the group facilitator removed titles from all attendees instead. This quote pointed to the inability of other people within the healthcare institution to acknowledge a doctorate outside that of a medical doctor:

There are so many doctors on our team that I... quite often look at the way honorifics are used on minutes and stuff like that and it's so obvious that most of the time it's just medical doctors that put their honorific on and so I just always ask the question ... if we're going to use honorifics, and most people don't know what I mean by honorifics which is quite funny in itself. But if we're going to use it for the medical doctors, why aren't we using it for everyone. So, what they do is take it off everyone. (Participant 011, Registered Nurse)

The same participant highlighted the candid way they incorporated their title without obfuscating their clinical identity as a nurse, yet they were still reluctant to use the title in a clinical setting:

... I do subscribe to the perspective that it's [the doctorate] something that I've worked hard for and so it just needs to be part and parcel of who I am really. You know, if someone says, "oh you're a doctor", I

say "a doctor-nurse". You know. So, it's just about how you explain it to people...I just introduce myself as [role title and name]. I don't say I'm Doctor [name]. I just say I'm [role title] and if they notice the doctor [on participant's name badge] then that creates a conversation, and we have that. But I wouldn't go up and say hello my name is Doctor [name], but it's [doctoral title] on my signatures. (Participant 011, Registered Nurse)

Dataset reports illustrated the title or post nominals were used for maximised impact in communications. Several participants confirmed they used the title as they perceived a positive shift in response by others when they did so. The next participant reported that the participant used the doctoral title in communications if they thought using it would be strategically advantageous for themselves and for nursing as a profession:

I unashamedly use it, I will use it in nursing's interest, because I know it means something. You know, since I've had the [doctorate]. I've seen how it works and I know when to use the title to get what I want. (Participant 012, Registered Nurse)

Unease over how the public interpreted the title of doctor was a common concern identified in the dataset. The next participant, identified more tensions within their healthcare team about when using the title might be dishonest in a patient care setting since a clinician with the title of doctor holds the balance of power within the direct patient care interaction. However, rather than risk being confused as a medical doctor, this participant chose to disregard the title altogether. Using the title and re-educating those inside and outside the healthcare system to the different types of doctors working in health may be too confrontational for most participants:

...we used to have a bit of a conversation in our team around do you introduce yourself as a nurse or as a doctor. And I used to say well I don't introduce myself as anything. I just say, "Hi I'm [name], I work for the [specialty area]". Now some people on the team used to say, "you're being dishonest or being misleading or you're embarrassed of your profession". So, one of the things I used to say to them was, "what do you think people think, particularly if I walk in with a doctor, and I introduce myself as the nurse and the doctor introduces themselves as the doctor". Who's the patient going to direct their conversation to? Even if I'm leading the consultation. They all direct their conversation to the doctor. Every. Single. Time. (Participant 008, Nurse Practitioner)

The same participant described how titles held power within healthcare settings. However, once they developed a trusting relationship with the patient, titles became irrelevant. The following quote highlighted a desire to build a relationship over a desire for any doctoral education to be recognised. What is striking about this quote is that the participant had no intention of explaining that they were a nurse clinician with a doctorate and therefore had no opportunity to change the public's perception of what nurses could contribute to the healthcare interaction:

...if I'd said I was Dr [name] and I'm a nurse. And actually, it happens at some [name of institutions], they still call me doctor-nurse, or Doctor [name] because I go in with a stethoscope around my neck because I'm a nurse practitioner and I'm going to examine the patient right. They automatically think that stethoscope says, 'I'm a doctor'. Because of the way I talk they think I'm a doctor. And I think once people know you are trustworthy, and you have the knowledge they need, then it doesn't matter who you are. But at the beginning I think it can be difficult in terms of what titles you use. I never use doctor in the hospital environment, no. (Participant 008, Nurse Practitioner)

While most participants chose not to use their doctoral title or acknowledge their doctoral qualification in the clinical environment, some were emphatic that their title be used in their role. The following participant outlined a dispute that erupted when the participant insisted their doctoral title be used correctly in their clinical role. The institutional representative vehemently held onto a rigid definition of who constituted a 'doctor,' but the participant insisted that they were just as entitled to use it as any other doctor:

And so, they said to me "oh you can't use your title", and I said, "I'm using my title", you know, and they said, "but you're not a doctor", and I said, "I am a doctor". And then it got down to yadayada about medical doctors and things, so I said, "look its either all in or all out, if you don't want me to use it then no one uses any titles". (Participant 006, Registered Nurse)

In the next quote, the participant illustrated two reasons behind their decision to use the title. The first was that they had earned the right to use the title, and the second was that their patient population was unable to distinguish between a nurse practitioner and a medical doctor, therefore, the participant felt the issue was irrelevant to their practice setting. What mattered for different participants varied

enormously. For the participant, quoted below, what mattered was that they remain a credible and skilled clinician providing excellent and safe care for patients:

So, for me using the term doctor made perfect sense to me and I wasn't not going to use it. I earned it just like anybody else. Now in clinical practice it's really interesting. I do use it. I absolutely use it. And the reason I use it is because I earned it, no. 1, and no. 2 when I go into [institution] and when I [perform clinical consultations] the older people don't know the difference. I can tell them I'm a nurse practitioner until I'm blue in the face and it doesn't matter.
(Participant 009, Nurse Practitioner)

The next participant quote corroborated that titles held power, were influential, and were perceived to elevate the nursing discipline to equality with other healthcare provider groups, such as medical doctors. They proudly used their title to gain the respect that was required to advance their nursing agenda. The pertinent point of this quote is that the participant indicated the profession of nursing still struggled to find equal footing with non-nursing colleagues. Without their doctoral education the participant believed they too would be as oblivious to the status quo as their colleagues appeared to be:

I kind of think doctors possibly still see nurses as slightly subordinate to medicine. Even though they say this mentality is changing, moving over time, there's still that vestige of 'doctors are the centre of care delivery'. Think about the title, Head of Department, Clinical Director, Hello? Why can't nurses have those jobs? Why is it assumed that a doctor will be Head of Department or Clinical Director? It's the language that we use that positions them as central. If I'd not done a [doctorate], I wouldn't even have thought about that. It was just taken as par for the course. Now I challenge those words, I call them out on them, all the time.... They stop and go, "Oh yeah". You know, they hadn't even thought about it. So, you kind of bring a different perspective. It does bring a different perspective. You do get respect from your medical colleagues. But you also get respect from the budget managers. You get respect from the Chief Executive.
(Participant 012, Registered Nurse)

Participants' level of comfort with their identity as a DPCN correlated with their willingness to be seen by others as a DPCN. Most of the participants in this research grappled with recognition of their doctoral identity. Some alluded to the discomfort being called 'doctor' caused. However, the struggle went deeper than mere use of a title. There was a degree of internal and external discomfort created by participants

challenging the expectations of nursing and nurses. The participant in the quote below expressed their discomfort being seen as different to their nursing colleagues. The participant pointed to cultural and gender expectations of fitting in and an unwillingness to stand out from the proverbial crowd. The participant inferred that any perception of elevated status, above other nurses or colleagues, through an advanced education, would be unaccepted by both the participant and their nursing colleagues:

...it's partly being a Kiwi but it's also partly about being a woman and also partly about being a nurse but we're very good at celebrating leaders and we're not very good at owning our expertise and knowledge and experience in a way that would draw any attention to us. It's kind of, yeah, often perceived as I've just voiced that haven't I, I don't like the idea of me blowing my own trumpet or implying any hierarchical relationships in the clinical environment. (Participant 004, Registered Nurse)

The next participant described acute embarrassment when any 'fuss' was made over their doctoral degree. The participant highlighted their concern over other nurses feeling intimidated, therefore they were unwilling to have their doctoral qualification acknowledged within a clinical environment. Their fear was that by standing out they would make other nurses feel inferior and a good nurse should not want to make other nurses feel inferior. Therefore, they chose not to claim the title. In addition, the participant appeared to have little confidence they would be part of research in their area, instead research possibility was presented as haphazard rather than intentional. Also noteworthy was the participant's inability to meld doctoral and nursing identity together; they inferred that being 'nurse' was more important than being a 'doctorally qualified nurse.' This failure to appropriately value their doctoral skills in clinical practice is one mechanism through which doctorally qualified participants in this study obstructed their amalgamation back into the clinical nursing team as a new DPCN:

Oh, that's just me. I think I'm, and possibly a lot of nurses are like it. You know I find it all quite embarrassing and you don't want to intimidate people by saying I've got a [doctorate]. and all that kind of stuff because I see myself as a nurse first and foremost and I have a [doctorate] and that can give you skills to do things, to do research if I have the opportunity, but I don't want people to be intimidated by that. So yeah, I find all the fuss a bit embarrassing. (Participant 007, Registered nurse)

Some participants' reluctance to embrace their doctoral identity was perplexing because the qualification was not a surprise ending to the doctoral process. Concerns about maintaining a flat nursing hierarchy, gendered nursing roles, and a fear of being ostracised were abundant in the dataset. However, some participants were much more accepting of their doctoral identity. The following participant even had the doctoral title embroidered on their clinical uniform as a way of elevating, not only themselves, but the public perception of what nurses could achieve. Their experience of 'good conversations' around doctoral education showed that the public could change their perception of nursing:

I also feel that there's a responsibility for doctorally prepared nurses to be out there, role modelling for colleagues. So, I confronted it head-on. I had 'Doctor [Name], Registered Nurse' printed on my scrubs, embroidered on my scrubs. I insisted that my staff ID read Doctor [Name and doctorate], RN. I was bringing the registered nurse to more prominence, it very clearly said registered nurse on all my uniforms. But it also said doctor, and that prompted a lot of conversations with patients, and staff, you know. Yes, I'm a doctor, I'm a Doctor of Nursing, you know. And they were good conversations. (Participant 013, Registered Nurse)

Participants, in this chapter, reflected on the transformative internal identity transition and reshaped self-perception which started them along the doctoral journey, and which continued into the post-doctoral era. There was diversity of experience, and also diversity of acceptance of the doctoral identity by participants themselves. The dataset showed many tensions created by a lack of role models and mentors for newly qualified DPCNs in their clinical roles, a reluctance to stand out or disrupt the status quo, and a gendered role designed to keep the peace and avoid making others uncomfortable. Many nurses were unwilling to claim their doctoral title in the clinical environment, concerned they would be confused with medical doctors or be ostracised from nursing circles. What informed participants' decisions to claim the doctorate was their willingness to advocate for nursing advancement despite the risk of rejection from colleagues and institutional leaders, and their ability to stand alone against resistance from patients, the public, colleagues, employers and other nurses. Most participants began their doctoral journey as part of an enthusiasm for lifelong learning, while a minority chose the doctorate for strategic career reasons. Given the dearth of doctorally qualified nurses returning to clinical practice after becoming

doctorally qualified, it is unsurprising that participants arrived into the realities of a post-doctoral world they were unprepared for, and which was unprepared for them.

Internal identity and self-perception change was one aspect of identity shifts that impacted DPCNs. Similarly, to the diversity of internal change experienced, external perceptual changes were equally present and divergent. Some participants experienced a welcoming and inclusive environment while others experienced alienation from nursing colleagues. The next chapter will discuss the impact of this external perception on the participants' post-doctoral period.

Chapter 7 External Perception Shifts

Important changes were identified from the dataset about the perception of DPCNs by the public, nursing, and non-nursing colleagues. Some participants dealt with alienation and ‘othering’ due to their doctoral qualification, while others were welcomed and supported by their clinical teams. Some changes of perception created tension within the healthcare team while other perception changes created new opportunities for participants to contribute to clinical care. In this chapter, how these perceptions impacted both DPCNs and their practice are explored.

7.1 The Perception of Nurses as Anti-Intellectual

Before addressing perception change, it is important to understand how nurses and nursing have been historically perceived. As previously outlined in Chapter Two participants dealt with outdated societal perceptions of what nursing entailed. The contrast between society’s perception of who constituted a nurse and who constituted a doctorally educated person was highlighted in the quote below. This participant described surprise from the wife of an academic colleague, when they discovered the participant planned to undertake a nursing qualification. The wife’s response illustrated a belief that nurses had less propensity for intellectualism than other professions. The quote pointed to the public’s anti-intellectual beliefs about nurses and nursing which constrained nurses’ ability to impact healthcare delivery:

One of my professors from [other qualification], he was a great guy and I worked for him as an assistant, and his wife said to me “oh you’re going into nursing” and I said “yeah I’m going to get a nursing [degree-type] and I’m quite excited about it” and she said “Oh I thought you were much brighter than that”. (Participant 009, Nurse Practitioner)

Society’s image of nurses as less intellectual was exacerbated by nurses themselves when they failed to acknowledge nursing leaders, thinkers, and philosophers in academia. In the following quote, the participant pointed towards nurses’ omission to celebrate their renowned nursing philosophers and their acceptance of nurse scholars misidentified as less qualified than they were. The participant pointed to nurses’

failure to advocate for the contribution of academic nurses to both medical and nursing science, thereby perpetuating the image of nurses as unscholarly:

We don't study nursing outcome research, we don't teach it to our nurses.... I mean there are nurses out there who are doing amazing things. I mean palliative care has almost been dominated for 40 years by the stages of grief. Kubler-Ross. I heard a psychologist on a podcast yesterday talking about Kubler-Ross. She was described as a nursing tutor. She wasn't a nursing tutor, she was a professor, a doctorally qualified professor of nursing practice. You know. Why do we let this happen? (Participant 013, Registered Nurse)

Understanding how nurses were perceived by society provided context to how nurses perceived themselves, and therefore how they extrapolated that understanding to DPCNs in clinical practice. These perceptions and reactions of nursing colleagues leaders, and managers are explored in the following section.

7.2 External Perceptions by Nursing Colleagues

Participants reported experiences which intimated changes in how their nursing colleagues perceived them after their doctoral conferment. Some nursing colleagues accepted participants as DPCNs and welcomed their contribution to the team and their role modelling of advanced educational value. However, many participants reported negative reactions from nursing colleagues, ranging from snide remarks to perceptions of being excluded from the nursing team. Participant perceptions of their nursing colleagues' reactions indicated the concept of participants as advanced intellectual thinkers was viewed by some colleagues as antithetical to what a nurse should be which created tension in the clinical environment. In the following quote, the participant described tension created with a nursing colleague when that colleague discovered the participant intended to undertake doctoral study. The quote was significant because it drew attention to a colleague's negative reaction to the idea of a DPCN as 'better and fancy'. The participant's experience appeared to reflect that, for this colleague, the desire to maintain the status quo of nurses (all the same, not doctorally-educated) outweighed any advantage a DPCN could bring to the clinical environment through new knowledge, research, or practice innovation. However, despite expecting some degree of change, the participant did not share their colleague's expectation of becoming a different person:

The perception is that you think you are different. And someone did say to me "I hope you don't come back and think that you're better and fancy because you've got your [doctorate], I hope you don't change", and I'm thinking...of course I'll change but that doesn't mean that I'm going to be different. So maybe a perception from nurses that...again ...you change hierarchy. (Participant 005, Nurse Practitioner)

The idea of DPCNs as a threat to non-DPCN was repeated in the data. The following participant discussed that gaining a doctorate was deemed by non-DPCNs to be outside the norm for clinical nurses and therefore unacceptable. The quote detailed the participant's impression of negativity from their colleagues when the participant revealed they intended to become doctorally qualified. The participant indicated how collegial disapproval emerged from the tension between the thinking and the doing of clinical nursing practice. Astonishingly, the nursing colleague's reaction implied that academic thinking and clinical activities should be segregated:

...nurses particularly...I got a strong impression that they didn't want me to do it [the doctorate]. That it was somehow making it difficult for others, actually you were going against the grain by doing something you shouldn't have been doing. That this wasn't nursing's way. That...nurses were practically orientated, not academically orientated. And it was kind of tall poppy syndrome I think that was operating. (Participant 012, Registered Nurse)

Some participants suggested this negativity was from a fear that DPCNs would consider themselves as better than their non-doctorally prepared colleagues which led nursing colleagues to react negatively to the participant's doctoral qualification. The following participant attributed the reaction to the academic / clinical nursing divide, in which academia was viewed by clinical nurses as less valid than clinical nursing:

We still have a lot of oppressed group behaviour going on and I think it's always about elitism and all this other nonsense that comes out. That's where you hear it "oh it's just academic, it's elitism", I say "for goodness sake how is it?". You'd never say that to anyone else in any other discipline who got to the level of a PhD. You'd be, you know, applauding it. Its oppressed group behaviour. I'm sorry but that's what it is. We just don't want to come out from behind the bushel. (Participant 006, Registered Nurse)

The participant, quoted above, related a sense of alienation because they were not considered to be 'in the trenches' with other clinical nurses. The analogy of war led to

considering anyone not directly involved in the daily clinical challenges to be irrelevant to patient care. However, the participant disagreed and expressed their perception of being 'in the trenches' in their own clinical capacity:

The comments about being in the trenches and all that kind of stuff. When were you last in the trenches and blah de blah. I said "I'm in the trenches all the time". (Participant 006, Registered Nurse)

The idea that participants should be the same as their non-doctorally prepared colleagues was pervasive. The concept of the Tall Poppy Syndrome (TPS) - a concept that anyone behaving differently from the group needed to be reprimanded or excluded - was repeated across the dataset. Many participants detailed feeling constrained by the negative reactions of nursing colleagues, which diminished their ability to use their doctoral skills and knowledge without being excluded or marginalised by the clinical nursing team. In the following quote, the participant described rejection from colleagues who implied the participant was no longer willing to do the physical work of nursing, such as washing and toileting patients because of their educational achievement, even though the participant was still doing those activities. The salient point of this quote is the nursing colleague's response indicated they believed that nurses undertake doctoral study to remove themselves from the tasks of clinical nursing rather than to create enhanced clinical practice:

I think it was that really crappy 'to posh to wash'. That idea "oh, you went to school for so long", "oh you think you're great" and dadadadada. And it was rubbish. I mean I was there wiping bums with everybody else. (Participant 013, Registered Nurse)

Being alienated from the clinical nursing team was also perceived by the next participant. Their experience highlighted that there appeared to be an attitude among some nursing colleagues that becoming doctorally qualified meant the participant was no longer part of the clinical nursing team, in effect 'othering' the participant. In the quote below, the participant expressed a sense of being 'pushed out of nursing' when they qualified as a Nurse Practitioner and reported the same alienation when they eventually became a DPCN. This experience highlighted the difficulty for both the participant and their colleagues when a DPCN has no defined place in clinical practice. They appeared to be an enigma to those around them and the participant themselves

laboured to understand how they could fit into practice. They described a liminal state of being an unquantifiable entity to not only their colleagues, but also to themselves:

...I also wonder if it feels like, to some people, and this is an assumption, whether you are crossing the line again and a little bit I think about when I became a nurse practitioner, I was walking in a really grey area then because I was the only one then in [speciality area]. So, no-one else knew where I sat, and I did feel a little bit like I was pushed out of nursing to a degree. You know again that kind of a little bit non-supportive because you think you are better. Not that anyone said that in words but that feeling I guess of not being in the same camp because you are walking between camps. (Participant 005, Nurse Practitioner)

In the next quote, the participant referenced TPS as a contributing factor for othering of participants. The participant's quote intimated DPCN's threatened the status quo, that non-DPCN felt threatened by their doctoral success, and were unsure what a DPCN would mean for them:

So, then you've got to wonder if those that had a different experience [an experience of being othered], if that is actually something to do with the tall poppy syndrome. That they're actually trying to say that 'you're the same as us so don't get too big for your boots'. I wonder if that's it. Nursing, gosh you know, my [doctorate] has taught me ... that nurses will do that. Nye on 60,000 of us, trying to keep us all the same. (Participant 012, Registered Nurse)

Some participants realised that their doctorate was seen as irrelevant to colleagues and nursing leaders. The participant in the next quote suggested that the value of academic learning in the context of clinical nursing was invisible to nursing colleagues because those colleagues had not experienced it themselves:

But there's a lack of interest in or knowledge of [doctoral education] and it's a lack of valuing of academic qualifications, yeah there is. I think it's particularly bad among [nursing specialty], I don't know why. But it's like, I don't know that it means much to many people really. It's just me doing a [doctoral degree] but they probably don't consider it relevant to them or to nursing. (Participant 005, Nurse Practitioner)

Another participant suggested the size and diversity of the profession contributed to negative reactions from colleagues. They suggested that colleagues saw a doctorate as expected within an academic setting, but its relevance in a clinical setting was unclear.

The participant also indicated that a lack of clarity about a place for DPCNs in clinical practice created some unease among nursing colleagues:

We've got such a big profession that people feel threatened by people that have got qualifications. So, they tolerate them when they're in academic institutions, but when you don't sit in an academic institution, they don't know what you're about really. (Participant 006, Registered Nurse)

The same participant explained their perception that non-DPCNs were fearful that participants, who were uniquely qualified, would somehow make other colleagues less valued. In the following quote, the participant described the vitriolic reaction to the participant's support of advanced nursing roles. The participant inferred that like advanced nursing roles, DPCNs also disrupted the status quo and created tension in the clinical team.

They called me a barefoot doctor. Honestly. There was some appalling stuff. And I was arguing on evidence around [advanced nursing role]. I fought for [advanced nursing roles] in New Zealand.... everything was chucked at me mainly by other nurses. And you know [nurses said] "it wasn't what nurses were there for, they should know their status"... oh it was shocking.... And they were scared. A lot of it was because they were scared. A lot of people think when others go up, they'll get left behind and naturally want to pull you back. (Participant 006, Registered Nurse)

For the next participant, the perception of doctoral education as irrelevant to clinical practice was specific to nursing. When questioned, the participant indicated the doctoral difference was indiscernible to the delivery of clinical care between a DPCN and a non-DPCN and therefore allocation of value was impossible. The participant acknowledged that the doctorate had meaning in some groups they were part of, but not in clinical practice groups:

...the thing is when you are doing clinical work, the fact that I have a [doctorate] doesn't mean anything in the [clinical] environment. I don't know if that's because I'm a nurse. It did mean something in some groups that I was on, but in terms of clinical care it didn't mean anything at all. (Participant 008, Nurse Practitioner)

Invisibility of doctoral impact to clinical practice was repeated across the dataset reportedly from nursing colleagues and surprisingly from participants themselves.

When asked if their doctorate had impacted their clinical practice, several participants responded in the negative. However, throughout the interview, those same participants identified critical differences between pre-doctoral and post-doctoral practice. In the following quote, the participant responded that doctoral learning did not affect their nursing practice, but then described their ability to critique clinical evidence, conduct robust care discussions with colleagues, explain care to patients guided by evidence, and improved confidence - all skills developed by their doctorate education. This was a startling juxtaposition. The participant reported that their clinical nursing role had not visibly changed, their role responsibilities had not changed, their remuneration had not changed, so they considered their nursing practice was also unchanged. In addition, the participant defined 'clinical practice' as the direct patient–nurse interaction, but ignored contributions such as professional conversations, creation of care delivery guidelines, and national professional group facilitation, all of which they led in their professional capacity:

Not a lot actually [of difference attributable to the doctorate]. Not on a day-to-day basis with my patients and the clinical work that I do. It's hard to tell looking from inside out ... but I don't think it makes a difference. The only difference maybe is that I have superior skills around critiquing journals and understanding the research and the literature and the conversations I have with my senior medical colleagues there's probably that different level of respect I think academically and clinically and so that, those conversations and that learning and those capabilities I can then transfer into my patient care and when I'm talking with patients about potential options of their diabetes management perhaps it's a different level or different type of conversation very evidence informed you know I'm able to easily talk about the evidence and to explain differences in the whys and wherefores, but it hasn't changed and I don't get any additional money for having a [doctorate], it's not a requirement of my position to have a [doctorate] at all so you know, that, it hasn't changed that aspect much. (Participant 001, Nurse Practitioner)

If participants were unable to verbalise what had changed in their clinical practice, then it was unsurprising that their colleagues also have failed to perceive any change. In the next quote, another participant reported they were unsure if their doctoral degree had impacted their clinical practice. They acknowledged they experienced an important internal shift, but highlighted that, as a doctoral qualification was not a requirement of their clinical role, an external expression of benefit remained

uncertain. The doctoral difference was invisible because it was not an expectation of the clinical role and therefore any value doctoral knowledge might bring was irrelevant and unlooked-for:

I mean internally for me I feel like it's different, but externally I'm, cos it's not built into the role, this must be someone who's doctorally prepared. So internally for me, yes, I feel like it's a big difference, but externally I'm not certain. (Participant 016, Registered Nurse)

How participants perceived of themselves and were perceived by nursing colleagues appeared to influence their ability to affect clinical change. To avoid alienation, many participants downplayed or even purposefully hid their doctoral qualifications. Hiding the doctorate indicated that advanced education for clinical nurses was perceived as unacceptable for many. However, negative acceptance of DPCNs in this study went beyond clinical nursing colleagues. Nursing leadership was noted across the dataset to either ignore the doctorally prepared participant or limited their ability to impact practice by failing to support the participant to expand their role. The next section examines some of these nursing leader's response to DPCNs under their direction.

7.3 Perceptions from Nursing Leaders

The idea that doctoral education was irrelevant to clinical nursing was held not only by general nursing colleagues, but also by some nursing leaders. In the quote below, the participant recounted the response by a nursing leader to the participant's outlined goal to become doctorally prepared. While the nursing leader did not overtly discourage them, the participant was left with an impression that doctorate was a personal choice and would not be actively supported by the nursing leader since it was not deemed to hold value in clinical care delivery, despite the research focus on care improvement of many doctoral nursing theses. Most notable in this quote was that the participant emphasised that they held no expectation that any doctorally prepared nurse would be treated differently, indicating the pervasiveness of the idea that advanced education to doctoral level for healthcare professionals was widely seen as pointless:

... I don't know if it's just nursing. I think anyone who does a [doctorate] in a clinical environment would be treated any other way. I don't know if it's even noticed. And I remember having a

conversation with my nurse director many years ago about the possibility of doing a [doctorate] and the conversation went something like, "well if you'd like to do that, that's great, if you'd like to do that in your spare time". It was never seen as being anything valuable for clinical delivery. (Participant 008, Nurse Practitioner)

Another participant intimated that nursing leaders were unaware of the DPCNs available to them. In the following quote the participant was uncertain if their nurse leader knew they had acquired a doctoral degree. Some nursing leaders may simply be unaware, rather than disinterested, which placed the impetus on DPCNs to ensure their skillset was known to their nursing leaders:

I think they just don't know it's going on [the doctoral degree]. Probably. And I don't know if it gets fed up the food chain that they have a nurse studying a [doctorate], I have no idea. So, if they are aware, they don't really make it known they are aware. (Participant 007, Registered Nurse)

Participants suggested many nursing leaders thought education beyond a master's level unnecessary for nurses. Such a degree had a specific purpose for advanced practice roles, but a doctorate was not a requirement for any nursing position. As the next participant indicated, support from nursing leaders for nursing education was abruptly discontinued once a master's degree was awarded. This provided evidence that, incredibly, a clinical nurse with an advanced research skillset, ability to competently and thoroughly critique healthcare practice, and to communicate healthcare delivery change, was deemed irrelevant in a clinical practice setting:

...You know we could encourage it [doctoral education and research competence] we'd like to build that component of our nurses and our organisation, our clinical practitioners, yeah, but there isn't anything, it's just a master's degree and then that's it. "Good you've got that, we don't have to support you anymore." (Participant 001, Nurse Practitioner)

In the following quote, the participant confirmed their nursing leaders were aware of their doctoral degree but suggested that because many nursing leaders had no experience of either obtaining a doctoral degree or working alongside a DPCN, they were unsure how to utilise them in their clinical teams:

No, they did know [that the participant had their doctoral degree], I think maybe it's because if you haven't done the same level [of

doctoral education], and you haven't been through the process, you don't realise how much work it is, so I think maybe it's just...it's the same like when managers who haven't done post grad education don't understand post grad education and therefore the significance of that and, I guess, in the same way some managers who don't understand the role of Nurse Practitioners, then the Nurse Practitioners who are under them have a hard time meeting competencies such as research and audit and things because they are perceived as a clinical role. And so, I think maybe it's just that, I don't think it was an intentional thing... but more a lack of understanding. And maybe a lack of value of what a [doctorate] brings to nursing as well. (Participant 005, Nurse Practitioner)

The final participant quote succinctly pointed out that no-one knew what to do with a DPCN. Again, this is a remarkable statement given the volume of clinical, process, and quality issues afflicting the health sector:

I don't think they really knew what to do with me when I got back. (Participant 006, Registered Nurse)

7.4 An Alternative Experience of External Perceptions

The previous section explored the prevalence of rejection, denigration, or apathy of DPCNs by nursing colleagues and nursing leaders. However, several participants had an alternative experience. While some participants perceived ambivalence from nursing colleagues, other participants reported warm acceptance and even enthusiasm from within their nursing teams and within their organisations. In the following quote, the participant discerned no change in their relationship with others, despite being watchful for a difference. The participant described the doctorate was seen as an artefact of interest but without power to change how people perceived the DPCN. Therefore, the doctorate essentially made little difference to the participant's relationships, unless the person was completely unknown to the DPCN. The inference here was that the participant perceived no fundamental change to existing relationships, but conceded a difference could exist in new relationships:

I did wonder if it would be intimidating for say students or some other people, but it doesn't seem to have been. I think people are in their own space really and they get on with it. And I hope it doesn't essentially change who you are does it? You know it's a signature that you've earned. And I don't think it actually changes fundamentally how you relate to people or how you get on with people or how

people judge you. Perhaps it would change that a little bit if people didn't know you. (Participant 017, Registered Nurse)

Ambivalence was also reported by another participant who identified no 'othering' or negative reaction, but neither did they perceive any acceptance or enthusiasm. The experience described below indicated that the participant ignored the doctorate and therefore it was ignored by the rest of the healthcare team:

No, I didn't really [experience negative reactions]. No, I can't say that I did really. I mean if people would ask me then I would say "yes I've finished it and it was fabulous and great walking across the stage, and all of that, and it was an exciting moment" but otherwise no I didn't experience that. (Participant 015, Registered Nurse)

Some participants were enthusiastically welcomed by their institutional leaders. In the next quote the participant highlighted some institutional managers were thrilled to have a DPCN, while other managers were perceived as less thrilled. The difference appeared to lay in the context of a manager's understanding of the doctoral value, rather than their perception of the participant as a DPCN. In other words, it was the doctorate that provided prestige to the workplace rather than the participant:

The organisation I'm in they love it, they love it. It's a strange thing because when I worked in [clinical area] they didn't like it that much and when I worked in [organisation] and my other [organisations], I've worked they loved it. So, it's a funny old thing. (Participant 006, Registered Nurse)

In the next quote the participant experienced a warm congratulations from their colleagues and a distinct impression of adding value to the team. For this participant, the pertinent factor in their team's enthusiastic acceptance may have been inclusion of the team within the participant's doctoral research. Inclusion gave the healthcare team members a unique lens through which they viewed the DPCN and their doctoral effort. However, even team members in the DPCN's new place of employment thought the doctoral qualification was advantageous:

I haven't had any negative responses, I've had positive responses and when I finished it all the staff in the unit and on the floor were so lovely and so thrilled. They'd been part of it as well because they'd delivered the intervention and they'd seen it all happen. They were all so pleased, and here [new organisation] they've been really pleased, so far, that I've come here. The impression I've gotten is they hope to

use some of those skills. Which would be lovely. (Participant 007, Registered Nurse)

The next participant also experienced a positive response from clinical nursing colleagues. They said that their colleagues were surprised but impressed that they chose to return to a clinical role after graduating, indicating that the participant helped to affirm for those colleagues the great value of clinical nursing to their team:

It's been nurses are like, "Oh, that's so amazing that you still work clinically." I just tell them how much I love it and how much I love being able to work within it, and I think that's very affirming for them. (Participant 003, Registered Nurse)

This diversity of perceptions appeared to be founded on a lack of understanding among nursing teams of the DPCNs' purpose in clinical practice. Although many participants worked in a clinical role throughout their studies, the experience of alienation from nursing colleagues suggested they thought the DPCN would leave clinical nursing after graduation. Nursing colleagues, nursing leaders, and even participants themselves struggled to find a clinical space that made sense for a DPCN.

Although nursing colleagues were often less than accepting of participants, medical colleagues were far more supportive and inclusive of DPCNs. Some participants reported that medical peers provided practical support, celebrated their academic success, and made better use of their doctoral skillset. Although there remained diverse reactions from the profession of medicine, overall, medical peers were reported by participants as more positively receptive to their new educational standing. Medical colleague's perceptions of the participants reportedly changed once they became doctorally prepared. This change and the impact on the opportunities afforded to participants is discussed in the following section.

7.5 Perceptions by Medical Colleagues

Although many participants felt accepted by their medical colleagues, some pointed to a power struggle between the professions of nursing and medicine which constrained the participant. Other participants stated their medical colleagues provided significant support and validation of their doctoral preparedness. In the following quote, the participant outlined a potential rift between medical and nursing personnel, pointing

to the medical profession's historical dominance of healthcare and their desire to hold power over nurses, while nurses continued to struggle against being constrained. Participants in clinical practice were deemed part of a struggle to have a voice in healthcare, a voice that may not be accepted by existing power structures:

It's a medic-centric healthcare service in [organisation], health services are configured so medicine is always in competition with nursing and medicine is trying to control nurses because nurses keep popping up and wanting to lead. And medicine doesn't want nurses to lead. Medicine wants nurses to stay in their place and nurses keep challenging that medical hegemony. (Participant 012, Registered Nurse)

Several nurses reported resistance from their medical colleagues when they attempted to create clinical change. In the following quote, the participant described difficulty persuading medical colleagues to adopt a new model of care for patients. The participant perceived their medical colleagues rigidly held onto the existing model, while the participant's doctoral research provided a valid alternative. Despite the medical colleagues' resistance, the new model of care was introduced and improved healthcare delivery for patients in this participant's clinical area. The participant's experience provided evidence that nursing doctoral research, coupled with the perseverance to continue against opposition, benefitted patient care and clinical practice:

I got a lot of support and also resistance as well.... But the resistance I had was much more from my medical colleagues. Sometimes they see the framework I'm adding, it's going outside of the biomedical model. Some of my medical colleagues are very medically focused. Like [health condition] should be treated with medication. So, at the start our [medical doctors] were not really open to the idea. But through the whole process and then coming back to it, you see the change of perceptions. (Participant 010, Registered Nurse)

Other participants pointed to a direct rejection of their research, indicating that some medical doctors saw a nurse's contribution to science as irrelevant solely because it was generated by nurses. The rejection of the following participant's research effectively hid their work from the wider healthcare community:

I did the first [research topic] in the ward, yet doctors rarely cite it. And the reason being is because it's nurse-led research, not done by a

doctor. I've heard from a person who attended the conferences who's part of [company], who said "why when you shared research you didn't mention this research?" And they [medical doctors] said because it's a nurse. (Participant 018, Nurse Practitioner)

The same participant described that their doctoral research created contention within some spheres of the medicine profession, which pointed to a discomfort from some peers when the participant revealed their evidence for practice change:

I started my [doctorate] knowing it was going to be with [topic] and the difference [made] and in fact it ended up being wider than that. I looked at [topic], I looked at [topic] and you know I think it was a very good piece of work but with some doctors it didn't go down well. (Participant 018, Nurse Practitioner)

These quotes showed DPCNs challenging the medical profession's traditional place as creators of healthcare knowledge. However, some participants indicated medical colleagues were supportive and encouraging. For example, the same participant quoted above, who experienced suppression of their research, reported being accepted and validated by their immediate medical colleagues. This participant's diverse experience provided evidence that while some medical professionals felt threatened by DPCNs, others valued participant's contribution:

You know the medical specialists I work with introduce me as Doctor [name]. And certainly, when I got my [doctorate], it was them that organised a big afternoon tea to celebrate it. (Participant 018, Nurse Practitioner)

Indeed, participants reported far more encouragement than discouragement from medical colleagues. In the next quote, the participant identified their medical colleague was a significant support in their doctoral journey, providing important collegial and practical assistance that was likely outside the ability of clinical nursing colleagues. In addition, the medical colleague appeared invested in the participant's success and celebrated their achievement with them:

My medical colleague, he was solidly alongside me. He would read parts of my work for me, and he would check it from a scientific point of view, or you know whatever was clinically something I just needed a trusted friend to have a look at. He didn't have a [doctorate], but he was very clinically sound and experienced. So, he was sitting on the end of the phone waiting to hear how it went and he was very excited

and bought me a bottle of champagne and so lots of really...lots of support. (Participant 001, Nurse Practitioner)

The same participant described receiving mentorship from medical colleagues rather than from the discipline of nursing. Their medical colleague had the knowledge, skills, and connections the DPCN needed as they navigated an undefined postdoctoral pathway. Importantly these were connections that appeared unavailable through nursing avenues:

Interestingly, one of the heads of research in the [clinical area] who's a Senior Medical Officer, a doctor, he has been very helpful and supportive, and I just straight up said to him, "I need mentorship about how to work in this area, can you copy me into [everything]". Because you know we did a research proposal together for [funder], that wasn't funded, but I was like "copy me in on everything, I want to know, like getting people's names I want to know those processes". So, he's been navigating me through some of that. (Participant 004, Registered Nurse)

Research and higher education were familiar concepts for the discipline of medicine, which provided convenient and available mentors for DPCNs, whereas the discipline of nursing had scant experience with research. The participant in the next quote indicated that their medical colleagues saw value in their research skills, and although their nursing colleagues weren't resistant to research, the nursing discipline had limited exposure to research in the clinical area and therefore struggled to see value in a DPCN:

...when I had the interview, there was a [medical doctor] and a [medical doctor] on the panel and then two nurse specialists. And the [medical doctor], in particular, was really keen [on doing research] and the [another medical doctor], I think he'd be keen as long as it's all done and he doesn't really have to do anything and I think the nurses probably, I don't get the impression they would be resistant to it but they probably haven't been exposed to it before. (Participant 007, Registered Nurse)

Another participant discussed how their medical colleagues were 'thrilled' that their workload would be reduced after the participant initiated a change in clinical care to the more complicated aspects of patient care. This helped to create a collegial environment where both medical and nursing colleagues worked together to achieve health outcomes for their patients:

And the docs that I worked with were fantastic and we had this great working relationship, and they were just thrilled that I was doing this programme because I was dealing with the hardest patients.
(Participant 009, Nurse Practitioner)

Reports from the dataset indicated support from the medical profession was incurred through a transformation of perception. Participants were seen by their medical colleagues as clinicians with intellectual credibility. The quote below reiterated the correlation of the profession of medicine's research paradigm with that of the doctoral paradigm, which was outside the experience of traditional nursing:

You tend to find doctors have more of a research upbringing in their education than nurses. COVID is a really good example. Doctors are scouring the evidence to see what works and what doesn't and then implementing that in their practices on the fly. The research is coming thick and fast on different variants and what treatments are working. Nurses don't have that kind of upbringing. (Participant 011, Nurse Practitioner)

This section detailed tensions from the various reactions from nursing colleagues, nursing leaders, and medical peers to a doctorally prepared nurse in clinical practice. Some participants were accepted, some rejected, while others were tolerated as long as the doctorate was not mentioned. Some participants were deemed too intellectual, some not intellectual enough. The impact of historical nursing roles and images were complicit in these reactions, however, medical colleagues were surprisingly more positive in their perception of the clinical benefit of DPCNs. Even more surprising was nursing leaders' failure to appropriately leverage the DPCN skillset. Nursing leaders' perceived disinterest in DPCNs in their teams was perplexing. In a healthcare system where clinical problems abound; one would have expected nursing leaders to encourage participants to address clinical problems with the pragmatism nurses are renowned for. However, the reverse was evident. Participants perceived some nurse leaders failed to utilise their skillset, discouraged participants, implied there was no benefit to clinical practice beyond a master's degree, and used inflexible conceptualisations of what entailed nursing care to further constrain participants. Despite the difficulty participants encountered navigating a liminal post-doctoral period; negative perceptions of their relevance by other nurses; variable perceptions by medical colleagues; and lack of support by nursing leadership. There are two further

challenges identified from the data set that significantly impact the value DPCNs provide to nursing practice and healthcare in Aotearoa. Mentorship and role modelling appeared essentially absent for many participants who experienced an isolative post-doctoral period. Additionally, the lack of a post-doctoral pathway contributed to a liminal post-doctoral period where participants struggled to find their place in clinical practice.

Chapter 8 Mentorship, Role Models, and a Post-Doctoral Pathway

8.1 Mentorship and Role Models for Doctorally Prepared Clinical Nurses

Mentors and role models were acknowledged in Chapter Six to provide significant impetus for several participants to become doctorally prepared. Additionally, participants identified themselves as mentors and role models for junior nurses and doctors (Chapter Five). However, mentorship was largely unavailable for participants overall and role models were rare since many participants were the only DPCNs in their clinical area, or indeed the entire institution. This isolation was detrimental to participant's ability to contribute to clinical care and to establish themselves as researchers, while also extending their liminal discomfort.

The following participant described their sense of consternation at being isolated from other DPCNs in the immediate post-doctoral period. They were uncertain how to position themselves in clinical practice, and received no advice or example:

...you're at the beginning and unless you have that support network, it's an isolating and lonely experience because you don't know what you're supposed to do now. You've got your doctorate so now what? (Participant 013, Registered Nurse)

The next participant also described an isolative experience. They expressed a sense of trepidation at determining the next step. Guidance was absent and the participant's account provided a sense of pessimism in what could be a productive and inspirational time:

Because the worst thing that can happen is that you get it and you're not supported to, you know, establish your platform. But it's really hard, and you've got the post-PhD blues because you are like "Oh my God this has been my life for so long" and now it's over and what do I do now, and I'm all alone. (Participant 014, Registered Nurse)

A sense of isolation was expected by some participants who were already aware they would be the only DPCN in their clinical specialty. The participant quote below highlighted how this participant did not anticipate any support or mentorship in the post-doctoral period:

I don't know another [name of specialty] nurse who's done a doctorate in New Zealand. So, it was kind of the unknown, I think. I'm sure there are, I just didn't know anyone. (Participant 016, Registered Nurse)

The participant's contribution to practice and healthcare was severely impacted by this isolation. The same participant quoted above pointed to the importance of the post-doctoral period for consolidating research skills and publishing; a time which is considered finite:

If you haven't published and established yourself as an early career researcher, you know I think it's got a short-term life on it. You can't turn around 10 years post doc and go "right now I'm going to do something with this". I think you've really got to try to establish yourself within at least five years of finishing your doctorate I think, that's my impression. (Participant 016, Registered Nurse)

A mentor may have mitigated some of this tension by providing advice, support, and connections. The next participant thought their isolation occurred, in part, because a DPCN had no clear place in clinical practice. A clinical qualification, such as a Nurse Practitioner, made sense in this space, but a doctorally qualified nurse did not. The participant pointed to the need for a combination of advanced clinical skills coupled with advanced academic/research skills as the basis of the participant's contribution:

So, there's a doctorate and what you can do with that and then there's clinical practice and what you can do with an RN. And so one of the reasons I went and got my NP was that it allowed me to advance my clinical practice as well as my doctoral work so that combination is really important. Because in the healthcare system there is no place for somebody with a doctorate. (Participant 009, Nurse Practitioner)

Some participant experiences indicated a sense of being overwhelmed produced by being the only DPCN in their area. The next participant described the pressure of being the only academically qualified nurse in their clinical environment. Systematic requirements associated with research meant the participant would be leading more work than they deemed prudent:

Part of the challenge of being the only doctorally prepared nurse that's in a position to do something is that I have to be the PI on everything so to get grants and all that kind of stuff they need someone who's doctorally prepared to lend more weight to the

application. So that then means I've got to be doing PI type work on it. (Participant 009, Registered Nurse)

A lack of mentorship, role models, and the resulting isolation left participants with a sense of uncertainty about how to advance their careers, research, and practice forward. Their post-doctoral struggle to fit back into a clinical environment was linked to the lack of a pathway for DPCNs, which is explored in the next section.

8.2 No post-Doctoral Pathway

Since most participants began their doctorate with an enthusiasm for lifelong learning, rather than as a strategic career move, it is unsurprising that their arrival in a post-doctoral world was something for which they were unprepared. This gap was then amplified by the distinct lack of an institutional ability to absorb their skillset.

Participants said the absence of a clear post-doctoral pathway meant they graduated into an unknown and undefined era, leaving them to struggle along without guidance or support. In the next quote, the participant reflected on this time, pointing out the need for others to begin planning their post-doctoral period while they studied.

Hindsight made this need obvious, but at the time the participant was unaware of the benefits of intentional planning:

So yeah, I think I would have had to have a much clearer vision myself, of that possibility [eventual postdoctoral career goal], and have been working quite hard in the background, you know using relationships in order to get people thinking about this possibility, you know trying to sell that idea way earlier. But like I say, it wasn't until I was actually finished that I went, okay so what now. And I really needed to have been thinking about that much earlier. (Participant 002, Registered Nurse)

The above participant assumed it was their responsibility to craft a post-doctoral pathway. However, other participants said it was partially the responsibility for universities, supervisors, or institutions as well. The next participant quote highlighted the naiveté of expecting doctoral students to plan what they had never experienced:

I didn't have a distinct plan. I wish I did. In retrospect I really think that was a detriment to my career. And I don't think that's something you could expect a doctoral student to have, I think that's something

the supervisor should be responsible for. (Participant 013, Registered Nurse)

The same participant expressed their opinion of how doctoral supervisors could have helped in planning a post-doctoral season and admitted a sense of disappointment about their own supervisory experience. Although their supervisors got them through the qualification, at the end they were left adrift in an unknown space with no clear idea of how to proceed:

A discussion with your supervisors about the possibility of joining a research team, and having that sort of academic mentoring, to become involved in large research projects, get publications off the ground, and kick start your career. And some mentoring, rather than having to try and find your own way. (Participant 013, Registered Nurse)

Another participant verbalised that clinical career pathways existed for specific clinical nursing roles such as Nurse Practitioner or Nurse Prescriber however, a DPCN had no such defined pathway. Furthermore, the value of a DPCN appeared to be correlated to the existence of such a pathway; no pathway equated to little value perceived by others in having a DPCN on the team. The participant also indicated that the nursing profession lacked a cohesiveness which impacted their ability to create a post-doctoral pathway within clinical practice environments:

People are a little bit perplexed I suppose and I think that's really sad, because nurses with doctorates shouldn't be put on a shelf, and in a university. There's definitely a place for that, but I feel we need to develop a pathway for doctoral prepared nurses in practice. We need to value that kind of thinking. This is my bug-bear at the moment, I feel there really aren't clear pathways for advanced practice other than nurse practitioner, and prescribing now, but that's a very small amount of nurses. Doctoral prepared nurses don't necessarily have to be nurse practitioners, they don't need to be prescribers. I think that's something that as a profession we would do very well to start thinking about, and how to utilise the experience and knowledge that a group of us have, and I wonder because having worked across the sector if it's because we're not very well joined up. (Participant 003, Registered Nurse)

A post-doctoral pathway could enhance possibilities and mitigate some of the difficulties for nurses in late clinical career but still emerging as researchers.

Participants' development of a post-doctoral research career was linked to making

efficient use of the post-doctoral timeframe. In the following quote, the participant illustrated how completing doctoral study at a late career stage, and the life responsibilities of being a 50-year-old, impacted their ability to follow a traditional postdoctoral pathway:

... I had thought about the possibility about maybe applying for something post-doctoral away from New Zealand, then again I thought the opportunities of, the chance of me getting something given my age as well, because I was in my early 50s, on top of family commitments, you know and I couldn't just, like the young person, just up and leave. (Participant 002, Registered Nurse)

Being a late career doctoral student appeared to limit the participant's choices in the post-doctoral period. As the next participant outlined, traditional and poorly remunerated post-doctoral fellowships were simply unsuitable for DPCNs who were often also advanced clinical practitioners. However, even if the participant had been willing to take a formal post doctorate fellowship, opportunities were not widely available. Instead, this participant outlined what would be advantageous to create a postdoctoral period where the DPCN could consolidate their research skills:

Well, I think there should be an easy pathway straight into a post-doc, there should be funding available, and you know, you could easily do a post-doc in three years, because I think, and a lot of post doc contracts will last three years, but I mean they are unheard of ... they aren't around anywhere, so they are unheard of. You might get little pockets of funding but they are never full time, they are always fractional. But that's what, ... to establish career academics we need way more post-docs so you should finish your PhD, and then they need to be competitive, because again, nurses, you know, we have scholarships but they are like \$33000 per year, well that's great but what senior nurse can afford to drop to that? (Participant 014, Registered Nurse)

Another participant confirmed the difficulty utilising the immediate post-doctoral period to develop and consolidate a research career. They pointed to the difficulties of adapting to a new role and being a 'nobody' as two key drivers in their struggle to build a research career. This participant's perception emphasised the need for guidance, introductions, and collaborations to advance a DPCN career:

It took me maybe three years, maybe four years before I was able to get another project going and become research active again. Because

there is that whole process of learning [a new role]. There's all that. And not being part of a team and being a nobody, you know a newly graduated doctorate, it's really hard to start off and know what to do, where to go. (Participant 013, Registered Nurse)

The participant pointed to a four-year hiatus from research after completing their doctoral degree. Such a delay was harmful to a career if the DPCN was already older at the time of graduation since they would have a shorter post-doctoral career.

Essentially, there was no time to waste. The participant quote below illustrated a common reliance on serendipity for participants to provide not only post-doctoral opportunities, but also their entire career. This participant's experience emphasised the need for recognised clinical pathways, other than Nurse Practitioner, including a pathway for post-doctoral clinical nurses:

I should say I had a plan, but I didn't. I probably shouldn't say this either, but I've never had a plan for anything in my career, I've been lucky and opportunities have come along and I've been in a position to do things, but no I didn't [have a plan]. (Participant 007, Registered Nurse)

Despite some participant reports of essentially 'winging' the post-doctoral period, others approached the doctorate with deliberate career intent. For the following participant, a doctorate was an intentional part of their plan to achieve a career goal. However, they also understood that career planning is often poor within the discipline of nursing:

It was calculated on my part. It was part of a career strategy which I don't think nurses are very good at doing. (Participant 012, Registered Nurse)

Participants expressed frustration around the arduousness of finding a path to follow that would utilise their doctoral knowledge and research expertise while simultaneously managing busy clinical roles. The following participant described a sense of desperation about the struggle to apply their doctoral skills while working in clinical practice. Their anxiety stemmed from a valid belief of a finite time in which their doctoral thesis could support a research career:

...there's a short timeframe, which I haven't met yet, but there's a short timeframe where you've got to publish your doctorate research right, otherwise it is no longer up-to-date anyway. So, I think that's

the basis of it. And then to start some post-doc conversations with other people based on your research and what you found, again there's a life on that. So, if you leave it too long things will change so much that you've got to kind of alter where you are, so if you, kind of, want to ride that wave, of what you've investigated, I think you have to write it fairly quickly. And I haven't managed to achieve that, because of the clinical workload and the way things have worked post COVID, but I do think the time is ticking and I do need to sort that out.
(Participant 016, Registered Nurse)

A further effect of no clear post-doctoral pathway was the difficulty participants had in balancing their clinical priorities with their research. Many reported zero protected time for their research, while those with heavy clinical workloads were forced to undertake research in personal hours. The next participant told of an inability to find the dedicated thinking time required for research, due to clinical role pressures, even when research was related to the participant's role responsibilities. This quote drew attention to the participant's acceptance that clinical requirements took priority over research during a working day:

...that kind of stuff [research], even though it's related to my role and the work I've been doing nationally, ... it's easier to have the head space to do it in my own time, or I might try to carve out a day, although it never really happens, but I might try to carve out a day.
(Participant 011, Registered Nurse)

Some participants chose to leave their clinical roles as the effort to maintain both their clinical responsibilities and research deliverables became untenable. The following quote succinctly illustrated the tension this participant felt which led to their resignation from their clinical role. The inability of healthcare organisations to incorporate research time into advanced practice roles led to the loss of skilled clinicians from a system that could ill afford to lose any nurse:

I didn't really want to leave it [clinical practice], but I had to for research purposes. (Participant 010, Registered Nurse)

Another participant indicated the rigidity of traditional nursing practice was complicit in preventing DPCNs driving research. They pointed towards the medical model as the most successful integration of clinical and research activities into a practice setting. The participant drew attention to the autonomy of the profession of medicine to

structure their working day, while nursing roles had less autonomy, therefore less capacity to incorporate research:

Medicine seems to do this better than we do [combine clinical with research/academic work]. You gotta ask why? Part of it is because it's easier in the way they've set up their practice to just do half a day here and there right. It's not so easy to do that as a nurse. (Participant 009 Nurse Practitioner)

Participants' experiences indicated a pathway for the post-doctoral period could be beneficial for effectively and efficiently driving participants' careers. A defined pathway could enhance a DPCN's research time, ameliorate the difficult identity transition, and provide encouragement to other nurses to do doctoral studies. Additionally, a formal post-doctoral pathway may mitigate the frustration experienced by some participants which led to their loss for the public health system.

The last four chapters showed how significant value from DPCNs was identified including: being a knowledge expert, producing and using research, enhancing the approach to nursing practice, increasing credibility, holding valuable conversations and facilitating new opportunities and collaborations. However, several significant challenges were also highlighted: tumultuous identity transitions, tensions arising from the external perceptions of the DPCN, lack of mentorship and role models, a loss of momentum in post-doctoral careers, and an absence of a formal post-doctoral pathway. Each of these challenges impacted the value contribution of DPCNs as they struggled to balance clinical and doctoral activities without formal boundaries. This sense of disaffection caused at least one participant to resign from their clinical role.

The next two chapters will discuss the analytical evidence from this research in more detail. Chapter Nine explores the mechanisms underlying the value contribution of DPCN to nursing practice and healthcare in Aotearoa. The chapter presents each mechanism and places this research within the context of our current knowledge and the international nursing literature. Chapter Ten examines the challenges highlighted by the data analysis and explores how those challenges fit within the body of literature.

Chapter 9 Discussion of the Data Analysis

9.1 Introduction

The purpose of this research is to answer the question: how do doctorally-prepared clinical nurses (DPCNs) add value to nursing practice and healthcare in Aotearoa? Understanding *how* value manifests is just as important as understanding *what* value DPCNs contribute. Understanding the *how* helps guide nursing leaders and managers to ensure they make the best use of a limited resource. Knowing how a doctoral degree benefits nursing practice and healthcare can motivate other clinical nurses to consider adding a doctoral qualification in their career plan.

This research explored the mechanisms behind creating this value, including: being a knowledge expert (producing and using knowledge); an enhanced approach to clinical practice; valuable conversations; improved credibility and prestige; and new collaborations and opportunities for DPCNs. This research also identified several constraints which limit the contribution of participants, such as: difficult identity transitions; lack of mentorship and role models; adverse perceptions by peers; lack of post-doctoral pathways; and limited nursing leader and manager support. The rest of this chapter discusses how these findings fit within the existing body of knowledge and contribute new understandings of a DPCN's value. I will discuss how this research adds to knowledge about DPCNs in Aotearoa and provide recommendations for improving the experience and leverage of DPCNs. Finally, I consider future research and debate the limitations of this study's design.

9.2 Summary of Findings

Uncovering the value contributed to healthcare by DPCNs is important because doctorally prepared nurses employed clinically are rare. Understanding the mechanisms of DPCN value will help nursing leaders and healthcare managers support this scarce resource more effectively. How do DPCNs add value to healthcare and nursing practice? To answer this question, I interviewed 18 DPCNs who were either employed in clinical roles or with recent (≤ 5 years) clinical experience. Participants discussed contemplating a doctoral degree, going through the doctoral process, and

their post-doctoral experiences. They described their contribution to patient care delivery, their input into disciplinary and professional groups, and their influence on local and national nursing practices. Participants' accounts also highlighted a tenacity and perseverance in environments perceived as disinterested and sometimes hostile. Participants also described tumultuous identity transitions and being accepted or alienated by various healthcare groups. The findings of this research contribute to the international data on clinically based, doctorally qualified nurses and provides unique knowledge around the mechanisms that create value and the experience of DPCN in Aotearoa. The following chapter discusses the contribution to knowledge created by this research in more detail.

9.3 How is Value Defined?

As I approached the research question, I deliberately chose not to define value to avoid constraining what was reported in the data into my initial idea of what could be valuable. During the research my intent was to be open to as many aspects of value as possible. The open approach to what could be considered valuable enabled a construction from participants' experiences that represented the often invisible value unique to DPCNs, for example, the mechanism of holding valuable conversations. One could look at two people having a conversation and be oblivious to the value being created; that ideas had been exchanged; that a collaboration had been born; or that a seed for a future endeavour was sown. As a result of the open approach this research revealed novel findings about how a DPCN's value was perceived. Participants conceptualised their own value in different ways, incorporating a variety of situations and outcomes across the healthcare environment. For example, participants highlighted they provide value to the patient interaction through consulting on national healthcare policy, and collaboration on international research. Previous literature struggled to identify the value of DPCNs to healthcare since nursing value has traditionally been conceptualised as the discrete nurse-patient interaction (Gijbels et al., 2010; Met et al., 2022; Porter, 2010; Welton & Harper, 2016). However, this definition limited the understanding of how nurses provide a positive effect. Researchers have expanded the idea of value to include quality improvements, expertise, leadership, and addressing clinical issues (Abraham et al., 2021; Andreassen & Christensen, 2018; Borbasi & Emden, 2001; Cheraghi et al., 2014; Gijbels et al., 2010;

Orton et al., 2021; Smith, 2013; van Oostveen et al., 2017; Wilkes & Mohan, 2008). However, the analysis within this study found value beyond what was previously known.

9.4 How Doctorally Prepared Clinical Nurses add Value to Nursing Practice and Healthcare in Aotearoa

This research illustrated how participants deliver value by: being a knowledge expert producing and using research; an enhanced approach to clinical practice; building prestige and credibility; having valuable conversations and creating new collaborations and opportunities. Participants discussed contemplating a doctoral degree, going through the doctoral process, and their post-doctoral experiences. They described their contribution to patient care delivery, their input into disciplinary and professional groups, and how they leveraged their doctoral skillset to acquire influence in local, national, and international spaces. Participants' accounts also highlighted tenacity and perseverance in disinterested and sometimes hostile work environments. They also described tumultuous identity transitions and explored how accepted or alienated they were by various healthcare groups. These findings contribute to the body of knowledge about DPCNs by expanding on the value they provide. Understanding their contribution is crucial because of the limited number of such nurses. Comprehending how DPCNs add value to practice will help nursing leaders and healthcare managers leverage this valuable resource, affirms for DPCNs their own value, and provide more career options for clinical nurses.

The research cohort consisted of 18 DPCNs and nurse practitioners either working or recently working in clinical practice. Their deep knowledge and experience of the clinical practice environment provided an authentic lens for exploring the mechanisms behind their value. Earlier research found that many healthcare and nursing leaders appeared unaware of the value of having a DPCN on their team (Borbasi & Emden, 2001; Chavez et al., 2021; Orton et al., 2019; Wilkes & Mohan, 2008). Other researchers suggested value from DPCNs was present but further research, specifically more geographically diverse research, was needed (Andreassen & Christensen, 2018; Borbasi & Emden, 2001; Dobrowolska et al., 2021; Gijbels et al., 2010; Happell et al., 2008; Orton et al., 2019; Orton et al., 2021; Wilkes & Mohan, 2008). Importantly,

limited study participant numbers, heterogeneous samples, and cohorts that combined both academic and clinical doctorally prepared nurses, made it difficult to draw conclusions from the literature about DPCNs in the clinical environment.

The following sections examine each mechanism of value in detail, exploring how they add value, examples of the mechanism at work, and how these findings compare to the existing body of knowledge. Identifying the mechanisms that lie behind value is important to define specific activities, roles, relationships, and supports that can enhance the benefit provided by DPCNs.

9.5 A Knowledge Expert

Study participants provided examples that demonstrated their reputation as knowledge experts in both clinical work and research. These findings confirmed that being a knowledge expert allowed participants to influence healthcare delivery at their institutions through research and quality initiatives and to influence local and national healthcare policy. Some examples include introducing new care models, creating intervention programmes, collaborating on research projects, and contributing nursing expertise to national healthcare policy development. Further examples are described in the Findings (Chapter Five).

The findings of this study are comparable to those of Abraham et al. (2021), and Armstrong et al. (2017), who highlighted the advances DPCNs made during fellowship programmes to clinical care delivery, quality of care, and critical clinical issues. However, this study's findings contrasted with Gijbels et al. (2010), which failed to specify DPCN value in a systematic review of postgraduate education on nursing practice. The relevance of the Gijbels et al. (2010), findings were impacted by the age of the data, and the unknown number of DPCNs in the cohort. The knowledge expert finding also contrasted with Cheraghi et al. (2014), Moghadam et al. (2017), and van Oostveen et al. (2017), all of which suggested some participants considered DPCNs less competent if they spent time in non-clinical activities such as research or teaching. This study's participants highlighted being a knowledge expert gave them opportunities to lead, mentor, and contribute to clinical disciplinary groups. Examples from the data included: supervising doctoral projects for medical colleagues; supporting the healthcare team to conduct research; leading or participating in disciplinary guidelines

groups; and advising nursing colleagues on education pathways and research opportunities.

In the literature review (Chapter Three), Andreassen and Christensen (2018), Dobrowolska et al. (2021), and Orton et al. (2021), highlighted mentorship and role modelling were principal components of the DPCN role. However, mentoring peers as a specific outcome of being doctorally prepared was not directly addressed in other studies, such as those by authors Chavez et al. (2021), Elgaard-Sorensen et al. (2019), and Rugs et al. (2020). Mentorship of the participants themselves will be addressed later in this chapter. Connected with being a knowledge expert was the production of new knowledge and the use of existing knowledge, which is discussed in the next section.

9.5.1 Research production and utilisation

Producing research

This study provided many examples of participants creating new knowledge which was implemented across clinical teams. This is an important finding because there are so few DPCNs, so their contribution to knowledge must be recognised, supported, and enhanced. Participants in this study led or participated in research as investigators or co-investigators, contributing to innovation in healthcare in Aotearoa. For example, one participant created a culturally safe model of care delivery which was implemented into their specialty area. Another provided New Zealand-specific data on their specialty patient group that informed care delivery in Aotearoa. However, there were also examples of tensions for participants when trying to balance research and clinical practice, particularly when a clinical role did not formally recognise research as an expectation.

The nursing literature highlighted that DPCNs produce significant amounts of research with the potential to improve clinical care (Happell et al., 2008; Elgaard-Sorensen et al., 2019; Smith, 2013; Wilkes et al., 2015). However, whether DPCNs' research was implemented is less clear (Happell et al., 2008; Smith, 2013), leaving their impact on nursing practice, patient care, and the health system, ill-defined. Previous research highlighted DPCNs were expected to produce and support the implementation of research (Andreassen and Christensen, 2018; Dobrowolska et al., 2021; Kim et al.,

2022; Orton et al., 2019; Orton et al., 2022) but this research did not explore how research might fit into a clinical role, leaving the 'how' of the equation unanswered. Orton et al. (2022), and Met et al. (2021), found that despite recognising the importance of nursing research, DPCNs often remained in supportive research roles instead of leading them.

Participants in the current study reported numerous experiences that indicate many healthcare leaders and managers consider research to be of less important than direct patient care. There were several examples in the literature of similar perceptions indicating healthcare leaders and managers lack understanding of a doctoral skillset. The challenge of promoting research in a clinical environment was also reported by Avery et al. (2022), who conducted an online questionnaire asking about factors that influence a clinical academic career. The cohort consisted of nurses, midwives, and allied health professionals. Half of the 231 respondents to the questionnaire stated they received inadequate support from their institutional leaders for ongoing research. Similarly, McNett (2006), undertook a qualitative investigation of how DPCNs saw their roles and responsibilities. Although all the participants stated they were involved in research, only one had research formally incorporated into their role. In a recent study by Orton et al. (2019), DPCNs reported their doctoral competencies were poorly understood by healthcare managers, preventing them from being leveraged appropriately. These studies illustrated that almost two decades of research has seen little change in recognising or supporting DPCNs in the clinical environment.

Examples from the current research showed clear value created by participants, including research opportunities for themselves and their teams. The positive impact of undertaking research for the current study participants supported that of Wilkes et al. (2015), who noted that 50% of their participants also reported a positive impact of their doctoral research on nursing practice. The finding was also supported by Orton et al. (2019), and Orton et al. (2022), who noted that DPCNs provide value to colleagues, managers, and other health professions through their experience in nursing science production. Although the diversity of cohorts, endpoints, and outcomes in previous research confused the value of DPCNs (Gijbels et al., 2010), this study draws attention to participants' critical reflections on the value they add to practice.

This study expanded from Wilkes et al.'s (2015), initial consideration of doctoral research to the impact of research in the post-doctoral period. Over half of this study's participants were actively involved in research in the post-doctoral period. Those who were not involved said their clinical roles were too busy to accommodate the extra work of producing quality research. Importantly, the ability of participants to define a rigorous research plan and comprehend the importance of data, empowered the extended healthcare team to undertake research and change clinical practice. Participants' experiences illustrated research production value was clearly visible and directly impacted clinical practice for the healthcare team. Examples of visibility included, participants leading research projects as the principal investigator, creating Aotearoa-specific data to support quality improvements, publishing research, and supporting data production by mentoring the healthcare team. This finding of visibility contrasted with research by Dobrowolska et al. (2021), and Met et al. (2022), who reported that research skills may be invisible, meaning that research value attributable to DPCNs existed, but was often unseen by others.

The contribution of participants' research is supported by the literature, with some caveats. Happell et al. (2008), reported many publications from their doctorally prepared mental health nurse cohort in Australia. However, nine of the 16 participants were in academic positions with the remainder in clinical positions or combined academic/clinical positions. Abraham et al. (2021), reported that published articles and presentations were an outcome for their participants who were part of a formal fellowship programme. However, it is worth noting that Abraham et al.'s (2021), participants were a multi-disciplinary team of whom some, but not all, were nurses, potentially diluting the applicability to DPCNs.

Using data

Using data was another key finding of this study. Using data refers to the ability of a DPCN to find, evaluate, and present knowledge to argue for practice initiatives and acknowledge the contribution of the profession of nursing to healthcare. Participants used data to powerfully argue for their recommendations and ensure a legacy of practice interventions. This finding indicated that a comprehensive understanding of data added a further layer of benefit for participants. The ability to use data to influence healthcare and nursing practice was widely reported in the DPCN literature.

Many researchers found that implementing research findings, translating evidence into clinical practice, and creating practice improvements were key responsibilities for DPCNs (Andreassen & Christensen, 2018; Chavez et al., 2021; Dobrowolska et al., 2021; McNett, 2006; Met et al., 2022; Orton et al., 2019; Orton et al., 2022; Rocafort, 2020).

Participants in this study added value to nursing practice and healthcare through research production and its use. Research production was significant because it often changed patient care models, improved national healthcare policy, and expanded nursing roles. The use of data by participants also ensured legacy of innovations introduced. This study highlighted how the doctoral processes of defining and evaluating a research problem, and critiquing interventions, were often replicated by participants when facing clinical problems. Ongoing critical enquiry illustrated that DPCNs applied their academic thought processes to everyday practice problems, which is explored in the next section.

9.6 An Enhanced Approach to Practice

Participants' doctoral learning enhanced their approach to nursing practice and clinical care through rigorous problem solving and an expanded healthcare lens. This study provided many examples of the enhanced approach, reviewed in Chapter Five.

9.6.1 Rigorous problem-solving

Several participants perceived the rigorous nature of doctoral research could be integrated into their clinical practice evidenced by a meticulous approach to practice problems. Participants highlighted their doctoral learning impact by approaching clinical issues with a full understanding of a problem then placing it into context before making recommendations. This structured thought process was a replica of the doctorally-acquired approach to answering a research question. Problem-solving skills meant participants could proactively tackle clinical concerns in a structured and evidenced way by using the thinking tools developed during their doctoral studies. For example, many participants told of transitioning clinical improvements from being a 'good idea' into reality by creating evidence that supported the implementation. Participants were no longer limited to merely noticing clinical problems. The academic rigor of careful evaluation empowered them to solve these problems. Previous studies only partially addressed this shift and illustrated expectations of critiquing and

translating evidence into practice (Andreassen & Christensen, 2018; Chavez et al., 2021; Dobrowolska et al., 2021; McNett, 2006; Met et al., 2022; Orton et al., 2019; Orton et al., 2022; Rocafort, 2020).

This study expanded on the literature about how DPCNs contribute to the clinical environment. Chapter Five highlighted that participants were more confident in discussing evidence, which gave them a greater ability to advocate for patient care. This confidence was a result of their academic ability to articulate a defence, acquired through the doctoral process. Previous nursing education literature supported the idea that post-graduate education benefits healthcare through enhanced attitudes and knowledge and improved clinical skills (Dobrowolska et al., 2021; Gijbels et al., 2010; Orton et al., 2019; Orton et al., 2022). The experiences of DPCNs in this study suggested that while many aspects of their value were visible, some aspects, including their enhanced problem-solving, may be invisible. This invisibility is different to that suggested by Dobrowolska et al. (2021), and Met et al. (2022), mentioned in the previous section. The opacity of participants' capabilities meant their thought process was not necessarily evident to colleagues unless intentionally explained. Evaluating evidence took time and was often conducted outside the clinical practice setting, further rendering the practice invisible to colleagues. Invisibility was compounded because participants reported their role responsibilities often remained the same as other non-DPCNs, a finding supported by Orton et al. (2019), in their review of DPCN work. The researcher's reported participants often had the same clinical responsibilities as non-DPCNs, making the doctoral distinction difficult to identify.

9.6.2 An expanded healthcare lens

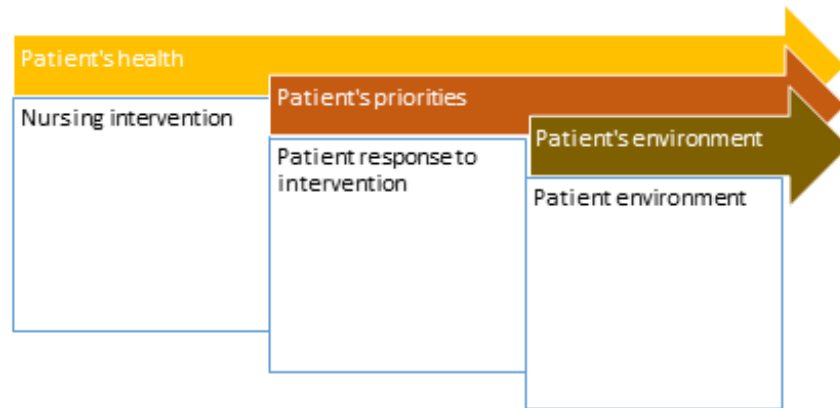
A doctorally-enhanced approach to practice also widened the lens through which many participants interpreted healthcare. Instead of viewing healthcare as the clinical nursing requirements of an individual patient interaction, the new lens enabled participants to visualise the patient in the context of their economic, cultural, environmental, and social determinants of health. In their pre-doctorate lens, healthcare interaction was primarily a nurse-patient interaction, and only occasionally would consider the environment. After their doctorate, several participants explained their doctoral education meant they now considered patient care to begin with the

environment and end with a nursing intervention. The figure below (figure 1) illustrates the change in how participants approached patient care.

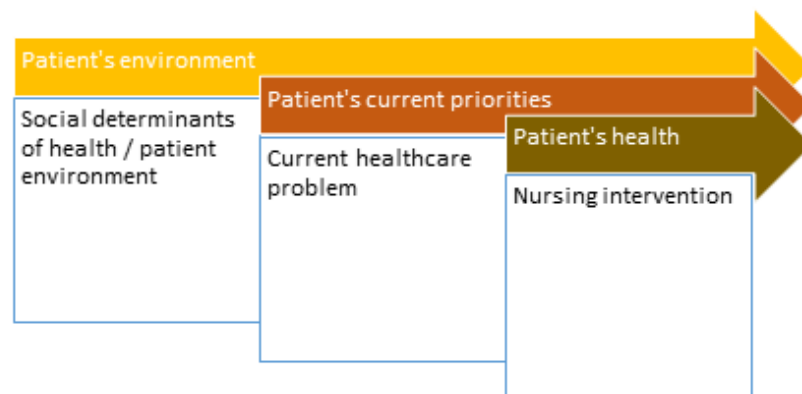
Figure 1

Participant perception of care

Pre-doctorate



Post-doctorate



The participant lens also expanded to better understand the physical, social, cultural and political constraints brought on by the structures of the healthcare environment within which they provided care. For example, one participant chose to base their initial patient interaction solely on Whakawhanaungatanga (Lacey et al., 2011), leaving clinical concerns to later interactions. Another participant recognised the impact of the financial and social environment on their patient's experience of an acute illness and planned the care accordingly. A further participant recognised the impact of the family home environment on patients' medication compliance and created an innovative approach to support adherence. An expanded lens is an important finding because with awareness comes innovation, improved equitable care delivery, and better engagement with healthcare services for patients and their whānau. Participants in this study appeared to experience a substantive change in beliefs and values to reflect

a practice perspective that was more authentic than theoretical for the complexity of patient's lives.

A refreshed healthcare lens expanded on several examples in the DPCN literature. A small qualitative study by McNett (2006), explored how DPCNs perceived their clinical roles. Participants in the McNett (2006), study highlighted a changed lens allowed them to see healthcare at a systems level, rather than at an individual patient level. However, the study had only a small cohort of five participants. A similar experience was reported by Heinrich (2005), in which participants gained a broader view of nursing and of the world. A study by Kim et al. (2022) also found that participants improved their ability to see patients as human beings with human experiences, rather than as "healthcare customers" (p. 5). An expanded lens offered an opportunity to partner with patients in therapeutic interventions that were more impactful as they aligned with the patient's priorities. Participants in this study described placing patients within the context of their lives to provide individually considered care due to a greater understanding of patient environments and the social determinants of health that factor into patients' engagement with healthcare. Engaging with the realities of patient's lives added substantial benefit for clinical nursing practice.

Along with an enhanced approach to practice, increased prestige and credibility were also reported in the current dataset to be key mechanisms contributing to participants' doctorally provided value. How participants leveraged credibility and prestige to add value to nursing practice and healthcare is examined in the following section.

9.7 Increased Prestige and Credibility

Many participants in this study perceived they had greater influence because of the credibility and prestige of their doctoral qualification. Participants reported the doctoral qualification enhanced their ability to be seen and heard in places where they previously perceived they were unable to speak, or perceived others were unwilling to listen. For example, some participants reported they discerned medical colleagues and healthcare leaders were more likely to listen to their opinions and respond more favourably because of their doctorate. Others reported feeling more confident to voice opinions that were backed by doctorally-acquired skills of rigorous discussion and academic language. This increased credibility and prestige provided opportunities to

lead healthcare initiatives, while the knowledge created through participants doctoral and post-doctoral research provided something of value to contribute to healthcare discussions.

The idea of DPCNs experiencing an increase in credibility and prestige was uncertain in the literature. Some researchers found the doctorate did act as a mechanism of implied credibility (Heinrich, 2005; McNett, 2006). Orton et al. (2022), who, as previously discussed, examined the roles and responsibilities of DPCNs in Nordic countries noted that DPCNs discerned their degree improved their visibility in the clinical environment. However, Orton et al. (2022), also reported how DPCNs struggled with their perception as subservient to medical doctors. Other researchers reported decreased clinical credibility for DPCNs (Cheraghi et al., 2014; Moghadam et al., 2017; van Oostveen et al., 2017). The conflicting findings may be explained by considering who is contemplating the DPCN's credibility. For example, Cheraghi et al. (2014), reported from the viewpoint of clinical ward nurses who considered credibility as the ability for the DPCN to competently complete clinical tasks. Van Oostveen et al. (2017), explored attitudes to the suggestion of introducing a nurse scientist to a team. Some in van Oostveen et al.'s (2017), multi-disciplinary cohort suggested DPCNs may have less clinical credibility if they had reduced time in clinical care. Those who expressed concern in the Van Oostveen report were a minority of the 26 participants, all of whom had no experience of working with a DPCN before.

This study suggests that credibility and prestige allowed participants' opinions and advocacy to be heard by healthcare leaders and the wider medical profession. The ramification of greater credibility for exposing the value of DPCNs to healthcare leaders and managers is discussed later in this chapter. In this research, medical colleague support was conflicted but significant for many participants, as discussed in the following section.

9.7.1 Support from medical colleagues

Participants in this study described varying experiences with medical colleagues. Some highlighted derogatory behaviours such as ridicule or apathy. For example, a participant who described hearing their research was to be excluded from a national conference discussion around a healthcare issue because it was 'nurse' research.

However, others described their medical colleagues as a significant source of support both during and after their doctoral studies. Many participants noted they were accepted by medical colleagues as academic equals. This was important because acceptance manifested as participating in and even leading, historically medically dominated disciplinary and research groups, which provided opportunity for influence. This significant finding provides evidence that a doctoral qualification can influence how DPCNs drive healthcare agendas.

Examples from the literature also found a conflicted role of medical colleagues for DPCNs. Van Oostveen et al. (2017), surveyed the perceived value of DPCNs, which included medical doctors as part of the cohort. Van Oostveen et al. (2017), reported that medical participants in their study were concerned DPCN research skills would not be strong enough to be part of a research team, indicating that not all medical colleagues understood a doctoral skillset or accepted a DPCN as an academic equal. Although not overtly stated by van Oostveen et al. (2017), this concern may have been influenced by the lack of a nursing research tradition within the discipline of nursing. Conversely, Met et al. (2022), in their exploration of DPCNs working in hospitals in France, highlighted how medical doctors in France provided some of their DPCN cohort with funding and scientific support. Perhaps perceptions of increased respect from medical colleagues may relate to DPCNs achieving a qualification that has a universally recognised and accepted standard.

It is significant that this study found an increased credibility and prestige for DPCNs in the healthcare environment since it improved their ability to influence healthcare and hold valuable healthcare conversations. The following section defines valuable conversations and explores how these benefit both nursing practice and healthcare.

9.8 Valuable Conversations

This study's findings indicated the ability of participants to hold valuable conversations was reinforced by being a knowledge expert, a data creator, a credible clinician, and a healthcare leader. Valuable conversations are any significant communications that impact people's lives or create important change. Participants perceived they were better able to hold valuable conversations with healthcare colleagues, local and national healthcare leaders, and with patients and whānau. The academic lexicon and

oratory skills learned during their doctoral studies enhanced valuable conversations which, in turn, influenced healthcare delivery, nursing practice, and healthcare policy. Participants in this study reported they developed specialised clinical disciplinary knowledge, which enhanced their cognition of clinical scenarios. Patient conversations also became more focused on evidence and how social factors affect health and engagement with healthcare.

The nursing literature provided many reports of DPCNs' growth in confidence, attributable to their doctoral degree, which, in turn, contributed to their ability to hold valuable conversations (Gijbels et al., 2010; Heinrich, 2005; Wilkes & Mohan, 2008). However, one participant in the present study did not perceive an increase in confidence. This participant was isolated in their clinical role from other DPCNs and had little opportunity to engage in valuable conversations. Although it is outside the scope of this research, underlying personality traits could impact the ability for some DPCNs to engage in valuable conversations. The participant may also not have recognised the valuable conversations they were already having in their practice. The next section discusses how valuable conversations also contributed to new opportunities and collaborations which further impacted nursing practice and healthcare in Aotearoa. The next section details how new opportunities and collaborations provided a further mechanism for adding value to nursing practice and healthcare.

9.9 Opportunities and Collaborations

The final mechanism of added value was the perception of increased opportunities and collaborations. Participants discerned they were able to engage in opportunities to be part of healthcare decision-making groups as a result of their doctoral degree. Participants also developed a network of collaborations that generated new knowledge-making but were previously inaccessible. This study highlighted collaborations were a significant way value was contributed to healthcare and many participants were already proactively developing collaborations while others were invited onto research collaborations because of their expertise and reputation. This finding provided evidence that DPCN were not waiting for a culture shift to make collaborations. For example, a participant successfully approached an international

research team to join their research while another was invited to join a group exploring the effect of culture on healthcare because of their doctoral research. However, several participants reported being unable to continue research or collaborate due to their overwhelming clinical workloads. It may be that protected research time would have more benefit to DPCNs' ability to contribute than a culture change alone. A culture of acceptance and support needs to couple with allocated and protected time for research and thinking to provide DPCNs with the optimal circumstances for positive contribution to healthcare in Aotearoa.

While becoming doctorally-prepared is not the only way to gain influence over the healthcare system, the increased credibility attracted opportunities and offers of collaboration. Collaborations reported in this study encompassed local, national, and international partnerships. Participants reported being the first nurse on medically-led committees or the first nurse to lead their multi-disciplinary interest group. The ability of participants to contribute to the national and international environment also expanded their spheres of influence beyond their immediate clinical space. Collaboration to influence healthcare delivery is important because it validates nurses' ability to contribute to the body of science and to healthcare practice.

A further significant understanding from the current research is that it was often the combination of their doctoral degree *and* nursing experience that made participants such an attractive partner for collaborators. Participants in the current study outlined their ability to use pragmatic problem-solving, real-world experience, and clinical advocacy to enhance research protocols and improve research impact. Creating clinical protocols that consider the realities of patient and clinicians' experience allowed research outcomes to be applied to clinical practice and patient settings with authenticity and authority. However, some reports in the literature contrasted with this study's finding of increased opportunities and collaborations. In Heinrich's (2005), study of doctoral identity development in the five-year post-doctoral period, several participants reported conducting no research or doctoral activities, indicating a lack of increased opportunities or collaborations related to their doctoral degree. Rocafort (2022), in a grounded theory study on the roles of DPCNs, recommended collaborating between the two types of American DPCNs, implying that collaboration was not currently occurring. Hafsteinsdóttir et al. (2017), in their systematic review of literature

investigating post-doctoral nurse leadership and mentoring, also described how a lack of career opportunities negatively impacted DPCNs. Similarly, a mixed-method study of DPCNs in Australia by Wilkes and Mohan (2008), noted that nurses in full-time clinical practice found it incredibly difficult to parcel enough time for research.

9.10 Summary

Findings from this study confirm and expand upon the value DPCNs add to nursing practice and healthcare. The research outlined the mechanisms underlying value and explored the experience of participants in the context of Aotearoa. Previous literature reported various perceptions of DPCN value. However, this research found specific instances of their value and, importantly, how this value contributed to clinical practice and healthcare. This study provides a strong argument for nurses to consider a doctoral degree as part of their career planning and also justifies a place for DPCNs in clinical practice in Aotearoa. Despite the significant value being contributed by participants, many constraints were also identified, including: difficult identity transformations; the impact of being perceived differently by others; being isolated; and lacking a defined post-doctoral pathway. The next chapter discusses the impact of these perceived constraints.

Chapter 10 Challenges to the Doctorally Prepared Clinical Nurses' Value Contribution

The previous chapter discussed the mechanisms used by DPCNs to contribute value to nursing practice and healthcare in Aotearoa. It also discussed the literature and how this study's findings fit within that body. This study's unique contribution to knowledge included: clearer insights into how DPCNs provide value and defined the underlying mechanisms that produced this value. Participants also reported limits to their ability to add value, including: difficult identity transitions; adverse external perceptions; a lack of mentors and role models; being 'othered'; hiding their doctoral identity in clinical environments; deficiencies of support; and the absence of a post-doctoral pathway. In the following chapter, each of these experiences is discussed in-depth.

10.1 Identity Transformation, Self-perception, and Liminality Theory

Participants in this research highlighted a tumultuous identity transition when moving from pre-contemplation of the doctorate to a doctorally prepared clinician in a post-doctoral world. A transition was defined in the wider identity literature as a process of moving from one place to another over time and was a subjective experience which resulted in substantive change (Willson, 2019). Participants in this study described experiences consistent with constructing a new identity of a DPCN.

10.1.1 Constructing a new identity

Participants in this study described developing a doctoral identity gradually, rather than instantaneously at conferment. Similarly, the DPCN literature noted that DPCN identity construction was a process (Armstrong et al., 2017; Ashforth & Schinoff, 2016; Heinrich, 2005). A successful identity transformation was not guaranteed in a study by Heinrich (2005), who investigated identity formation of DPCNs over a five-year period. Two participants perceived they had no doctoral identity at all because their clinical role did not include what they considered doctoral activities.

Identity construction has been extensively described in the workplace literature. While it is beyond the scope of this study to examine identity as a concept, some key features of an interpretivist view is that identity is dynamic and influenced through social

contexts (Ashforth & Schinoff, 2016; Bell, 2021; Bertolotti et al., 2022). In a recent literature review of empirical studies on researcher identity, the researcher's own experiences and actions were reported to be critical for transitioning to a new identity (Castelló et al., 2021). The wider professional identity literature confirmed the importance of DPCNs' doctoral activities in the post-doctoral period for consolidating their doctoral identity (Armstrong et al., 2017; Bertolotti et al., 2022; Castelló et al., 2021; Chen & Reay, 2021; Heinrich, 2005). Another way of understanding this idea is that 'doing' doctoral activities is necessary to 'be' a DPCN (Lepisto et al., 2015). However, participants in this research illustrated being trapped in old ways of working due to the structured nature of clinical nursing within the healthcare system. Working in old ways, despite thinking in new ways, led to conflict between identity, work, and the DPCN. Examples of this tension included the inability to engage in on-going research because of clinical workloads. Some participants resolved this tension by resigning from their clinical roles to eliminate the conflict between clinical demands, healthcare structure inflexibility, and their personal agency.

10.1.2 The impact of isolation

Participants in this study reported they were often the only DPCN in their specialty area, or indeed their entire organisation. This sense of isolation made their post-doctoral identity transitions much harder. A study by Thornborrow and Brown (2009), investigated how British Paratroopers developed their identity and was a useful contrast to DPCNs' experiences. Thornborrow and Brown (2009) found that identity transition occurred through a number of mechanisms: comparison to other paratroopers; storytelling; rites of passage; and by others in the group monitoring the new recruit. Most of these mechanisms were impossible for participants in this study, since they were alone. However, a rite of passage, such as a formal recognition by nursing leaders or managers, was an achievable step. The next section examines the research through the lens of liminality to conceptualise how identity transitions impacted the value of DPCNs.

10.1.3 Liminality theory

Liminality is an anthropological concept first coined by Arnold van Gennep (Garcia-Lorenzo et al., 2020; Janusz & Walkiewicz, 2018; Söderlund & Borg, 2018). Van Gennep

(1960), described a three-phased 'Rites of Passage' theory of identity transformation, which began with 'Separation' from the old identity, then 'Margin' (limen) and finally 'Aggregation' into the new state of being. Van Gennep (1960), illustrated that Rites of Passage were frequent experiences during a person's life. Anthropologist Victor Turner expanded on van Gennep's work, focusing on the second 'Margin' phase, or what Turner (1987), referred to as the 'liminal' phase. In the liminal phase, a person had left identity A, but had not yet reached identity B. They were neither one nor the other, but in transit between the two (Beech, 2011; Garcia-Lorenzo et al., 2020; Willson, 2019), in the case of the current research, between being a non-DPCN and being a DPCN. Turner (1987), explained that the 'liminal' period was an ambiguous time where an individual had no defined social place. However, the liminal period was finite, with aggregation into the new identity as the ultimate destination (Turner, 1987). For some of this study's DPCN participants, transitioning the liminal space appeared to be unresolved.

A further characteristic of a liminal space was bi-directional behaviour (Chen & Reay, 2021; Willson, 2019). Several examples of bi-directional behaviour occurred in the present study. For example, some participants reported fluctuating between using their post nominals on email signature and then removing them. This is important because identity was closely linked to the activities one took in their professional life (Armstrong et al., 2017; Bertolotti et al., 2022; Castelló et al., 2021; Chen & Reay, 2021; Heinrich, 2005). Therefore, liminality could result from the tension between a person's new identity and their work activities (Chen & Reay, 2021). For example, when a DPCN could not find time to research due to their clinical responsibilities.

Armstrong et al. (2017), suggested a difficult identity transition was caused by continuing to practice in a clinical environment during doctoral studies. Armstrong et al. (2017), discussed that continued clinical practice kept the DPCN in an identity of 'clinical nurse' rather than as 'doctorally-prepared nurse.' Armstrong et al.'s (2017), finding suggested that van Gennep's (1960), 'Separation' step had not occurred for some DPCNs who were unable to transit to 'Aggregation.' While participants in the present study also worked in clinical practice during their doctoral education, contrasting with Armstrong et al. (2017) the clinical environment itself did not directly impact their identity development. Instead, identity tensions were linked to the

societal image of nursing, lack of mentorship, difficulty balancing research and clinical responsibilities, and isolation. While the current study found participants often chose to conceal their doctoral identity, none reported a complete lack of doctoral identity.

Liminality is a disruptive time that may induce uncertainty, excitement, and degrees of discomfort or disorientation. It was a sense of ambiguity (Garcia-Lorenzo et al., 2020; Henfridsson & Yoo, 2014; Turner, 1987), during the liminal period that appeared to characterise the experiences of participants in this study. While many participants found their identity transition tumultuous, a liminal experience also provided personal and professional growth. Participants in this study spoke of their academic and personal successes, their networks, and their contribution to clinical areas, all of which were part of the liminal phase of 'becoming' a DPCN.

10.1.4 Identity tension in the wider nursing literature

The identity challenges noted in this study appeared elsewhere in the literature. A study by Barrow and Xu (2021), provided a useful parallel between nurses developing an academic nurse identity and the participants in this research. The researchers found that identity change was less a transformation and more an expansion of a previous identity. The nurse academic built upon their clinical nurse identity to create a new identity that was still 'nurse' but also expanded to include 'academic'. In the same manner, participants in this study voiced still being 'nurse' but built upon their 'nurse' identity to become 'doctorally-prepared clinical nurse'.

Participants in the current study said their identity transition tensions were exacerbated by their perception of being unrecognised as doctorally-prepared by others in the clinical setting. Highlighted in the literature review, and in the wider workplace identity literature, was the adverse impact of being unrecognised coupled with lack of activities associated with that identity, for example research, may adversely impact the ability of a professional to construct and consolidate an identity (Ashforth & Schinoff, 2016; Bertolotti et al., 2022). Essentially, being unrecognised within clinical practice environments resulted in no discernible place for participants' expanded identity to be acknowledged. This finding was important because, without a defined place or recognition of their identity, participants could only rely on self-validation. Lack of validation prompted some participants to disengage from their

clinical positions and enter independent practice or academia where the identity of a doctorally-prepared nurse was less contentious. Failing to find a place within clinical practice impacted some participant's ability to contribute to nursing practice and healthcare. For example, Participant 002 planned to use their research skills in their clinical role but found those skills were not accepted by the clinical or managerial leaders and the participant pursued a university role instead. Another example was Participant 014 who found no place as a DPCN in clinical practice in Aotearoa, also forcing them to move into academia.

10.2 External Perceptions

Participants in this research perceived external perceptions by others clashed with their internal identity as a DPCN. The literature on workplace identity suggested identity construction was a complex interplay between personal agency and social relationships (Ashforth & Schinoff, 2016; Beech, 2011; Bertolotti et al., 2022; Brown & Coupland, 2015). Beech (2011), described identity construction was a combination of the agency of one's self-identity projected outward and the social structure of one's identity projected onto the self. However, there was an added layer of difficulty for this study's participants. The literature review in Chapter Three highlighted that many participants were often the only DPCN in their clinical area, making them part of an emerging nursing identity, that of DPCN. Murphy and Kreiner (2020), in their work on identity in emerging professions, drew attention to the sense of struggle experienced by emerging professions. Without reference to, or guidance from, others already holding the identity, individuals may struggle to build a valid self-perception. Brown (2015), also noted in their research on identity work in organizations that the more "...strains, tensions and surprises..." (p. 25), surrounded a professional identity, the more intense identity work could be. Participants in the present study dealt with similar tensions and surprises of being an emerging professional identity, which was detailed throughout the analysis chapters.

Doctorally prepared clinical nurses in this study highlighted they often became 'outsiders' to many of their colleagues. Van Gennep (1960), hypothesized that societies can treat strangers with fear and aggression, or care and protection. Doctorally prepared clinical nurses, as the perceived strangers in this context, may be

accepted and admired, or treated with contempt and alienated. Participants in this study perceived both enthusiasm and contempt from colleagues. My personal experience of being repeatedly asked by my nursing clinical colleagues why I would undertake a doctorate underlined how DPCN's were often seen as an enigma. Workplace identity literature suggested professional identities must be accepted by the wider organisation and the individual, as necessary and appropriate (Brown, 2015; Murphy & Kreiner, 2020). Therefore, organisations (and society) could be complicit in limiting the identities of workers (Bell, 2021; Boussebaa & Brown, 2017; Thornborrow & Brown, 2009). A limited identity palette impacted DPCNs because, as Bell (2021), highlighted in their discourse analysis of the literature on the politics of professional nursing identity, identity affects the behaviours the individual believes should be or not be undertaken. The analogy of a restaurant menu is useful to further explain the idea of organisationally limited identities. Healthcare system leaders appeared to recognise a predefined set of nursing identities on the menu. Nurses could have this identity, or that identity. But there were limited options and the analysis of this study showed that being a DPCN was not on the menu.

An external view of identity was only part of the identity construction process. The next section explores participants' self-perception and their insight into how a doctorate affected their personal clinical practice. The consequence of participants' ability to stand out is also examined as it related to their ability to provide value.

10.2.1 Self-perception and the relevance of a clinical doctoral identity

This study identified both internal and individual tensions for claiming the identity of DPCN. Each participant was asked to talk about how their doctorate had changed their clinical practice. Surprisingly, many said the doctorate made no difference to their clinical nursing practice, yet during the remainder of the interview they described significant differences. This conflict indicated that some participants were unaware of their own value in clinical nursing settings and perhaps had limited time to reflect on the question. For example, some participants had the same responsibilities as their non-DPCN colleagues, which meant their doctorate had no effect. However, *how* participants completed their responsibilities was improved due to their doctoral learning.

10.2.2 The role of a doctorally prepared nurse in clinical practice

Participants in this study perceived delivering care from a paradigm that incorporated their complex doctoral knowledge, but without recognition by nursing leaders, managers, nursing colleagues, or at times even from themselves. This finding was reflected in the literature review (Chapter Three). Chavez et al. (2021), described how the complexity of a DPCNs' activities was not formally recognised in their job descriptions or career pathways. Dobrowolska et al. (2021), in their review of the roles of DPCN in practice environments similarly found that healthcare managers, nursing leaders, and even the DPCN themselves, weren't always sure how best to leverage their competencies in the practice environment. This study underlined a need for the collective nursing identity to change. Embracing the growth in advanced nursing abilities and advanced nursing knowledge could only be achieved by acknowledging and accepting the diverse education and skill levels of the DPCN.

The findings of this study illustrated that many participants were unaware of the identity transition they were about to experience when becoming a DPCN. For example, participants reported not considering a post-doctoral plan, indicating little expectation and no preparation for an identity transition. Factors that influenced an identity transition included awareness of the transition, preparation for the transition, and the ability to understand the transition (Willson, 2019). Some participants described foundering through the post-doctoral period without direction. While a few were able to create a niche for themselves, others struggled, appearing less confident to forge their own path. In the literature review, van Oostveen et al. (2017), found no common vision for DPCNs in clinical practice in part because a doctorate was not a requirement of any clinical nursing role. This research also did not discover when a doctorate was a requirement for any clinical nursing role in Aotearoa. My findings and those of van Oostveen et al. (2017), added to an overall sense the doctorate was perceived by many, including some DPCNs, as irrelevant to clinical nursing practice.

This study found that identity tensions were augmented by a lack of ceremony about doctoral conferment in the clinical space. This was important because recognising a DPCN as part of a clinical team could easily have provided legitimacy for the DPCN and mitigated their identity transitions. Janusz and Walkiewicz (2018), in a review of Arnold van Gennep's (1960), Rites of Passage framework, suggested rituals were part of

acknowledging a person's new self. While participants in this study reported their clinical teams celebrated their doctoral graduation, there was little acknowledgement from nursing leaders and managers, which is discussed further at the end of this chapter. The findings in this study conflicted with that of Rocafort (2020), which noted that nurses with doctorates were contributing to a groundswell of professional nursing change emanating from within the nursing discipline. Rocafort (2020), described the profession of nursing as "defining itself from within" (p. 255). However, there was little evidence in this study of a similar groundswell of change. Indeed, Bell's (2021) literature review of nursing identity reported nursing identities remained inflexible and would benefit from accepted diversity.

Participants in this study appeared hesitant to define themselves within clinical nursing circles, many choosing to hide their doctoral degree instead to fit in with the clinical nursing group. It may be that Rocafort's (2020), findings were affected by the trend in the United States for Nurse Practitioners to hold a doctoral degree. In other countries, including Aotearoa, a master's degree is the required qualification for Nurse Practitioners. Participants in this study pointed to a lack of mentorship and role models as significant contributors to their identity tensions, which is discussed in the next section.

10.3 Mentorship, Role Modelling, and Isolation

This study found the identity struggle of some participants was exacerbated by the paucity of mentorship and role modelling, particularly in the post-doctoral period. This was a significant finding because these factors influenced how much DPCNs could constructively create value for nursing practice and healthcare.

10.3.1 Lack of mentorship

The literature discussed the importance of mentorship and role modelling as a traditional method of learning for nurses (Mijares et al., 2013; van Rooyen et al., 2018; Vinales, 2015). Mentorship included shared understanding, experience, guidance, and emotional support. The strength of the mentoring relationship was in the sharing of wisdom from a seasoned clinician to a novice (Mijares et al., 2013). However, the literature review found mentorship for DPCNs to be fragmented, at best (Armstrong, 2017; Dobrowolska et al., 2021; Heinrich, 2005; Met et al., 2022).

This study found that mentorship would be particularly important in the post-doctoral period where a traditional post-doctoral fellowship was impractical for DPCNs who often held advanced practice roles. However, participants had few opportunities to access seasoned DPCNs as mentors. Mentors play a vital role in socialising a novice to their new environment (van Rooyen et al., 2018; Vinales, 2015), and often influence both career development and research engagement (Abraham et al., 2021; Avery et al., 2022; Hafsteinsdóttir et al., 2017). However, Avery et al. (2022), and Heinrich (2005), illustrated that mentorship was often missing from a DPCN's post-doctoral experience. The 17-year difference between these two pieces of research indicated that mentorship paucity has been a long-standing and unaddressed issue for DPCNs.

10.3.2 Lack of role models

Role modelling is also important for DPCNs, but as with mentorship it was difficult for DPCNs to access. This study confirmed that several participants had a role model who guided them to the doctorate decision, but in the post-doctoral period role models were absent for most DPCNs. Role modelling was found to be important for undergraduate nursing students and newly-graduated nurses (Hunter & Cook, 2018; Jack et al., 2017), and, from the analysis of this research, for DPCNs as well.

There was little data related to role modelling for DPCNs in the nursing literature. However, a systematic scoping review on role modelling for medical professionals noted that exposure to role models enhanced cognitive skills; professional practice; expectations and standards; and guided behaviour (Koh et al., 2023). Additionally, role modelling may contribute to identity construction and professional practice by revealing both positive attributes and behaviours as well as undesirable ones (Hunter & Cook, 2018; Koh et al., 2023). Koh et al.'s (2023), review pointed out that not only were role models needed, but the person observing the role model required enough time and capacity to observe, reflect, and integrate or reject their example.

Participants in the present study reported high workloads which impacted their ability to use any role modelling opportunity, should one be available. Therefore, not only did DPCNs need role models, but they also needed time to utilise the role modelling opportunity.

Participants in this study essentially existed in a 'what shall I do now?' state of being. Many had no direction and were left to find their own way to create and sustain a doctoral identity. When faced with such uncertainty, nurses were reported to rely on colleagues for advice and solutions (Grant, 2009; Hunter & Cook, 2018). However, without role models DPCNs had few options within their clinical nursing teams. Some participants were eventually able to forge a path while others struggled and were less impactful as a result. The difference was in the participant's capacity and confidence to find opportunities for collaboration, become acknowledged experts in their specialty, or join decision-making structures such as healthcare boards, management groups, disciplinary leadership groups, or national and international research projects.

The analysis showed that DPCNs traverse a tension-filled and isolating identity transformation due to the lack of role models or mentors. Adding to these challenges were responses to the DPCN by colleagues, nursing leaders, and managers which either expanded or inhibited their contributions, as explored in the following section.

10.4 Othering, the Tall Poppy Syndrome, and Incivility

This study found dismissive and sometimes hostile reactions to DPCNs from some nursing colleagues and others. This finding was significant because how participants considered they were regarded by others affected the value that they could create.

Participants experienced name-calling, rude comments, stereotyping, and exclusionary tactics from nursing colleagues because of their doctoral qualification. The profession of nursing has a well-documented history of bullying (Bloom, 2019; Daly et al., 2020; Farrell, 2001; King et al., 2021; Roberts, 2015; Wilson, 2016). This tendency was still evident in modern nursing practice (Bloom, 2019; Daly et al., 2020; Roberts, 2015; Wilson 2016). Bullying behaviour in the nursing literature aligned with the experiences of participants in this study: unpleasant or belittling comments; non-verbal disrespect (making faces, eye-rolling); questioning of decisions; withholding information; gossiping; exclusionary tactics such as cliques and ridicule, or being ignored (Daly et al., 2020; Johnson, 2009; Roberts, 2015; Vasas, 2005; Wilson, 2016).

The nomenclature of bullying was diverse in the social research literature (Daly et al. 2020). Common terms included horizontal, lateral, or hierarchical violence, and

incivility. Bullying behaviours within nursing were reported to be learned and socialised behaviours often delivered from senior nurses to junior nurses (Farrell, 2001; King et al., 2021; Wilson, 2016). However, participants in this study were senior nurses where the power differential was equal or potentially reversed. One explanation related to the novelty of DPCNs since doctorates were not part of traditional clinical nursing. Bullying in nursing practice was linked to the task-oriented, temporaneous and hectic nature of clinical nursing (Bloom, 2019; Farrell, 2001; Roberts, 2015). Those that did not conform to the traditional path could be seen as a threat to some clinical nursing colleagues. This study suggested some nursing colleagues saw DPCNs as challenging the social norms of clinical nursing.

10.4.1 Tall poppy syndrome

In this study, Tall Poppy Syndrome (TPS) was referred to by several participants and was a recognised mechanism of maintaining group norms. Tall Poppy Syndrome refers to pulling back into the group any member who attempts to stand apart by doing something outside the norm or by achieving a higher level than others in the group (Kirkwood & McNaughton, 2022). The English Oxford Dictionary (n.d), defined TPS as, “a perceived tendency to disparage prominent or successful people”. This study identified that TPS appeared to be a response behaviour by nursing colleagues when presented with an academically advanced DPCN. An example was the participant who stated they felt ‘pushed out of nursing’ (Participant 003) because of their doctoral identity.

10.4.2 Othering the doctorally prepared clinical nurse

Bullying behaviours are essentially a form of ‘othering,’ a term first used in the profession of nursing in the late 1990s (Canales, 2010). Othering recognises differences and excludes or includes those considered different (Canales, 2010; Kempenaar & Shanmugam, 2018; Roberts & Schiavenato, 2017). ‘Othering’ has been identified in nurse-to-patient interactions; between male and female nurses; between nurses and medical doctors; and between advanced practice nurses and their nursing colleagues (Anderson et al., 2020; Kempenaar & Shanmugam, 2018; Roberts & Schiavenato, 2017). Examples of participants’ perceived experiences of being ‘othered’ by nursing colleagues and nurse leaders are in Chapter Seven.

The 'othering' identified in this study was primarily exclusory, and witnessed across the wider nursing professional literature. Anderson et al. (2020), reviewed the perceptions of advanced practice nurses fitting into clinical practice. Their review described remarkably comparable experiences to those of the participants in the current study. Advanced practice nurses (APN) were often nurses who held roles such as nurse anaesthetist, clinical nurse specialist, or nurse practitioner (Lewis, 2022). Advanced Practice Nurses in Anderson et al.'s (2020), study, like the participants in the current study, undertook extended professional/clinical activities and were perceived by nursing colleagues to have stepped away from the 'traditional' role of nursing (Anderson et al., 2020; Lewis, 2021). There appeared to be consternation from some nurses about when the extended behaviours were no longer considered nursing behaviours and the APN (or the DPCN) was no longer a nurse but 'other' (Lewis, 2022; Nadaf, 2018). Participants in the current research identified many collegial reactions which fit the experience of being 'othered' and reported being ridiculed, received negative comments, name-calling and other responses of incivility by their nursing colleagues because of their doctorates. The perceived dismissive response by some nursing colleagues aligned with what Armstrong et al. (2017), found in that for many clinical nurses the doing of nursing was valued above the thinking of nursing.

This study highlighted the fascinating yet problematic conundrum that the most highly qualified nurses may not experience greater power in their role. The theory of Oppressed Group Behaviour helped to understand the context of these interactions and to explore why nurses behaved in hostile ways towards those perceived as different. Oppressed group dynamics were characterised by a dominant group and a dominated group (Farrell, 2001). The dominated group was unable to assert itself when interacting with the dominant group, becoming fearful and turning their frustrations inwards or at the dominated group (Dubrosky, 2013; Farrell, 2001; Roberts et al., 2009). Nurses belonged to at least two oppressed groups, being both nurses and primarily female (Bell, 2021; Dubrosky, 2013; Roberts et al., 2009). Due to the societal development of healthcare, the profession of medicine had been the traditional power holder that was perceived to control nurses, the role of nurses in healthcare, and nurses' access to knowledge (Carrier, 2020; Dubrosky, 2013; Farrell, 2001; Lewis, 2022; Roberts et al., 2009). The result of oppressed group dynamics was bullying and

exclusionary 'othering' of the dominated group by members of that same group. It was important to recognise these behaviours because a person being 'othered' may become isolated from the nursing team which would reduce their contribution to the nursing team and the profession of nursing.

This study provided examples of participants supporting and mentoring nursing colleagues who wanted to do research, quality improvement work, or post-graduate study. This support conflicted with the findings by Anderson et al. (2020), that ANPs may, in turn, 'other' their less advanced nursing colleagues with the unconscious (or conscious) intention of aligning with the more dominant group – the profession of medicine (Anderson et al., 2020; Dubrosky, 2013; Farrell, 2001; Roberts, 2015). The current research did not support this suggestion for DPCNs. Instead, the findings indicated participants did not need to denigrate nursing colleagues to be accepted into medical groups. It was possible that the small number of DPCNs in clinical practice in Aotearoa obscured any reverse 'othering' which might occur with larger numbers. It was also worth noting that many participants in this study were APNs *and* DPCNs and therefore may be more at risk of being 'othered' than if they were one or the other alone.

The 'othering' experienced by participants in this study was primarily negative. However, the wider nursing literature indicated a positive side to 'othering' as well. Roberts & Schiavenato (2017), suggested that 'othering' could enhance nursing practice and nursing professionalism through role modelling how a dominating social power structure can be modified or ignored. For example, several participants reported becoming part of decision-making groups which allowed the opinions and priorities of nurses to be contributed to healthcare policy, previously a physician-only domain. Canales (2010), described how inclusionary 'othering' could positively impact team relationships through alliance-building, power-sharing, and inclusion. An example was Participant 018's efforts to include their team members in research by ensuring appropriate staff were noted as first author on collaborative research.

How DPCNs perceived they were 'othered' (negatively or positively) could impact the value they provided to clinical nursing colleagues. The effect of perceiving they were negatively 'othered' was an unwillingness to disclose their doctoral identity to the

clinical nursing group. Identity literature acknowledged some individual's reaction to a difficult identity transition was to create multiple identities and choose the contexts in which each was used (Bell, 2021; Slay & Smith, 2011; Willets & Clarke, 2014). For participants in this study, choosing to reveal or obscure their doctoral identity appeared to be related to their desire to remain part of the nursing group; to avoid confusing the healthcare consumer; and to leveraging the title to obtain a favourable outcome. The next section explores why participants oscillated between their self-perception and the identity that was expected by others.

10.5 Selecting when to Reveal a Doctoral Qualification

10.5.1 Anti-intellectualism

This study illustrated that some participants hid their doctoral qualification in clinical practice. Participants perceived they were less accepted by clinical nursing colleagues because of their doctoral qualification. The decision to hide the doctoral qualification was reportedly based on a fear of being considered elitist and being rejected by clinical nursing colleagues, indicating anti-intellectualism may be a contributing factor. Anti-intellectualism behaviours were problematic in clinical nursing because they impacted the ability for the profession of nursing to develop science. Consequently, the uptake of evidence-driven clinical nursing interventions would be affected (Davis-Tubbs, 2019). The broader literature on anti-intellectualism was useful to understand participant's reluctance to claim their doctoral title in clinical practice. Anti-intellectualism was a concept described by Hofstadter (1963), in his seminal work on anti-intellectualism in American life. Hofstadter (1963), proposed anti-intellectualism was a product of anti-rationalism and anti-elitism associated with the social influences of industrialisation and religious evangelism. Anti-intellectualism was described in the nursing literature as contempt or distrust towards intellectual activities and antipathy towards higher education (Davis-Tubbs, 2019; Duff, 2005; Racine & Vandenberg, 2021).

In this study, anti-intellectualism manifested in comments such as "you're just an academic," or accusations of being 'too academic.' McPherson (1996), wrote that nursing was historically divided into two groups. The first group included nursing leaders and academics focused on improving the profile and professionalism of

nursing. The second group was clinical nurses focused on patient care improvements and patient safety. This historical divide has led to the conflict between the advanced educated nurse and less educated nurses, and between academic nurses and clinical nurses (Davis-Tubbs, 2022; Racine & Vandenberg, 2021). Hofstadter (1963), presented an example of the elite aristocrat, pursuing intellectual activities, while being considered out of touch with the realities of life. Similarly, some clinical nurses saw the development of nursing theory as out of touch with real-life nursing practice ((Clark & Thompson, 2019; *The Florence Nightingale Training School for Nurses History*, 2022; McCrae, 2012; Racine & Vandenberg, 2021; van Oostveen et al., 2017). Bridging the divide between academia and the clinical environment was suggested in the nursing literature as an ideal utilisation for a DPCN (Avery et al., 2022; Dobrowolska et al., 2021; Dunn & Yates, 2000; van Oostveen et al., 2017). A clinically based doctorally prepared nurse could effectively bridge the divide and create relevancy for the nursing profession. However, this possibility may be difficult, given the experience of some participants in the current study.

10.5.2 Choosing to use the doctoral title

This study suggested a quandary for participants. Revealing their doctoral identity risked collegial alienation, however those who used their title in clinical practice, discerned increased legitimacy, credibility and respect, particularly from medical colleagues. Previous research highlighted the importance of the presence and visibility of DPCNs in the clinical environment (Orton et al., 2022). However, this study found some participants reported they were uncomfortable to be visible in the clinical space. The literature review (Chapter Three) provided similar experiences of DPCNs who selectively chose when to reveal their doctoral qualification. The underlying reason for non-disclosure appeared to be fear of being seen as elitist or causing confusion for the healthcare consumer (Heinrich, 2005; Wilkes & Mohan, 2008). The DPCN literature, coupled with the findings in this study, indicated fear of alienation was a longstanding problem.

Along with concerns of alienation, this study suggests internal thought processes stopped participants from acknowledging their doctoral title in clinical practice. Participants illustrated their discomfort to stand out through statements such as; “blowing my own trumpet” (Participant 004); “I don’t want to intimidate people”

(Participant 007); “feels a bit like gloating” (Participant 017); “I just don’t like putting myself out in the front” (Participant 001). Some participants suggested this reluctance to stand out was a female trait, showing that discourses of the gendered perception of nurses as serving, and subordinate, continued to impact present day behaviours (Bell, 2021; Daiski, 2004; Nelson, 2001). Participants’ reticence about using their title or acknowledging the doctoral qualification in the clinical environment provided evidence that DPCNs may be complicit in their own subjugation.

Many participants stated they chose not to use the title to prevent confusing patients and the public. There was some literature that supported participants' concerns about confusing the public. Bismire et al. (2022), noted that even though DPCNs were not physicians, the public still associated the title ‘doctor’ with a medical doctor. Bismire et al. (2022), reported the public was confused about who was a medically qualified doctor and who held an academic doctoral title as well as being another type of healthcare worker. Bismire et al. (2022), emphasised that patients and their families needed to understand an individual’s skills and expertise rather than rely on the title to provide trust. I would argue the public also needed to understand the knowledge and skills that were required of a registered nurse or a medical doctor.

A similar commentary on the use of ‘doctor’ by Pike and Moore (2021), recommended dispensing with the title of ‘doctor’ altogether in the clinical setting and using the title only in scientific, teaching, or other academic situations. Wilkes and Mohan (2008), in their descriptive mixed methods survey of 19 DPCNs in Australia reported participants determined using the title was unimportant in clinical practice. This finding contrasted with the present study in which the title could contribute to credibility, respect, and opportunities for DPCNs while also providing role models for other non-DPCNs. There remained considerable unresolved tension over who should use the title of doctor, and how to avoid confusing the healthcare consumer. A few participants in the current study purposefully used their doctoral title in clinical practice. These participants tended to hold roles that included significant leadership responsibilities. Participants in roles that were more clinically focused were less likely to use the doctoral title within the clinical environment. All participants appeared cognisant that the title meant something to those that heard it. However, some participants saw this as an opportunity, while others perceived it as a problem.

Outside the clinical environment, this study found no such tension in using the doctoral title or acknowledging the doctoral degree, particularly in academic settings because it was an expectation in academia. This was notable because it indicated the title was not the issue; it was the setting in which the title was used that caused tension. The decision to use the title in a clinical setting was related to participants trying to fit into the expectations of the profession of nursing in which a DPCN was uncommon. Participants' concerns appeared validated by the reactions of some nursing colleagues who were unsure how to respond to a DPCN and either ignored their qualifications or were antagonistic. The earlier discussion of bullying and 'othering' brings some perspective to participants' decision on using the doctoral title.

Not all nurses reacted adversely to participants. Some nursing colleagues and leaders appeared to be impressed and inspired by the participant's doctoral success. Other nursing colleagues asked for help to plan their own post-graduate journey, and some were thrilled to have a DPCN on their team. These alternative reactions indicated that DPCNs provided motivation for colleagues to undertake education and research and were seen by some leaders as a significant asset. However, the data showed such reactions were usually disinterested or unfavourable, fuelled as they were by uncertainty about what a DPCN would mean for some nurses and nursing leaders.

10.6 Leadership and Managerial Support

Participants reported that the inability of some nursing colleagues to see the purpose of a DPCN in clinical practice was echoed by some nursing leaders who struggled to acknowledge, celebrate, or use the DPCNs. One participant referred to their nursing leader's response to their doctoral conferment as 'tumbleweeds,' which was an emotive metaphor for this participant's perception of the lack of support and acknowledgement from their nurse leader. Lewis (2021), in their commentary on the development of APN roles, noted that new nursing roles required macro-level acknowledgement and jurisdictional decisions. For participants in this study, the macro level of acknowledgement appeared absent. Contrasting with the paucity of support from some nursing leaders was the significant support provided by many medical colleagues. Perhaps it was the physicians' familiarity with doctoral education that allowed them to see the value and therefore provide support for DPCNs.

Tensions about leaders and manager support had several contributing factors that were not fully explored in prior research. The reported inability to easily identify DPCNs in clinical environments (Chavez et al., 2021; Elgaard-Sorenson et al., 2019; Met et al., 2022; Rugs et al., 2020; Wilkes & Mohan, 2008), may contribute to the paucity of leadership support. The idiom 'out of sight, out of mind' seemed relevant here. A further issue was the reluctance of some DPCN to use their doctoral title which may inadvertently be contributing to a leader's inability to recognise their doctoral identity. These two factors may be accidental or due to poor planning. However, analysis of this study's dataset, coupled with the wider literature on DPCNs, suggested there may be a purposeful rejection of DPCNs by some of their nursing leadership or healthcare managers.

The following evidence supported the argument that nurse leaders were possibly complicit in limiting the value impact of DPCNs. At times, even when they actively strove to use their doctoral skills, participants were rebuffed by nursing colleagues and nurse leaders. This may be, in part, because a rigorous approach to clinical problem-solving took longer to become apparent to those outside the DPCN's immediate sphere of influence. However, participants also reported a perception that some nursing leaders and clinical managers thought their contributions were irrelevant if they fell outside immediate clinical responsibilities. Support to implement research findings was highlighted as a key contributor to participants' practice impact, however, there were several examples in the current study of participants reporting nursing leaders and healthcare managers were dismissive of research findings.

The unrecognised, or purposefully discouraged, value of doctoral research was noted by other researchers. Dobrowolska et al. (2021), found that healthcare managers appeared to consider DPCN research as an indulgence, and could not distinguish between a master's qualified nurse and a DPCN. Orton et al. (2019), noted their participants perceived managers did not seem to understand the doctoral skillset. Similarly, Chavez et al. (2021), reported their cohort of DPCNs had their capabilities limited by organisational structures. Orton et al. (2022), highlighted that managers often thought research competed against direct patient care, creating tension among managers and nursing leaders who were focused on patient care indicators. Finally,

Orton et al. (2022), noted nursing leaders and managers considered the DPCN a threat to their authority.

Nursing leaders' disengagement from the DPCN value was often referred to in the literature (Borbasi & Emden, 2001; Dobrowolska et al., 2021; Orton et al., 2019; Rugs et al., 2020; Wilkes & Mohan, 2008). Part of the disinterest was the lack of pathways for doctorally-prepared clinical nurses (Avery et al., 2022; Heinrich, 2005; van Oostveen et al., 2017), and because many nursing leaders and managers simply do not understand how best to use DPCNs (Andreassen & Christensen, 2018; Chavez et al., 2021; Elgaard-Sorensen et al., 2019; McNett, 2006; Orton et al., 2019; Rugs et al., 2020). The impact of no recognised path in the post-doctoral period for DPCNs is discussed in the following section.

10.7 No Pathway for Doctorally Prepared Clinical Nurses

Participants in this study had no formal, or informal, pathway in their post-doctoral period. They needed to forge their own path with varying levels of success. This study found that participants often worked during their doctoral studies and, upon graduating, stayed in a similar role with little evolution to match their new skillset. Some of the cohort had research as part of their role expectation and some did not. Some wanted to undertake research and were forced to use their personal time to do so. Some described their clinical role as so demanding they were unable to consider adding any research component at all. The literature provided several examples that highlighted DPCNs diversity of roles globally (Andreassen & Christensen, 2018; Chavez et al., 2021; Dobrowolska et al., 2021; Elgaard-Sorensen et al., 2019; McNett, 2006; Orton et al., 2019; Rugs et al., 2019). This diversity of post-doctoral responsibilities and expectations aligned the experience of participants in the current study with those in the international nursing community. Although DPCN literature recommended structured pathways for DPCNs in clinical practice (Andreassen & Christensen, 2018; Chavez et al., 2021), these pathways are still emerging. The result for participants in the current study was a liminal experience which previous research noted as being tremendously difficult (Armstrong et al., 2017; Heinrich, 2005).

Nurses are a limited resource both in Aotearoa and internationally. It is therefore essential that nurses are retained in the healthcare environment and that their

contributions are optimised to enhance value and provide new ways of delivering care. Providing career pathways to keep nurses engaged and active in clinical practice is a viable retention option. Doctorally prepared clinical nurses have already shown significant self-motivation and commitment to gain a doctoral degree. To lose members of this advanced group from healthcare would be detrimental for both the profession of nursing and for Aotearoa. A post-doctoral pathway for DPCNs would provide a 'landing place' for DPCNs after conferment and an option for remaining in a clinical practice role. Formal mentorship coupled with recognised post-doctoral pathways are an ideal combination to support, enhance, and attract DPCNs to remain in clinical practice and continue solving critical practice problems.

10.8 Conclusion

This study provided new knowledge of the experience of DPCNs in Aotearoa. It explored the mechanisms underlying the value DPCNs bring to nursing practice and healthcare which can be used to understand how to support this limited resource. This study highlighted participants contribute value to healthcare and nursing practice in Aotearoa by: being recognised knowledge experts producing and using research; enhancing the approach to nursing practice; increasing prestige and credibility; having valuable conversations; and opening new collaborations and opportunities. The current study also identified how this value could be diminished by difficult identity transitions; external perceptions of the DPCN; lack of mentors and role models; being 'othered' by colleagues; hiding their doctoral identity in clinical practice; limited nursing leader and managerial support; and no appropriate post-doctoral pathway.

This study expanded on previous research about the experience of DPCNs, how their value was defined, and how they were perceived by colleagues, nursing leaders, and managers. Importantly the current study identified the discipline of nursing may be complicit in limiting the impact of DPCNs in the clinical environment. Some participants curbed their value contribution through the fear of being alienated from nursing groups. Participants also highlighted their perception that some nursing colleagues and nursing leaders constrained the doctoral value through disinterest and dismissal. For DPCNs to be authentically innovative in the clinical environment, they need the authority that comes with recognition and acknowledgment from nursing leaders,

healthcare managers, and healthcare colleagues. A clear place in clinical practice must be identified and post-doctoral pathways established. The final chapter will address implications and recommendations for practice, recommendations for further research, and the limitations of this study's design.

Chapter 11 Recommendations, Limitations and Conclusion

The Analysis and Discussion chapters presented the experiences and perceptions of participants and how they contributed value to nursing practice and healthcare in Aotearoa. They also examined the events, situations, and attitudes that challenged this value. The knowledge provided in this study is an opportunity to find ways to support DPCNs and encourage nurses who may be considering doctoral study.

Keeping DPCNs engaged in clinical practice environments, and working optimally to ensure work-life satisfaction is essential for retaining this rare group. Additionally, DPCNs provide significant benefit to their practice communities and their patient communities. Supporting DPCNs creates an opportunity to improve and sustain their contribution and counter the gendered discourses of nurses as anti-intellectual, followers, and servers. The following section offers eight recommendations to optimise the DPCN experience and value. Several recommendations are simple actions that could be incorporated into practice environments easily, while others would require more consideration, debate, and planning. This chapter also suggests areas of future research, and outlines the limitations of this study's design, methodological approach and analysis. Reader awareness of the context in which this research was conducted is important to create an ethical and quality Interpretive Descriptive study. This chapter will conclude the thesis.

11.1 Recommendations

The following eight recommendations have the intent of supporting the value DPCNs bring to clinical practice and healthcare in Aotearoa. They may provide further benefit by mitigating the challenges for a DPCN's contribution and unlock even more value for nursing practice and healthcare in Aotearoa.

11.1.1 Recommendation 1. Widespread dissemination of the value of doctorally prepared clinical nurses

Discussing the knowledge produced in this study is critical to support DPCNs in clinical practice. Combining this study with the international nursing literature will contribute to the wider conversation about the value DPCNs provide. Dissemination should be through professional nursing forums, published journal articles, and in the media. If

DPCNs are to be recognised for providing exceptional value, their value must be publicised. Evidence of benefit will also give nursing leaders and managers more awareness of the value of DPCNs within their teams, so they can plan roles accordingly.

11.1.2 Recommendation 2. Doctoral education should be integrated into career planning

Doctoral education for clinical nurses should be introduced at the undergraduate level as a viable and accepted option for clinical career planning. The knowledge in this research confirmed that while DPCNs are few, they provide considerable value to healthcare in Aotearoa and to nursing practice. Given this evidence, there appears to be an unmet need for more clinical nurses to move beyond master's education to the doctoral level. Many study participants reported never considering a doctorate earlier in their career because it was not expressed as an option for clinical nurses.

Additionally, the advanced average age of nurses undertaking doctoral learning, compared to other sciences, is a disadvantage. The idea of a doctoral degree for clinical nurses must become a widely recognised and integrated option introduced at the start of a nurse's career, rather than at the end.

11.1.3 Recommendation 3. Easy identification of doctorally prepared clinical nurses in healthcare environments

Nursing service leaders should create and maintain a voluntary register of DPCNs working in their locales. This research, and the international literature, showed that DPCNs were invisible to some leaders through a combination of reticence on the part of the DPCN and the ignorance of nursing leaders. While more DPCNs would be advantageous, they must be identifiable in practice environments beyond their immediate teams. However, it should be the responsibility of DPCNs to ensure they are added to such a register.

11.1.4 Recommendation 4. Introduce formalised post-doctoral mentorship

This research reported a lack of mentorship and role models in the post-doctoral period which negatively impacted DPCNs' contribution to nursing and healthcare. Therefore, it is recommended that a voluntary register of DPCNs willing to mentor new DPCNs should be created. This register could be held by a neutral party, such as the

College of Nurses Aotearoa. A mentorship programme would allow DPCNs to connect with other DPCNs for advice and support. The international nursing mentorship literature indicated the positive impact of such a programme for post-doctoral nurses (Hafsteinsdóttir et al., 2017; van Donegan et al., 2021). Mentorship can enhance a DPCNs' identity transition, stimulate scientific conversations, and promote research collaborations. However, such a programme would need to be culturally appropriate for nurses in Aotearoa.

11.1.5 Recommendation 5. Develop a post-doctoral pathway for clinical nurses

A post-doctoral pathway for DPCNs would provide direction and clarity in the post-doctoral period for both the DPCNs and their managers/leaders. This study exposed the tumultuous nature of the post-doctoral period for DPCNs. A defined, yet flexible, post-doctoral pathway would give DPCNs and their teams certainty about responsibilities and activities. This study showed that DPCNs were an enigma to nursing leaders, healthcare managers, colleagues, and even to themselves. A post-doctoral pathway would guide healthcare managers and nursing leaders to fully leveraging what these highly skilled clinicians can contribute to the clinical environment. A post-doctoral pathway could incorporate Recommendation Four, a formalised mentorship programme.

11.1.6 Recommendation 6. Improve collegial relationships

Collegial relationships between DPCNs and their non-DPCN nurse colleagues must be improved to benefit workplace culture. This recommendation is to source ways to improve collegial relationships. A formal post-graduate pathway would help improve these relationships by legitimising the DPCN and demarcating their role in clinical practice. However, additional interventions to prevent the marginalisation of DPCNs within nursing teams must also be investigated.

11.1.7 Recommendation 7. Introduce a Clinician Scientist as part of the nursing structure in healthcare institutions

Introduce a senior nursing role in clinical practice that has a doctoral qualification as a requirement, such as a Clinician Scientist (CS). A CS is a DPCN whose responsibilities are primarily to produce research and translate that research into practice outcomes (Mackay, 2009). A CS role would contribute to improved patient outcomes (Brant, 2015; Vessey et al., 2017), however this role is not well established globally (Brant,

2015; Henshall et al., 2021). A CS role could be part of the post-doctoral pathway for DPCNs and provide a tangible role for junior nurses to plan their clinical career.

11.1.8 Recommendation 8. Address the brand image of nurses for the public, other healthcare professionals, and nurses themselves.

Nurses have a well-established, if erroneous, image as carers and servers (Burton, 2020; Fealy, 2004; Godsey et al., 2020; Joseph et al., 2023; Nelson, 2001). Many nurses still do not see themselves as potential leaders in healthcare. Nurses must be reminded of their ability to contribute to policy, service provision, and any healthcare conversation they choose, without waiting for permission. The public also needs better awareness of nursing roles and functions in society (Gill & Baker, 2021; Nelson & Gordon, 2004; Price & McGillis-Hall, 2014; van der Cingel & Brouwer, 2021). There is international work examining the brand image of nurses and how the brand may be changed (Joseph et al., 2023). Nurses in Aotearoa should monitor this work and plan their own brand image adjustment.

11.1.9 Summary of recommendations

Some of these recommendations are achievable in the short term, while others will take time. However, incremental steps would enhance the experience of DPCNs working in Aotearoa and the value they contribute. The next section outlines suggested further research.

11.2 Recommendations for Further Research

Many questions remain unanswered or require confirmatory evidence about DPCNs. Understanding how best to support DPCNs in the post-doctoral period is a key research area. Support could include evaluation of the recommended post-doctoral pathway and the mentorship programme. Future research could also investigate ways to reduce the incidence of Tall Poppy Syndrome and understanding its impact on job satisfaction and the outputs of DPCNs. An audit of DPCNs' roles and work environments in Aotearoa would help quantify the available resources of DPCNs and contribute to international research on the roles and responsibilities of DPCNs. Recommendation Three, creating a voluntary register of working DPCNs, would help identify DPCNs for such an audit. Future research could investigate the public

perception of DPCNs and if there is confusion when a DPCN uses their doctoral title when introducing themselves as a registered nurse or nurse practitioner. Clarification of the use of the title of 'doctor' in clinical environments would also create consistency for title use.

This study did not represent the experience of Māori DPCNs. Understanding the unique experience of Māori DPCNs is important to fulfil the obligations of Te Tiriti o Waitangi. This research confirmed that Māori DPCNs are a small percentage in an already minuscule population of DPCNs in Aotearoa. However, presenting findings for Māori was outside the scope of this research, and could be a focus of future research.

11.3 Limitations of this research

Several limitations in this research must be understood in conjunction with the knowledge constructed, including the study methodology, sampling and population, the impact of a global pandemic, and generalisability of the knowledge. The final section of this chapter discusses these limitations.

11.3.1 Limitations of the methodology

The approach to inquiry produced a study congruent from research question through to findings and recommendations. However, the reader should be cognisant of the strengths and appropriateness of the Interpretive Descriptive design, which were extensively presented in the Methodology Chapter (Chapter Four). These limitations include that in ID, knowledge is socially constructed, time bound and subjective (Thorne et al., 2004). This means another group of participants may reveal different findings. Furthermore, research knowledge using qualitative methodologies is constructed through the engagement of the researcher with the data. This means another researcher with a different background may construct alternative knowledge.

11.3.2 Limitations sampling and population

The sampling for this study was limited by the need to enrol registered nurses and nurse practitioners, individuals who had the experience of working in clinical practice after obtaining a doctorate. Because this group was small, the sampling strategy was to take all DPCNs who volunteered, rather than a diverse representation of age, gender, ethnicity, and location. Additionally, the study did not represent the

perspective of nurses who work in Tertiary Education since they are student-facing rather than patient-facing in their roles.

11.3.3 Limitations of the impact of COVID-19

The impact of COVID-19 is discussed in Appendix H. The years 2021-22, during which study recruitment occurred, were unique in history. It is impossible to assess the impact of the pandemic on qualitative research studies, particularly those enrolling essential healthcare workers. However, the context of a global health crisis must be considered when reading this research.

11.3.4 Limitations on the generalisability of the data

Generalisability is not the goal of an ID methodological study. Instead, the purpose (as stated in Chapter Four) is to identify patterns from the data that could be applicable to future similar contexts (Thorne et al., 1997; Thorne et al., 2004). The richness of this dataset allows for the transferability of patterns to other DPCNs in Aotearoa. Patterns can be utilised by responsible clinicians, who carefully assess how they could fit into the clinician's current situation (Thorne, 2014). Therefore, the analytical knowledge produced by this study is not generalisable across the entire DPCN population, or beyond the current time and place. However, the knowledge is relevant to the profession of nursing and does support the transferability to similar populations on a case-by-case basis.

11.4 Conclusion

This research provided significant insight into the value of DPCNs to nursing practice and healthcare in Aotearoa by exploring the mechanisms underlying that value. Value was provided through DPCNs' reputation as knowledge experts, their production of research, and the use of data to improve practice and patient care. Doctorally prepared clinical nurses contributed value through an enhanced approach to practice that encompassed rigorous problem-solving and an expanded lens of healthcare which produced substantive change in some participant's approach to practice. Benefit was perceived to come through valuable conversations that impacted across the healthcare environment. Doctorally prepared clinical nurses' credibility and prestige increased through the doctoral degree and subsequent academic skillset. The effect of

increased credibility and prestige was the perception DPCNs had of being listened to respectfully and an enhanced ability to drive healthcare change. Additionally, DPCNs also provided value through new collaborations and opportunities. This research adds to the existing body of knowledge by expanding on the understanding of doctorally prepared nurses' experiences working in clinical practice in Aotearoa. There are low numbers of DPCN in Aotearoa which concurs with international reports. In addition, DPCNs were difficult to identify, and their experiences in clinical settings in Aotearoa were ill-defined. This research provided new knowledge by identifying the mechanisms that allow significant value to be created by DPCNs in Aotearoa.

The study also acknowledged several factors that challenged the DPCNs' value contribution, such as difficult identity transitions compounded by isolation and a liminal experience. Negative reactions from nursing colleagues also led some DPCNs to downplay or hide their doctoral qualifications for fear of being ostracised.

Unexpectedly, DPCNs received significant support from medical colleagues but a lack of mentors and role models exacerbated their isolation and a prolonged liminality. Similarly, no post-doctoral pathway meant the post-doctoral period was uncertain and less impactful than could have been achieved in a supportive environment. Of particular concern was the complicity of nursing colleagues, nursing leaders, and the DPCN themselves in maintaining the systems that contributed to limiting DPCNs ability to add value.

Knowledge produced from this study has implications for DPCNs, their nursing colleagues, nursing leaders, healthcare managers, and health researchers. The research culminated in a set of eight recommendations that, if implemented, could support existing DPCNs and encourage more clinical nurses to consider doctoral education. The recommendations may also mitigate some of the limiting factors highlighted in this study. Enhancing the DPCN workforce would help to address the problems facing the wider healthcare system by finding new ways of working with limited personnel, retaining the nursing workforce, dealing with the aftermath of a global pandemic, mitigating gendered discourses about nurses, and encourage the professional and scientific development of the profession of nursing into the future.

References

- Abraham, C., Kleinpell, R., Godwin, K., & Dolansky, M. (2021). The interprofessional veterans affairs quality scholars program pre-and postdoctoral nurse fellow outcomes. *Nursing Outlook, 69*(2), 202-211. <https://doi.org/10.1016/j.outlook.2020.09.003>
- Abu-Qamar, M., Vafeas, C., Ewens, B., Ghosh, M., & Sundin, D. (2020). Postgraduate nurse education and the implications for nurse and patient outcomes: A systematic review. *Nurse Education Today, 92*. <https://doi.org/10.1016/j.nedt.2020.104489>
- Adlam, K., Dotchin, M., & Hayward, S. (2009). Nursing first year of practice, past, present and future: Documenting the journey in New Zealand. *Journal of Nursing Management, 17*(5), 570-575. <https://doi.org/10.1111/j.1365-2834.2008.00932.x>
- Anderson, H., Birks, Y., & Adamson, J. (2020). Exploring the relationship between nursing identity and advanced nursing practice: An ethnographic study. *Journal of Clinical Nursing, 29*, 1195-1208. <https://doi.org/10.1111/jocn.15155>
- Andreassen, P., & Christensen, M. (2018). "We're at a watershed": The positioning of PhD nurses in clinical practice. *Journal of Advanced Nursing, 74*(8), 1908-1918. <https://doi.org/10.1111/jan.13581>
- Anthony, M. (2016). Religion and care intertwined: Nursing in catholic hospitals 1950-1965. *Journal of Christian Nursing, 33*(2), 38-43. <https://doi.org/10.1097/CNJ.0000000000000228>
- Armstrong, D., McCurry, M., & Dluhy, N. (2017). Facilitating the transition of nurse clinician to nurse scientist: Significance of entry PhD courses. *Journal of Professional Nursing, 33*(1), 74-80. <https://doi.org/10.1016/j.profnurs.2016.06.005>
- Ashforth, B., & Schinoff, B. (2016). Identity under construction: How individuals come to define themselves in organizations. *Annual Review of Organizational Psychology and Organizational Behavior, 3*, 111-137. <https://doi.org/10.1146/annurev-orgpsych-041015-062322>
- Audet, L., Bourgault, P., & Rochefort, C. (2018). Associations between nurse education and experience and the risk of mortality and adverse events in acute care hospitals: A systematic review of observational studies. *International Journal of Nursing Studies, 80*, 128-146. <https://doi.org/10.1016/j.ijnurstu.2018.01.007>

- Avery, M., Westwood, G., & Richardson, A. (2022). Enablers and barriers to progressing a clinical academic career in nursing, midwifery and allied health professions: A cross-sectional survey. *Journal of Clinical Nursing, 31*(3-4), 406-416. <https://doi.org/10.1111/jocn.15673>
- Baer, E. D. (1985). Nursing's divided house: An historical view. *Nursing Research, 34*(1), 32-38.
- Baldwin, S. (2013). Exploring the experiences of nurses studying professional doctorates. *British Journal of Nursing Scholarship, 22*(8), 476-483. <https://doi.org/10.12968/bjon.2013.22.8.476>
- Barrow, M., & Xu, L. (2021). Making their way as academics: A qualitative study examining how nurse academics understand and (re) construct academic identity. *Nurse Education Today, 100*(104820). <https://doi.org/10.1016/j.nedt.2021.104820>
- Beech, N. (2011). Liminality and the practices of identity reconstruction. *Human Relations, 64*(2), 285-302. <https://doi.org/10.1177/0018726710371235>
- Bell, B. (2021). Towards abandoning the master's tools: The politics of a universal nursing identity. *Nursing Inquiry, 28*(2), e12395. <https://doi.org/10.1111/nin.12395>
- Bertolotti, F., Tagliaventi, M., & Dosi, C. (2022). From lone wolves to members of the pack: Exploring interpersonal identity work within identity workspaces. *Journal of Organizational Behavior, 43*(4), 620-642. <https://doi.org/10.1002/job.2589>
- Bismire, H., Nunn, S., Malpas, C., & Bilszta, J. (2022). Doctor Who? Honorific titles and their influence on patients' perceptions of healthcare professionals. *Journal of the Royal Society of Medicine, 115*(3), 91-94. <https://doi.org/10.1177/01410768221080775>
- Bloom, E. (2019). Horizontal violence among nurses: Experiences, responses, and job performance. *Nursing Forum, 54*(1), 77-83. <https://doi.org/10.1111/nuf.12300>
- Borbasi, S., & Emden, C. (2001). Is a PhD the best career choice? Nursing employers' views. *Contemporary Nurse, 10*(3-4), 187-194. <https://doi.org/10.5172/conu.10.3-4.187>
- Boussebaa, M., & Brown, A. (2017). Englishization, identity regulation and imperialism. *Organization Studies, 38*(1), 7-29. <https://doi.org/10.1177/0170840616655494>

- Bradshaw, C., Atkinson, S., Doody, O. (2017). Employing a qualitative description approach in health care research. *Global Qualitative Nursing Research*, 4, 1-8. <https://doi.org/https://doi.org/10.1177/2333393617742282>
- Bramadat, I., & Chalmers, K. (1989). Nursing education in Canada: Historical 'progress'—contemporary issues. *Journal of Advanced Nursing*, 14(9), 719-726.
- Brant, J. (2015). Bridging the research-to-practice gap: The role of the nurse scientist. *Seminars in Oncology Nursing*, 31(4), 298-305. <https://doi.org/10.1016/j.soncn.2015.08.006>
- Braun, V., & Clarke, V. (2021a). Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches. *Counselling and Psychotherapy Research*, 21(1), 37-47. <https://doi.org/10.1002/capr.12360>
- Braun, V., & Clarke, V. (2021b). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 18(3), 328-352. <https://doi.org/10.1080/14780887.2020.1769238>
- Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. Sage Publishing.
- Brown, A. (2015). Identities and identity work in organizations. *International Journal of Management Reviews*, 17(1), 20-40. <https://doi.org/10.1111/ijmr.12035>
- Brown, A., & Coupland, C. (2015). Identity threats, identity work and elite professionals. *Organization Studies*, 36(10), 1315-1336. <https://doi.org/10.1177/0170840615593594>
- Brown, M., Masters, D., & Smith, B. (1994). *Nurses of Auckland: A history of the Genral Nursing Programme in the Auckland School of Nursing* (D. Harris, Ed.). Brown, Masters and Smith.
- Burton, C. (2020). Paying the caring tax: The detrimental influences of gender expectations on the development of nursing education and science. *Advances in Nursing Science*, 43(3), 266-277. <https://doi.org/10.1097/ANS.0000000000000319>
- Canales, M. (2010). Othering: Difference understood??: A 10-year analysis and critique of the nursing literature. *Advances in Nursing Science*, 33(1), 15-34. <https://doi.org/10.1097/ANS.0B013E3181C9E119>

- Carryer, J. (2020). Letting go of our past to claim our future. *Journal of Clinical Nursing*, 29, 287-289. <https://doi.org/10.1111/jocn.15016>
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41(5), 545-547. <https://doi.org/10.1188/14.ONF.545-547>
- Castelló, M., McAlpine, L., Sala-Bubaré, A., Inouye, K., & Skakni, I. (2021). What perspectives underlie 'researcher identity'? A review of two decades of empirical studies. *Higher Education*, 81, 567-590. <https://doi.org/10.1007/s10734-020-00557-8>
- Chalmers, L. (2020). Responding to the State of the World's Nursing 2020 report in Aotearoa New Zealand: Aligning the nursing workforce to universal health coverage and health equity. *Nursing Praxis in Aotearoa New Zealand*, 36(2), 7-19. <https://doi.org/10.36951/27034542.2020.007>
- Chavez, M., Melillo, C., Rugen, K., & Sullivan, S. (2021). Exploring the role complexity and workforce needs of doctoral-prepared nurses. *Nursing Outlook*, 69(2), 124-126. <https://doi.org/10.1016/j.outlook.2021.01.007>
- Chen, Y., & Reay, T. (2021). Responding to imposed job redesign: The evolving dynamics of work and identity in restructuring professional identity. *Human Relations*, 74(10), 1541-1571. <https://doi.org/10.1177/0018726720906437>
- Cheraghi, M., Jasper, M., & Vaismoradi, M. (2014). Clinical nurses' perceptions and expectations of the role of doctorally-prepared nurses: A qualitative study in Iran. *Nurse Education in Practice*, 14(1), 18-23. <https://doi.org/10.1016/j.nepr.2013.06.007>
- Clark, A., & Thompson, D. (2019). Nursing's research problem: A call to action. *Journal of Advanced Nursing*, 75(12), 3190-3192. <https://doi.org/10.1111/JAN.14169>
- Clark, M., Spence, J., Holt, N. (2011). In the shoes of young adolescent girls: Understanding physical activity experiences through interpretive description. *Qualitative Research in Sport, Exercise and Health*, 3(2), 193-210. <https://doi.org/10.1080/2159676X.2011.572180>
- Cleary, M., Happell, B., Walter, G., & Hunt, G. (2013). Obtaining higher research degree qualifications: Key strategies to consider. *Contemporary Nurse*, 44(2), 196-203. <https://doi.org/10.5172/conu.2013.44.2.196>

- Corser, W. (2000). The contemporary nurse-physician relationship: Insights from scholars outside the two professions. *Nursing Outlook*, 48, 263-268. <https://doi.org/10.1067/mno.2000.109154>
- Cotterill-Walker, S. (2012). Where is the evidence that master's level nursing education makes a difference to patient care? A literature review. *Nurse Education Today*, 32(1), 57-64. <https://doi.org/10.1016/j.nedt.2011.02.001>
- Crotty, M. (1998). *Foundations of social research: Meaning and perspective in the research process*. ProQuest Ebook Central. <http://ebookcentral.proquest.com/lib/aut/detail.action?docID=5161332>
- Crowther, M., & Grecic, D. (2022). Reflecting on reflections of Reflexive Thematic Analysis (RTA): Exemplar experiences and recommendations for new researchers in sport and coaching. *Journal of Qualitative Research in Sports Studies*, 16(1), 69-86. <https://clou.uclan.ac.uk/46399/>
- Daiski, I. (2004). Changing nurses' dis-empowering relationship patterns. *Journal of Advanced Nursing*, 48(1), 43-50. <https://doi.org/10.1111/j.1365-2648.2004.03167.x>
- Daly, Z., O'Flynn-Magee, K., & Rodney, P. (2020). "A Call to Revisit and Address the Histories of bullying in nursing education. *Qualite Advancement in Nursing Education- Avancées En Formation Infirmière*, 6(3), 9. <https://doi.org/10.17483/2368-6669.1249>
- Davis-Tubbs, J. (2019). *An investigation of anti-intellectualism among nurses* [Doctoral dissertation, University of Southern Mississippi]. University of Southern Mississippi. <https://aquila.usm.edu/dissertations/2019>
- Dobrowolska, B., Chruściel, P., Markiewicz, R., & Palese, A. (2021). The role of doctoral-educated nurses in the clinical setting: Findings from a scoping review. *Journal of Clinical Nursing*, 30(1), 2808-2821. <https://doi.org/10.1111/jocn.15810>
- Dubrosky, R. (2013). Iris Young's five faces of oppression applied to nursing. *Nursing Forum*, 48(3), 205-210. <https://doi.org/ezproxy.aut.ac.nz/10.1111/nuf.12027>
- Duff, D. (2005). Ageism, elitism, and anti-intellectualism in nursing. *AXON*, 26(3), 4-5. https://content.ebscohost.com/cds/retrieve?content=AQICAHiyIJ_bvOB56hl8UzTN6Ryruh7a0kiIBN_ANwtaWYjmxwEg7paT2944t2LE2zrA1zH-AAAA4jCB3wYJKoZlhvcNAQcGoIHRMIHOAgEAMIHIBgkqhkiG9w0BBwEwHgYJYIZIAWUDBAEuMBEEDJZSCxjgbq3N3d6jUwIBEICBmnFPEDQs1_bu5xFR4RcxNhLOLpXhnoTaIFMxhkR8w66ev7MmIginPpG1s93I6rhPbdeP66X27o-FK_Qq51CQe7hIUy89fys92vskl4mHzqox_fCg11RTLrtFGTAqqGQiEISC0EzL40NKF

fxj3VUNT0wXpCrms4jnuagIIX4Vc3hh2RNc_0eWp_we5mEy1JgEnop_Q0vtOoU8vo=

- Duffield, C., Gardner, G., Chang, A., & Catling-Paull, C. (2009). Advanced nursing practice: A global perspective. *Collegian, 16*(2), 55-62.
<https://doi.org/10.1016/j.colegn.2009.02.001>
- Durette, B., Fournier, M., & Lafon, M. (2016). The core competencies of PhDs. *Studies in Higher Education, 41*(8), 1355-1370.
<https://doi.org/10.1080/03075079.2014.968540>
- Dunn, S., & Yates, P. (2000). The roles of Australian chairs in clinical nursing. *Journal of Advanced Nursing, 31*(1), 165-171.
<https://doi.org/10.1046/j.13652648.2000.01248.x>
- Egenes, K. J. (2017). *History of nursing*. Jones and Bartlett.
- Ehrenreich, B., & English, D. (1973). *Witches, midwives, and nurses: A history of women healers*. The Feminist Press.
- Elgaard-Sorensen, E., Hoffmann-Kusk, K., Athlin, A., Lode, K., Rustoen, T., Salmela, S., & Holge-Hazelton, B. (2019). The role of PhD-prepared, hospital-based nurses: An inter-Nordic study. *Journal of Research in Nursing, 24*(7), 470-485.
<https://doi.org/10.1177/1744987119877213>
- Falkenberg-Olson, A. (2019). Research translation and the evolving PhD and DNP practice roles: A collaborative call for nurse practitioners. *Journal of the American Association of Nurse Practitioners, 31*(8), 447-453.
<https://doi.org/10.1097/JXX.0000000000000266>
- Farrell, G. (2001). From tall poppies to squashed weeds*: Why don't nurses pull together more? *Journal of Advanced Nursing, 35*(1), 26-33.
<https://doi.org/10.1046/j.1365-2648.2001.01802.x>
- Fealy, G. M. (2004). 'The good nurse': Visions and values in images of the nurse. *Journal of Advanced Nursing, 46*(6), 649-656.
<https://doi.org/10.1111/j.13652648.2004.03056.x>
- Fitzgerald, C., Kantrowitz-Gordon, I., Katz, J., & Hirsch, A. (2012). Advanced practice nursing education: Challenges and strategies. *Nursing Research and Practice, 2012*(854918). <https://doi.org/10.1155/2012/854918>

- Florczak, K., Poradzisz, M., & Kostovich, C. (2014). Traditional or translational research for nursing: More PhDs please. *Nursing Science Quarterly*, 27(3), 195-200. <https://doi.org/10.1177/0894318414534470>
- Gage, J., & Hornblow, A. (2007). Development of the New Zealand nursing workforce: Historical themes and current challenges. *Nursing Inquiry*, 14(4), 330-334. <https://doi.org/10.1111/j.1440-1800.2007.00380.x>
- Garcia-Lorenzo, L., Sell-Trujillo, L., & Donnelly, P. (2020). Entrepreneurship after 50: The liminal identity transitions of older emergent entrepreneurs. *Entrepreneurship & Regional Development*, 32(9-10), 922-942. <https://doi.org/10.1080/08985626.2020.1849408>
- Ge, S., Xi, X., & Guo, G. (2015). A systematic review of the impact of master's-educated nurses on inpatient care. *International Journal of Nursing Sciences*, 2(4), 414-421. <https://doi.org/10.1016/j.ijnss.2015.10.003>
- Gerard, S., Kazer, M., Babington, L., & Quell, T. (2014). Past, present, and future trends of master's education in nursing. *Journal of Professional Nursing*, 30(4), 326-332. <https://doi.org/10.1016/j.profnurs.2014.01.005>
- Gijbels, H., O'Connell, R., Dalton-O'Connor, C., & O'Donovan, M. (2010). A systematic review evaluating the impact of post-registration nursing and midwifery education on practice. *Nurse Education in Practice*, 10(2), 64-69. <https://doi.org/10.1016/j.nepr.2009.03.011>
- Gill, J., & Baker, C. (2021). The power of mass media and feminism in the evolution of nursing's image: A critical review of the literature and implications for nursing practice. *Journal of Medical Humanities*, 42(3), 371-386. <https://doi.org/10.1007/s10912-019-09578-6>
- Godsey, J., Perrott, B., & Hayes, T. (2020). Can brand theory help re-position the brand image of nursing? *Journal of Nursing Management*, 28(4), 968-975. <https://doi.org/10.1111/jonm.13003>
- Goldmark, J. (1923). Nursing and nursing education in the United States: Report of the Committee for the Study of Nursing Education, and report of a survey by Josephine Goldmark. *JAMA*, 80(21). <https://doi.org/10.1001/jama.1923.02640480042033>
- Gordon, S. (2005). *Nursing against the odds: How health care cost cutting, media stereotypes, and medical hubris undermine nurses and patient care*. Cornell University Press.

- Gortner, S. (2000). Knowledge development in nursing: Our historical roots and future opportunities. *Nursing Outlook*, 48(2), 60-67. [https://doi.org/10.1016/S0029-6554\(00\)90004-6](https://doi.org/10.1016/S0029-6554(00)90004-6)
- Grant, A. (2009). Seeking help in the shadow of doubt: The sensemaking processes underlying how nurses decide who to ask for advice. *Journal of Applied Psychology*, 94(5), 1261-1274. <https://doi.org/10.1037/a0016557>
- Gray, M., Ratliff, C., & Mawyer, R. (2000). A brief history of advanced practice nursing and its implications for WOC advanced nursing practice. *Journal of WOCN*, 21(1), 48-54. [https://doi.org/10.1016/S1071-5754\(00\)90042-1](https://doi.org/10.1016/S1071-5754(00)90042-1)
- Greene, M. (2014). On the inside looking in: Methodological insights and challenges in conducting qualitative insider research. *The Qualitative Report*, 19(29), 1-13. <https://www.proquest.com/openview/650719dc1b51c2291994f16f7efcf33f/1?cbl=55152&pq-origsite=gscholar>
- Grimshaw, J., Eccles, M., Lavis, J., Hill, S., & Squires, J. (2012). Knowledge translation of research findings. *Implementation Science*, 7(1), 1-17. <https://doi.org/10.1186/1748-5908-7-50>
- Hafsteinsdóttir, T., van der Zwaag, A., & Schuurmans, M. (2017). Leadership mentoring in nursing research, career development and scholarly productivity: A systematic review. *International Journal of Nursing Studies*, 75, 21-34. <https://doi.org/10.1016/j.ijnurstu.2017.07.004>
- Hakvoort, L., Dikken, J., Cramer-Kruit, J., Molendijk-van Nieuwenhuyzen, K., van der Schaaf, M., & Schuurmans, M. (2022). Factors that influence continuing professional development over a nursing career: A scoping review. *Nurse Education in Practice*, 65, 103481. <https://doi.org/10.1016/j.nepr.2022.103481>
- Hampshaw, S., Cooke, J., Robertson, S., Wood, E., King, R., & Tod, A. (2022). Understanding the value of a PhD for post-doctoral registered UK nurses: A survey. *Journal of Nursing Management*, 30(4), 1011-1017. <https://doi.org/10.1111/jonm.13581>
- Happell, B., Edward, K., & Welch, T. (2008). Doctoral graduates in mental health nursing in Victoria, Australia: The doctoral experience and contribution to scholarship. *International Journal of Mental Health Nursing*, 17(4), 270-278. <https://doi.org/10.1111/j.1447-0349.2008.00543.x>
- Harris, R., Paine, S., Atkinson, J., Robson, B., King, P., Randle, J., Mizdrak, M., & McLeod, M. (2022). We still don't count: The under-counting and under-

representation of Māori in health and disability sector data. *New Zealand Medical Journal*, 135(1567), 54-78. <https://www.proquest.com/scholarly-journals/we-still-dont-count-under-counting-representation/docview/2755159481/se-2?accountid=47398>

- Heinrich, K. (2005). Halfway between receiving and giving: A relational analysis of doctorate-prepared nurse-scholars' first 5 years after graduation. *Journal of Professional Nursing*, 21(5), 303-313. <https://doi.org/10.1016/j.profnurs.2005.07.004>
- Henfridsson, O., & Yoo, Y. (2014). The liminality of trajectory shifts in institutional entrepreneurship. *Organization Science*, 25(3), 932-950. <https://doi.org/10.1287/orsc.2013.0883>
- Henly, S., McCarthy, D., Wyman, J., Stone, P., Redeker, N., McCarthy, A., Alt-White, M., Dunbar-Jacob, J., Titler, M., Moore, S., & Heitkemper, M. (2015). Integrating emerging areas of nursing science into PhD programs. *Nursing Outlook*, 63(4), 408-416. <https://doi.org/10.1016/j.outlook.2015.04.010>
- Henshall, C., Kozłowska, O., Walthall, H., Heinen, A., Smith, R., & Carding, P. (2021). Interventions and strategies aimed at clinical academic pathway development for nurses in the United Kingdom: A systematised review of the literature. *Journal of Clinical Nursing*, 30(11-12), 1502-1518. <https://doi.org/10.1111/jocn.15657>
- Hofstadter, R. (1963). *Anti-intellectualism in American Life*. Vantage Publishing.
- Hollingsworth, J. (2002). Research organizations and major discoveries in twentieth-century science: A case study of excellence in biomedical research. *Social Science Open Access*, 02(003). <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-112976>
- Hunt, M. (2009). Strengths and challenges in the use of interpretive description: Reflections arising from a study of the moral experience of health professionals in humanitarian work. *Qualitative Health Research*, 19(9), 1284-1292. <https://doi.org/10.1177/1049732309344612>
- Hunter, K., & Cook, C. (2018). Role-modelling and the hidden curriculum: New graduate nurses' professional socialisation. *Journal of Clinical Nursing*, 27(15-16), 3157-3170. <https://doi.org/10.1111/jocn.14510>

- Huston, C., Phillips, B., Jeffries, P., Todero, C., Rich, J., Knecht, P., Sommer, S., & Lewis, M. (2017). The academic-practice gap: Strategies for an enduring problem. *Nursing Forum, 53*(1), 27-34. <https://doi.org/10.1111/nuf.12216>
- Idzik, S., Hammersla, M., & Rosseter, R. (2018). Advancing scholarship through translational research: The role of PhD and DNP prepared nurses. *Online Journal of Issues in Nursing, 23*(2), 1-8. <https://doi.org/10.3912/OJIN.Vol23No02Man02>
- Jack, K. (2019). Clinical academic careers for nurses: A viable career pathway. *Gastrointestinal Nursing, 17*(4), 22-25. <https://doi.org/10.12968/gasn.2019.17.4.22>
- Jack, K., Hamshire, C., & Chambers, A. (2017). The influence of role models in undergraduate nurse education. *Journal of Clinical Nursing, 26*(23-24), 4707-4715. <https://doi.org/10.1111/jocn.13822>
- Jackson, D., & Cleary, M. (2011). Practical advice to support mid-career doctoral students in nursing: Some considerations for academic supervisors. *Contemporary Nurse, 38*(1-2), 171-179. <https://doi.org/10.5172/conu.2011.38.1-2.171>
- Jacobs, S., & Boddy, J. (2008). The genesis of advanced nursing practice in New Zealand: Policy, politics and education. *Nursing Praxis in New Zealand, 24*(1). <https://web-p-ebshost-com.waitematadhb.idm.oclc.org/ehost/pdfviewer/pdfviewer?vid=2&sid=51b853f3-1622-400e-9208-8bab410d9974%40redis>
- Janusz, B., & Walkiewicz, M. (2018). The rites of passage framework as a matrix of transgression processes in the life course. *Journal of Adult Development, 25*(3), 151-159. <https://doi.org/10.1007/s10804-018-9285-1>
- Johnson, S. (2009). International perspectives on workplace bullying among nurses: A review. *International Nursing Review, 56*, 34-40. <https://doi.org/10.1111/j.1466-7657.2008.00679.x>
- Jokiniemi, K., Pietilä, A., Kylmä, J., & Haatainen, K. (2012). Advanced nursing roles: A systematic review. *Nursing and Health Sciences, 14*(3), 421-431. <https://doi.org/10.1111/j.1442-2018.2012.00704.x>

- Joseph, M., Godsey, J., Hayes, T., Bagomolny, J., Beaudry, S., Biangone, M., Brewington, J., Anest, P., Godfrey, N., Lose, D., Martin, E., Ollerman, S., Seik, T., Thompson, J., & Valiga, T. (2023). A framework for transforming the professional identity and brand image of All Nurses as Leaders. *Nursing Outlook, 71*(6), 102051. <https://doi.org/10.1016/j.outlook.2023.102051>
- Keddy, B., Jones, M., Burton, H., & Rogers, M. (1986). The doctor-nurse relationship: An historical perspective. *Journal of Advanced Nursing, 11*(6), 745-753. <https://doi.org/10.1111/j.1365-2648.1986.tb03393.x>
- Kempenaar, L., & Shanmugam, S. (2018). Inclusionary othering: A key threshold concept for healthcare education. *Medical Teacher, 40*(9), 969-970. <https://doi.org/10.1080/0142159X.2017.1403575>
- Kim, M., Lee, J., Choi, S., & (2022). Clinical practice experience of doctor of philosophy nurses in South Korea: A qualitative study. *International Journal of Qualitative Studies on Health and Well-being, 17*(1), 1-9. <https://doi.org/10.1080/17482631.2022.2123939>
- King, C., Rossetti, J., Smith, T., Smyth, S., Moscatel, S., Raison, M., Gorman, R., Gallegos, D., & J, W. (2021). Workplace incivility and nursing staff: An analysis through the lens of Jean Watson's Theory of Human Caring. *International Journal for Human Caring, 5*(24), 283-291. <https://doi.org/10.20467/HumanCaring-D-20-00050>
- Kirkwood, J., & McNaughton, R. (2022). *Tall Poppy Syndrome in New Zealand*. <https://sway.cloud.microsoft/xxn8U2jZXXN8KaT?ref=email>
- Koh, E., Koh, K., Renganathan, Y., & Krishna, L. (2023). Role modelling in professional identity formation: A systematic scoping review. *BMC Medical Education, 23*(194), 1-16. <https://doi.org/10.1186/s12909-023-04144-0>
- Krampitz, S. (1983). Historical development of baccalaureate nursing education in the American university: 1899-1935. *Western Journal of Nursing Research, 5*(4), 371-380. <https://doi.org/10.1177/019394598300500409>
- Lacey, C., Huria, T., Beckert, L., Gilles, M., & Pitama, S. (2011). The Hui Process: A framework to enhance the doctor-patient relationship with Māori. *The New Zealand Medical Journal (Online), 124*(1347), 72-78. <http://journal.nzma.org.nz/journal/124-1347/5003/>
- Lepisto, D., Crosina, E., & Pratt, M. (2015). Identity work within and beyond the professions: Toward a theoretical integration and extension. In A. Desilva & M.

Aparicio (Eds.), *International Handbook of Professional Identities*. Scientific & Academic Publishing.

- Lewis, R. (2022). The evolution of advanced nursing practice: Gender, identity, power and patriarchy. *Nursing Inquiry*, 29(4), e12489. <https://doi.org/10.1111/nin.12489>
- Liamputtong, P. (2020). *Qualitative research methods* (5th ed.). Oxford University Press. <https://ebookcentral.proquest.com/lib/AUT/detail.action?docID=5979415>
- Lucci, A. (2019). A reflection on the Doctorate of Nursing Practice (DNP). *Insight, Winter*, 27-29. <https://doi.org/10.1016/j.outlook.2005.06.003>
- Lusk, B., Russell, R. L., Rodgers, J., & Wilson-Barnett, J. (2001). Preregistration nursing education in Australia, New Zealand, the United Kingdom, and the United States of America. *Journal of Nursing Education*, 40(5), 197-202. <https://doi.org/10.3928/0148-4834-20010501-04>
- Mackay, M. (2009). Why nursing has not embraced the clinician–scientist role. *Nursing Philosophy*, 10(4), 287-296. <https://doi.org/10.1111/j.1466-769X.2009.00416.x>
- Malterud, K., Siersma, V., & Guassora, A. (2016). Sample size in qualitative interview studies: guided by information power. *Qualitative Health Research*, 26(13), 1753-1760. <https://doi.org/10.1177/1049732315617444>
- McBride, P., Hoang, T., Hamblin, R., Li, Y., Shuker, C., Wilson, J., & Bramley, D. (2021). Using REACH, a new modelling and forecasting tool, to understand the delay and backlog effects of COVID-19 on New Zealand's health system. *The New Zealand Medical Journal (Online)*, 134(1544), 159-168. <https://web-p-ebscohost-com.waitematadhb.idm.oclc.org/ehost/pdfviewer/pdfviewer?vid=1&sid=7269a0d7-e7e7-4130-aa3f-c31f25c8404b%40redis>
- McCrae, N. (2012). Whither nursing models? The value of nursing theory in the context of evidence-based practice and multidisciplinary health care. *Journal of Advanced Nursing*, 68(1), 222-229. <https://doi.org/10.1111/j.1365-2648.2011.05821.x>
- McKenna, H. (2005). Doctoral education: Some treasonable thoughts. *International Journal of Nursing Studies*, 42(3), 245-246. <https://doi.org/10.1016/j.ijnurstu.2005.01.001>

- McKillip, A., Sheridan, N., & Rowe, D. (2012). New light through old windows: Nursing, colonists, and indigenous survival. *Nursing Inquiry*, 20(3), 265-276. <https://doi.org/ezproxy.aut.ac.nz/10.1111/nin.12005>
- McNett, M. (2006). The PhD-prepared nurse in the clinical setting. *Clinical Nurse Specialist*, 20(3), 134-138. <https://doi.org/10.1097/00002800-200605000-00010>
- McPherson, K. (1996). *Bedside matters: The transformation of Canadian nursing, 1900–1990*. Oxford University Press.
- Met, N., Dupuis, M., & Waelli, M. (2022). Nurses and the doctorate: A mixed study in French health care organizations. *Journal of Nursing Management*, 1-12. <https://doi.org/10.1111/jonm.13870>
- Mijares, L., Baxley, S., & Bond, M. (2013). Mentoring: A concept analysis. *Journal of Theory Construction and Testing*, 17(1), 23-28. <https://doi.org/10.1097/ANC.0b013e3182a14ca4>
- Ministry for Culture and Heritage. (2020). *World's first state-registered nurses*. <https://nzhistory.govt.nz/page/worlds-first-state-registered-nurses>,
- Ministry of Health. (1998). *Report of the Ministerial Taskforce on Nursing*. [https://www.moh.govt.nz/notebook/nbbooks.nsf/0/380F282D7CAEDADC4C25669B007C00CA/\\$file/report-ministerial-taskforce-nursing.pdf](https://www.moh.govt.nz/notebook/nbbooks.nsf/0/380F282D7CAEDADC4C25669B007C00CA/$file/report-ministerial-taskforce-nursing.pdf)
- Ministry of Health. (2017). *Nurse Practitioners in New Zealand*. <https://www.nurse.org.nz/user/inline/1794/nurse-practitioners-in-new-zealand.pdf>
- Ministry of Health. (2024). *Health workforce*. <https://www.health.govt.nz/our-work/health-workforce>
- Moghadam, Y., Atashzadeh-Shoorideh, F., Abbaszadeh, A., & Feizi, A. (2017). Challenges of PhD graduated nurses for role acceptance as a clinical educator: A qualitative study. *Journal Of Caring Sciences*, 6(2), 153-161. <https://doi.org/10.15171/jcs.2017.015>
- Murphy, C., & Kreiner, G. (2020). Occupational boundary play: Crafting a sense of identity legitimacy in an emerging occupation. *Journal of Organizational Behavior*, 41(9), 871-894. <https://doi.org/10.1002/job.247>
- Nadaf, C. (2018). Perspectives: Reflections on a debate: When does Advanced Clinical Practice stop being nursing? *Journal of Research in Nursing*, 23(1), 91-97. <https://doi.org/10.1177/1744987117751456>

- National Academies of Sciences Engineering and Medicine. (2021). *The future of nursing 2020–2030: Charting a path to achieve health equity*. The National Academies Press. <https://doi.org/https://doi.org/10.17226/25982>.
- Nelson, S. (2001). *Say little, do much: Nuns, nurses, and hospitals in the nineteenth century*. University of Pennsylvania Press.
- Nelson, S., & Gordon, S. (2004). The rhetoric of rupture: Nursing as a practice with a history. *Nursing Outlook*, 52(5), 255-261. <https://doi.org/10.1016/j.outlook.2004.08.001>
- New Zealand Nurses Organisation. (n.d). About us history. https://www.nzno.org.nz/about_us/history
- New Zealand Qualifications Authority. (2023). *Doctoral Degree*. <https://www2.nzqa.govt.nz/qualifications-and-standards/about-qualifications-and-credentials/doctoral-degree>
- Nicolaou, K., & Rigol, S. (2018). A brief history of antibiotics and select advances in their synthesis. *The Journal of Antibiotics*, 71, 153-184. <https://doi-org.waitematadhb.idm.oclc.org/10.1038/ja.2017.62>
- Nursing Council of New Zealand. (2019). The New Zealand nursing workforce: A profile of nurse practitioners, registered nurses and enrolled nurses 2018-2019. <file:///C:/Users/mcannalg/Downloads/NCNZ-Workforce%20Document%202018-19-WEB.pdf>
- Nursing Council of New Zealand. (n.d). *Registered Nurse*. https://www.nursingcouncil.org.nz/Public/Education/How_to_become_a_nurse/Registered_nurse/NCNZ/Education-section/Registered_Nurse.aspx?hkey=b7246e10-b2ac-463e-b735-308667320bbd
- Ocean, M., Montgomery, R., Jamison, Z., Hicks, K., & Thorne, S. (2022). Exploring the expansive properties of interpretive description: An invitation to anti-oppressive researchers. *International Journal of Qualitative Methods*(21), 1-14. <https://doi.org/10.1177/16094069221103665>
- Oliver, C. (2012). The relationship between symbolic interactionism and interpretive description. *Qualitative Health Research*, 22(3), 409-415. <https://doi.org/10.1177/1049732311421177>
- Orton, M., Andersson, A., Wallin, L., Forsman, H., & Eldh, A. (2019). Nursing management matters for registered nurses with a PhD working in clinical

practice. *Journal of Nursing Management*, 27(5), 955-962.
<https://doi.org/10.1111/jonm.12750>

Orton, M., Nelson Follin, N., Dannapfel, P., & Wengström, Y. (2022). Roles and functions in clinical care for registered nurses with a PhD—A systematic literature review. *Scandinavian Journal of Caring Sciences*, 36(1), 16-26.
<https://doi.org/10.1111/scs.12979>

Palaganas, E., Sanchez, M., Molintas, M., & Caricativo, R. (2017). Reflexivity in qualitative research. *The Qualitative Report*, 22(2), 426-438.
<https://doi.org/10.46743/2160-3715/2017.2552>

Pike, K., & Moore, M. (2021). Is there a doctor in the house? Medical ethics and the doctoral honorific. *Journal of Health Ethics*, 17(1).
<https://doi.org/10.18785/jhe.1701.08>

Porter, M. (2010). What is value in health care? *New England Journal of Medicine*, 363(26), 2477-2496. <https://www.57357.org/app/uploads/2020/06/What-is-Value-in-Health-Care-NEJM-2010.pdf>

Price, S., & McGillis-Hall, L. (2014). The history of nurse imagery and the implications for recruitment: A discussion paper. *Journal of Advanced Nursing*, 70(7), 1502-1509. <https://doi.org/10.1111/jan.12289>

Racine, L., & Vandenberg, H. (2021). A philosophical analysis of anti-intellectualism in nursing: Newman's view of a university education. *Nursing Philosophy*, 22(3), e12361. <https://doi.org/10.1111/nup.12361>

Reid, P., Paine, S., Te Ao, B., Willing, E., Wyeth, E., Vaithianathan, R., & Loring, B. (2022). Estimating the economic costs of indigenous health inequities in New Zealand: A retrospective cohort analysis. *BMJ open*, 12(10), e065430.
<https://doi.org/10.1136/bmjopen-2022-065430>

Rees, S., Ousey, K., Koo, K., Ahmad, N., & Bowling, F. (2019). Higher degrees in nursing: traditional research PhD or professional doctorate?. *British Journal of Nursing*, 28(14), 940-945. <https://doi.org/10.12968/bjon.2019.28.14.940>

Reverby, S. M. (1987). *Ordered to care. The dilemma of American nursing*. Cambridge University Press.

Roberts, M., & Schiavenato, M. (2017). Othering in the nursing context: A concept analysis. *Nursing Open*, 4, 174-181. <https://doi.org/10.1002/nop2.82>

- Roberts, S. (2015). Lateral violence in nursing: A review of the past three decades. *Nursing Science Quarterly, 28*(1), 36-41. <https://doi.org/10.1177/0894318414558614>
- Roberts, S., Demarco, R., & Griffin, M. (2009). The effect of oppressed group behaviours on the culture of the nursing workplace: A review of the evidence and interventions for change. *Journal of Nursing Management, 17*, 288-293. <https://doi.org/10.1111/j.1365-2834.2008.00959.x>
- Rocafort, T. (2020). Following the path; A grounded theory study regarding doctoral roles. *Journal of Professional Nursing, 36*(4), 251-258. <https://doi.org/10.1016/j.profnurs.2019.11.004>
- Ruby, J. (1999). History of higher education: Educational reform and the emergence of the nursing professorate. *Journal of Nursing Education, 38*(1), 23-27. <https://web-p-ebshost-com.waitematadhb.idm.oclc.org/ehost/pdfviewer/pdfviewer?vid=1&sid=dd25213a-6d37-4746-be60-147b70c55bfd%40redis>
- Rugs, D., Barrett, B., Chavez, M., Cowan, L., Melillo, C., Sullivan, S., Engstrom, C., Rugen, K., Toyinbo, P., & Powell-Cope, G. (2020). Doctoral-prepared nurses in the Veterans Health Administration: A cross-sectional survey. *Journal of Professional Nursing, 36*(1), 62-68. <https://doi.org/10.1016/j.profnurs.2019.06.008>
- Schober, M., Lehwaldt, D., Rogers, M., Steinke, M., Turale, S., Pulcini, J., Roussel, J., & Stewart, D. (2020). *Guidelines on advanced practice nursing 2020*. International Council of Nurses. www.icn.ch
- Sheer, B., & Wong, F. (2008). The development of advanced nursing practice globally. *Journal of Nursing Scholarship, 40*(3), 204-211. <https://doi.org/10.1111/j.1547-5069.2008.00242.x>
- Slay, H., & Smith, D. (2011). Professional identity construction: Using narrative to understand the negotiation of professional and stigmatized cultural identities. *Human Relations, 64*(1), 85-107. <https://doi.org/10.1177/001872671034290>
- Smith, N. (2013). Professional doctorates and nursing practice contribution: A systematic literature search and descriptive synthesis. *Journal of Nursing Management, 21*(2), 314-326. <https://doi.org/10.1111/j.1365-2834.2012.01446.x>

- Söderlund, J., & Borg, E. (2018). Liminality in management and organization studies: Process, position and place. *International Journal of Management Reviews*, 20(4), 880-902. <https://doi.org/10.1111/ijmr.12168>
- Squires, J., Estabrooks, C., Gustavsson, P., & Wallin, L. (2011). Individual determinants of research utilization by nurses: A systematic review update. *Implementation Science*, 6(1), 1-20. <https://doi-org.waitematadhb.idm.oclc.org/10.1186/1748-5908-6-1>
- Staffileno, B., Wideman, M., & Carlson, E. (2013). The financial and clinical benefits of a hospital-based PhD nurse researcher. *Nursing Economics*, 31(4), 194-197. <https://web-p-ebsohost-com.waitematadhb.idm.oclc.org/ehost/pdfviewer/pdfviewer?vid=1&sid=582f9049-e8db-4fdf-b99b-0df636803e66%40redis>
- Stanfill, A., Aycock, D., Dionne-Odom, J., & Rosa, W. (2019). Strategies and resources for increasing the PhD pipeline and producing independent nurse scientists. *Journal of Nursing Scholarship*, 51(6), 717-726. <https://doi.org/10.1111/jnu.12524>
- Stephens, M. (2001). Return to the Tohunga Suppression Act 1907. *Victoria University of Wellington Law Review*, 32(2), 437-462. <https://heinonline.org/HOL/P?h=hein.journals/vuwlr32&i=537>.
- Stuckey, H. (2014). The first step in data analysis: Transcribing and managing qualitative research data. *Journal of Social Health and Diabetes*, 2(01), 006-008. <https://doi.org/10.4103/2321-0656.120254>
- Terry, G., & Hayfield, N. (2021). *Essentials of thematic analysis*. American Psychology Association.
- The English Oxford Dictionary. (n.d). Tall Poppy Syndrome [16 April 2024]. <https://www.oxfordreference.com/display/10.1093/acref/9780198609810.001.0001/acref-9780198609810-e-6949>
- The Lancet. (1932). The Lancet commission on nursing. *The Lancet*, 219(5663), 585-588. [https://doi.org/10.1016/S0140-6736\(00\)91039-0](https://doi.org/10.1016/S0140-6736(00)91039-0)
- Thompson Burdine, J., Thorne, S., & Sandhu, G. (2021). Interpretive Description: A flexible qualitative methodology for medical education research. *Medical Education*, 55, 336-343. <https://doi.org/10.1111/medu.14380>

- Thornborrow, T., & Brown, A. (2009). Being regimented': Aspiration, discipline and identity work in the British parachute regiment. *Organization Studies*, 30(4), 355-376. <https://doi.org/10.1177/0170840608101140>
- Thorne, S. (2016). *Interpretive Description: Qualitative research for applied practice* (2nd ed.). Routledge.
- Thorne, S., Kirkham, S., & O'Flynn-Magee, K. (2004). The analytic challenge in interpretive description. *International Journal of Qualitative Methods*, 3(1), 1-11. <https://doi.org/10.1177/160940690400300101>
- Thorne, S., Kirkham, S., MacDonald-Emes, J. (1997). Interpretive Description: A noncategorical qualitative alternative for developing nursing knowledge. *Research in Nursing and Health*, 20(2), 169-177. [https://doi.org/10.1002/\(SICI\)1098-240X\(199704\)20:2<169::AID-NUR9>3.0.CO;2-I](https://doi.org/10.1002/(SICI)1098-240X(199704)20:2<169::AID-NUR9>3.0.CO;2-I)
- Turner, V. (1987). Betwix and between: The liminal period in rites of passage. In L. Mahdi, S. Foster, & M. Little (Eds.), *Betwixt & Between: Patterns of masculine and feminine initiation* (pp. 3-19). Cornell University Press.
- United Kingdom Nursing and Midwifery Council. (2023). Becoming a nurse. <https://www.nmc.org.uk/education/becoming-a-nurse-midwife-nursing-associate/becoming-a-nurse/>
- van der Cingel, M., & Brouwer, J. (2021). What makes a nurse today? A debate on the nursing professional identity and its need for change. *Nursing Philosophy*, 22(2), e12343. <https://doi.org/10.1111/nup.12343>
- van Dongen, L., Cardiff, S., Kluijtmans, M., Schoonhoven, L., Hamers, J., Schuurmans, M., & Hafsteinsdottir, T. (2021). Developing leadership in postdoctoral nurses: A longitudinal mixed-methods study. *Nursing Outlook* 69. <https://doi.org/10.1016/j.outlook.2021.01.014>
- Van Gennep, A. (1960). *The Rites of Passage*. University of Chicago Press.
- van Oostveen, C., Goedhart, N., Francke, A., & Vermeulen, H. (2017). Combining clinical practice and academic work in nursing: A qualitative study about perceived importance, facilitators and barriers regarding clinical academic careers for nurses in university hospitals. *Journal of Clinical Nursing*, 26(23-24), 4973-4984. <https://doi.org/10.1111/jocn.13996>
- van Rooyen, D., Jordan, P., Ham-Baloyi, W., & Caka, E. (2018). A comprehensive literature review of guidelines facilitating transition of newly graduated nurses

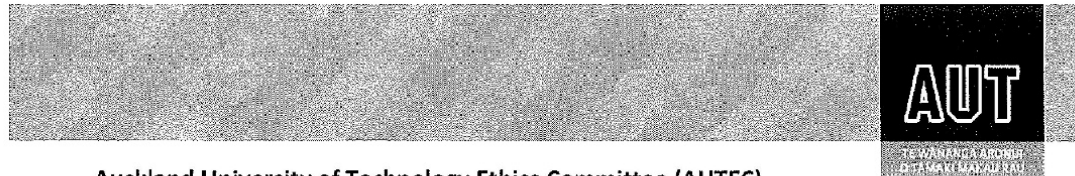
to professional nurses. *Nurse Education in Practice*, 35-41.
<https://doi.org/10.1016/j.nepr.2018.02.010>

- Vasas, E. (2005). Examining the margins: A concept analysis of marginalization. *Advances in Nursing Science*, 28(3), 194-202. <https://web-p-ebSCOhost-com.waitematadhb.idm.oclc.org/ehost/pdfviewer/pdfviewer?vid=1&sid=98b70107-d483-4cb2-9970-72eb89bac417%40redis>
- Vessey, J., McCabe, M., & Lulloff, A. (2017). Nurse scientists: One size doesn't fit all. *Nursing Management*, 48(2), 26-34.
<https://doi.org/10.1097/01.NUMA.0000511917.44775.95>
- Vinales, J. (2015). The mentor as role model and the importance of belongingness. *British Journal of Nursing*, 24(10), 532-535.
<https://doi.org/10.12968/bjon.2015.24.10.532>
- Walker, K., & Holmes, C. (2008). The 'order of things': Tracing a history of the present through a re-reading of the past in nursing education. *Contemporary Nurse*, 30(2), 106-118. <https://doi.org/10.5172/conu.673.30.2.106>
- Walker, L., & Clendon, J. (2018). Early nurse attrition in New Zealand and associated policy implications. *International Nursing Review*, 65(1), 33-40.
<https://doi.org/10.1111/inr.12411>
- Wall, B. (2012). American catholic nursing. An historical analysis. *Medizin Historisches Journal*, 47, 160-175. <https://www.jstor.org/stable/24573289>
- Watkins, D. (2011). The influence of masters education on the professional lives of British and German nurses and the further professionalization of nursing. *Journal of Advanced Nursing*, 67(12), 2605-2614.
<https://doi.org/10.1111/j.1365-2648.2011.05698.x>
- Weaver, K., & Olson, J. (2006). Understanding paradigms used for nursing research. *Journal of Advanced Nursing*, 53, 4459– 4469. <https://doi.org/10.1111/j1365-2648.2006.03740.x>
- Welton, J., & Harper, E. (2016). Measuring nursing care value. *Nursing Economics*, 34(1), 7-14. <https://web-p-ebSCOhost-com.waitematadhb.idm.oclc.org/ehost/pdfviewer/pdfviewer?vid=1&sid=1231b2e1-cb61-4426-9ab0-3bdca0339804%40redis>
- Wheeler, K., Miller, M., Pulcini, J., Gray, D., Ladd, E., & Rayens, M. (2022). Advanced practice nursing roles, regulation, education, and practice: A global study. *Annals of global health*, 88(1). <https://doi.org/10.5334/aogh.3698>

- Wilkes, L., Cummings, J., Ratanapongleka, M., & Carter, B. (2015). Doctoral theses in nursing and midwifery: Challenging their contribution to nursing scholarship and the profession. *Australian Journal of Advanced Nursing*, 32(4), 6-14. https://search.informit.org/doi/pdf/10.3316/informit.430500298365184?casa_token=cy2Gh3HZEmIAAAAA%3A3F-Br9vWmwT1HMXa3eVSzJqdDXk8qe_jIEKlrHST7uSVXW1VGojVL50vcNCBhSyIsTJbrMw7YION2
- Wilkes, L., & Mohan, S. (2008). Nurses in the clinical area: Relevance of a PhD. *Collegian*, 15(4), 135-141. <https://doi.org/10.1016/j.colegn.2008.05.001>
- Willets, G., & Clarke, D. (2014). Constructing nurses' professional identity through social identity theory. *International Journal of Nursing Practice*, 20(2), 164-169. <https://doi.org/10.1111/ijn.12108>
- Willson, R. (2019). Transitions theory and liminality in information behaviour research: Applying new theories to examine the transition to early career academic. *Journal of Documentation*, 75(4), 838-856. <https://doi.org/10.1108/JD-12-3018-0207>
- Wilson, J. (2016). An exploration of bullying behaviours in nursing: A review of the literature. *British Journal of Nursing*, 25(6), 303-307. <https://doi.org/10.12968/bjon.2016.25.6.303>
- Wood, P. (2014). Historical imagination, narrative learning and nursing practice: Graduate nursing students' reader-responses to a nurse's storytelling from the past. *Nurse Education in Practice*, 14(5), 473-478. <https://doi.org/10.1016/j.nepr.2014.05.001>

Appendices

Appendix A: AUT Ethics Committee Approval



Auckland University of Technology Ethics Committee (AUTEC)

Auckland University of Technology
 0-88, Private Bag 92006, Auckland 1142, NZ
 T: +64 9 921 9999 ext. 8316
 E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

20 September 2021

Elissa McDonald
 Faculty of Health and Environmental Sciences

Dear Elissa

Re Ethics Application: **21/335 Doctorally-prepared nurses in clinical practice, what is the impact?**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 20 September 2024.

Standard Conditions of Approval

1. The research is to be undertaken in accordance with the [Auckland University of Technology Code of Conduct for Research](#) and as approved by AUTEC in this application.
2. A progress report is due annually on the anniversary of the approval date, using the EA2 form.
3. A final report is due at the expiration of the approval period, or, upon completion of project, using the EA3 form.
4. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form.
5. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
6. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.
7. It is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard and that all the dates on the documents are updated.
8. AUTEC grants ethical approval only. You are responsible for obtaining management approval for access for your research from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

Please quote the application number and title on all future correspondence related to this project.

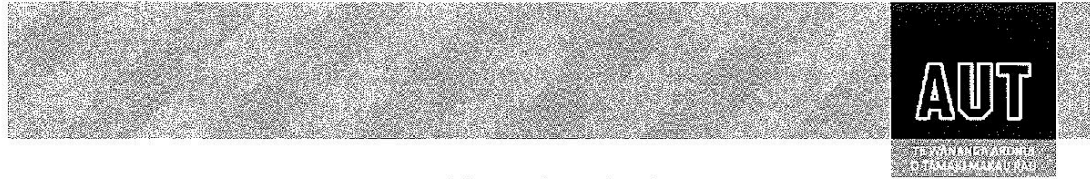
For any enquiries please contact ethics@aut.ac.nz. The forms mentioned above are available online through <http://www.aut.ac.nz/research/researchethics>

(This is a computer-generated letter for which no signature is required)

The AUTEC Secretariat
 Auckland University of Technology Ethics Committee

Cc: Grainne.McAnnalley@waitematadhb.govt.nz; catherine.cook@aut.ac.nz

Appendix B: Participant Information and Informed Consent



Participant Information Sheet

Date Information Sheet Produced: 30 Aug 2021

Project Title

Doctoral Education for Clinical Nurses – What is the impact on practice?

My name is Gráinne McAnnalley and I am registered nurse working in New Zealand and a student in the Doctor of Health Science programme at AUT. I would like to invite you to consider participating in my research which will examine the impact on nursing practice of a doctoral education for clinical nurses. This research will form the main part of the Doctor of Health Science qualification.

What is the purpose of this research?

My research will examine the impact of a doctoral qualification for nurses in clinical practice. Previous international research has shown the majority of nurses with doctoral qualifications work in academia, however there is a minority who remain wholly or partly in clinical practice. Doctorally-qualified clinical nurses report a diversity of experience which includes role ambiguity, difficulty transitioning back into clinical practice, positive and negative reactions from colleagues, varying expectations around research production and varying levels of mentorship and support from employers. There is also a lack of understanding around how doctoral education might impact the nurse's clinical practice. This research proposes to determine the Aotearoa/New Zealand experience, to understand the doctorally-prepared nurse's perception of the impact of the doctoral qualification on their clinical practice, and to identify role development and support mechanisms both formal and informal. The research findings will be published as the thesis for the Doctor of Health Science degree. In addition, the findings of this research may be used for academic publications and presentations, and to inform guidelines.

How was I identified and why am I being invited to participate in this research?

You have been invited to participate in my research because you have responded to an advert in print or social media, to an invitation sent to your publically available email contact, or you may have heard about this study from colleagues and nursing friends, and you meet the entry criteria listed below.

Inclusion criteria:

1. Registered nurses or Nurse Practitioners who are currently working wholly or partly in a clinical environment in Aotearoa, or who have worked clinically within the last five years. The clinical environment is defined as a healthcare setting where the nurse has direct or indirect influence on patient care. For clarity, this will not include nurses working wholly in academic positions but would include healthcare managers, clinical researchers, and

clinical educators working within the clinical environment of a public or private healthcare provider. Any clinical position working 8 hours per fortnight and above will be included.

2. A health or related-field doctoral qualification obtained from a New Zealand or Australian university where a substantive part of the qualification was a thesis.
3. At least 12 months of post-doctoral clinical experience.

How do I agree to participate in this research?

Please feel free to show this information to your whānau, friends, and colleagues. If you have questions about this project please feel free to telephone 021 178 9971 or email the researcher at gramca85@autuni.ac.nz If you would like to take part in this research please let the researcher know by phone/txt/or email. Once you agree to participate the researcher will be in contact to arrange an interview time with you. A written consent will be signed before the interview begins. You will receive a copy of this signed consent form.

Your participation in this research is voluntary and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study prior to submission of the thesis, you may request your collected data be removed from the analysis. However, once the study findings have been produced, removal of your data may not be possible.

What will happen in this research?

Participants in this research will have an in-depth one-to-one semi-structured interview with the researcher. Due to the geographical diversity of participants, and the unknown future of the current pandemic, some interviews may need to be conducted using video conferencing such as ZOOM or Microsoft TEAMS. However, in the first instance they will be done *kanohi ki te kanohi* (face to face). Interviews will be in a mutually-agreed location. You may choose to bring your whānau to the interview to support you. Interviews will be audio-recorded by a primary and a secondary recording device. The interviews will be transcribed using a combination of researcher transcription and a professional transcription service. The professional transcription service will have a confidentiality agreement in place prior to undertaking any work on the researcher's behalf. Some demographic data will be collected including: gender, age, ethnicity, type of doctorate, and current clinical setting. The duration of interviews will be guided by the data, however, are expected to be approximately 60 minutes duration. If you give consent, the transcribed interview may be sent to you to be checked for accuracy. At this time any data that you decide you do not want included in the data analysis can be indicated for removal. The audio-recordings and original transcripts will be stored on the AUT cloud under the researcher's account to which only the researcher has access. A formal data management plan is available on request. Each interview will be de-identified and allocated a code as an identifier to protect your privacy.

The data analysis method for this research is Braun and Clarke's reflexive thematic analysis. Once final themes are identified and named, the analysis will be made available to you for your review and comments if you give consent.

What are the discomforts and risks?

The researcher anticipates any risk to you during this research is minimal; however, questions around your personal experience and perceptions of practice may bring up unpleasant memories which you could find distressing. If you find yourself distressed, you may choose to stop the interview at any time. You may also choose to decline to answer a question or stop a line of questioning that is uncomfortable for you.

Participants can access free and confidential counselling support from AUT. The contact details for this counselling service are listed in the next section. If you work for a District Health Board or Primary Healthcare Organisation you may also contact the Employee Assistance Programme.

How will these discomforts and risks be alleviated?

AUT Student Counselling and Mental Health is able to offer three free sessions of confidential counselling support for adult participants in an AUT research project. These sessions are only available for issues that have arisen directly as a result of participation in the research and are not for other general counselling needs. To access these services, you will need to:

- drop into our centre at WB203 City Campus, email counselling@aut.ac.nz or call 921 9998.
- let the receptionist know that you are a research participant, and provide the title of my research and my name and contact details as given in this Information Sheet.

You can find out more information about AUT counsellors and counselling on <https://www.aut.ac.nz/student-life/student-support/counselling-and-mental-health>

What are the benefits?

The primary benefit of this research is for the researcher to gain a doctoral qualification. The researcher hopes this research will further the conversation around doctoral education for New Zealand nurses. The findings will be used to create a set of guidelines for nurses, management, and organisations to promote, support, and optimise the roles of doctorally-educated nurses in clinical practice. This may not directly benefit you, but may benefit future nurses who choose to undertake doctoral education and remain in clinical practice.

How will my privacy be protected?

Your name and other identifying demographic data will not be published as part of this research. Each interview will be de-identified and allocated a code to protect privacy. A table may be published as part of this research which will give details of the demographic break down of participants in this research, however demographic data will be withheld if it risks aiding the identification of participants. The researcher plans to use direct in-vivo quotes from interviews to support themes. These quotes will be carefully chosen to minimise the risk of being able to identify you through your language or experience. Aotearoa is a small country, the community of nurses smaller still, and the number of clinically-based nurses with a doctoral qualification even smaller. Efforts to maintain your confidentiality will be made which include removing identifying data from your interview, not identifying work places or geographical locations and referring to clinical specialities in board (i.e. primary healthcare). However, there remains a risk that your

identity may become known or guessed when results become available. You will receive a copy of the results before publication in any media other than the thesis submission to AUT.

What are the costs of participating in this research?

The primary cost to you will be the time given for the interview and, if you consent, to the review of the transcription data. The time is expected to be around 60 minutes for the interview. If you consent, I estimate another 60 minutes for review of the transcription data and 60-120 minutes to review the thematic data once available.

What opportunity do I have to consider this invitation?

Please take your time to read through this document and discuss the contents with your whānau or anyone else you choose. Once you have made your decision feel free to contact me on 021 178 9971 or email gramca85@autuni.ac.nz

The researcher may contact you after a month has passed to see if you have any questions regarding this research or your participation.

Will I receive feedback on the results of this research?

Yes, you will be provided with a report on the findings of the research once available.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor,

Dr Elissa McDonald, elissa.mcdonald@aut.ac.nz, (09) 921 9999 ext. 7656

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Gráinne McAnnalley: phone: 021 178 9971 email: gramca85@autuni.ac.nz

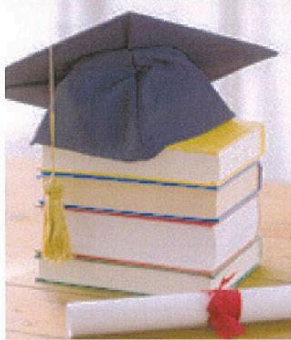
Project Supervisor Contact Details:

Dr Elissa McDonald, elissa.mcdonald@aut.ac.nz, (09) 921 9999 ext. 7656

Dr Catherine Cook, Catherine.cook@aut.ac.nz, (09) 921 9999 ext. 6651

Approved by the Auckland University of Technology Ethics Committee on *17 Sept 2021*, AUTEC
Reference number 21/335.

DOCTORALLY PREPARED NURSE/NP PARTICIPANTS NEEDED



I am an AUT Doctor of Health Science student and a registered nurse. I'm inviting doctorally-prepared nurses/nurse practitioners who work in clinical practice to be part of my research examining how a doctoral qualification impacts practice. This will involve a confidential interview of around one hour.

- Do you have a doctoral degree from a NZ or Australian university in a health or related field?
- Do you have 12 months post-doctoral clinical experience?
- Have you been working clinically in the last 5 years, after obtaining your doctorate?

If you are interested and would like to participate:

Please contact the researcher :

GRAINNE MCANNALLEY

Email: gramca85@autuni.ac.nz

ph/txt **021 178 9971**



Appendix C: Interview Guide

AUTEC ethics application
Elissa McDonald

Doctoral qualification for clinical nurses, What is the impact?

Provisional Research Questions:

- Tell me about your current clinical role (or previous clinical role if no longer in clinical practice, see inclusion criteria).
- Tell me about your intention when you did your doctorate (was there an intention to inform your practice).
- Did you have a plan for the post-doctoral period around what you would do next or how you might use the doctoral education?
- Describe what has been different in your practice as a result of your doctoral degree, can you give examples.
- Describe an event or situation in which you used your doctoral-gained knowledge in clinical practice.
- Has your identity as a clinician changed? Can you describe the change?
- Describe your colleagues' reaction, if any, to your doctoral degree.
- How has your manager responded to your doctorate?
- How do you designate yourself at work? Do you use your title? Under what circumstances? Can you give an example of a time you used your doctoral title in clinical practice.
- Are you involved in research? Please describe your involvement.
- Has having a doctoral qualification created opportunities and/or challenges since you graduated?
- Tell me about any support structures in place post doctorate - formal mentorship; support group; informal structures.
- Describe your ideal role, what would it look like?
- Given your experience, what advice would you give to a clinical nurse considering undertaking doctoral research?
- What are your thoughts about whether there is a place for doctoral studies for nurses committed to a clinical pathway?
- Describe the support structures you would like to have in place for yourself or other post-doctoral nurses working clinically. What about those structures is important?
- Is there anything else you would like to say before we conclude?

The interview will conclude with thanks from the researcher and presentation of a koha to the participant. The researcher will ensure the participant has their contact details and is aware to contact them at any time if they have questions about the research.

Appendix D: Literature Review Journal Matrix

Article	Methodology/Method	Country	Participants	Primary Findings
Andreassen, P., & Christensen, M. K. (2018). "We're at a watershed": The positioning of PhD nurses in clinical practice.	Qualitative explorative	Denmark	Six PhD nurses Nine nurse colleagues Six clinical nurse leaders	Translation of research to practice a key responsibility. Connection to practice was vital. Few career options and a precarious position in economically difficult times. Balancing research and clinical priorities challenging DPCN expected to improve nurses' reputation, contribution and culture.
Abraham, C., Kleinpell, R., Godwin, K. M., & Dolansky, M. A. (2021). The interprofessional Veterans Affairs Quality Scholars program pre-and postdoctoral nurse fellow outcomes.	Survey evaluation	America	Data from 65 Nurse Fellows	Fellowship programme fellows provided significant improvements to nursing practice and healthcare delivery.
Avery, M., Westwood, G., & Richardson, A. (2022). Enablers and barriers to progressing a clinical academic career in nursing, midwifery and allied health professions: a cross-sectional survey	Cross-sectional survey	United Kingdom	Approximately 268 respondents from previous successful and unsuccessful applicants for post-doctoral fellowship positions from the National Institute of Health Research	Support and advice from others were a primary drive to develop a research career. Advice primarily informal with few formal mentoring relationships.

Article	Methodology/Method	Country	Participants	Primary Findings
Borbasi, S., & Emden, C. (2001). Is a PhD the best career choice? Nursing employers' views.	Qualitative exploratory survey	Australia	Five participants Non-nursing health care administrators and employers of nurses.	Some participants reported a doctoral degree could provide benefit in the clinical context. Others reported a doctorate level education was unnecessary and a master's was sufficient.
Chavez, M., Melillo, C., Rugen, K., & Sullivan, S. C. (2021). Exploring the role complexity and workforce needs of doctoral-prepared nurses.	Cross-sectional survey (same data set at Rugs et al. (2020))	America	929 respondents all DPCNs	Participants held multi-faceted responsibilities but often unclear and unrecognised. Participants saw themselves as systems level thinkers. Wanted protected research time and reflection of skills in position descriptions.
Cheraghi, M. A., Jasper, M., & Vaismoradi, M. (2014). Clinical nurses' perceptions and expectations of the role of doctorally-prepared nurses: A qualitative study in Iran.	Qualitative description Content analysis	Iran	43 total participants 30 participants had oral interviews. 13 participants had written interviews.	Participants were unsure of the purpose of a doctorate for nurses or of a DPCN in practice. Clinical competence was questioned. Participants suggested DPCNs were less clinically competent because they spent less time in clinical practice.

Article	Methodology/Method	Country	Participants	Primary Findings
Dobrowolska, B., Chruściel, P., Markiewicz, R., & Palese, A. (2021). The role of doctoral-educated nurses in the clinical setting: Findings from a scoping review.	Scoping review of the literature on roles and career opportunities for DPCNs	America UK Iran Nordic countries	10 articles	Role confusion No pathway Three common areas of work included: the practice influencer; the clinical leader; and the clinical teacher.
Elgaard Sørensen, E., Hoffmann Kusk, K., Athlin, A. M., Lode, K., Rustøen, T., Salmela, S., & Hølge-Hazelton, B. (2019). The role of PhD-prepared, hospital-based nurses: An inter-Nordic study.	Descriptive cross-sectional survey	Six Nordic countries	164 respondents	Roles were diverse across countries. Participants wanted more research time and less administration time.
Gijbels, H., O'Connell, R., Dalton-O'Connor, C., & O'Donovan, M. (2010). A systematic review evaluating the impact of post-registration nursing and midwifery education on practice.	Systematic review	Global	61 Articles	Challenging to evaluate outcomes due to nursing care. Highlighted dearth of evidence around the value contribution of DPCNs Concluded there was little evidence to support a positive impact of nurses' educational level on patient outcomes.
Hafsteinsdóttir, T. B., van der Zwaag, A. M., & Schuurmans, M. J. (2017). Leadership mentoring in nursing research, career development and scholarly productivity: A systematic review.	Systematic review	United States, Australia, Jordan, The United Kingdom	15 articles	Mentoring positively impacted DPCNs across a range of outcomes. No research found on leadership of DPCNs.

Article	Methodology/Method	Country	Participants	Primary Findings
Hampshaw, S., Cooke, J., Robertson, S., Wood, E., King, R., & Tod, A. (2022). Understanding the value of a PhD for post-doctoral registered UK nurses: A survey.	Online quantitative and qualitative survey	United Kingdom	47 Participants Mix of academic and clinical nurses	Nursing leaders did not value a DPCN in practice. Medical doctors did value a DPCN in practice. Doctorate was perceived to have limited applicability in clinical practice environments in terms of career advancement, due to inflexible nursing structures.
Happell, B., Edward, K. L., & Welch, T. (2008). Doctoral graduates in mental health nursing in Victoria, Australia: The doctoral experience and contribution to scholarship.	Quantitative Questionnaire	Australia	16 Participants Mixed clinical and academic nurses.	All but one was research active. 300 papers were published across the cohort.
Heinrich, K. T. (2005). Halfway Between Receiving and Giving: A Relational Analysis of Doctorate-Prepared Nurse-Scholars' First 5 Years After Graduation.	Qualitative: Longitudinal phenomenological methodology Using a relational feminist analysis.	America	16 participants at the start 14 participants by the end Nurses with doctoral qualification in the first five years after graduation. Primarily examined identity.	Gradual identity transition hampered by lack of a common post-doctoral pathway. Hesitant to reveal doctoral identity or chose to selectively reveal doctoral identity. Increase confidence, credibility, empowerment, and contribution.

Article	Methodology/Method	Country	Participants	Primary Findings
Kim, M., Lee, J., & Choi, S. (2022). Clinical practice experience of doctor of philosophy nurses in South Korea: a qualitative study.	Qualitative descriptive analysis	Republic of Korea	15 DPCNs Interviews Field notes Two pre-existing diaries by two of the 15 participants	Participants reported the following value contribution: providing evidence-based, patient specific education; proactive communication with patients; reflexive thinking and questioning nursing practice and nursing care; providing holistic care and involving the multidisciplinary team and advocating for the patient; producing nursing science as an obligation; a conscious understanding of patients as people; and role modelling for nursing colleagues.
McNett, M. M. (2006). The PhD-prepared nurse in the clinical setting.	Descriptive qualitative in-depth interviews	America	Five participants PhD nurses working in a clinical setting as a clinical nurse specialist or a nurse practitioner.	Two themes identified were leadership and bridging the research practice gap. No dedicated research time. Independent research was valued by DPCNs. DPCNs expected to facilitate the translation of research into clinical practice. DPCN provided leadership through membership on committees and contribution to practice change. DPCN had an expanded view of the organisation's needs.

Article	Methodology/Method	Country	Participants	Primary Findings
Met, N., Dupuis, M., & Waelli, M. (2022). Nurses and the doctorate: A mixed study in French healthcare organizations.	Mixed methods survey	France	79 Survey responses from DPCNs 45 Interviews with DPCNs (not all DPCN) 10 interviews with chief nurses 27 hours of observation of research nurse practice.	Difficult to identify DPCN in practice settings DPCN were research nurses coordinating other's research. DPCN wanted the same recognition as medical colleagues. Participants described they no longer fit into the traditional image of a French nurse.
Moghadam, Y. H., Atashzadeh-Shoorideh, F., Abbaszadeh, A., & Feizi, A. (2017). Challenges of PhD graduated nurses for role acceptance as a clinical educator.	Qualitative exploration using individual interviews.	Iran	13 participants 8 PhD nurses 3 HOD nurses 1 Vice chancellor 1 Nurse (undefined)	Educators felt tension in clinical environments Participants suggested perceived poor clinical competencies from DPCN damaged their credibility for students and ward nurses.

Article	Methodology/Method	Country	Participants	Primary Findings
Orton, M. L., Andersson, Å., Wallin, L., Forsman, H., & Eldh, A. C. (2019). Nursing management matters for registered nurses with a PhD working in clinical practice.	Qualitative descriptive Content analysis	Sweden	13 participants	<p>Examined the role, functions, and work context of nurses with a doctoral qualification.</p> <p>Hard to identify DPCN in the practice setting as no record kept.</p> <p>Clinical work was the same as non-DPCNs but value was contributed through research expertise.</p> <p>Being in clinical environments was important to maintain authority, but maintaining clinical competence was difficult.</p> <p>Research authority sometimes questioned by others.</p>
Orton, M. L., Nelson Follin, N., Dannapfel, P., Wengstrom, Y. (2022). Roles and functions in clinical care for registered nurses with a PhD.	Systematic review	Sweden	12 papers included from 1986 to 2020	<p>Two primary roles: researcher or APN</p> <p>Three categories of role bridging the theory/practice gap; leadership; and professional tradition</p>
Rocafort, T. B. (2020). Following the Path; A Grounded Theory Study Regarding Doctoral Roles.	Adapted Grounded Theory *data from 2015	America	13 DPCN participants Focus group with five experts on doctoral nursing roles.	<p>Basic social process 'following the path'.</p> <p>advancing, collaborating, transforming, and stewarding</p> <p>Concluded nurses were beginning to define themselves from within the discipline.</p>

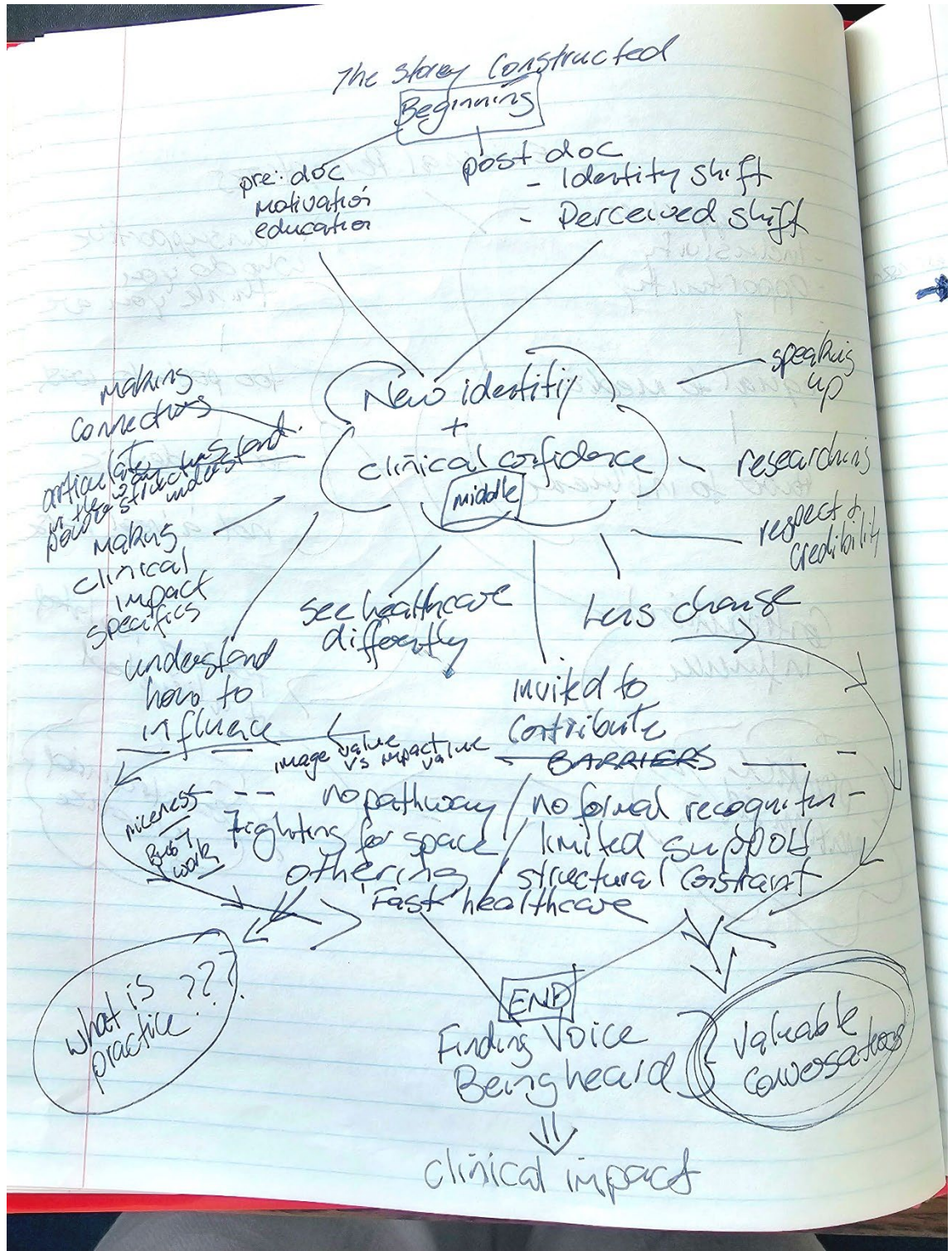
Article	Methodology/Method	Country	Participants	Primary Findings
Rugs, D., Barrett, B., Chavez, M. A., Melillo, C., Sullivan, S., & Powell-Cope, G. (2019). Doctoral-prepared nurses in the Veterans Health Administration: A cross-sectional survey.	Cross-sectional survey	America	929 DPCNs responded.	75% held a clinical doctorate, the remainder a PhD. Roles were diverse and ill-defined. No institutional record of who held a doctoral qualification. Difficult definition of what constituted being research active. Researcher's recommended aligning type of doctorate with activities to best utilise the skillset.
Smith, N. J. (2013). Professional doctorates and nursing practice contribution: A systematic literature review and descriptive synthesis.	Systematic Literature Review.	United Kingdom and America	2005-2012 Five research papers Three theses	Doctoral thesis created new knowledge, but implementation was often difficult and dependant on support from managers and leaders.
Van Oostveen, C. J., Goedhart, N. S., Francke, A. L., & Vermeulen, H. (2017). Combining clinical practice and academic work in nursing: A qualitative study about perceived importance, facilitators and barriers regarding clinical academic careers for nurses in university hospitals.	Qualitative design not further defined but appeared to be qualitative description.	Netherlands	24 interviews with nurse academics and other invested parties (including medical doctors). Two focus groups with total of 14 nurse participants (50% held a doctorate) And two nurse academics from the United Kingdom had separate interviews.	Surprise from some that clinical nurses would obtain a doctoral degree. No advanced clinical role required a doctoral degree No common vision for DPCN. DPCN value limited by hierarchy with medical doctors in control of decision making and budgets.

Article	Methodology/Method	Country	Participants	Primary Findings
Wilkes, L., Cummings, J., Ratanapongleka, M., & Carter, B. (2015). Doctoral theses in nursing and midwifery: challenging their contribution to nursing scholarship and the profession.	a mixed methods study. Online survey with numerical and textual data.	United Kingdom and Australia.	27 doctorally qualified nurses in academic and clinical environments.	50% reported thesis changed nursing practice. 37% reported no change. Rest did not respond.
Wilkes, L. M., & Mohan, S. (2008). Nurses in the clinical area: Relevance of a PhD.	Descriptive mixed methods study Qualitative Interviews and 16-item quantitative survey	Australia	19 participants completed the survey. 13 of the 19 participants completed a telephone interview.	Perceived improved career prospects, credibility, confidence and improved patient care through research production. Nurse leaders did not value doctoral education for patient impact. Research time was limited for DPCN in clinical roles.

Inclusion Criteria

- Registered nurse or Nurse Practitioner who is currently working wholly or partly in a clinical environment in Aotearoa, or who has worked clinically within the last five years. The clinical environment is defined as a healthcare setting where the nurse has direct or indirect influence on patient care. For clarity, this will not include nurses working wholly in academic positions but would include healthcare managers, clinical researchers and clinical educators working within the clinical environment of a public or private healthcare provider. Note that any clinical position working 8 hours per week and above will be included.
- A doctoral qualification from a New Zealand or Australian university. This is because the two countries qualifications are of similar quality and to reduce the impact of a heterogeneous pool of unquantified international qualifications.
- Any health or related field doctorate will meet entry criteria where a substantive part of the doctoral requirement was a thesis. This is to allow a sufficient number from which to gather a cohort, and because the phenomenon is not about the doctorate itself, but about impact related to the qualification.
- At least 12 months of post-doctoral experience. This is to ensure participants have had sufficient time to experience the phenomenon under study.
- Willing to give informed consent which will include recording of participant interviews.

Appendix F: Example of Coding Work



Appendix G: Email Communication

From:
Sent: Thursday, 12 December 2019 12:11 p.m.
To: Grainne McAnnalley
Subject: RE: trust application

Whaddya mean, above Masters' level???
What degree are you flippin' doing?

From: Grainne McAnnalley
Sent: Thursday, 12 December 2019 9:59 AM
To:
Subject: RE: trust application

Of course, I have asked them for an email confirming there is no funding for nurses above a masters level.

Regards
Grainne

From:
Sent: Wednesday, 11 December 2019 10:00 p.m.
To: Grainne McAnnalley
Subject: RE: trust application

Of course. Trustees will want to see evidence that you've applied and been turned down by the DHB?

Appendix H: Reflexive Journal Example

24 March 2022

I had my usual supervision meeting today. Always so incredibly helpful to stimulate my thinking. We discussed our thinking about including/excluding doctoral qualifications from other countries. What is the benefit of excluding countries? Originally I was trying to avoid including nurses with PhDs from countries where the qualification is not equal to that of New Zealand. So the nurses don't graduate with the same kind of critical evaluation, insightfulness, and ability to autonomously investigate and evaluate. I thought it would be simplest to exclude the world except for New Zealand and Australia, but actually this is doing the research a disservice by limiting the voice of many well qualified nurses with world-class doctorates. So after consideration and discussion with Catherine and Elissa, I will include first world countries where the doctoral education is known to be first class, such as the UK, America, Scotland, Ireland, etc. but not countries like India, Pakistan, China, where the content of a doctoral qualification for nursing is less understood for those of us in New Zealand.

02 Oct 2022

I've been reading about anti-intellectualism, social groups and how they function, bullying, and niceness as a form of control. As I've been coding, I have had a growing awareness of these nurses as complex clinicians with juxtaposed, polarised aspects all within one psyche. They are confident and not confident, they stand out but fear standing out, they value their skills but don't always have an opportunity to use them, they are proud of their achievements but don't want to use the title or tell others they are doctorally qualified. They say there is no difference to their practice then describe creating significant practice change. They are valued by some in the healthcare setting but ignored by nursing management. They conduct important research but implementation doesn't occur. They sit within a social space in nursing that doesn't connect between the clinical and academic worlds and when they try to bridge the gap they are stretched beyond elasticity. They hold a liminal identity where no-one is quite sure what to do with them, yet they are making impactful contributions to clinical pathways, health policy, and research. They are the point at which nursing has the opportunity for further transformation, for claiming the nursing voice, for impacting patient and whanau care in larger scale, and for addressing equity in a dynamic way.

Appendix I: COVID-19 Reflection

A brief reflection on doing research during the COVID-19 pandemic.

This appendix provides an overview of the context of conducting research during the pandemic. It is beyond the scope of this study to provide an in-depth review of the Aotearoa response to COVID-19. However, there are research, policy and governmental documents that provide these details (see for example (Cook et al., 2021; Mowat et al., 2023; Robert, 2020)).

The Doctor of Health Science is a professional doctorate which begins with three taught papers and ends with a research thesis. I completed the first taught paper in 2019. In 2020 and 2021 I completed the second paper and third paper and subsequently submitted my research proposal. The proposal was accepted and the research portion of the doctorate was underway by Sept 2021. When I began the first paper, no-one had any idea of the global upheaval we were all about to experience with COVID-19. The first whisperings of a significant health event began to circulate in December 2019 and on 11 March 2020 (coincidentally also my birthday) a global pandemic was announced by the World Health Organization (World Health Association, 2024).

The pandemic in Aotearoa was a horrible and frightening time for me, my family, my friends and for our country's population, particularly for people who were already socio-economically marginalised and for those living with the effects of health disparities. As part of the government's response, the country's borders closed leaving people separated from the ones they loved. Strict isolation was introduced mandating people stay in their homes and isolate from family, friends, and neighbours. These periods of incredible social isolation were known as lock-downs. I spent the first the lock-down in and out of hospital recovering from persistent complications from surgery I had had on the day the pandemic was announced. My husband and family

were not able to enter the hospital. I was dropped off at the emergency department door and didn't see my family again for a week. I can say I have never felt so alone as I did, during my hospital admissions, with no-one beside me. My doctors at the hospital were worried I might be infected with COVID. I was isolated in a single room. Everyone was clearly scared and I had the distinct impression the staff didn't want to come near me. I cannot imagine what it was like for women who gave birth alone, people who died without family around them and for families separated for much longer than I was from mine. During the coming months, people lost their businesses and livelihoods, and the vaccine mandate divided society and families in arguments over individual rights versus population-based ethics. COVID-19, the death toll, and the vaccination mandate became commonplace in every conversation from parliament to people's intimate and social connections. As the pandemic went on I recall delivering water and supplies to clinical staff in the testing stations where endless queues of cars filled with masked people waited their turn for the dreaded nasal swab. My memory of that time included the eerie feeling of silent streets, a motorway usually packed with cars, now empty, and a bombardment of dire news, global death tolls, and terrifying stories of overseas health systems overwhelmed by COVID-19 patients.

The healthcare system in Aotearoa was at significant risk of also becoming overwhelmed, as we had seen in other countries. The public health sector underwent a series of rapid structural changes which required significant health care practitioner role changes, re-prioritisation of services, and real-time reactive changes as information around infection rates became available. In reflection, this may not have been the ideal time to undertake health research, yet that is exactly what I, and many others, did.

It was in this rapidly changing context that I undertook my data collection. The first participant interview occurred in September 2021. At the time Auckland, where I live, was at Level 4 alert and the rest of Aotearoa was at Level 3. Level 4 restricted non-essential workers to their homes, and Level 3 restricted travel outside the geographical borders of the immediate urban area (Ministry of Health, 2024; New Zealand Herald, 2020). Gathering data from doctorally prepared clinical nurses, the majority of whom held advanced practice or leadership positions, during a global pandemic was a challenging task for both researcher and participants. The first effect was a prolonged

recruitment time. Finding an hour to spare during a major health crisis for high-level clinical nurses, already stretched, was a challenge answered by participants with enthusiasm, grace, and perseverance. The initial plan for data was to perform face-to-face interviews with virtual interviews as a backup. However, to mitigate lockdowns and minimise physical contact, I conducted 16 of the 18 interviews virtually via MS TEAMS or ZOOM. Despite the challenges of virtual interviewing, there were benefits to this form of data collection.

Virtual interviewing allowed a wider geographical diversity of participants than may otherwise have been possible. Virtual interviewing saved time for busy nurses, in terms of travel, enabling participants to fit the interview in at a time convenient to them no matter where they were physically located. Automatic calendar invitations allowed both researcher and participants to diarise interviews and created a reminder to assist in time management planning. Virtual interviews also tempered the need to group interviews close together to make the most of times when travel restrictions eased. Spacing the interviews allowed me time to sit with the data and consider other questions of interest. Virtual interviews also allowed the research to continue with zero risk of transmitting the virus to already vulnerable clinicians. Due to the pandemic, ZOOM and MS TEAMS became rapidly familiar to both the participants and me, mitigating any discomfort or distraction caused by unfamiliar technology. Finally, virtual interviewing granted me time to conduct interviews around my own clinical role. My experience was echoed by Self (2021), in their report on choosing qualitative interviews using virtual technology during the pandemic. The benefits Self (2021), listed mirrored mine in terms of convenience, reduced travel time, increased geographical diversity, and prevention of viral transmission.

The research continued throughout the pandemic and was uninterrupted by social restrictions. Looking back on the experience now, I appreciate how much more difficult it could have been. Other doctoral students whose research required lab work or clinical observation fared much worse than me. The university campuses were closed, but the library offered full online services and help over MS TEAMS, and my supervisor's continued to meet with me virtually.

The pandemic was not a completely negative experience for me. There were positives in my life despite the chaos and I was aware of my privileged position. Job security in

the public health system for vaccinated nurses was not a concern. The employed members of my family kept their jobs and homes, and while we might have felt a degree of survivor's guilt, I am so grateful it was not worse for us. Working on my doctoral research also gave me something to think about other than the chaos taking place around me. I knew data collection would be challenging, but I have always believed that to get somewhere one just has to take one step forward at a time and not look too far ahead, and that is what I did.

References

- Cook, C., Brunton, M., Chapman, M., & Roskruge, M. (2021). Frontline nurses' sensemaking during the initial phase of the COVID19 pandemic in 2020 Aotearoa New Zealand. *Nursing Praxis in Aotearoa New Zealand*, 37(3), 41-52. <https://doi.org/10.36951/27034542.2021.034>
- Mowat, R., Cook, C., Chapman, M., & Roskruge, M. (2023). Good death disrupted: Nurses' moral emotions navigating clinical and public health ethics during the first wave of COVID-19 pandemic. *Journal of Clinical Nursing*, 32(17-18), 6611-6621. <https://doi.org/10.1111/jocn.16702>
- Ministry of Health. (2024). COVID-19: Protecting Aotearoa New Zealand. <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-response-planning/covid-19-protecting-aotearoa-new-zealand>
- New Zealand Herald. (2020, August 18). Covid 19 coronavirus: Level 4 lockdown - what you need to know. *New Zealand Herald*. www.nzherald.co.nz
- Robert, A. (2020). Lessons from New Zealand's COVID-19 outbreak response. *The Lancet*, 5(11), e569-e570. [https://doi.org/10.1016/S2468-2667\(20\)30237-1](https://doi.org/10.1016/S2468-2667(20)30237-1)
- Self, B. (2021, September). Conducting interviews during the COVID-19 pandemic and beyond. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* (Vol. 22, No. 3). <https://doi.org/10.17169/fqs-22.3.3741>
- World Health Association. (2024). Coronavirus disease (COVID-19) pandemic. www.who.int

Appendix J: Confidentiality Agreement

Confidentiality Agreement

Project title: Doctorally-prepared nurses in clinical practice, what is the impact?

Project Supervisor: Dr Catherine Cook

Researcher: Gráinne McAnnalley

- I understand that all the material I will be asked to transcribe is confidential.
- I understand that the contents of the tapes or recordings can only be discussed with the researchers.
- I will not keep any copies of the transcripts nor allow third parties access to them.

Transcriber's signature:

Transcriber's name:

Transcriber's Contact Details (if appropriate):

.....

Date:

20-1-22

Project Supervisor's Contact Details (if appropriate):

Dr Catherine Cook

AUT Nursing Department

Catherine.cook@aut.ac.nz, (09) 921 9999 ext. 6651

Approved by the Auckland University of Technology Ethics Committee on 17 Sept 2021 AUTEK Reference number 21/335

Note: The Transcriber should retain a copy of this for their record