AN EXPLORATORY STUDY EXAMINING CRITICAL EXPERIENCES AND INFLUENCES ON PROFESSIONAL IDENTITY OF ALLIED HEALTH STUDENTS DURING CLINICAL PLACEMENT IN A REGIONAL HEALTH SERVICE

A Thesis submitted by

Linda Joy Furness, B. Occ Thy, MPST.

For the award of

Doctor of Professional Studies

2020

ABSTRACT

Background:

Significant investment has been put into supporting clinical placements to facilitate work-ready allied health professionals. Clinical placements in regional locations provide student health professionals with diverse learning opportunities. Engaging in clinical work and learning from role models and peers in the workplace are primary ways allied health students develop professional skills, behaviour and identities as a health professional. This Professional Studies thesis explores the influences that are supporting allied health students who are undertaking clinical placements in a regional health service, in Queensland, Australia, to think, feel and act like health professionals.

Methods

A qualitative study comprising focus group discussions and a document review were conducted. Thematic analysis was used to analyse transcripts from the focus group discussions and of clinical education placement documents. A deductive framework based on Merton's definition of professional identity 'to think, act and feel like a health professional' was used to inform and frame the data analysis.

Participants

Participants of the study included allied health staff whose roles support clinical placement education in the health service (n=17), allied health students on placement (n=12) and new graduates in their first two years of practice working in the regional health service (n=11), and these all participated in separate focus groups. Clinical education documents used in the health service for orientation (n=13) and competency assessment (n=20) were reviewed.

Results

Three overall themes about the influences of clinical placements on the development of professional identity for allied health students were identified. Using a framework of *think/feel/act,* the themes I have identified were:

1) Thinking supported by quality learning

2) Feeling supported by socialisation into the workplace community of practice

3) Acting supported by workplace affordances.

Suggested actions that can be implemented by a health service to support students completing clinical placements include the development of a learning partnership between student and clinical educator with clear expectations and opportunities for reflection and supervision; creating a workplace culture where students are valued and balancing student's autonomy with graded learning to increase their independence. This research has contributed to professional practice through the revision of a conceptual framework for professional identity development by. The results of this research have been applied to practice in the candidate's role as a Clinical Education Support Officer in the health service, through presentations to clinical educators and publications.

Conclusions

The findings from this research show that the diverse work environment and experiences in a rural setting provide unique opportunities for students to begin to think, feel, and act as health professionals. Suggestions provided by students and new graduates can be used to inform the implementation of clinical placement experiences. These suggestions will be of interest to regional services providing student placements, universities providing student education and organisations providing professional development for clinical educators.

CERTIFICATION OF THESIS

This Thesis is entirely the work of Linda Furness except where otherwise acknowledged. The work is original and has not previously been submitted for any other award, except where acknowledged.

Principal Supervisor: Dr Jenny Ostini

Associate Supervisor: Dr Anna Tynan

Student and supervisor signatures of endorsement are held at the University.

ACKNOWLEDGEMENTS

There are many people who have been part of my research journey whom I wish to acknowledge. This thesis has been supported by my family – my patient and encouraging husband, my children who have been my 'study buddies' and my parents who funded and supported my original training in gaining my Bachelor of Occupational Therapy.

I thank my supervisors, Dr Jenny Ostini and Dr Anna Tynan, who have encouraged, questioned, and pushed me to have confidence in my work and writing, all the while guiding my research skill development. I also acknowledge the role of Dr Alison Pighills and Dr Clare Wilding for their generous encouragement throughout my research learning journey. An enormous thanks to Ms Cate Fitzgerald, Program Manager of the Occupational Therapy Clinical Education Program, who is a constant source of wisdom, guidance and encouragement in striving to build quality and sustainable student learning experiences. The Occupational Therapy Clinical Education Program Clinical Education Leaders and Occupational Therapy Clinical Education Support Officer colleagues have also been an ongoing source of inspiration and encouragement.

It is also appropriate that I acknowledge various players in Darling Downs Health who have supported this research. These players include the Executive Director Allied Health; Allied Health professional Directors who have set a culture supporting, nurturing and setting expectations for clinical education experiences; Clinical Education Support colleagues; Library staff; and the Darling Downs Health Research support team. I would also like to thank allied health professional Directors, Clinical Education Support Officers, Clinical Educators, new graduates and student participants who participated by sharing their experiences and opinions during focus groups.

This research has been generously enabled by the Australian Commonwealth Government's contribution through the Research Training Program (RTP) Fees Offset scheme and a Toowoomba Hospital Foundation research grant. I would like to thank Libby Collett for proofreading this thesis.

Table of Contents

List of Figures

List of Tables

Glossary

Table of Definitions used in this thesis

Term	Definition used for this thesis
Allied health professions	The allied health professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, speech pathology, and social work were the focus of this research. In other health service settings, health professions (such as dentistry, pharmacy, podiatry, and radiography) are included as allied health professions.
Clinical Educator	'…the person who takes primary responsibility for the education and supervision of the student/s while on placement. The term Clinical Educator has been adopted in occupational therapy to reflect that this person offers more than supervision alone and is instrumental in student education during the period of the placement. This person has been traditionally referred to as the supervisor and this terminology is still used in some locations at times.' (Allied Health Professions Office of Queensland, 2014, p. 4)
Clinical Education Support Officer	Clinical Education Support Officers have a dedicated role in the health service to coordinate logistics of placements in consultation with universities; build capacity and capability of allied health professionals as clinical educators, and manage risk associated with novice learning in healthcare (McBride, Fitzgerald, Morrison, & Hulcombe, 2015).
Clinical placement	Clinical placements contribute towards clinical professional education and training requirements for an accredited course. They are an essential requirement necessary for successful course completion (and therefore exclude voluntary extra placements). Clinical placements generally take place outside the university educational setting and may include a variety of activities (for example, rotations, observation, and selective placements) across all or some years of a course, depending

	on the accredited course requirements (Allied Health Professions Office of Queensland, 2014).
Allied health professional Director	Professional Directors are responsible for all aspects of professional governance and practice, including clinical education for their profession within the health service. A Professional Director is appointed for each allied health profession in the health service.
Interprofessional collaboration	Occurs when members (or students) of two or more health professions collaborate with each other to improve the delivery of care.
Multidisciplinary team	A team of health professionals work together to provide care.
Professional identity	The definition of professional identity used for this research was drawn from Merton (1957) who proposed that the purpose of medical education is: 'to shape the novice into the effective practitioner of medicine, to give him the best available knowledge and skills, and to provide him with a professional identity so that he comes to think, act and feel like a physician' (p. 7).
Regional placement	Based on the Australian Statistical Geography Standard Remoteness Areas, the locations where clinical placements take place in Darling Downs Health are classified as inner or outer regional.
Patients	In some health services patients may be referred to as clients or consumers.
Uniprofessional education	Learning within one profession.
Work shadow	'The activity of spending time with someone who is doing a particular job so that you can learn how to do it. Students may have the opportunity to shadow with a staff member from their own or another profession.' (Cambridge University, 2019)

List of Abbreviations

Abbreviation	Description
AH	Allied Health
AHPOQ	Allied Health Professions Office of Queensland (Queensland Health)
ASGS-RA	Australian Statistical Geography Standard Remoteness Areas
CE	Clinical Educator
CESO	Clinical Education Support Officer
DDHHS	Darling Downs Health Service (now known as Darling Downs Health)
Metro	Metropolitan
N&D	Nutrition and dietetics
OT	Occupational Therapy
OTCEP	Occupational Therapy Clinical Education Program
PI	Professional identity
PIS	Professional identity socialisation
Psych	Psychology
PT	Physiotherapy. ‘Physio’ may also be used as an abbreviation for Physiotherapy.
RN	Registered Nurse
SP	Speech Pathology
USQ	University of Southern Queensland

Chapter 1: Identifying the need to explore professional identity and the role of clinical placements

1.1 CHAPTER OVERVIEW

In this chapter, I introduce the concept of professional identity and the role played by clinical placements in the development of professional identity. I describe the philosophy of work-based projects in Professional Studies and why I have chosen a Professional Studies research degree. I introduce the idea for my research and explain the identified need for my research. I describe the context in which my research was conducted – explaining clinical education in the regional healthcare context and overview of allied health education. I introduce my research aims, research questions, methodology and explain my thesis style and structure. Finally, I provide key definitions and explanations of the delimitations of my research, ending with a justification for my research.

1.2 PROFESSIONAL IDENTITY AND THE ROLE OF CLINICAL PLACEMENTS

The role of 'real-world', authentic experiences in a clinical environment has been identified by students as important in developing their professional identity. Clinical placements support student health professionals to become effective practitioners by integrating their knowledge and skills and supporting their development of professional identity so they come to 'think, feel and act' like a member of their profession. Despite understanding the importance of clinical placements, little is known about allied health student perceptions of the impact of clinical placement on the development of professional identity (Ashby, Adler, & Herbert, 2016). Understanding how clinical placement experiences influence professional identify formation in the allied health professions will benefit patients through enhanced practice and understanding of professional roles and contribution to patient care. This gap in knowledge highlights the need to investigate the impact of clinical placement experiences on the development of the professional identity of allied health students.

1.2.1 Developing professional identity in a rural context

A shortage of rural health professionals has resulted in an increasing support for, and emphasis on, enabling rural placement experiences (Siggins Miller Consultants, 2012; Smith et al., 2018(a)). This emphasis on providing rural placement experiences with the aim to facilitate recruitment to rural areas, coupled with the increased number of students undertaking allied health courses, has resulted in an increased demand for rural placement learning opportunities (McBride et al., 2015).

Several investigations of student perceptions of their experience of a rural clinical placement in Australia have been undertaken (Johnson & Blinkhorn, 2011; McAllister, McEwen, Williams, & Frost, 1998; Smith et al., 2018(b); Smith et al., 2018(a); White & Humphreys, 2014). The majority of students were found to be satisfied with their rural placement (Johnson & Blinkhorn, 2011) and reported they would recommend a rural placement to other students (Johnson & Blinkhorn, 2011; McAllister et al., 1998). Students reported the positive aspects of rural placements to include: the friendly welcoming community, support provided by teams, interactions between professions and the learning opportunities provided by them (McAllister et al., 1998). Rural placements were described to increase opportunities for learning and taking on responsibility for a wide variety of caseload presentations (Billett & Sweet, 2015; Elliott-Schmidt & Strong, 1995; Johnson & Blinkhorn, 2011; McAllister et al., 1998; Webster et al., 2010). The challenges of rural placements reported by students were potential isolation from family and friends, limited funding to support practice resources and limited social opportunities (Edmunds & Harris, 2015; Johnson & Blinkhorn, 2011; McAllister et al., 1998).

Darling Downs Health (Darling Downs Health, 2019a) asserts that rural placements provide students with experience in a diverse caseload and a close-knit multidisciplinary team environment, often including outreach services to a number of small towns. This assertion is supported by Johnston, Newstead, Sanderson, Wakely, and Osmotherly (2017) and Smith et al. (2018(b)) who describe how students have the opportunity to experience a diverse caseload, learn in multidisciplinary teams and be immersed in communities and their culture during a regional placement.

Much of the research undertaken has examined the intentions of allied health, nursing, and medical students to return to rural communities following their placement (Dalton, Routley, & Peek, 2008; Young, Lindsay, & Ray, 2016) or perspectives about regional placement experiences (Johnson & Blinkhorn, 2011; McAllister et al., 1998; Smith et al., 2018(b); Smith et al., 2018(a); White & Humphreys, 2014; Young et al., 2016). Smith et al. (2018(b)) reported student perception of the importance of 'positive' practice experiences with patients across a wide range of conditions and interactions with 'supportive staff' providing a welcoming, supportive learning environment when completing regional placements. To date, I have not identified research specifically examining the impact of clinical placement experiences in a regional context on the development of allied health student professional identity.

1.3 WORK BASED PROJECTS

1.3.1 The philosophy of professional studies

Professional Studies Doctorates are degrees undertaken by experienced professionals focussing on research which is centred on professional practice and expanding their professional knowledge (Lundgren-Resenterra & Kahn, 2019). Professional Studies degrees have been described to contribute benefits to the individual and their organisation (Johnson, 2001; Lester & Costley, 2010). The emphasis of Professional Studies is on developing applied knowledge enabling student professional practice while completing research in their area of practice (Baldwin, 2013).

My interest in undertaking a doctorate in Professional Studies was influenced by my desire to develop my research skills while working in my professional practice area of clinical education. I wanted to undertake practice-based research rather than research with a strong academic focus. I was motivated by the capacity for Professional Studies degrees to influence the workplace through practice-based research. This is summed up by Bourner, Bowden, and Laing (2001) who stated: "The traditional doctor of philosophy degree is intended to develop professional researchers, while the professional doctorate is designed to develop researching professionals"(p. 71). I consider myself a researching professional with a desire for knowledge and lifelong learning. Thus, my journey in the Professional Studies Doctoral Program began.

1.3.2 The idea

This study arose not as the result of a need to solve a 'problem', but rather from my curiosity and desire to continuously improve clinical placement learning experiences for allied health students. Having worked in a number of occupational therapy clinical, management and case management roles, I commenced in the role of Clinical Education Support Officer in Darling Downs Health, Queensland, in 2010. The allied health Clinical Education Support Officer positions are enshrined in an industrial agreement to support workload management associated with providing pre-entry clinical placements (McBride et al., 2015). As the positions have evolved within public health services across Queensland, they have been tasked with enabling quality and sustainable clinical education practices for pre-entry students, clinical educators, and new graduates. In addition to linking within the local health service, my Clinical Education Support Officer role links with the state-wide Occupational Therapy Clinical Education Program. The Occupational Therapy Clinical Education Program provides strategic direction statewide with regular reflections on service improvement and quality through in-service education, teleconference meetings, and a journal club.

In September 2016, an article was presented at the Occupational Therapy Clinical Education Program journal club exploring the perceptions of occupational therapy students from five countries on the influences on the development of professional identity (Ashby et al., 2016). In this study, 98% of occupational therapy students reported professional education/placements as having the greatest effects on professional identity formation (Ashby et al., 2016). This article ignited my interest in learning more about how placement experiences support the professional identity development for allied health students. I was particularly interested in understanding the impacts of clinical placements on professional identity to be able to apply this in the regional health service where I work. I anticipated that a better understanding of this would inform my role in enabling quality clinical education by informing clinical placement documents, orientation, placement experiences and clinical educator support and education practices.

In early discussions on this subject with others in my workplace, it became apparent that there was the perception that professional identity was primarily a problem for occupational therapists. Colleagues reported that this belief stemmed from

their perception that the breadth of the occupational therapy role led to occupational therapists not having a strong professional identity. My colleagues went on to suggest that my exploration of this topic potentially had little relevance for other allied health professions. These perceptions have prompted me to provide clarity in defining the concept of professional identity. The definition of professional identity used for this study was drawn from Merton (1957) who proposed that the purpose of medical education is:

> to shape the novice into the effective practitioner of medicine, to give him [sic] the best available knowledge and skills, and to provide him [sic] with a professional identity so that he [sic] comes to think, act and feel like a physician (p. 7)

Subsequent authors (Cruess, Cruess, Boudreau, Snell, & Steinert, 2015b; Dall'Alba, 2009) have used the definition to "think, act and feel" like a member of the profession (Cruess & Cruess, 2016). I determined that the concepts of "thinking, acting and feeling like a member of the profession" used by Merton (1957, p. 7), explained professional identity clearly. For my research, I have adopted the definition of Merton (1957).

1.4 IDENTIFIED NEED FOR THE RESEARCH

1.4.1 The importance of workplace learning

The importance of authentic workplace learning experiences gained through clinical placements has been highlighted by many authors (Billett, 2002; Billett, 2004; Billett, 2016; Houghton, Casey, Shaw, & Murphy, 2013; Kell, 2014; Liljedahl, Björck, Kalén, Ponzer, & Bolander Laksov, 2016; Morris, 2007; O'Brien et al., 2017; Ó Lúanaigh, 2015; Recker-Hughes, Wetherbee, Buccieri, Fitzpatrick Timmerberg, & Stolfi, 2014; Roulston, Cleak, & Vreugdenhil, 2018; Trede & Smith, 2012). Clinical placements provide learning opportunities that are not accessible through classroom experiences (Christiansen, 1999; Recker-Hughes et al., 2014; Trede, Macklin, & Bridges, 2012). Clinical placement education is valued by students as a powerful situated learning environment where they are seeing, experiencing and learning about their profession's practice (Kell, 2014).

Newton, Billett, and Ockerby (2009) assert that student participation in placements in healthcare settings is central to their formation of occupational identity. This is reiterated by Volpe, Hopkins, Haidet, Wolpaw, and Adams (2019) who report their findings from a meta-synthesis of twenty-nine articles identifying professional identity formation as a key process in physician development. Their literature review identified three inter-related themes from across the professions of medicine, nursing, and counselling/psychology. The first theme identified the importance of clinical experiences with role models, patients and the impact of inclusion in the professional community on professional identity. Literature reported that hands-on experiences with patients helped students to understand their profession and by learning in the clinic environment they developed a sense of identity through interaction patients and other professionals which was not available in classroom learning. The second theme highlighted the role of student expectations about what their profession would be, and the third theme identified the impact of broader professional culture including hierarchy and power in the workplace.

1.4.2 Frameworks for clinical education quality

The importance of quality learning experiences on placement is well known (Siggins Miller Consultants, 2012). Several frameworks enabling quality of workplace learning in allied health have been developed for Australian contexts. These frameworks include: Best Practice Clinical Learning Environments (BPCLE) Framework; Delivering quality clinical education for learners (Department of Health. Victoria, 2014); and Clinical Learning Environment Evaluation Framework: A framework for effective clinical placements in regional and remote primary care (Siggins Miller Consultants, 2012). In a report commissioned by Health Workforce Australia, Siggins Miller Consultants (2012) outlined five factors enabling quality in clinical placements as being:

- A culture for quality
- Effective supervision
- Learning opportunity
- Effective collaboration
- Resources and facilities.

Queensland Health is a department of the Queensland Government that operates the state's public health and hospital system. Within Queensland Health, where I conducted my research, overall governance for allied health professionals working in the Queensland public health system is provided by the Allied Health Professions Office. The Allied Health Professions Office Queensland drew on these three clinical education quality frameworks to publish a Clinical Learning Framework for Allied Health learners (Allied Health Professions Office of Queensland, 2017b). This Queensland Health framework identified nine elements that underpin quality placements. These quality elements are:

- an organisational culture that values learning,
- effective clinical practice,
- a positive learning environment,
- a supportive health service-training provider relationship,
- effective communication processes,
- appropriate resources and facilities,
- effective interprofessional learning,
- a safe working environment, and
- quality of supervision (Siggins Miller Consultants, 2012).

These elements have been used to underpin clinical education policies and practices implemented by state-wide allied health clinical education programs and Hospital and Health Service practices.

1.5 RESEARCH CONTEXT

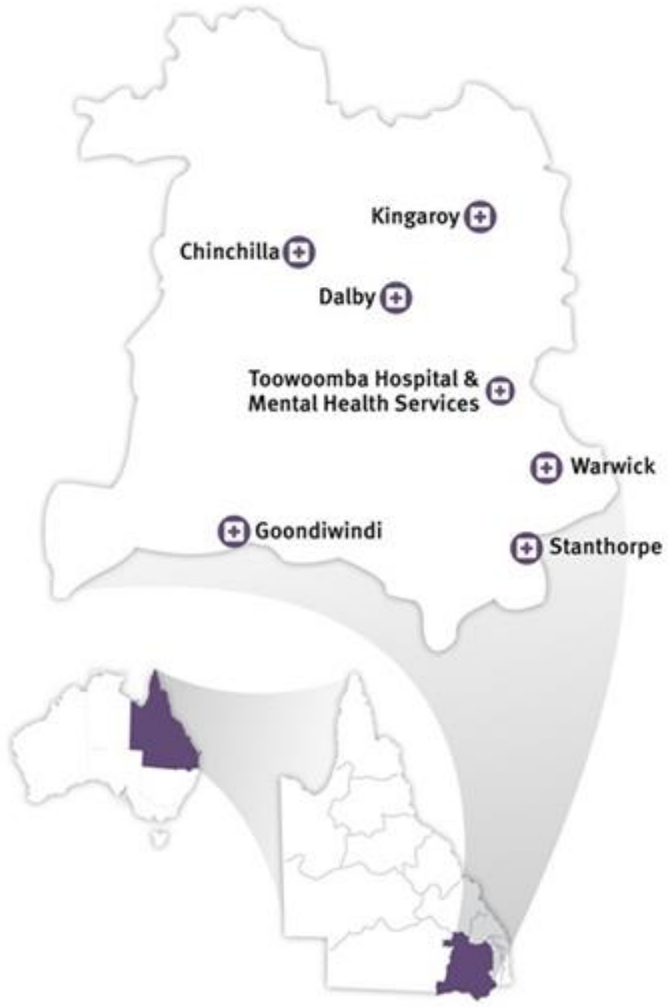
1.5.1 A regional public health service

My research was conducted in a non-metropolitan, regional public health service in Queensland, Australia. Darling Downs Health provides public hospital and healthcare services within a diverse geographic area of approximately 90,000 square kilometres (Darling Downs Hospital and Health Service, 2017b). The region serviced by Darling Downs Health has a population of approximately 280,000 people and this number is expected to reach 300,000 in five years. The health service also provides specialist services to individuals living in neighbouring regions. Services are provided from a major hospital Toowoomba) and outlying rural community hospitals and health centres (Goondiwindi, Inglewood, Millmerean, Stanthorpe, Texas, Warwick, Chinchilla, Dalby, Jandowae, Miles, Oakey, Tara, Taroom, Wandoan, Cherbourg, Kingaroy, Murgon, Nanango, and Wondai).

Darling Downs Health plays a major teaching role in providing clinical placement experiences for members of the multidisciplinary healthcare team (Darling Downs Hospital and Health Service, 2017a). One of the strategic objectives for Darling Downs Health is to demonstrate a commitment to learning, research, innovation, and education in rural and regional healthcare. To help fulfil this objective, the health service provides clinical education to allied health students on placement in one large regional hospital and six smaller regional hospitals (Darling Downs Hospital and Health Service, 2016). The geographical location of clinical placements within the health service is represented in Figure 1-1. The provision of clinical education is considered core business for the health service. Clinical Education Support Officer positions are based in Toowoomba and provide services across the whole of Darling Downs Health. The role of allied health Clinical Education Support Officers in the health service is to support quality clinical education and placement capacity building (McBride et al., 2015). Day to day learning and assessment for students on placement are provided by clinical educators

Figure 1-1

Darling Downs Health map showing geographic locations for allied health student placements



Source: Developed by Darling Downs Health Media and Engagement Services

1.5.2 Classifying remoteness and accessibility in the health service

Classification of health service locations in Australia is measured by assessing access to services using the Australian Statistical Geography Standard Remoteness Areas (ASGS-RA) (Australian Bureau of Statistics, 2018). The Australian Statistical Geography Standard Remoteness Areas classification divides Australia into five remoteness classes based on a measure of relative access to services. The five remoteness areas are: Major Cities of Australia, Inner Regional Australia, Outer Regional Australia, Remote Australia and Very Remote Australia (Australian Bureau of Statistics, 2018). Calculation of the remoteness index considers accessibility to the closest type of services and remoteness for any location across the whole of Australia (Hugo Centre for Migration and Population Research, 2019). Appendix A shows ASGS-RA codes and descriptors of accessibility to goods, services, and opportunities for social interactions.

Australian Statistical Geography Standard Remoteness Areas categories are used for data analysis in the Occupational Therapy Clinical Education Program in which I work. I have therefore used the Australian Statistical Geography Standard Remoteness Areas categories to describe the context of my research. Based on the Australian Statistical Geography Standard Remoteness Areas classification, my research is situated in a healthcare setting classified as Inner or Outer regional. Inner regional locations are described to experience some restrictions to the accessibility of some goods, services, and opportunities for social interaction, while outer regional locations experience significant restrictions in access (Australian Longitudinal Study on Women's Health, 2003). Table 1-1 identifies health service sites included in this research and the ASGS-RA classification. Based on the Australian Statistical Geography Standard Remoteness Areas classifications, I will therefore describe Darling Downs Health, where my research was conducted, as a regional health service.

Table 1-1
Geographical classification of health service locations included in this research

Town	ASGC-RA (2006)	Description
Toowoomba	RA2 – Inner Regional	Areas categorised ASGS-RA 2 and ASGS-RA 3 that are in, or within, 20km road distance of a town with population >50,000.
Warwick	RA2 – Inner Regional	Areas categorised ASGS-RA 2 and ASGS-RA 3 that are in, or within, 10km road distance of a town with population between 5,000 and 15,000.
Stanthorpe	RA3 – Outer Regional	All other areas in ASGS-RA 2 and 3.
Goondiwindi	RA3 – Outer Regional	Areas categorised ASGS-RA 2 and ASGS-RA 3 that are in, or within, 10km road distance of a town with population between 5,000 and 15,000.
Kingaroy	RA2 – Inner Regional	Areas categorised ASGS-RA 2 and ASGS-RA 3 that are in, or within, 10km road distance of a town with population between 5,000 and 15,000.
Dalby	RA2 – Inner Regional	Areas categorised ASGS-RA 2 and ASGS-RA 3 that are in, or within, 10km road distance of a town with population between 5,000 and 15,000.
Chinchilla	RA3 – Outer Regional	All other areas in ASGS-RA 2 and 3.

Source: Developed for this research using Hugo Centre for Migration and Population Research (2019).

When writing about rural and regional health and education issues, authors frequently use terms such as rural, regional and remote to describe health service locations (Daly, Perkins, Kumar, Roberts, & Moore, 2013; McAllister et al., 1998; Smith et al., 2018(b); Smith et al., 2018(a)). Another term used is non-metropolitan which is used to describe areas outside of metropolitan cities (Francis-Cracknell, Maver, Kent, Edwards, & Iles, 2017). In my study, I consider the experiences of placements in a regional health service which could be considered to be ‘country’ or ‘in the bush’ as distinct from placements taking place in urban or metropolitan or city areas.

1.5.3 Clinical education in the regional health service

Providing clinical education placements is included in Darling Downs Health Strategic Plan 2017-2020 within the strategic directive of demonstrating a commitment

to learning, research, innovation, and education in rural and regional healthcare. The Strategic Plan informs the Darling Downs Health Allied Health Operational Plan 2018-2019 which highlights the Allied Health Division's 'focus on, and commitment to, service delivery and education and training and a thriving culture of research that delivers continuous service improvement and evidence-based care' Darling Downs Hospital and Health Service (2017a, p. 5).

Recognition of the workplace pressures in supporting clinical education was included in the Queensland Health Enterprise Bargaining Agreement 2007 for Allied Health Professionals. This agreement enshrined the establishment of the allied health Clinical Education Support Officer positions within each health service (McBride et al., 2015). The allied health Clinical Education Support Officers work to build capacity, knowledge, skills, and confidence of the allied health workforce to undertake clinical education. Clinical Education Support Officers provide support to clinical educators to facilitate student development and enhance the provision of high-quality allied health services by students. Support to clinical educators and students for placement preparation, during and post-placement is provided by Clinical Education Support Officers. Clinical Education Support Officers are also linked into their profession's state-wide clinical education program to drive innovation, quality and efficiency in allied health clinical education across Queensland public health services.

Clinical placements for allied health students take place across a variety of practice domains, throughout Darling Downs Health including acute wards, mental health services, paediatrics, community-based services, and regional services. Students can be placed within Darling Downs Health in a variety of regional locations (refer to Figure 1-1). Health service accommodation is available for students free of charge in most placement locations in Darling Downs Health.

The expectation for the involvement of allied health staff (beyond their first two years of practice) in providing clinical placements is included in job descriptions and yearly performance planning processes. In their first two years of practice, staff are classified as new graduates. During this period, they are provided support to consolidate their practice skills and are therefore not expected to take on the role of clinical educator (Occupational Therapy Clinical Education Program, 2019). Darling Downs Health has

provided an increasing number of clinical placements for allied health students since records began to be published in 2012. A 43% increase in placement days for allied health between 2012 and 2018 was reported by Darling Downs Health (Allied Health Professions Office of Queensland, 2019). Given the emphasis placed on clinical education by Darling Downs Health through reference to the Strategic Plan 2017-2020 and Allied Health Operational Plan 2018-2019, this research is therefore of interest and benefit to the service.

1.5.4 Allied health in the context of this research

Individual allied health professions in hospital systems have smaller numbers of staff compared to medicine and nursing. Therefore, allied health professions have been encouraged to band together as a way of collectively addressing workforce issues by taking a united stance (Nancarrow et al., 2016). The smaller comparative numbers of allied health professions have led to the grouping of allied health professions together in many healthcare organisational structures (Gibson et al., 2019). In the health service where I conducted my research, the allied health professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, speech pathology and social work report to the Executive Director of Allied Health in the health service organisational structure. In my research, I have mirrored the health service organisational structure for allied health and included these professions in my research. The professions of radiography, pharmacy, and dentistry are sometimes referred to in allied health organisational structures (Gibson et al., 2019), however, have been excluded from my research as they have a different reporting structure in the health service where my research is being conducted.

Each of the allied health professions included in my research has differences in how entry-level programs are accredited, methods for ensuring clinical competence and the way clinical education is provided (Rodger et al., 2008). For most allied health professions, practice education requirements are met through a combination of simulated learning and clinical placements (Brown, McKinstry, & Gustafsson, 2015). For most allied health professions, graduates must meet entry-level competency standards as stated by their profession, however some professions specify hours of practice learning ranging between 300-1000 hours (Brown et al., 2015). An overview of clinical placement practice

education requirements for allied health professions included in this research is provided in Table 1-2.

Table 1-2
Overview of Allied health accreditation and practice education requirements.

Profession	Accrediting or registration authority	Practice education requirements
Nutrition and Dietetics	Dietician Association of Australia	Hours of clinical placement are not specified. Students must develop skills to meet competency standards for safe practice (Dieticians Association of Dieticians Association of Australia, 2019).
Occupational Therapy	World Federation of Occupational Therapy	Minimum Standards for the Education of Occupational Therapists mandate 1000 hours of practice education (Gustafsson, 2016).
Physiotherapy	Australian Physiotherapy Council	Hours of practice not specified. Section 3.3 states the requirement for 'quality and quantity of clinical education is sufficient to produce a graduate competent to practice across the lifespan in a range of environments and settings.'(Australian Physiotherapy Council, 2017, p. 11).
Psychology	Australian Psychological Society Registration Psychology Board of Australia	Students are required to accrue a minimum of 300 hours of practicum experience with an additional minimum of 32 hours of supervision from a registered psychologist (University of Southern Queensland, 2018).
Social Work	Australian Association of Social Workers	Minimum 1,000 hours.(Australian Association of Social Workers, 2012).
Speech Pathology	Speech Pathology Australia	Hours of practice not specified. Graduates must meet entry-level competency standards as specified in Competency-Based Occupational Standards for Speech Pathologists, referred to as CBOS (The Speech Pathology Association of Australia, 2017).

Source: Developed for this research. Adapted from (Brown et al., 2015)

1.5.5 Fitting clinical education into healthcare

1.5.5.1 The evolving healthcare context

Students completing clinical placements in a healthcare environment are met with complex systems that are striving for greater efficiencies (Frenk et al., 2010). This places significant pressures on staff and students on placement. Healthcare reforms have placed a greater emphasis on multi-disciplinary care for patients, a well-coordinated continuum of care, high-quality education for the incoming and existing workforce, and an embedded

culture of interprofessional practice (Brownie, Thomas, McAllister, & Groves, 2014). Other factors operating in the healthcare environments include staffing shortages, fiscal constraints, and the increasing burden of non-communicable diseases (Rodger et al., 2008). Health care workers are facing increased pressures to see more clients, deal with more patients with complex needs, and respond to an increasing number of workplace policies and legislative requirements (McAllister, 2005; Sholl et al., 2017). Furthermore, Rodger et al. (2008) reported health services to face changes in the financing and organising of healthcare, technological changes impacting on lifespan and quality of life, the burden of care shifting to the community, hospital patients being more acutely ill, staff requiring increased clinical competencies, changes to staffing patterns, increased productivity and workload expectations; and lack of physical resources (for example, availability of desks, access to computers, and office space). Also impacting on care are scientific developments, the impact of regulatory bodies rules and protocols, changes within organisations and increased demands from well-educated patients (ten Cate, Snell, & Carraccio, 2010).

1.5.5.2 Impacts on clinical placements

It is in this changing healthcare environment that clinical placements take place. Clinicians providing clinical placements may experience productivity expectations. These expectations place increasing pressure on clinical educators necessitating the consideration of placement models suited both to the workplace environment and student learning and development (Casares, Bradley, Jaffe, & Lee, 2003; Rodger, Stephens, Clark, Ash, & Graves, 2011).

Changes are also taking place in the education sector. Universities and education providers are experiencing changes such as reduced funding, new models of care and an increasing number of students in new education programs and in some sectors payment for placements (Rodger et al., 2008). For example, Brown et al. (2015) identified changes happening in the occupational therapy profession. These authors reported the impact of an increased number of education programs with increased student enrolment numbers which results in a corresponding increased requirement for clinical placement experiences. Increases in student numbers have resulted in the need for students to take up clinical placement learning across the range of available opportunities, including an increasing number of students undertaking regional placements.

1.5.5.3 Clinical Education in the regional healthcare environment

A shortage of rural health professionals has resulted in increasing support for and emphasis on enabling rural placement experiences (Siggins Miller Consultants, 2012; Smith et al., 2018(b)). This emphasis on facilitating rural and regional placement experiences with the aim to facilitate recruitment to rural and regional areas, coupled with the increased number of students undertaking allied health courses, has resulted in an increased demand for rural placement learning opportunities (McBride et al., 2015).

Several investigations of student perceptions of their experience of a rural clinical placement in Australia have been undertaken (Johnson & Blinkhorn, 2011; McAllister et al., 1998; Smith et al., 2018(b); Smith et al., 2018(a); White & Humphreys, 2014). The majority of students were found to be satisfied with their rural placement (Johnson & Blinkhorn, 2011) and reported they would recommend a rural placement to other students (Johnson & Blinkhorn, 2011; McAllister et al., 1998). Students reported the positive aspects of rural placements to include: the friendly welcoming community; support provided by teams, interactions between professions and the learning opportunities provided by them (McAllister et al., 1998). Rural placements were described to increase opportunities for learning and taking on responsibility for a wide variety of caseload presentations (Elliott-Schmidt & Strong, 1995; Johnson & Blinkhorn, 2011; Webster et al., 2010; White & Humphreys, 2014). The challenges of rural placements reported by students were potential isolation from family and friends, limited funding to support practice resources and limited social opportunities (McAllister et al., 1998; Spiers & Harris, 2015).

Placement experiences often influence intentions for future rural practice, however there is limited research on impacts of rural placement on developing professional identity. Rural clinical placements provide unique opportunities for personal and professional development and hands-on learning (Daly, Perkins, et al., 2013). Learning experiences during rural placements can have a positive effect on skills, knowledge and attitudes and enhance confidence in students (Bennett, Jones, Brown, & Barlow, 2013). Students report that access to a broad range of clinical experiences and the associated knowledge gained, access to good clinical mentors, and relationships with the community and patients a small town can improve their regional placement

experiences (White & Humphreys, 2014; Young et al., 2016). To date, minimal research has looked specifically at the influence a regional placement has on supporting allied health students to *think, feel and act* as a health professional and what this may mean for supporting students in these settings.

1.6 RESEARCH AIMS AND RESEARCH QUESTIONS

The aim of my research is to develop a better understanding of the impact of clinical placement experiences on the development of the professional identity of allied health students in a regional setting. Research questions have been designed to achieve this research aim. The research questions and sub-questions for this research were:

• Research Question 1: What are the critical experiences that influence the development of professional identity for allied health students during clinical placement in a regional health service?

Three sub-questions will be used to answer this overarching research question. These sub-questions provide data about the organisational environment into which students enter during placement in the regional health service and provide an understanding of student and new graduate perspectives. Data from these questions will be triangulated to answer the overarching research question. My research sub-questions were:

• Sub-Research Question 1: What are the organisational influences on development of professional identity for allied health students placed in Darling Downs Health?

• Sub-Research Question 2: From the perspective of current allied health students, what are the critical experiences that shape the development of professional identity once they are placed in Darling Downs Health?

• Sub-Research Question 3: What are the perspectives of recent allied health graduates, on the impact of their clinical placement learning on the development of professional identity?

• Research Question 2: How can these findings improve clinical placement design for regional settings?

1.7 METHODOLOGY

The purpose of this research was to examine the influence of clinical placements on the development of allied health students' professional identity. Allied health professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, social work and speech pathology were included in the study. These allied health professions are aligned in the operational reporting structure of the health service. Data was collected from document review and focus groups. Two types of clinical education documents were reviewed. The first type of documents reviewed were placement handbooks and orientation documents provided to students by the health service prior to and during student placements. The second type of documents reviewed were documents used to assess competency during placement. The inclusion of documents used for competency assessment was considered important as they guide clinical educators in assessing student learning on placement and outline competencies required for students to transition to practice as an allied health professional.

Focus groups were conducted with allied health staff supporting clinical education (allied health professional Directors, Clinical Education Support Officers, and Clinical Educators), students and new graduates. A qualitative design has been used for my research which asked 'what' and 'how' questions and is aimed to develop an understanding of the influences on the development of professional identity for allied health students during clinical placements in a regional health service. Qualitative data were analysed using a deductive framework for thematic analysis (Braun & Clarke, 2006; Braun, Clarke, Hayfield, & Terry, 2019). The research was conducted in three concurrent phases:

The three phases of this research were:

- Phase 1: Review of organisational influences on professional identity
    - Review of organisational documents (allied health student orientation folders, orientation presentations, student handbooks) and competency assessment documents examined references to professional identity and strategies supporting professional identity development.
    - Focus group discussions with Darling Downs Health allied health staff examined their perceptions of placement experiences influencing allied

health students in beginning to think, feel and act like a member of their profession. Staff focus groups comprised three groups: allied health professional Directors, Clinical Education Support Officers, and clinical educators. These three groups of staff have been chosen to provide a range of perspectives including those of professional Directors who provide governance within their profession; experienced clinical educators and Clinical Education Support Officers who provide placement coordination and support.

- Phase 2: Allied health student perspectives
  - Allied health students completing placements in Darling Downs Health during 2018 were invited to participate in focus groups examining allied health student perspectives of clinical placement experiences influencing their professional identity and beginning to think, feel and act like a member of their profession.
- Phase 3: Allied health new graduate perspectives
  - Allied health new graduates in their first two years of practice working in Darling Downs Health between May and September 2018, were invited to participate in focus group discussions. Allied health new graduates were not required to have completed a placement in Darling Downs Health in order to participate. These focus groups examined their perceptions of the impact of their clinical placement experiences on the development of professional identity.

Data from the three phases of the research were triangulated to answer the overall research questions listed in Section 1.6.

1.8 THESIS STYLE AND STRUCTURE

1.8.1 Thesis style

In this thesis, I tell the story of my research journey (Lingard & Watling, 2016). Because of the nature of this research as a piece of qualitative research, I have written in the first person to position myself in relation to the research and reflect my subjectivity (John, 2010). Writing in this style enabled me to support and explain my connection with

the qualitative research process and data. I have also used figures, hand-drawn diagrams and mind maps to represent the development of my ideas. I have chosen not to convert some of my hand-drawn diagrams to computer-generated forms as I wanted to stay connected to the development of my ideas. I thank readers for their understanding of my decisions to use hand-drawn diagrams.

I have used the words of participants to provide evidence to support my findings and these quotes are emphasised in italicised text. To maintain the confidentiality of participants, I have assigned a profession, focus group number and participant number (e.g. professional Director, Focus group 1, participant 2 = Director 1.2). For the ease of the reader, I have removed repetitive words and fillers such as 'um'., 'ah' etc. Other grammatical irregularities have been maintained.

1.8.2 Thesis structure

This thesis consists of six chapters.

Chapter One provides a background to allied health clinical education in regional healthcare. It explains the research in the context of my work-based research project and provides an overview of the research aims, questions, methodology and thesis style. In the final section of this chapter, I justify the need for my research.

Chapter Two provides a foundation for my research by reviewing literature relevant to the development of professional identity considering how professional identity is defined, why professional identity is important for allied health professionals and key concepts in the development of professional identity. My literature review further justifies the need for my research.

Chapter Three overviews my considerations in planning my research. It describes my research philosophy, paradigm, methodology, and considerations in using qualitative methods and as an insider researcher. I explain how data collection methods were used to answer my research questions and how I applied the literature to develop a conceptual framework for my research. Finally, I explain how I established trustworthiness and addressed ethical considerations for my research.

Chapter Four describes my procedure for data collection, samples, sampling, and data analysis.

Chapter Five explains how I refined my theoretical framework with a description of data collected. This chapter outlines my findings and triangulation of data to answer my research questions.

Chapter Six discusses my conclusions about the research issues and describes their implications for theory, policy, and practice. I explain my research contributions to the workplace and explain limitations, reflect on methodology, and identify the need for future research before providing final conclusions.

1.9 DEFINITIONS

In this section, I provide clarity about several definitions used in this research to establish a consistent use and understanding of language throughout my thesis.

1.9.1 Allied health

My research focused on the exploration of the clinical placement experiences of allied health students. The allied health professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, speech pathology, and social work were the focus of this research. These allied health professions have been chosen based on the professions represented in the allied health Clinical Education Support Officer team in which I work. My location in this team provided me with access to Clinical Education Support Officer colleagues who assisted in identifying the clinical education documents, allied health student and new graduate samples. Throughout my research whenever referring to all allied health professions included in the research, I ordered the allied health professions in alphabetical order.

1.9.2 Clinical Educator

A Clinical Educator is defined as:

> the person who takes primary responsibility for the education and supervision of the student/s while on placement. The term Clinical Educator has been adopted in occupational therapy to reflect that this person offers more than supervision alone and is instrumental in student education during the period of the placement. This person has been traditionally referred to as the supervisor and this terminology is still used in some locations at times (Occupational Therapy Clinical Education Program, 2019).

While the above definition was sourced from the occupational therapy profession, I believe it provides a representative definition of a clinical educator suited to use in my research. A variety of other names have been used as synonymous to clinical educator. These include preceptor, clinical teacher, clinical instructor (Recker-Hughes et al., 2014), mentor (Plack, 2008), clinical placement mentor (Maranon & Pera, 2015), practice educator (Ashby et al., 2016; Brown et al., 2015), field instructors (Globerman & Bogo, 2003), clinical supervisors (Rodger et al., 2008) and professional practice educators (Turpin, Fitzgerald, & Rodger, 2011). I use the term clinical educator throughout this thesis.

1.9.3 Clinical Education Support Officer

Clinical Education Support Officers have a dedicated role in the health service to coordinate logistics of placements in consultation with universities; build capacity and capability of allied health professionals as clinical educators, and manage risk associated with novice learning in healthcare (McBride et al., 2015). Allied Health professions use different titles when referring to the Clinical Education Support Officer positions. For example, social work and psychology refer to the Clinical Education Support Officer positions as ‘Clinical Educators’ and to clinical educators as ‘supervisors. For the purposes, of this thesis allied health positions whose role is to support clinical education in Darling Downs Health are all referred to as Clinical Education Support Officers.

1.9.4 Clinical placement

Clinical placements are an activity that contributes to clinical professional education and training requirements for an accredited course. They are an essential requirement necessary for successful course completion (and therefore exclude voluntary extra placements). Clinical placements generally take place outside the university educational setting and may include a variety of activities (for example, rotations, observation, and selective placements) across all or some years of a particular course, depending on the accredited course requirements (Allied Health Professions Office of Queensland, 2014). A number of other terms are used in literature to refer to what I define as clinical placements. These terms include clinical education, clinical fieldwork, fieldwork, practice education, work-based learning and work-integrated learning. Appendix B provides a comprehensive listing of terms used in the literature to describe clinical placements. I use the term clinical placement throughout this thesis.

1.9.5 Professional Directors

Professional Directors are responsible for all aspects of professional governance and practice, including clinical education for their profession within the health service. A professional Director is appointed for each allied health profession in the health service.

1.9.6 Professional identity

The definition of professional identity I used for this research was drawn from the notion of Merton (1957) which describes the process of thinking, feeling and acting like a physician. I will provide further explanation of the process of analysis and discovery leading to my decision to use the definition of professional identity by Merton (1957) for my research in Chapter 3 Section 3.5.3.

1.9.7 Regional placements

In Section 1.5.2 I have explained my rationale for describing the health service in which my research was conducted as 'regional'. Participants in my study referred to regional placements as "rural" and spoke of other placements in "metro" settings.

1.10 DELIMITATIONS OF SCOPE AND KEY ASSUMPTIONS

My decision to limit the conduct of this research to one public health service in Queensland was made based on my assumptions and literature that suggests that the culture of an organisation can influence how individuals assimilate into it (Jaye, Egan, & Smith-Han, 2010; Van Maanen & Schein, 1977). How newcomers are socialised into an organisation has been identified by some authors to have a greater impact on them than what they learn (Ashforth, Sluss, & Saks, 2007; Jones, 1986; Van Maanen & Schein, 1977). Organisational culture is underpinned by social aspects of the workplace and the impacts of patient care (Jaye et al., 2010) and can influence student feelings of belonging in the workplace (Walker et al., 2014). Limiting the focus of my research to one health service enabled me to dive deeper into the health service organisational context. This would have been more difficult if more than one health service were included in the research. In addition, as a work-based research project, I wanted to be able to use my research to improve my service delivery in my role as a Clinical Education Support Officer within the health service where I work.

My research focused on the investigation of allied health professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, speech pathology, and

social work. My decision to limit my investigation to these professions is explained in Section 1.9.

Several factors impacted on the conduct of my research. My negotiations with health service management to develop an agreement about the conduct of my research resulted in some changes to my initial planned approaches for the recruitment of student participants. For a more detailed description of these negotiations and resulting changes to the research refer to Chapter 3 section 3.3.4. The timeframes for data collection were influenced by my research and curriculum timelines and agreement with the health service in relation to allied health student recruitment (further explained in Chapter 3 Section 3.3.4). Conducting research in a regional health service dictated the need to use video conferencing resources which are available in the health service to link some participants into focus groups. My experience in using video conferencing is extensive, however, not all participants had such experience to enable them to overcome technical issues in using the equipment. I share some reflections on using video conference technology for data collection in Chapter 6 Section 6.7 to assist future researchers.

1.11 JUSTIFICATION FOR THIS RESEARCH

The literature reports that clinical education placements are one way the development of professional identity can be enabled (Mylrea, Gupta, & Glass, 2017; Newton et al., 2009; Wilson, Cowin, Johnson, & Young, 2013). Poor professional identity has been linked to the risk of burnout (Edwards & Dirette, 2010; Monrouxe, Bullock, Tseng, & Wells, 2017); role confusion and difficulty transitioning from student to professional (Crossley & Vivekananda-Schmidt, 2009). Anecdotally, increasing numbers of allied health new graduates have been reported to be experiencing burnout and role confusion during their transition to practice.

What is not currently known is how clinical placements influence the development of professional identity for allied health students. Given the links between identity formation and effective practice skills (Hooper, 2008), a better understanding of how placement experiences support professional identity formation is critical. The need for more research on how professional socialisation and workplace learning experiences, such as actions of clinical educators, and interactions with clients and others in the

workplace, contribute to the formation of professional identity has been identified (Ashby et al., 2016).

My research project aimed to support student and new graduate learning and development by developing a better understanding of how clinical placement experiences influence the development of allied health students' professional identity. Of particular interest was the impact of clinical placement experiences in a regional health service. The impact of regional clinical placement experiences on intention of future practice and recruitment of allied health staff has been described in 1.5.5.3. My research will benefit Darling Downs Health by enabling the education and recruitment of competent and confident allied health professionals to service patients living in a regional setting. Understanding how clinical placement experiences influence professional identify formation in the allied health professions will benefit patients through effective practice provided by confident practitioners (Hooper, 2008) and support future strategies for recruitment and retention. Findings from the research conducted by Ashby et al. (2016) identified clinical placement experiences that support the development of professional identity. Outcomes from my research will be used to identify strategies that can be implemented by allied health Clinical Education Support Officers in Darling Downs Health to support the development of student professional identity. These changes to clinical placements will support the transition of new graduates to practice and enhance patient care provided by students and new graduates in Darling Downs Health.

1.12 CHAPTER OVERVIEW

This chapter has introduced my research and laid the foundation for my thesis. It has introduced the research problem and my goal to explore the influence of clinical placement experiences on the development of professional identity for allied health students. I have explained the context in which my research was conducted. I have overviewed my research questions, methodology and thesis style. I have provided an outline of the thesis as well as introductory definitions and concepts in relation to the research. The next chapter situates my research in the context of literature relating to professional identity development.

Chapter 2: Reviewing literature relevant to the development of professional identity

2.1 CHAPTER OVERVIEW

In this chapter, I build a foundation for my research by reviewing literature relevant to the development of professional identity. My literature review addresses the questions 'What has been written about professional identity formation in medical, nursing and allied health fields?' and 'How can this literature inform my study?' I examine how professional identity is defined; why professional identity is important for health professionals, and key concepts in the development of professional identity. I review the role of socialisation in a community of practice during clinical placement on the development of professional identity. Lastly, I justify the need for my present study.

2.2 INTRODUCTION

Merton (1957) proposed that medical education has a dual purpose - to develop professional knowledge and skills and the development of professional identity. While this is drawn from medical education, I believe this equally applies to other health professions such as nursing and allied health. The purpose of my literature review is to:

- To define professional identity and its importance for health workers
- Identify and describe theoretical and conceptual frameworks explaining professional identity
- To understand the role that clinical placements play in professional identity development
- Identify gaps in the literature that my research will address.

2.3 METHOD FOR LITERATURE REVIEW

My literature review provides a historical overview of the literature relating to the development of professional identity, reviews theories of professional identity

development, and considers the role of clinical placements in developing a professional identity.

I conducted a narrative literature review to provide an overview of the literature to inform my study. I searched CINAHL, Medline, and PubMed databases focussing on medical education, nursing, dentistry, pharmacy and allied health literature examining the impact of clinical placement experiences on the development of professional identity. Reference lists of all retrieved articles were also searched to identify additional sources of information. Search terms used were: professional identity, professional identity formation, clinical placement, allied health, nursing, medicine, allied health students, professional socialisation, occupational therapy, physiotherapy, psychology, social work, speech pathology, dietetics, and dentistry in a variety of combinations. Refer to Appendix C for further search details.

Included in the search were: peer-reviewed publications, books, and theses. Both research studies and viewpoint teaching articles were included. The review covered literature from the fields of medical education, nursing, allied health (including nutrition and dietetics, occupational therapy, physiotherapy, podiatry, psychology, speech pathology, and social work) and other health professions (such as dentistry, pharmacy, and radiography). While undergraduate education curriculum and clinical placements in medicine and nursing differ from allied health, I included literature from medicine, nursing, dentistry/oral health and pharmacy fields to give my study a broader perspective on the topic. I believe the clinical placement experiences of medical, allied health and nursing students in hospital settings have enough similarities to be relevant for inclusion. A mix of research methodology (qualitative and mixed-method designs) is evident in studies examining professional identity development and is included in this review. I have also included literature providing an explanation of theoretical concepts linked to professional identity, such as professional socialisation in communities of practice.

Excluded were: literature specifically examining professional identity development in interprofessional education; experiences of academics or faculty members; literature relating to qualified and practising medical, nursing and allied health staff; and university curriculum implementation and design for medical, nursing or allied health students. Literature related to interprofessional education and placement experiences was not included in the study as I was seeking to examine

'traditional' clinical placement experiences and not those with a focus on interprofessional learning. Refer to Table 2-1 for inclusion and exclusion criteria for the literature review.

Table 2-1
Inclusion and exclusion criteria for literature review

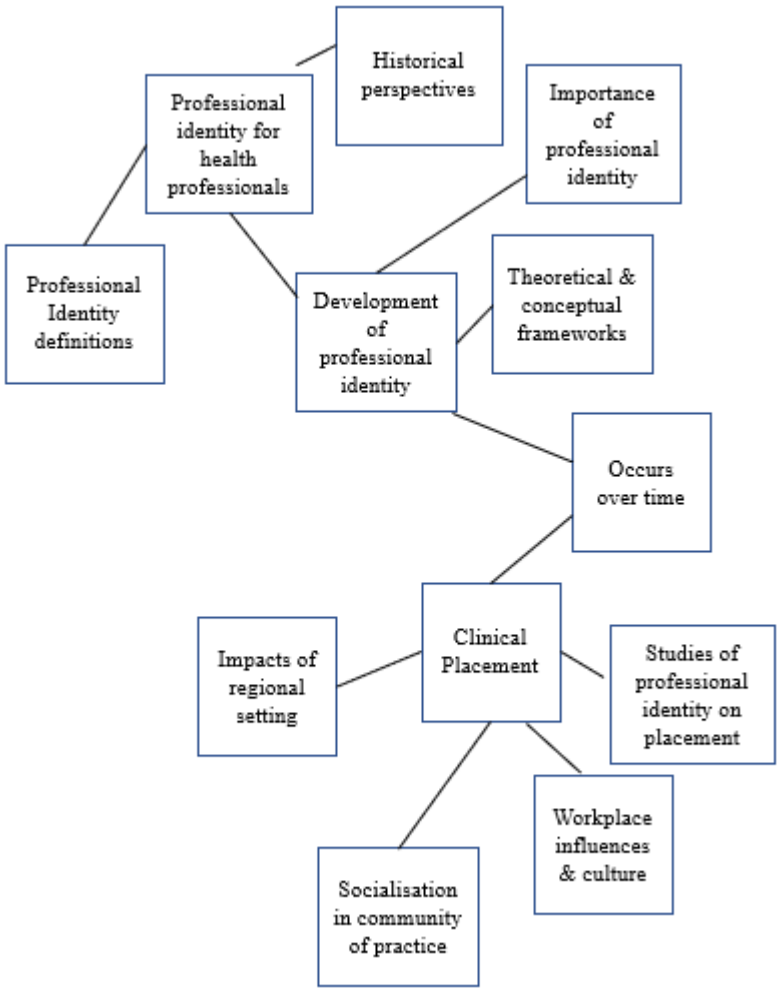
Inclusion criteria	Exclusion criteria
• The focus of the article was examining professional identity development in undergraduate medical, nursing or allied health students • Research methods including all methods of research - qualitative and quantitative, descriptive articles, viewpoint articles, and literature reviews • Published articles and thesis • Theoretical concepts impacting on professional identity	• Not written in English • The focus of article professional identity development in interprofessional education • Experience of academics or faculty members • Professional identity relating to qualified and practicing medical, nursing and allied health staff • University curriculum design for medical nursing or allied health students

2.3.1 Synthesis of literature

I have used mind mapping to develop diagrams to illustrate my synthesis of the literature reviewed and how it informs my study. Throughout the literature review, I have added to my mind map. Figure 2-1 shows my mind map of literature illustrating elements identified in the literature and their relationships. Key aspects of the literature are: defining professional identity, professional identity for health professionals, historical perspectives, importance of professional identity, theoretical and conceptual frameworks, development of professional identity which occurs over time, and the role of clinical placements in developing professional identity From the literature, I have determined the working definition for professional identity used in this study (Merton, 1957). I have also identified a framework (Mylrea et al., 2017) based on the work of Merton et al (1957) which has informed my data collection, data analysis and reporting of findings. Further information detailing how I have used this literature to inform my study design will be provided in Chapter 3 Section 3.5.1. I have used my mind map shown in Figure 2-1 to structure this chapter.

Figure 2-1

Literature mind map

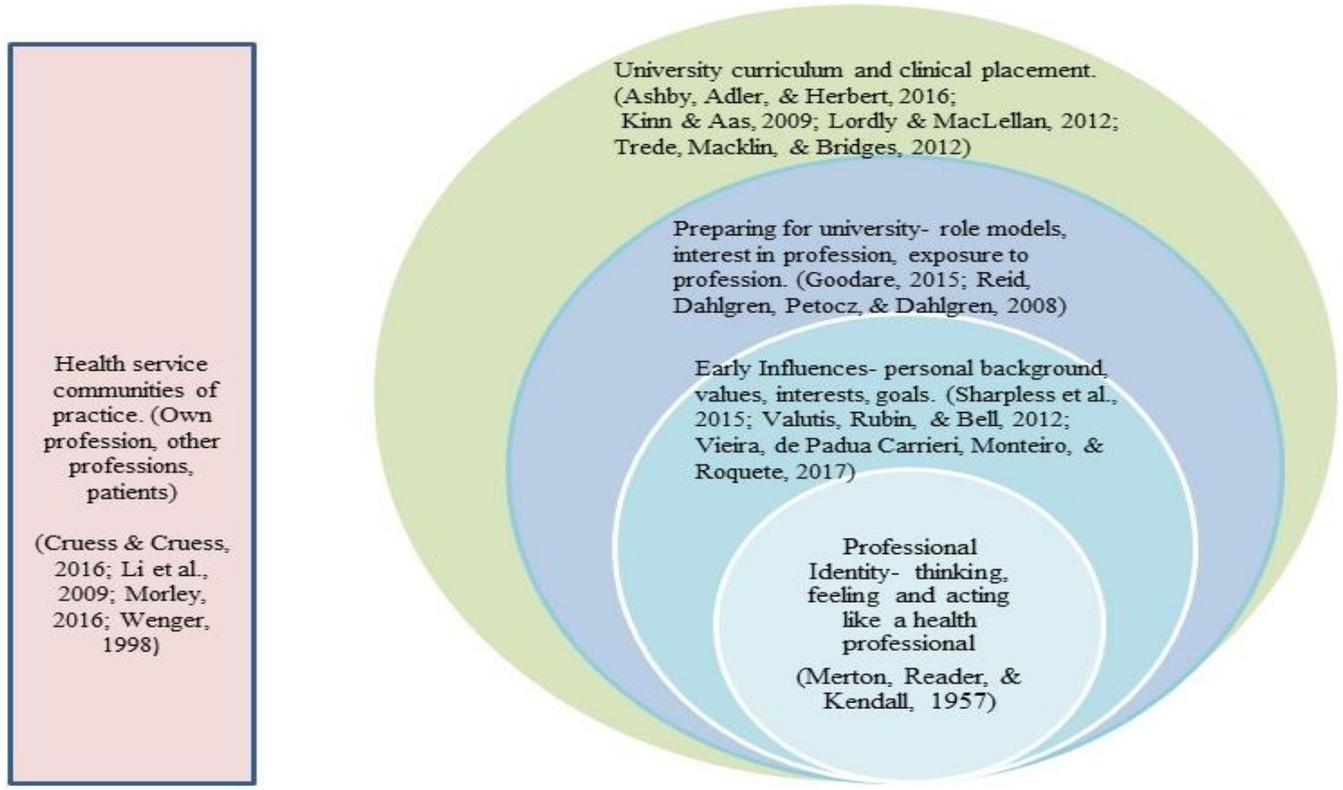


My synthesis of literature examining professional identity formation and impacts of clinical placement is shown in Figure 2-2. In this figure, professional identity is represented as a central core of the individual student with onion layers representing the layers of influence on professional identity formation. At the core of a student or health professional is their ability to think, act and feel like a health professional (Merton, 1957). Merton (1957) proposed that the development of thinking, acting and feeling like a professional to be the purpose of medical education. Literature reports that the development of professional identity is influenced by an individual's early experiences, background, values, and goals (Sharpless et al., 2015; Valutis, Rubin, &

Bell, 2012; Vieira, de Padua Carrieri, Monteiro, & Roquete, 2017). As students prepare to enter university to study to become a health professional their sense of professional identity is influenced by role models, interest in and exposure to the profession (Goodare, 2015; Reid, Dahlgren, Petocz, & Dahlgren, 2008). While studying, students are influenced by the university curriculum and in the case of health professionals, experiences during clinical placement in the workplace (Trede et al., 2012). In Figure 2-2, I have represented the clinical placement as a column beside the circles representing the student. Clinical placement experiences operate in parallel with the early influences on professional identity and curriculum. Clinical placements within a public health service represent a community of practice where students are socialised with their own profession, other professions and patients and their families/carers as they learn (Cruess & Cruess, 2016; Li et al., 2009; Morley, 2016; Steinert, 2016; Wenger, 1998). The concepts represented in this figure are further explained throughout this chapter.

Figure 2-2

Representation of literature synthesis



2.4 PROFESSIONAL IDENTITY

2.4.1 Defining professional identity

The use and understanding of the term professional identity is diverse and "not easily put into a box" (Wiles, 2013, p. 854). Professional identity has been defined in a variety of ways using a number of different terms (Adams, Hean, Sturgis, & Clark, 2006; Ashby et al., 2016; Crossley & Vivekananda-Schmidt, 2009; Cruess, Cruess, Boudreau, Snell, & Steinert, 2014; Jebril, 2008; Kururi et al., 2016; Slay & Smith, 2011; Vivekananda-Schmidt, Crossley, & Murdoch-Eaton, 2015). Appendix D shows the variety of ways professional identity is defined. These terms include professional identity formation, role identity, professionalism, professional self-identity (Crossley & Vivekananda-Schmidt, 2009), professional identity formation (Holden, Buck, Clark, Szauter, & Trumble, 2012), and occupational identity (Mariet, 2016; Newton et al., 2009). Despite the number of differing definitions of professional identity, I have identified key similarities in the definitions as being:

• A notion that professional identity is related to the individual, frequently described in the professional identity definitions using the word 'oneself' (Ashby et al., 2016; Crossley & Vivekananda-Schmidt, 2009; Jebril, 2008).

• Abilities, skills, attitudes, values, and beliefs (Adams et al., 2006; Ashby et al., 2016; Dall'Alba, 2009; Jebril, 2008; Kururi et al., 2016; Slay & Smith, 2011).

• Related to one's professional role or group (Adams et al., 2006; Ashby et al., 2016; Crossley & Vivekananda-Schmidt, 2009; Cruess et al., 2014; Dall'Alba, 2009; Jebril, 2008; Kururi et al., 2016; Slay & Smith, 2011; Vivekananda-Schmidt et al., 2015).

• Distinguishing one professional group from another (Cruess et al., 2014; Kururi et al., 2016).

I have used my literature review to identify a definition of professional identity to be used for my research. The definition I have used was described by Merton (1957) "beginning to think, act and feel like a member of a profession"(p. 7). This definition incorporates the elements of professional identity being related to the individual; encompassing abilities, skills, attitudes and beliefs; and relating to a professional group which distinguishes one professional group from another. While the definition covers the elements from the literature, it was simple enough for ease of explanation to study

participants. I provide further explanation about how this definition has been used in research on professional identity since 1957 and how it links to the conceptual framework, I have used in the study in sections 2.4.2 and 2.5.2.

The concept of 'professionalism' is frequently linked to professional identity in medical education literature (Burford, Morrow, Rothwell, Carter, & Illing, 2014; Frost & Regehr, 2013; Holden et al., 2012). While I have not found a reference to the concept of professionalism in the allied health and nursing literature I reviewed, I will briefly note it in this review given the potential for confusion for readers. Two approaches to looking at professionalism were described by Burford et al. (2014). The first approach is described as abstract and reflects social relationships in a profession. The second is an assessable construct which is the demonstration of professional behaviour. The perceptions of 112 participants from paramedics, occupational therapy and podiatry professions in relation to their definition of professionalism and examples of professional and unprofessional behaviour were studied by Burford et al. (2014).They concluded that, while views of professionalism were complex, participants used individual, interpersonal and societal-institutional references to explain professionalism. The references to professionalism identified in the study by Burford et al. (2014) were:

• Individual references - beliefs, foundational values and professionalism as an aspect of self

• Interpersonal references - considered contextual factors impacting on professional behaviour

• Societal-institutional references - including the culture of organisations, and the norms of work groups.

Graduate medical education is reported to have had a focus on fostering professional identity formation as distinct from professionalism, emphasising the longitudinal engagement of educators and role models throughout training and into their entry into practice (Wald, 2015). Other authors have noted concern that medical student professional identities do not always align with the expectations of their profession (Frost & Regehr, 2013). Professional identity formation was described by Holden et al. (2012) as a complex process that can be represented by three overlapping domains - professionalism, identity development, and identity formation. In contrast,

(Wilson et al., 2013) purport that professionalism is not the same construct as professional identity. They explain that professional identity is how an individual sees their own self, while professionalism is about behaving as a member of the profession. It is with Wilson's perspective of the differences of professionalism and professional identity in mind that I have determined that consideration of professionalism will not be included in my research.

2.4.2 Overview of professional identity in medical education literature

The concept of identity in medical education is not new and has been described as 'an honourable tradition in medical education' (Boudreau, 2016, p. 217). A series of reports for the Bureau of Applied Social Research, Columbia University, examining the process of developing a doctor were written by Merton, Reader, and Kendall (1957). In the opening chapter of the report Merton (1957) provided some preliminary observations about the sociology of medical education. He noted that the practice of healing and medicine as a social construct is long-standing. He explained that, more recently, health care had become a major social institution that brings together many agencies, facilities, and types of personnel with the medical school and teaching hospital at the heart of the health care institution. Merton (1957) proposed that the task of the medical school and teaching hospital is to provide novices with knowledge and skills to become an effective practitioner and a professional identity to think, act and feel like a physician. He went on to explain that this education continues to enable the physician to continue to uphold professional expectations long after they have completed their training.

It was later proposed by Cruess et al. (2014) that "a principal goal of medical education is the development of professional identity and that educational strategies be developed to support this new objective" (p. 1446). Much of the research in professional identity formation has taken place in medical education seeking to analyse the nature of identity, factors that influence identity formation for physicians (Cruess et al., 2014) and how it can be embedded in curriculum and training (Holden et al., 2012; Jarvis-Selinger, Pratt, & Regehr, 2012).

More recently, the concept of professional identity formation has continued to be a focus of literature in medical, nursing and allied health education (Adams et al., 2006; Ashby et al., 2016; Clarke, Martin, Sadlo, & de-Visser, 2014; Cruess & Cruess, 2016; Cruess et al., 2015b; Cruess, Cruess, & Steinert, 2017; Dall'Alba, 2009; Jebril,

2008; Walker et al., 2014). Dall'Alba (2009) has examined how in becoming a medical professional, individuals undertake a unique and personal transformation. She highlights that a focus on skill development and competency is not sufficient to prepare students for their professional roles and that further support is needed for identity development.

Cruess, Cruess and Steinert with various colleagues have written extensively on professional identity formation in medical education (Cruess, Cruess, & Steinert, 2016a; Cruess & Cruess, 2006; Cruess & Cruess, 2016; Cruess et al., 2014; Cruess, Cruess, Boudreau, Snell, & Steinert, 2015a; Cruess et al., 2015b; Cruess, Cruess, & Steinert, 2016b; Cruess et al., 2017). These authors have drawn on socialisation and professional identity formation literature proposing a schematic representation of professional identity formation to guide medical educators (Cruess et al., 2015b). Cruess et al. (2016a), proposed that a reframing of medical education was required for the development of competent physicians to move beyond acquiring knowledge and skills to ensure the development of professional identity. Other authors have contributed to the research conversation by examining strategies to facilitate professional identity formation through medical education (Wald, 2015; Wald, White, Reis, Esquibel, & Anthony, 2019; Wilson et al., 2013).

2.4.3 Studies examining professional identity formation

Examination of professional identity formation in professions other than the medical profession has occurred more recently. Studies investigating the development of professional identity in allied health students and newly qualified graduates have been conducted in dentistry (Vivekananda-Schmidt et al., 2015); dietetics (Lordly & MacLellan, 2012), physiotherapy (Hammond, Cross, & Moore, 2016; Lindquist, Engardt, Garnham, Poland, & Richardson, 2006; Plack, 2006), pharmacy (Mylrea et al., 2017; Mylrea, Sen Gupta, & Glass, 2015; Noble, Coombes, Nissen, Shaw, & Clavarino, 2015; Noble, Coombes, Shaw, Nissen, & Clavarino, 2014), occupational therapy (Ashby et al., 2016; Boehm et al., 2015; Clarke et al., 2014; Dancza, 2016; Davis, 2006; Herbert & Ashby, 2015; Ikiugu & Rosso, 2003), social care (Adams et al., 2006; Crossley & Vivekananda-Schmidt, 2009), and social work (Harrison & Healy, 2016; Kearns & McArdle, 2012; Moorhead, Bell, & Bowles, 2016; Roulston et al., 2018; Wiles, 2013). Studies in the nursing profession examining professional

identity development have also been identified (Ó Lúanaigh, 2015; Trevitt & Grealish, 2005; Walker et al., 2014).

These studies have broadly examined the development of professional identity throughout university training, as new graduates or newly qualified professionals enter the workforce and during the early years in their career. The studies examined how a professional practice course and curriculum impacts professional identity (Boehm et al., 2015; Ikiugu & Rosso, 2003; Mylrea et al., 2015), the impacts of professional socialisation (Davis, 2006; Hammond et al., 2016; Lindquist et al., 2006) and how professional identity is influenced during transition to practice for newly qualified professionals (Hammond et al., 2016; Harrison & Healy, 2016; Kearns & McArdle, 2012; Moorhead et al., 2016; Noble et al., 2015). Findings in the studies consistently referenced the impact of socialisation in communities of practice on professional identity development (Davis, 2006; Hammond et al., 2016; Herbert & Ashby, 2015; Lindquist et al., 2006; Noble et al., 2015; Noble et al., 2014; Plack, 2006).

Several studies are of particular interest for my research. Adams et al. (2006) investigated the factors influencing the professional identity of first-year health and social care students. They found that variables such as previous experiences in healthcare environments, knowledge of profession and gender were predictors of baseline professional identity. A study to explore the development of identity in occupational therapy students after the first year of a revised curriculum was conducted by Boehm et al. (2015). Their results showed that students progressively developed identity throughout their training. Ashby et al. (2016) explored the perspectives of occupational therapy students from five countries on how curriculum and placement experiences shape professional identity. Professional education (98%) and professional socialisation during placement (92%) were reported by students as the two curriculum activities having the greatest influence on the development of professional identity. The development of physiotherapy student and new graduate professional identity in a community of practice was conducted by Plack (2006). From her study, she developed a model of learning to support the development of communication skills, interpersonal skills, and a professional identity within a workplace community of practice.

2.4.4 Importance of professional identity formation for healthcare professionals

The development of professional identity is considered crucial for competency and career satisfaction of health professionals (Valutis et al., 2012). Cruess et al. (2016a) emphasise the importance of the development of professional identity by explaining that training of competent, engaged physicians requires more than acquiring knowledge and skills. Cruess and Cruess (2016) argued that the medical profession needs to ensure that members develop a professional identity. They explained that medical students enter education with partially developed identities and that through the process of socialisation in communities of practice, students develop their identity as a physician. Positive professional identity has also been identified as critical for nurses to function at an appropriate level and benefits individual nurse, patients and other members of the team (Goodare, 2015). Similarly, in their study of occupational therapy students, Ashby et al. (2016) also identified the need for a professional identity for effective practice. Professional identity is considered important for health professional students transitioning to professional practice in the workplace (Ashby et al., 2016; Crossley & Vivekananda-Schmidt, 2009; Johnson, Cowin, Wilson, & Young, 2012; Monrouxe, 2010; Moores & Fitzgerald, 2017; Mylrea et al., 2017; Noble et al., 2015; Walker et al., 2014). In addition, strong professional identity fosters confidence in oneself, others having confidence in you, collaborative leadership styles, and wellbeing (Rees, 2005; Rees & Monrouxe, 2018; Walker et al., 2014).

The costs of not developing professional identity have been identified by several authors. These include risk of burnout (Edwards & Dirette, 2010; Monrouxe & Rees, 2017), role confusion and underselling one's professional role (Ashby, Gray, Ryan, & James, 2015), difficulty transitioning from student to professional (Crossley & Vivekananda-Schmidt, 2009), and poor career promotion opportunities and representation of professional skills, both of which are essential for survival and growth in one's profession (Boehm et al., 2015; Edwards & Dirette, 2010; Turpin, Rodger, & Hall, 2012). Workplace satisfaction and retention (Ashby et al., 2016; Johnson et al., 2012; Walker et al., 2014) and development as a professional (Ashby et al., 2016; Johnson et al., 2012) have also been linked to professional identity.

2.5 DEVELOPMENT OF PROFESSIONAL IDENTITY

2.5.1 Theoretical frameworks for professional identity

There is a lack of consensus among researchers about the most effective theoretical approaches to professional identity formation (Trede & Smith, 2012). Some authors consider that there is not a single identified framework for the development of professional identity (Holden et al., 2012; Mylrea et al., 2017). The need for the description of processes of professional identity development to be compatible with the process of human development was argued by Cruess and Cruess (2016). Literature on professional identity draws on approaches from a variety of paradigms including professionalism, psychological ego development, social interactions, and learning theories (Holden et al., 2012).

The construction of professional identity sits within the overall theory of identity formation and takes place within the context of individual identity formation (Cruess et al., 2014). Some psychological theories discussed in the literature reviewed linked to professional identity formation are Kegan's Stages of identity development (Cruess et al., 2014, 2015b; Sawatsky, Nordhues, Merry, Bashir, & Hafferty, 2018), Erikson's developmental theory (Cruess et al., 2014; Holden et al., 2012), Bandura's social learning theory (Holden et al., 2012), Vygotsky's zones of proximal development (Hägg-Martinell, Hult, Henriksson, & Kiessling, 2015; Holden et al., 2012) and Ryan and Beci's self-determination theory (Mylrea et al., 2017). Learning theories such as Schon's reflective practice and Mezirow's critical reflection have also been used in literature and studies examining professional identity formation (Mylrea et al., 2017; Sawatsky, Beckman, & Hafferty, 2017). Frameworks describing professional identity development draw on role theory and consider identity development as both a personal and social process (Hercelinskyj, Cruickshank, Brown, & Phillips, 2014). Professional identity is one form of social identity (Adams et al., 2006). Social identity theory identifies the belief that individuals share membership of the same group and this affects their perceptions and behaviour (Morison, Marley, & Machniewski, 2011).

The theory most consistently referenced in literature reviewed is Lave and Wegner's community of practice (Ajjawi & Higgs, 2008; Cruess et al., 2016a; Cruess & Cruess, 2016; Cruess et al., 2015b; Cruess et al., 2017; Goldie, 2012; Hägg-Martinell et al., 2015; Holden et al., 2012; Jaye et al., 2010; Johnson et al., 2012; Li et al., 2009; Mylrea et al., 2017; Plack, 2006; Reid et al., 2008; Sawatsky et al., 2018;

Sternszus, 2016; Trede & Smith, 2012; Wilson et al., 2013). I explore the application of community of practice theory in Section 2.6 given its frequent use by other authors and my belief that it links so well to my study which examines student experiences during clinical placement.

2.5.2 Conceptual frameworks for professional identity

Professional identity formation has been written about by many authors (Cruess et al., 2014, 2015a, 2015b; Frost & Regehr, 2013; Holden et al., 2012; Holden et al., 2015; Li et al., 2009; Monrouxe & Poole, 2013; Sharpless et al., 2015; Wald, 2015; Weaver, Peters, Koch, & Wilson, 2011) and a number of conceptual frameworks illustrating professional identity development are found in medical education literature (Cruess & Cruess, 2016; Cruess et al., 2015b; Mylrea et al., 2017; Vivekananda-Schmidt et al., 2015; Wald, 2015). Some authors have developed schematics to illustrate frameworks for the development of professional identity in the medical and nursing professions (Cruess & Cruess, 2016; Cruess et al., 2015b; Wald, 2015). To date, I have not identified any frameworks specifically developed in allied health. In the absence of frameworks specific to allied health, I describe several frameworks from medical education literature and explain how I consider that they apply to my study.

Cruess et al. (2015b) developed a framework that described the place of professional identity in medical education. Their diagrammatic framework is in two parts. One part represents how individuals enter medical education with partially developed identities and through socialisation emerge with both personal and professional identity. The second part of the diagram depicts socialisation where students move from legitimate peripheral participation through socialisation to full participation in the workplace community of practice. In a second diagram, factors impacting on socialisation are depicted. Factors impacting on socialisation include role models and mentors, clinical and non-clinical experiences on placement. The diagram developed by Cruess et al. (2015b), which considers the impacts of socialisation on professional identity, underpinned my decision to include of consideration of impacts of workplace community of practice on student feelings of connection in my study. I have drawn on the Cruess et al. (2015b) framework to include exploration of socialisation with health professionals in the students' own and with other professions on the development of professional identity in my research.

Cruess et al. (2016b) published a proposal to amend Miller's assessment pyramid to include professional identity formation. The assessment pyramid was originally published by Miller in 1990 to illustrate four levels for assessment of clinical skills and competence. Miller's stages from bottom to top are: "knows/knowledge"; "knows how/competence"; "shows how/performance" and "does/action". The fifth level proposed by Cruess et al. (2016b) was "is/identity" which represented students consistently demonstrating "behaviours, attitudes, and values expected of one who has come to think, act and feel like a physician" (p. 181). The proposal by Cruess et al. (2016b) to add the attainment of professional identity to Miller's pyramid received some criticism in articles responding to its publication in the Academic Medicine Journal. Weissman (2015) in a letter to the editor of this journal, noted concerns that Cruess et al. (2016b) had made an assumption that all physicians have common definitions of professional identity and know what it means. Weissman questioned whether broad socialisation experiences from various clinical rotations were sufficient for students to attain professional identity. He also raised concerns that workplace learning experiences expose trainees to critical experience which do not highlight professionalism. In responding to these criticisms, Cruess et al. (2015a) highlighted that while clinical experiences and role models are important in professional identity formation, other factors also contribute to the learning environment. Hafferty, Michalec, Martimianakis, and Tilburt (2016) also responded to Cruess et al. (2016b) proposal to add to Miller's pyramid. Hafferty (2016) proposed that in medical training, educators need to consider how to socialise trainees to the professional groups whilst supporting them retain a capacity to question organisational values which may be at odds to their professional values supporting patient care. While the inclusion of professional identity as coming to think act and feel as a physician fits the definition I used in this research, I am hesitant to agree that professional identity is a state which can be fully achieved but continues to develop over time.

The analogy of a tree was employed by Wald (2015) to illustrate how reflection supports professional identity formation. He proposes that "roots" of guided reflection, nourished by the "fertiliser" of mentor feedback and reflective writing support a "trunk" of professional identity formation (p. 703). The "fruit" of this reflection and personal growth are professional competencies such as patient care, medical knowledge, interprofessional and communication skills, emotional intelligence and

capacity to deal with complexity and uncertainty. The analogy of the tree highlights the need for reflective practice and a strong professional identity to enhance professional service provision. While I affirm the importance of reflective practice in clinical education, I have chosen not to specifically examine the role of reflective practice in my research to enable the exploration of influences on professional identity without a pre-conception of its importance.

Reid et al. (2008) proposed professional identity formation as a function of the two dimensions of "knowledge for the profession" and "learning for professional work". I have chosen not to draw on Reid's conceptualisation on professional identity as it only considered two dimensions and did not include consideration of relatedness and the potential impacts of relationships in professional identity formation.

A framework for professional self-identity was conceptualised by Vivekananda-Schmidt et al. (2015) from their study of student doctors and dentists. Their results were represented as the perception of oneself and perception of the professional role overlapping to affect professional self-identity formation. Their framework also represents experiences affecting professional self-identity formation such as extracurricular teaching activities, being recognised as a quasi-professional and participation in the professional role. Given my study has been designed to include perspectives for six allied health professions and participants include experienced staff, students and new graduates, I have chosen not to investigate individual's perceptions of themselves or their perception of their professional role.

Self-determination theory was developed by Deci, Eghrari, Patrick, and Leone (1994) to explain identity development. It defines the role of motivation in the formation and maintenance of identity. Deci et al. (1994) describe competence, autonomy, and relatedness as fundamental human psychological needs which, when satisfied, promote high levels of motivation to develop and maintain the identity in question. Motivation is considered essential in moving to internalise behaviour that had been external to develop self-determined patterns of behaviour. The application of self-determination theory in medical education teaching and learning processes was proposed by ten Cate, Kusurkar, and Williams (2011). These authors provided descriptions of the three basic psychological needs in self-determination theory. Autonomy refers to "the desire to be one's own origin or source of behaviour" (ten Cate et al., 2011, p. 963). Competence describes the need to feel effective in what one

does. Finally, relatedness describes the desire to feel connected with others, to care and be cared for which provides a sense of belongingness with others and a community (ten Cate et al., 2011). Mylrea et al. (2017) reported a lack of consensus of theoretical frameworks for professional identity and promoted self-determination theory as a theoretical basis to support the development of professional identity among under graduate pharmacy students. Mylrea et al. (2017) argue that self-determination theory can be used to facilitate students beginning to think, feel and act like a pharmacist as shown in Figure 2-3.

Figure 2-3

Conceptualisation of the role of self-determination theory nutriments in the development of professional identity.

Source: Mylrea et al. (2017) (Reproduced with kind permission)

The variability in the frameworks I have described highlights the complexity and dynamic nature of professional identity formation and supports the need to examine the impact of clinical placement experiences on professional identity. I have drawn on the framework from Mylrea et al. (2017) for my research as it links to the definition of professional identity I am using for my study - to think, act, and feel like a health professional. I consider this framework is easy to explain and providing structure to

organise data and report on actions that can be taken to improve clinical education. Further description of how the Mylrea et al. (2017) framework informed my study design is provided in Section 3.5.4.

2.5.3 Development of professional identity occurs over time

Within the literature, there is agreement that the development of professional identity is a complex process (Dall'Alba, 2009; Frost & Regehr, 2013; Jebril, 2008; Kururi et al., 2016; Lordly & MacLellan, 2012; Vivekananda-Schmidt et al., 2015). Professional identity is also considered to be a dynamic process of change over time (Ashby et al., 2016; Goldie, 2012; Larson, Brady, Engelmann, Perkins, & Shultz, 2013; Noble et al., 2015; Sternszus, 2016; Valutis et al., 2012; Vieira et al., 2017; Wilson et al., 2013; Wong & Trollope-Kumar, 2014). Professional identity is a developmental process involving the establishment of values, moral principles and self-awareness (Holden et al., 2012) and is influenced by both internal cognitive processes and external social processes (Monrouxe, 2016). Professional identity development begins prior to the commencement of education (Adams et al., 2006; Goodare, 2015; Johnson et al., 2012; Morison et al., 2011; Reid et al., 2008; Walker et al., 2014), during training (Adams et al., 2006; Boehm et al., 2015; Goldstein, Storey-Johnson, & Beck, 2014; Larson et al., 2013; Lordly & MacLellan, 2012) and continues through transition to practice and throughout one's career (Boehm et al., 2015; Dall'Alba, 2009; Edwards & Dirette, 2010; Holden et al., 2012; Johnson et al., 2012; Naylor, Ferris, & Burton, 2016). A more detailed examination of the impacts on professional identity development at each of these stages will be considered in subsequent sections.

2.5.4 Early influences on the development of professional identity

While the development of professional identity is highly individual (Cruess et al., 2015b), influences on the development of professional identity have been identified to include personal background, values, expectations, interests, goals, relationships, role models (Sharpless et al., 2015) and gender (Cruess & Cruess, 2016; Vieira et al., 2017). Volpe et al. (2019) conducted a scoping review and qualitative meta-synthesis of ninety-two articles from medicine, nursing and counselling/psychology examining professional identity formation. They noted that only 10 out of the 92 articles examined sociocultural data such as trainee's race, ethnicity, gender, age, sexual orientation, and socioeconomic status. They suggest that the dominant culture in medicine is that of

white males, and encouraged other authors to examine whether the process of professional identity formation is more challenging for some groups. Valutis et al. (2012) explored the relationship between age, academic class level (year level of study) and identity formation in social work students in one American University. They found that identity formation is a dynamic process that correlates with age, but not academic class level.

Adams et al. (2006) investigated the levels of professional identity and factors influencing this using a questionnaire administered to 1254 students commencing studies in ten professions (audiology, medicine, midwifery, nursing, occupational therapy, pharmacy, physiotherapy, podiatry, radiography, and social work). Their findings indicated that a level of professional identity was evident before the students entered training. Differences in the strength of professional identity were found between professions, with physiotherapy students found to have the highest levels of professional identity. Variables as predictors of baseline professional identity of first-year health and social care students were found to be: gender, profession, previous work experience in healthcare, understanding of team working, knowledge of the profession, and cognitive flexibility (Adams et al., 2006). Knowledge of the profession through contact with others was also found to influence professional identity in a study of dietetic students conducted by Lordly and MacLellan (2012). They found that early influences on students included: family influences, an influential person outside the family (for example: dietician, friend, co-worker, or celebrity), or an influential event (for example, work experience or volunteering). The influence of pre-entry factors, such as exposure to the profession or a member of the profession, on the development of professional identity was also noted by Ashby et al. (2016). Professional identity development commences before entering university

2.5.5 Professional identity development commences before entering university

Professional identity begins to develop prior to students entering university programs (Morison et al., 2011). Students enter professional training at university with an interest in the profession (Lordly & MacLellan, 2012) and some idea of what their future profession will be like (Goodare, 2015; Reid et al., 2008). The study of first-year health and social care students in the United Kingdom conducted by Adams et al. (2006) found that there is a degree of professional identity evident as students enter

training. Exposure to the profession or a member of the profession has been shown to begin students development of an identity with the profession (Ashby et al., 2016; Johnson et al., 2012; Walker et al., 2014).

2.5.6 Professional identity development during training

University training in the medical profession (doctors) has had a long tradition which has now extended to other health professions (Nancarrow, Moran, & Graham, 2014; Reid et al., 2008). The aim of the university education program is for the transformation from lay person to a health professional (Holden et al., 2012). Professional identity further develops in entry-level university training programs (Ashby et al., 2016; Trede et al., 2012) and continues to develop throughout training (Boehm et al., 2015) with the interplay between university curriculum and workplace learning experiences (Ashby et al., 2016; Naylor et al., 2016; Trede et al., 2012).

During undergraduate training, students are encouraged to develop an understanding of the profession into which they are entering and develop connections between professional theory and practice. Turpin et al. (2012) investigated student perceptions of occupational therapy upon entry to two occupational therapy training programmes in Australia. They found that student perceptions, upon entry to their courses were consistent with the perceptions of occupational therapy held by the general public. Ikiugu and Rosso (2003) explored the impacts of a course about occupational therapy theory designed to help prepare students to develop a professional identity. They concluded that the connection made between theory and practice as a result of the course facilitated student professional identity. The undergraduate pharmacy curriculum in one Australian university was examined by Noble et al. (2014). They observed that while there was an emphasis on knowledge, there were limited opportunities to observe trained pharmacists or for students to evaluate their professional identities.

A description of the development of professional identity in the medical profession from a learner's perspective is provided by Sternszus (2016). Describing his experiences as a medical student at McGill University, Montreal, Canada, from 2009-2014, Sternszus identified four key principles in professional identity development. Firstly, professional identity is a developmental process which continues through training and the course of one's career. Secondly, professional identity is formed in the context of pre-existing identity formation and influences such as gender,

class, ethnicity, religion, and family. Thirdly, professional identity formation is the result of socialisation into a community of practice, and finally, professional identity results from a series of transformations that occur at times of transition when students are moving to new roles in their placement experiences. The perspectives of Sternszus (2016) have mirrored my findings as reported throughout this literature review. Clinical placements form a component of student university training and are the focus of interest for this study. A more detailed examination of the literature on the development of professional identity during clinical placement is provided in Section 2.7.

2.5.7 Professional Identity development continues throughout one's career

Following successful completion of university studies and clinical placement requirements, students enter the workforce to begin their career. In a longitudinal study exploring 18 physiotherapy students (eight in the United Kingdom and 10 in Sweden) professional identity before leaving university at the completion of their training, Lindquist et al. (2006), noted that upon graduation there was a diversity in professional identity. Other authors agree that professional identity continues to develop on entry into the workforce and throughout one's career (Boehm et al., 2015; Dall'Alba, 2009; Deppoliti, 2008; Edwards & Dirette, 2010; Goldie, 2012; Hammond et al., 2016; Holden et al., 2012; Johnson et al., 2012; Naylor et al., 2016; Noble et al., 2015; Sternszus, 2016). Naylor et al. (2016) conducted a longitudinal study to explore the expectations and experiences of four newly qualified diagnostic radiographers in their transition to practice in the United Kingdom. Their findings report that on graduation diagnostic radiographers participating in the study already had some professional identity but that further development occurs over time (Naylor et al., 2016).

A study examining newly registered nurses in their first three years of practice was conducted by Deppoliti (2008). She reported situational influences on the construction of identity and during the early years of practice. She noted the need for balance and support to professional identity formation in the practice environment. Hammond et al. (2016) studied the construction of professional identity in eight physiotherapists in South West England. They concluded that professional identity in physiotherapy was more complex than traditionally thought. They described identity as being fluid across time and place and influenced by changing communities of practice. Studying pharmacy graduate transition to practice, Noble et al. (2015) noted

that transition to practice was challenging and professional identities were responsive to the workplace context. These studies indicate that professional identity continues to develop during one's career.

2.6 ROLE OF SOCIALISATION IN COMMUNITIES OF PRACTICE ON PROFESSIONAL IDENTITY DURING PLACEMENT

While completing clinical placements within the workplace students enter a community of practice and begin to negotiate their learning with those in the workplace community of practice (Trevitt & Grealish, 2005). This section will overview the literature on the role of socialisation in workplace communities of practice during clinical placement on the development of professional identity.

2.6.1 Communities of practice

Agreement exists in the literature that professional identity results from socialisation into a community of practice (Ajjawi & Higgs, 2008; Cruess & Cruess, 2016; Cruess et al., 2016b; Johnson et al., 2012; Li et al., 2009; Reid et al., 2008; Sternszus, 2016). Identity is shaped and reinforced by communities and social processes in them (Cruess & Cruess, 2016; Reid et al., 2008). In this section, I describe the concepts of professional socialisation and community of practice in relation to professional identity.

Communities of practice were described by Wenger (1998) and explain learning in social environments. This theory of learning starts with assumptions that engagement in social practice is fundamental to how people learn (Morley, 2016; Steinert, 2016; Wenger, 1998; Wilson et al., 2013) and that becoming member of a community of practice is the way a student begins to acquire their professional identity (Cruess et al., 2016a). Communities of practice are everywhere (Wenger, 1998), for example, in day to day practice professionals work in smaller groups as a member of the profession, a work team, and with other students or professionals. A community of practice was defined by Lave and Wegner as a "set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice" (Ajjawi & Higgs, 2008, p. 98).

A definition of community of practice described in the medical context is "a persistent, sustaining social network of individuals who share and develop an overlapping knowledge base, set of beliefs, values, history, and experiences focussed

on a common practice and/or mutual enterprise" (Cruess et al., 2017, p. 2). This definition highlights the three essential elements for a community of practice: domain, community, and practice. Domain refers to the purpose of the community. In medicine, this is the prevention and treatment of human disease (Cruess et al., 2017). Community is the social setting in which learning occurs and membership of the community must be considered to be a desirable goal. Within medicine, many communities exist, and professionals usually belong to more than one. The community element of practice is the knowledge and skills which the community shares.

Lave and Wenger (2012) postulate that learning takes place in the cultural and social context of the learner and involves social interactions with others in the workplace context. The community of practice in the workplace makes the connection between the relationship, social and educational aspects of practice (Trede & Smith, 2012). 'Situated learning' suggests that most learning takes place through social relationships in the workplace (Lave & Wenger, 2012). Lave and Wenger's earliest work examined the process where newcomers create a professional identity through their interactions with experts, where they observe and model these experts in the learning community (Lave & Wenger, 2012). Each community of practice has boundaries and student participation in the community is legitimate, but on the periphery (Hägg-Martinell et al., 2015). Learners enter a community of practice at the periphery (Mann & Gaufberg, 2016) and through learning to participate in the community of practice, become members of their profession and the multi-professional workforce (Ajjawi & Higgs, 2008; Morison et al., 2011; Ó Lúanaigh, 2015). Students are accepted into the community of practice through socialisation and as they develop competence and credibility with community members achieve increasing acceptance by the group (Plack, 2006). The social engagement of students during clinical placement supports their learning and engagement in the community of practice (Cruess et al., 2014, 2015a, 2015b; Frost & Regehr, 2013; Holden et al., 2012; Holden et al., 2015; Li et al., 2009; Monrouxe & Poole, 2013; Plack, 2006; Sharpless et al., 2015; Wald, 2015; Weaver et al., 2011). Involvement in the social and professional community of practice contributes to student preparation for the workplace (Reid et al., 2008).

The application of community of practice theory in nursing placements was examined by Morley (2016). She identified that the learning and professional identity

of experienced practitioners and 'newcomer' members of the community of practice, was advanced through socialisation within the community of practice (Morley, 2016). More experienced colleagues demonstrate the history and ethos of the community of practice and the impact of professional socialisation and professional identity formation on the newcomer (Morley, 2016). However, opportunities for socialisation of students with experienced nurses are not always well used during placement Morley (2016). While clinical environments where students feel valued in the community of practice promote the integration and learning of students (Johnson et al., 2012), more experienced practitioners can also negatively impact upon student socialisation and therefore impact the development of professional identity (Holden et al., 2012).

Medical students on placement were observed as transient members of a clinical community of practice in a surgical ward by Jaye et al. (2010). This community of practice consisted of a group of health professionals delivering patient care as their common purpose. As the students were on placement for a short time, their participation in the surgical ward community of practice, as described in Lave and Wenger's model, was legitimate and peripheral (Lave & Wenger, 2012). Examples of legitimate peripheral participation on placement can also include clinical contact with patients, role modelling from others in the workplace, wearing a uniform and reflection on experience (Crossley & Vivekananda-Schmidt, 2009). Over time, socialisation would lead to full participation in the community of practice as students learn to become a member of their profession (Cruess & Cruess, 2016).

A number of criticisms of the community of practice theory have been described by Cruess et al. (2017). These include the observed tendency of social structures to reproduce themselves, the presence of hierarchy and historical inequality in medicine and the tension that to participate in the community an individual may need to suppress part of their identity. These criticisms were countered by Cruess et al. (2017) noting that the medical community has recognised these issues and taken actions to reduce their impacts. I consider these counterpoints posed by Cruess et al. (2017) to these criticisms to sufficiently address concerns to warrant the consideration of communities of practice as a relevant perspective in my research.

Communities of practice are documented in medicine and nursing (Jarvis-Selinger et al., 2012; Jaye et al., 2010; Morley, 2016; Steinert, 2016). The clinical placement environment was described by Jaye et al. (2010) as a community of practice

where health professionals come together for patient care. These environments become important in learning communities for students. I assert that the concepts of community of practice in placement learning could also apply in allied health education and workplace learning.

2.6.2 Professional socialisation

Within workplace communities of practice, students have opportunities for socialisation with their own and other professions. These opportunities for socialisation are often referred to as professional socialisation and have been identified to play a key role in the development of professional identity (Adams et al., 2006; Ashby et al., 2016; Dalton, 2008; Jones, McAllister, & Lyle, 2015b; Khalili, Orchard, Spence Laschinger, & Farah, 2013; Mariet, 2016; McKinlay et al., 2016; Trede et al., 2012; Turpin et al., 2012). Professional socialisation has been defined by a number of authors (Adams et al., 2006; Ajjawi & Higgs, 2008; Bartlett, Deborah Lucy, Bisbee, & Conti-Becker, 2009; Brown, Stevens, & Kermode, 2013; Cornelissen & Van Wyk, 2007; Cruess et al., 2014; Dalton, 2008; Goodare, 2015; Lordly & MacLellan, 2012; Mariet, 2016; Naylor et al., 2016; Schill, 2017; Vivekananda-Schmidt et al., 2015; Wilson et al., 2013). A list of professional socialisation definitions is provided in Appendix E. Professional socialisation enables preparation for a professional role and identity through developing skills, knowledge, professional norms and values of the profession (Adams et al., 2006; Ajjawi & Higgs, 2008; Bartlett et al., 2009; Cruess et al., 2014; Mariet, 2016; Schill, 2017; Sharpless et al., 2015).

Successful professional socialisation has been described as having a number of characteristics Schill (2017). These characteristics are: a continuous process that evolves through different stages over time; includes both formal and informal learning and involves social interaction (Schill, 2017). The end product of socialisation is the incorporation of group values and norms into individuals' 'self-image' (Schill, 2017). Curriculum includes both formal and informal professional socialisation (Ashby et al., 2016). Three interrelated stages in professional socialisation in social work were identified by Miller (2013) as being: pre-socialisation prior to entering social work; formal socialisation while a student and practice after formal education. Brown et al. (2013) noted that some authors believe that socialisation takes place in the education processes within the classroom, while others believe that socialisation can only occur in the clinical practice environment.

2.6.3 Impacts of professional socialisation on professional identity

Socialisation has been considered to be a major influence in the development of professional identity (Burford, 2012; Cruess et al., 2014; Cruess et al., 2016b; Goodare, 2015; Holden et al., 2012; Johnson et al., 2012; Rees & Monrouxe, 2018; Walker et al., 2014). As mentioned earlier (Section 2.4.2), professional socialisation was identified by 92% of occupational therapy students participating in the study conducted by Ashby et al. (2016) as being a significant factor in developing professional identity. In developing professional identity, students need to adopt the profession's ethos or paradigm (Hooper, 2008; Turpin et al., 2012) and develop an identity with the values and competencies of the profession (Sharpless et al., 2015). Goodare (2015) conducted a literature review to examine the effectiveness of current socialisation processes in clinical settings for student and graduate nurses. He identified that socialisation in nursing is a complex process where nurses are learning their professional roles (skills, knowledge, and behaviours) in the clinical setting. Burford (2012) also reported that achievement of professional identity is influenced by factors including knowledge, practical experience and reinforcement by qualified staff through social processes.

2.6.4 Socialisation during clinical placement

Professional socialisation is essential in health education because becoming a health professional takes more than mastering competencies (Hayden, 1995). Professional socialisation "is the process by which a person develops an identity as a member of their profession through acquiring knowledge, and skills through socialisation" (Adams et al., 2006, p. 56). Cruess et al. (2016a) argued for the importance of work-based learning stating that "professional identity is primarily acquired in the workplace as students engage in clinical work and learn from peers and role models." (p. 72) In their earlier work, Cruess et al. (2014) argued that a "complex networks of social interaction, role models and mentors, experiential learning, and explicit and tacit knowledge acquisition - influences each learner, causing them to gradually think, act and feel like a physician"(p. 1448).

How a student is treated in the practice environment has a powerful impact on professional identity (Cruess et al., 2016a). Clinical educators play a critical role in influencing student socialisation on placement (Brown et al., 2013; Cruess et al., 2016b). Students are reported to value socialisation with practice educators more than

university educators because of the authenticity of their educator's experiences (Ashby et al., 2016). Goodare (2015) further highlighted the importance of professional socialisation in the workplace reporting that nurses do not experience socialisation until they enter a clinical setting. It is the relationships a student nurse develops with others in the placement environment that Walker et al. (2014) argued influences professional identity development. In the practice environment students experience formal (lessons intended to teach) and informal socialisation (incidental learning opportunities, hearing others discussing cases, observations) (Ashby et al., 2016; Mariet, 2016). During clinical placements, students are socialised with clinical educators, members of their own profession, other professions and patients and their families. In the next section, I will describe literature outlining socialisation for allied health students on placement with each of these groups.

2.6.4.1 Socialisation with Clinical Educator

Clinical educators play a key role in student learning on placement. Kilminster and Jolly (2000) argued that "the supervision relationship is probably the single most important factor for the effectiveness of supervision, more important than the supervisory methods used"(p. 827). Several studies have been conducted in occupational therapy examining the attributes valued by students. In a Canadian study, Mulholland, Derdall, and Roy (2006) thematically analysed attributes listed in occupational therapy clinical educator excellence award nominations. The attributes listed were: creating a positive learning environment, facilitating learning, being a role model and having a positive effect on the student. In an Australian study, examining occupational therapy clinical educator nominations providing the 'just right' challenge was the overarching theme for supporting learning on placement (Rodger et al., 2014). Enablers of 'just right' challenge were: valuing a reciprocal relationship; facilitating learning opportunities and experiences; and encouraging autonomy and independence (Rodger et al., 2014). These studies evidence the significant role played by Clinical Educators in developing connections with students, facilitating their contact in the workplace environment to provide the 'just right' challenge in learning during placement.

2.6.4.2 Socialisation with own profession

Wald (2015) argued that for medical education to meet the goal of professional identity formation, educators must design a curriculum including the process of

socialisation with members of the profession. She described the importance of relationships and role modelling within the community of practice. Students actively construct professional identity through interactions with mentors and colleagues by learning in a social context (Wald, 2015). Socialisation within the profession was noted by Cruess et al. (2014) to have either a positive or negative impact on students, with negative experiences inhibiting the process of professional identity formation.

Learning environments with positive role modelling and skilled mentors promote professional identity (Wald, 2015). Role modelling is one form of socialisation and role models in the profession can have a significant impact on professional identity development Wilson et al. (2013). Similar views are expressed by Goldie (2012) who wrote that professional identity formation is a social and relational process. He stated that educators must use opportunities for students to experience relationships with appropriate role models from their own profession.

2.6.4.4 Socialisation with other professions

Two authors describe the importance of student socialisation with other professions for professional identity formation (Goldie, 2012; Wilson et al., 2013). Socialisation supports students to learn to work cooperatively with others in the team, begin to develop mutual trust with other professionals and prepare them to work together with other team members Weaver et al. (2011). Wald (2015) also emphasised the importance of relationships with colleagues in the learning environment to support professional identity formation. Studying nursing and midwifery student experiences on clinical placement, McAvoy and Waite (2018) found that staff responsiveness and their inclusion or exclusion of students influenced student feelings of belonging. These experiences can positively or negatively affect the learning experiences of student belongingness in clinical placements.

2.6.4.5 Socialisation with patients and families/carers

Interactions with patients and their families or carers have been identified to play a role in professional identity formation (Wald, 2015). The primary concern of healthcare is for its patients and during placement, students socialise with patients, their families and the groups of staff who provide their care (Jaye & Egan, 2006). In a study examining major influences on professional identity formation for medical students, patient encounters were identified as one of the factors associated with professional identity formation (Wong & Trollope-Kumar, 2014). The findings from

this study included references to: learning from patients, profound life moments such as birth and death, and balancing efficiency with empathy for patients (Wong & Trollope-Kumar, 2014). Feedback from patients during placement was reported to help medical students begin to feel more secure in their self-image as future doctors (Pitkala & Mantyranta, 2003).

2.7 DEVELOPMENT OF PROFESSIONAL IDENTITY DURING CLINICAL PLACEMENT

2.7.1 Influences of clinical placement on the development of professional identity

With an understanding that both curriculum and the workplace contribute to the development of professional identity, Trede et al (2012) emphasised the need to consider the intersection of professional identity between the university and the workplace. Clinical placements have been considered central to the formation of professional identity (Mylrea et al., 2017; Newton et al., 2009; Wilson et al., 2013). Clinical placements bring sense to theory and shapes identity (Maranon & Pera, 2015). Students are overtly and covertly socialised on placement by educators and members of their profession to support their transition into the profession (Dall'Alba, 2009; Mariet, 2016; Trede et al., 2012; Wilson et al., 2013). Practice education and professional socialisation were identified in an international study of occupational therapy students as having the greatest effect on professional identity formation (Ashby et al., 2016). Engaging in clinical work and learning from role models and peers in the workplace are a primary way students develop professional behaviour and identities (Steinert, 2016).

In their study examining how student nurses construct their identity while on placement Walker et al. (2014), identified five key elements needed during placement to construct professional identity. These were: positive role models to assist with learning and help understand what it means to be a nurse; belonging through acceptance and inclusiveness; peer support from other students; opportunities to develop critical thinking and problem-solving skills; and confidence developed through non-judgemental interactions and not feeling pressured. The role of the clinical placement mentor or clinical educator is considered critical (Ashby et al., 2016; Burford, 2012; Maranon & Pera, 2015; Ó Lúanaigh, 2015; Steinert, 2016). The intention of clinical educators could be described as seeking to support students to

develop an identity consistent with the skills and values required by the profession (Sharpless et al., 2015). Johnson et al. (2012) proposed a professional identity pathway examining the factors influencing professional identity in nursing. They noted: the importance of a sense of belonging to support professional identity development; the influence of factors such as length of placement, the impact of negative role models and the positive impacts of caring supportive environments where students are valued members of the team.

The impacts of Lave and Wenger's communities of practice model on integrating staff and students in a learning environment on placement was noted by Johnson et al. (2012). Steinert (2016) also considered that work-based learning often takes place in a community of practice. This is supported by Cruess and Cruess (2016), who argue in their schematic representation of professional identity formation that during the process of socialisation in a community of practice students move from legitimate peripheral participation to full participation. Given that much of the teaching and learning which takes place on clinical placement may be formal or structured, support for professional identity development can also be spontaneous (Steinert, 2016). Steinert (2016) stated "it is important to understand the nature of work-based learning (where learning takes place), which promotes situated learning (comprised of modelling, scaffolding, coaching, and fading), the setting in which this process unfolds, often a community of practice" (p. 73). The confidence of occupational therapy students during fieldwork placements was examined by Derdall, Olson, Janzen, and Warren (2002) who found that confidence levels increased during a placement and on subsequent placements. This finding could be seen to support the suggestion by Walker et al. (2014) of the need for students to develop confidence in placement to support the development of professional identity. A more detailed review of studies examining professional identity development will be provided in the next section of this literature review.

2.7.2 Studies of professional identity during clinical placement learning

I have identified eight studies from Australia and overseas relevant to professional identity development during clinical placement learning experiences. In this section, I overview these studies and their influence in the development of my research. The studies I identified included examination of nursing students (Ó Lúanaigh, 2015; Trevitt & Grealish, 2005; Walker et al., 2014), medical students

(Sharpless et al., 2015; Weaver et al., 2011); medical and dentistry students (Vivekananda-Schmidt et al., 2015); dietetics students (Lordly & MacLellan, 2012) and occupational therapy students (Ashby et al., 2016). Only the study conducted by Walker et al. (2014) was identified to have been conducted in a regional context. Table 2-2 provides an overview of these articles with studies listed alphabetically and full references included below table.

Table 2-2
Identified studies exploring influences on clinical placement supporting the development of professional identity

Reference	Study type/ design/ location	Participants	Purpose of study	Findings
Ashby, S., Adler, J., & Herbert, L. (2016).[1]	Cross-sectional survey Australia, Canada, Ireland, New Zealand, the UK, and the USA.	Undergraduate occupational therapy students 5 countries	Explore student perspectives on the ways that curriculum and pre-entry experiences shape professional identity.	Professional education/clinical placement (98%) and professional socialisation (92%) were the greatest influences on professional identity formation.
Lordly, D., & MacLellan, D. (2012).[2]	In-depth interviews Canada	13 undergraduate dietetics students from two Canadian universities in the final two years of education	Examination of dietetic student identity development and socialisation during education	Clinical placements expose to role models. Social and organizational influences shaped professionalisation
Ó Lúanaigh, P. (2015).[3]	In-depth interview of nursing students and a focus group of registered nurses who	5 final year student nurses. Australia	Influence of registered nurses (RNs) on nursing students learning	Four themes: 1. The clinical environment supports students to learn skills which can't be facilitated elsewhere

	were clinical facilitators Australia			2. RNs responsiveness can influence student learning 3. RNs create a sense of belonging 4. RNs influence professional identity development.
Sharpless, J., Baldwin, N., Cook, R., Kofman, A., Morley-Fletcher, A., Slotkin, R., & Wald, H. S. (2015).[4]	Qualitative – explored student reflections United States of America	5 students (one from each of years 1-4, and a first-year resident in paediatrics) from a United States medical school	Explore Professional Identity formation	The diverse and individual range of influences in professional identity development. These included relationships with mentors, peers, inter-professional relationships, family and relationships with patients.
Trevitt, C., & Grealish, L. (2005).[5]	Focus group Australia	Six undergraduate nurses Australian University	Examine student views of developing professional identity during clinical practice.	Three themes: 1. Theories learned in the classroom do not adequately prepare students for workplace relationships; 2. During practicum students create meaning about practices which are not consistent with classroom theory 3. Students develop an identity as a nurse through practical work.
Vivekananda-Schmidt, P., Crossley, J., & Murdoch-Eaton, D. (2015).[6]	Interviews England	20 student doctors and dentists who were known to have experienced a significant change in	Develop a model of Professional Identity formation	Two overlapping frames of reference affecting professional identity – students' self-perception (knowing yourself) and perception of their professional

		Professional identity		role (knowing your profession). Three processes underpinned the two frames of reference opportunities to participate in their professional role; recognition as a student professional by others and participation in extra-curricular teaching activities. Both formal and informal teaching affected professional identity development.
Weaver, R., Peters, K., Koch, J., & Wilson, I. (2011).[7]	Telephone interviews Australia	13 medical students enrolled years 1-3 of undergraduate study	Explores the elements that contribute to medical students a sense of professional identity.	Two themes contributing to professional identity: professional inclusivity and social exclusivity
Walker, S., Dwyer, T., Broadbent, M., Moxham, L., Sander, T., & Edwards, K. (2014).[8]	Online survey Australia	Undergraduate nursing students across 3-year levels of study at regional university. Australia	Examine how student clinical placement experiences constructed their professional identity	Five key elements in construction of nursing student professional identity: positive role models, belonging, peer support, critical thinking abilities and confidence

Abbreviations in Table 2-2: RN = Registered nurse

[1] Ashby, S., Adler, J., & Herbert, L. (2016). An exploratory international study into occupational therapy students' perceptions of professional identity. *Australian Occupational Therapy Journal* (4), 233-243.

[2] Lordly, D., & MacLellan, D. (2012). Dietetic students' identity and professional socialization in preparation for practice. *Canadian Journal of Dietetic Practice and Research: A Publication of Dietitians of Canada*, *73*(1), 7-13.

[3] Ó Lúanaigh, P. (2015). Becoming a professional: What is the influence of registered nurses on nursing students' learning in the clinical environment? *Nurse education in practice*, *15*, 450-456.

[4] Sharpless, J., Baldwin, N., Cook, R., Kofman, A., Morley-Fletcher, A., Slotkin, R., & Wald, H. S. (2015). The Becoming: Students' Reflections on the Process of Professional Identity Formation in Medical Education. *Academic Medicine, 90*(6), 713-717

[5]Trevitt, C., & Grealish, L. (2005). Developing a professional identity: student nurses in the workplace. *Contemporary Nurse: A Journal for the Australian Nursing Profession* (1-2), 137.

[6] Vivekananda-Schmidt, P., Crossley, J., & Murdoch-Eaton, D. (2015). A model of professional self-identity formation in student doctors and dentists: a mixed-method study. *BMC medical education, 15*(83), 1-9.

[7] Weaver, R., Peters, K., Koch, J., & Wilson, I. (2011). 'Part of the team': professional identity and social exclusivity in medical students. *Medical Education, 45*(12), 1220-1229.

[8]Walker, S., Dwyer, T., Broadbent, M., Moxham, L., Sander, T., & Edwards, K. (2014). Constructing a nursing identity within the clinical environment: The student nurse experience. *Contemporary Nurse, 49*(1), 103-112.

These studies investigated professional identity development during clinical placement learning using a mixture of qualitative and mixed methods. Participants in the studies included students at various points in their professional training and mostly considered only one or two professions. One study examined the influence of registered nurses on nursing students by conducting in-depth interviews of nursing students and a focus group for registered nurses undertaking a study program to become clinical facilitators (Ó Lúanaigh, 2015). Only one study considered the perspectives of students across a number of countries. Ashby et al. (2016) conducted a cross-sectional survey of undergraduate occupational therapy students in five countries to explore their perspectives on the ways that curriculum and pre-entry experiences shape professional identity. In this study, participants identified that professional education/clinical placement (98%) and professional socialisation (92%) were the greatest influences on professional identity formation (Ashby et al., 2016). While this study did not provide more specific detail about these influences, the authors identified the need for further research examining the role of practice education on professional identity development (Ashby et al., 2016). Although not explicitly stated in all studies, it might be presumed that the location of these studies was in larger metropolitan settings and not a regional setting, such as my workplace. The identified studies had a variety of aims including exploring professional identity formation (Sharpless et al., 2015), developing a model of professional identity (Vivekananda-Schmidt et al., 2015), exploring the elements that contribute to medical students professional identity (Weaver et al., 2011), and examining student perspectives on clinical placement experiences on the development of professional identity (Ashby et al., 2016; Lordly & MacLellan, 2012; Ó Lúanaigh, 2015; Trevitt & Grealish, 2005).

Trevitt and Grealish (2005) concluded that it is through practical work, such as clinical placements, students develop an identity as a nurse.

The studies identified a variety of clinical placement experiences contributing to professional identity development. The model of professional identity formation by Vivekananda-Schmidt et al. (2015) noted three processes that contributed to professional identity formation. These were: opportunities to participate in their professional role, recognition as a student professional by others and participation in extra-curricular teaching activities. The five key elements in the construction of nursing student professional identity reported by Walker et al. (2014) were: positive role models, belonging, peer support, critical thinking abilities, and confidence. Similar findings about the impacts of a student's sense of belonging in the clinical placement workplace were reported by Ó Lúanaigh (2015). The influence of role models (Lordly & MacLellan, 2012; Walker et al., 2014), socialisation in the workplace (Ashby et al. (2015) and relationships with peers, other professional and patients (Sharpless et al., 2015) were also identified as influencing the development of professional identity during placement.

The influence of role models supporting learning was identified by two authors (Lordly & MacLellan, 2012; Walker et al., 2014). Good role models were identified to influence the development of professional identity and help nursing students learn and understand what it meant to be a nurse (Walker et al., 2014). Being included and accepted during clinical placement supported the development of confidence and helped students establish belonging and nursing identity. The influence of negative experiences affecting the morale and perceptions of nursing by student nurses was also identified (Walker et al., 2014). With the focus of clinical learning on the development of critical thinking and problem solving, students in the study conducted by Walker et al. (2014) identified the need for opportunities to ask questions and demonstrate their knowledge in a non-threatening environment. Working and reflecting with student peers was also identified by study participants as supporting the construction of professional identity. While not a focus of their study, Walker et al. (2014) identified that the impact of socialisation through clinical placement experiences plays a key role in the construction of professional identity.

The studies by Trevitt and Grealish (2005) and Weaver et al. (2011) provided different perspectives on the influence of clinical placements on professional identity

development. Trevitt and Grealish (2005) reported that clinical placement learning helps create meaning from classroom theory. The impacts of professional inclusivity and social exclusivity for medical students were identified by Weaver et al. (2011). Professional inclusivity was referred to by medical students as: “doing the work of a doctor” and “feeling like a doctor” (p. 1223). This was reinforced by patients, lecturers and other medical professionals treating them as future members of the profession. This was identified as an external factor impacting on medical students’ professional identity. Study participants also reported feeling separate from other professionals through physical and social separation, social hierarchy and the development of inclusivity with peers (other medical students) (Weaver et al., 2011). This study noted the significant influence of early patient contact on the development of professional identity and the impact of ‘hidden curriculum’ or unspoken messages received by students in the workplace (Weaver et al., 2011). The findings of Weaver et al. (2011) link to the concepts of student participation in the workplace community of practice described in Section 2.6.1.

These studies highlighted gaps in the literature examining the influence of clinical placements on the development of professional identity for allied health students. Using these studies, I identified factors influencing professional identity could fit within the framework I selected for my study - thinking, acting and feeling like a health professional:

• Thinking like a health professional considers how students learn professional skills on placement. These skills included critical thinking abilities (Walker et al., 2014) and consider the influence of role models when learning on placement (Lordly & MacLellan, 2012; Ó Lúanaigh, 2015; Sharpless et al., 2015).

• Feeling like a health professional considers student feelings of belonging (Levett-Jones & Lathlean, 2009; Liljedahl et al., 2016; Walker et al., 2014) and social and organisational influences on learning during placement (Lordly & MacLellan, 2012).

• Acting like a health professional includes opportunities to participate in a professional role and recognition as a student health professional by others in the workplace (Trevitt & Grealish, 2005; Vivekananda-Schmidt et al., 2015).

Examination of these studies highlighted that there are no identified studies that examine the impact of clinical placement experiences on professional identity formation across a range of allied health professions within a regional setting. The studies identified in Table 2-2 which examine professional identity for allied health professions did not specifically note the location of placement experiences included in the study. The lack of studies specifically undertaken to examine the influence of regional clinical placement experiences on professional identity for allied health students therefore points to a gap in knowledge which my research study seeks to fill.

2.7.3 Influence of organisational culture and workplace on professional identity

While completing clinical placements students enter a workplace. Organisational culture and workplace influences have also been identified as having an influence on professional identity and professional socialisation (Naylor et al., 2016; Rees & Monrouxe, 2018). The culture of an organisation influences opportunities for positive and negative experiences with mentors and role models, clinical experiences, and how students are treated by patients, peers and healthcare professionals (Cruess et al., 2014; Ó Lúanaigh, 2015). Jaye et al. (2010) proposed that that organisational policies and procedures are influenced by the social context of the workplace and actualities of patient care. Walker et al. (2014) also proposed that the influence of the organisational context on student feelings of belonging within the workplace. It is these feelings of belonging which Walker et al. (2014) argued support the development of professional identity.

The need for newcomers to gain knowledge about social hierarchies and where they fit in was noted by Naylor et al. (2016). The authors identified the impact of staff room conversations and workplaces where staff work together to support each other (Naylor et al., 2016). The length of clinical placement has also been identified as increasing student integration in the workplace (Johnson et al., 2012; Naylor et al., 2016).

2.7.4 Impacts of clinical placements in regional locations on professional identity

I was unable to locate research that specifically examined the influence of clinical placements in regional communities on the development of professional identity for allied health students. Some research has been conducted examining professional identity formation in rural health education for medical, nursing and

pharmacy students (Dalton, 2008). Rural health education as a process of professional socialisation was examined by Dalton (2008) who argued that a rural placement is a pivotal experience defining personal and professional socialisation and identity for undergraduate students. She concluded that professional socialisation during rural placements supports the development of professional identity. The rural placement, she explained, made three identities available for students to take up or resist. These identities included: an emerging health professional identity; a student identity and a rural identity. She identified that this socialisation is dependent on people as the central actors in rural health education.

Other authors concur with the importance of learning experiences during rural placements (Carr & Gidman, 2012; Daly, Perkins, et al., 2013; McAllister et al., 1998; Siggins Miller Consultants, 2012; Smith et al., 2018(a)). Webster et al. (2010) identified that rural placements support preparedness for practice and provide students with an understanding of rural communities and their issues in accessing healthcare. Aspects of rural placement learning experiences such as the influences of shared accommodation have been studied (Smith et al., 2018(b)). McKinlay et al. (2016) reported the importance of the conversations that students have around the dinner table while staying in accommodation playing a significant role in identity development, optimising learning and belonging (Bonello, 2001; Edmunds & Harris, 2015; Perry, Henderson, & Grealish, 2018; Telio, Ajjawi, & Regehr, 2015; Thackrah, Hall, Fitzgerald, & Thompson, 2017; Wearne, 2016).

2.8 IDENTIFIED NEED FOR FURTHER RESEARCH

With an understanding that both curriculum and the workplace contribute to the development of professional identity, Trede et al (2012) identified the need to consider the intersection of professional identity between university and the workplace. Developing a professional identity is important for students, the professions they represent, colleagues and patients (Rees & Monrouxe, 2018). For students, professional identity is essential to: support transition to practice (Crossley & Vivekananda-Schmidt, 2009), enable role clarity (Ashby et al., 2015), prevent burnout (Edwards & Dirette, 2010; Rees & Monrouxe, 2018), underpin development as a professional (Ashby et al., 2016; Johnson et al., 2012) and is essential for effective practice skills (Hooper, 2008). Health professions benefit from members of the profession having a professional identity to clearly present the skills and role of the

profession (Boehm et al., 2015; Edwards & Dirette, 2010; Turpin et al., 2012) and facilitate work satisfaction and retention (Ashby et al., 2016; Johnson et al., 2012; Walker et al., 2014). For colleagues, professional identity enables their confidence in the individual's professional skills (Rees & Monrouxe, 2018). Health professional competence and career satisfaction supported by strong professional identity are critical for patient care (Cruess & Cruess, 2016; Valutis et al., 2012). Hooper (2008) goes so far as to say that without professional identity practitioners "misfire and fail"(p. 229).

Clinical placements have been shown to play a key role in professional identity development through socialisation within a workplace community of practice. Students identify the role of 'real-world', authentic experiences in the clinical environment as important in developing their professional identity (Ashby et al., 2016). What is not known is exactly what happens in placements that support student professional identity development to begin to think, feel and act as a health professional. Based on the literature identified as meeting my inclusion criteria, I have identified only a limited number of studies examining the impacts of clinical placement on professional identity. These studies examined a small number of participants within medicine, nursing and some allied health professions with much of the research investigating only one single or a small number of allied health professions The focus of these studies covered a diverse range of aspects of professional identity including student perceptions of clinical placement experiences, influence of others in the workplace and the development of a models of professional identity development. While some of the studies examined nursing students from regional Australian universities on placement, no studies examining the influence of clinical placements in a regional health service on the development of professional identity of students from a group of allied health professions were identified.

The need for further research on the way clinical placements can foster the development of professional identity in students has been identified by several researchers (Ashby et al., 2016; Ikiugu & Rosso, 2003). A better understanding of the influence of clinical placement learning on the development of professional identity will inform workforce learning in regional health services and ultimately benefit safe service delivery for patients. My study will influence the design of allied health clinical placements and identify aspects of placements to continue or modify to enable allied

health students completing placement to think, act and feel like a health professional thus helping to develop their professional identity. The need for further studies examining the impact of clinical placement on the professional identity of allied health students in a regional health service environment is therefore evident and was a primary motivation for conducting the present research study.

2.9 CONCLUSION

My review of the literature investigated professional identity formation and current literature in relation to the development of professional identity on clinical placements. Specifically, the literature review examined professional identity formation in medical, nursing and allied health fields. There are few studies examining professional identity formation in allied health professions. This highlights the need for further investigation of the impacts of clinical placement on professional identity formation for allied health students. This need underpinned the purpose of this research. The purpose of my research and methodology to answer the research questions will be discussed in detail in the next chapter.

Chapter 3: Planning the research

3.1 CHAPTER OVERVIEW

The previous chapter described the literature to lay a foundation for my study. In this chapter, I describe how the literature has informed the design of my research through the development of a conceptual framework. I describe my philosophy, research paradigm, methodology and considerations in using qualitative methods and as an insider researcher. I overview the data collection methods used to answer each research question. I address issues of establishing trustworthiness in my research. Finally, I describe ethical considerations for my research, outline ethical approvals to conduct research and how my data was protected.

3.2 RESEARCH QUESTIONS

My review of the literature showed that while there has been extensive research in relation to the development of professional identity in medical and nursing professions, there was limited identified research in allied health, particularly in a regional healthcare setting. To address this gap in the literature, the overarching research questions for this research were

• Research Question 1: What are the critical experiences that influence the development of professional identity of allied health students during clinical placement in a regional health service?

A number of sub-questions were used to answer this overarching research question:

• Sub-Research Question 1 What are the organisational influences on the development of professional identity of allied health students completing clinical placement learning in Darling Downs Health?

• Sub-Research Question 2: From the perspective of allied health students, what are the critical experiences that shape the development of professional identity during clinical placement learning?

• Sub-Research Question 3: What are the perspectives of recent allied health graduates, on the impact of their clinical placement learning on the development of professional identity?

• Research Question 2: How can these findings improve clinical placement design for regional settings?

3.3 JOURNEY TO DEVELOP METHODOLOGY

My review of the clinical education literature revealed a gap in the literature about the impact of clinical placement experiences on the development of professional identify for allied health students. The research questions aimed to explore the complex factors surrounding clinical placement learning for allied health students and present the perspectives and meaning for allied health students, new graduates and health service staff involved in clinical education. Specifically, I was interested in the critical experiences that influence the development of professional identity during clinical placement in a regional health service. As discussed in the next section, a constructivist paradigm was best suited to the exploratory approach proposed to examine participant experiences of clinical placement influences on the development of professional identity. Given my approach was exploratory seeking to understand participant's perspectives, I determined a qualitative methodology was required to answer the research questions. In Section 3.3, I will explain the reasoning process and journey to develop my methodology.

3.3.1 Philosophy and research paradigm

In this section, I provide an overview philosophy and research paradigms I adopted to guide readers in understanding how I have explored the research questions (Tong, Sainsbury, & Craig, 2007). Creswell (2003) noted four questions to be answered in the design of a research proposal. To describe my decision making, I answer each of these questions in turn:

1. What ontology and epistemology inform the research?
2. What theoretical perspective/paradigm lies behind the methodology?
3. What methodology govern the choice of methods?
4. What methods will be used?

1. What ontology and epistemology inform the research?

Researchers hold ontological assumptions about the nature of reality that influence epistemological choices (Flowers, 2009). My ontology, or beliefs about how things exist, recognises that there is no one ultimate or 'correct' way of knowing or truth (Krauss, 2005). For this research, I adopted the idea of multiple realities constructed through lived experiences and interactions with others (Creswell 2014). My research paradigm was formed from my ontological and epistemological positions and is the set of beliefs that guided my research actions (Flowers, 2009). Epistemology deals with the nature of knowledge and how knowledge is obtained (Guba & Lincoln, 1994; Liamputtong, 2013) and considers the relationship between the researcher and the phenomena being studied in the research (Varpio, Ajjawi, Monrouxe, O'Brien, & Rees, 2017).

2. What theoretical perspective/paradigm lies behind the methodology

My paradigm describes my beliefs or worldview (Bunniss & Kelly, 2010), assumptions about the nature of the world and whether there is one knowledgeable reality or several (Guba & Lincoln, 1994; Liamputtong, 2013). Creswell (2014) describes five epistemological frameworks – post-positivism, social constructivism, post-modern, pragmatism and critical/ race/ feminist/ queer / disability frameworks. The epistemological paradigm best suited to my work was that of constructivism. I adopted a constructivist position that considers that "individuals and groups make sense of situations based on their individual experience, memories, and expectations" (Flowers, 2009, p. 3). I consider that reality is socially constructed with multiple individually constructed truths (Liamputtong, 2013). In my research, I sought to develop an understanding of multiple participant perspectives (Creswell, 2003) about the influences on the development of professional identity in the health service context (Guba & Lincoln, 1994; MacKenzie & Knipe, 2006). While constructivism is a well-respected paradigm, there are also some critics (Green & Thorogood, 2009). The application of an extreme constructivist paradigm to explore phenomena such as disease, distress, pain or death was considered by Green and Thorogood (2009) to be unhelpful and pose logical issues. These criticisms of the application of the constructivist paradigm are not relevant for consideration in my research, given professional identity influences were the phenomena being studied.

3. What methodology governs the choice of methods?

My ontological and epistemological stances influenced my choice of research processes and methodology used to develop knowledge and understanding (Varpio et al., 2017). My methodology defined my plan of action and governed my choice of methods. In designing my methodology, I considered the six major qualitative methodologies (Dew, 2007) and their relevance for my research. I chose to use a phenomenological underpinning to explore participants' lived experiences (Dew, 2007). Grounded theory would have enabled me to build theory emerging from the data by asking 'What is happening here?', however my interest was in examining participant's experiences (Creswell 2003). Using discourse analysis would have explored how language with linguistics is used in clinical placement experiences, but not focus on participant's description of their experiences (Cheek, 2004). I could have undertaken ethnographic fieldwork to observe participation in clinical education, however, I would not have been able to effectively capture the views of a diverse participant groups given that each role operates differently in their delivery of clinical education experiences across the allied health professions (Creswell, 2003). Ethnomethodology would have enabled me to explore aspects of the social organisation, but not examine participant's experiences (Hanson, Balmer, & Giardino, 2011). Given that this was an exploratory research study, I was seeking suggestions about interventions that could be implemented in a future action research study. My chosen methodology, therefore, was a phenomenological approach to make in-depth explorations of participant's experiences (Dew, 2007).

4. What methods will be used?

The methods I chose to answer my research were document review and focus group discussions. The rationale for this is further explained in Section 3.4. I used a three-phase study. Phase 1 comprised document review and focus groups with staff: professional Directors, Clinical Education Support Officers and clinical educators. Phases 2 and 3 comprised focus groups with allied health new graduate and students. Data collection for each phase was conducted concurrently. Section 3.3.2 provides a further description of the methodology I chose for this research.

3.3.2 Methodological approach chosen

The purpose of this exploratory research was to develop a better understanding of the impact of clinical placement experiences on the development of professional identities of allied health students – understanding how they begin to think, feel and act like a member of their profession. I considered a qualitative design (Creswell, 2013) to be the most appropriate methodology for my research which asked 'What' and 'How' questions and aimed to develop understanding of the influences on the development of professional identity for allied health students during clinical placements in a regional health service (Ringsted, Hodges, & Scherpbier, 2011). By using a qualitative research design, I join colleagues in the fields of medical and education research to add new knowledge and perspectives in healthcare and education (Leung, 2015; Ringsted et al., 2011; Tong et al., 2007; Varpio et al., 2017; Yardley, Teunissen, & Dornan, 2012).

Using a qualitative design for this research allowed me to undertake a detailed exploration of clinical placements (Ringsted et al., 2011; Yardley et al., 2012), examine participant's multiple truths to develop meaning (Willig, 2012) and explore interdependencies that influence participant's experience of the development of professional identity. Qualitative research methods allowed me to capture the perceptions and interpretations of allied health staff, new graduates and students about the influences on the development of professional identity (Yardley et al., 2012). I would have been unable to answer my research questions using a quantitative design that seeks to understand the relationship between variables (Creswell, 2003).

My qualitative data focused on participant's views of clinical placement learning experiences, recognised the importance of understanding the health service context and provided opportunities to collaborate with participants in understanding the phenomena of clinical placement experiences (Curtin & Fossey, 2007; Hanson et al., 2011). The qualitative methods I chose were document review and focus group discussions. Document review tapped into existing sources of information (Hanson et al., 2011) and supported understanding of the context of student clinical placement experiences. I used focus groups to provide opportunities for participants to explore perspectives on the phenomena of clinical education placements (Hanson et al., 2011). I used focus groups in preference to individual interviews given the topic was not sensitive, participants were familiar with participating in group discussions through

their work roles and hearing perspectives of others enabled the exchange of viewpoints. Information about risks of conducting focus groups is provided in Section 3.4.1.2.

Open-ended questions used in focus groups allowed participants to share their perspectives (Creswell, 2003). Quotes from the document review and focus group participants were used to illustrate participant's experiences and interpretations of the phenomena (Tong et al., 2007). As a researcher using qualitative approaches, I wanted to understand the implications and consequences of experiences both for the participants and others and explore how the workplace could be responsive to these new findings (Willig, 2012). One of my research questions was to identify how findings from my research could influence clinical education practices. Qualitative data that draws on words and descriptions was the most appropriate methodology to answer this question (Hanson et al., 2011).

3.3.3 Considerations in using qualitative methods in this context

Conducting my research in the regional health service context where participants worked or were completing a clinical placement necessitated consideration of the importance of the workplace context in the interpretation of my data. I generated meaning from data collected in the workplace where I could consider the social, historical and individual elements of the workplace context (Ringsted et al., 2011). When reviewing clinical placement documents and conducting focus group discussions, I have represented data in words using thematic exploration (Braun & Clarke, 2006; Braun et al., 2019; MacKenzie & Knipe, 2006).

I have considered how to position myself as a researcher in the study (Creswell, 2014). I bring personal values of wanting to implement continuous improvement in my clinical education role and curiosity which initiated my interest in this topic. As a researcher using a qualitative approach, I focused on the phenomena of influences on professional identity during clinical placement, collaborated with participants to collect and interpret participant meaning of the phenomena. In my research, knowledge was obtained and created from interactions with participants through the facilitation of focus groups or through a review of focus group data (Guba & Lincoln, 1994; Varpio et al., 2017). Findings were created through these relationships between researcher and participants and transactions of knowledge during the exploration of this topic (Guba & Lincoln, 1994; Liamputtong, 2013). My research explored the

multiple realities of allied health staff and students while recognising that knowledge is subjective, and individuals will have multiple, diverse interpretations of reality (Ringsted et al., 2011).

In summary, in this section, I have described how I matched my research problem and methodological approach. My research focused on developing an understanding of perspectives of allied health staff linked to clinical education in the health service, students completing placements and new graduates on the influence of clinical placements on the development of professional identity. To answer my research questions, I adopted a constructivist paradigm using qualitative research methods and drew on researcher-participant interactions in the health service environment to gather diverse interpretations of the phenomena being studied.

3.3.4 Considerations as an Insider Researcher

The study design and methodology for this research were heavily influenced by my dual roles of worker and researcher (Workman, 2007). I hold a position coordinating clinical education in the health service where the research was conducted. Conducting work-based research necessitated I negotiate within the workplace to establish agreement about how my research would be conducted. These negotiations were undertaken with the portfolio holder for allied health clinical education who represented and liaised with Executive Director of Allied Health for the health service. The health service agreed to be a site for the research with the undertaking that the research would not impact on staffing, patient care or clinical education activities.

During workplace negotiations, two issues were raised. The first was a perception that this research had been initiated as a result of issues in my profession of occupational therapy and therefore was less relevant to other allied health professions. I used this opportunity to share literature findings reporting that professional identity is an issue for all health professions, including medical and nursing, and highlight the importance of strong professional identity for health professionals. I clarified that my research was initiated from a point of view of curiosity and my desire to continuously improve clinical education learning experiences for students on placement in our health service. The second issue raised was the perception of potential personal advantage through the completion of a higher research degree in the workplace setting. To ensure ongoing support for the conduct of my research project, I agreed to conduct data collection in personal time and ensure no impacts on service delivery. I, therefore,

scheduled focus groups prior to the workday commencing or in the afternoon when clinical care tasks had been completed.

My position and personal attributes as an insider in this research had the potential to introduce bias during implementation and interpretation. I used several strategies to counter this potential bias (Burns, Fenwick, Schmied, & Sheehan, 2012; Workman, 2007). Firstly, given my close association with some study participants, an external facilitator for some focus groups was used (Råheim et al., 2016). Secondly, participant identification codes were used for interpretation of focus group themes to de-identify participants and distance the researcher from individual participants and potential impacts on working relationships. Thirdly, the confidentiality of study participants was maintained with de-identified data and quotes used in any publications or presentations. Fourth, to clarify the separation of my workplace and researcher roles, I provided explicit information about the separation of roles during recruitment and when conducting focus groups. Fifth, my supervisors independently reviewed data and challenged my interpretations and assumptions to ensure my passion for clinical education and delivering quality learning experiences on placement did not introduce bias (Workman, 2007). This also ensured my familiarity with the language used in clinical education, policies and the health service context did not influence the interpretation of data. My principal supervisor had no work experience in the health sector, while my secondary supervisor had work experience in allied health services and the health service where I conducted the research. The diverse experiences of my supervisors supported my research learning journey by balancing and providing differing perspectives. Finally, the potential for bias in the data has been acknowledged as a study limitation in this thesis, journal publications, and presentations.

As a researcher, I bring my personal values to the research (Creswell, 2003) and hold explicit pre-suppositions and beliefs (Groenewald, 2004). While conducting research I collaborated with participants and became a "passionate participant" in the research process (Guba & Lincoln, 1994, p. 112). In the analysis phase, both my interpretations and experience as a Clinical Education Support Officer and those of the participants were considered (Creswell, 2003). To facilitate reflexivity and consider the influence of my personal experiences, I undertook a thoughtful analysis of my research experiences, reasoning, and decisions (Liamputtong, 2013; Råheim et al., 2016). I used a reflective diary to record my research journey and engaged in ongoing

reflection during regular meetings with supervisors (Workman, 2007). It is through these processes my skills and knowledge as a researcher have grown.

The socio-cultural setting for this research influenced the project implementation and decisions made in my conduct of the research (Yardley, 2000). This research was impacted by the health department and local health service context. The state health department influences clinical education through broad oversight and policy development. Future pressure points for allied health clinical education have been identified by the health department and state-wide clinical education programs as increased demand for student placements and therefore increased student numbers, the need to support student and new graduate health and wellbeing and preventing burn out (C. Fitzgerald, Program Manager Occupational Therapy Clinical Education Program, Queensland Health, personal communication, November 8, 2018). These pressure points influence the conduct of clinical placement learning experiences. In the health service where the research was conducted, allied health professions are grouped together in the organisational structure under an Executive Director for Allied Health (Gibson et al., 2019). This organisational structure influenced my decision to limit my investigation to explore the allied health professions grouped together in the health service (nutrition and dietetics, occupational therapy, physiotherapy, psychology, social work and speech pathology). Within the health service, clinical education is included as a key performance indicator on the Darling Downs Health Allied Health Operational Plan (Darling Downs Hospital and Health Service, 2017a) and Allied Health professional Directors actively support clinical education. My research, therefore, had the potential to contribute to practice changes supporting the delivery of key performance indicators for clinical education in the health service. The regional setting of the health service could also be seen to impact on clinical education. In regional settings, clinicians service a diverse and geographically broad caseload and are frequently noted to adapt to 'make do' with resources available. Videoconferencing is used as a platform for communication and enabled participants from smaller hospital to engage in focus group discussions.

The social context of research involves a range of relationships between the researcher and participants which can potentially influence participant's responses (Tong et al., 2007). Some participants, such as Allied Health Clinical Education Support Officers, were aware of my research project and spoke of their assumptions

about drivers for research and the topic content. Some workplace colleagues who were participants considered the research was conducted because of issues about professional identity within my profession of occupational therapy. These perceptions were considered by the research team and to provide clarity about the research topic, the definition of professional identity used in the research, 'beginning to think, feel and act as a health professional', was provided to participants in the facilitator's introduction at the commencement of each focus group. My occupational therapy clinical education support role does not provide an assessment of student performance, impact on placement outcomes, or provide direct supervision or operational management for new graduates. Because my workplace role did not have any assessment or operational management function for participants, I, therefore, conducted focus groups with allied health students and new graduates.

Given my research was a work-based study, I needed to adapt the design of my research in response to workplace expectations and restrictions on my data collection activities rather than be bound by predetermined research plans. Initially, I had considered using an online student survey to gain a broad range of allied health student perspectives across a twelve-month period, however, determined that a survey would not provide the best data collection method to answer my research question. During negotiations with the health service, it became evident I would need to reconsider my proposed methods for inviting allied health students to participate in the research project. I had intended using student health service emails for correspondence about the research, however not all allied health professions arranged health service email access for students. Instead, the health service provided agreement for me to attend three allied health student tutorials scheduled during 2018 to provide a verbal overview of the research and invite interested students to provide me with their contact details to receive study information and invitations to attend focus groups. Initial plans were for the new graduate sample to be restricted to allied health new graduates who had completed a clinical placement as a student in Darling Downs Health. Following contact with Allied Health Clinical Education Support Officers, it was determined that this sample would be too small. I therefore decided to broaden the sample to include all allied health new graduates working in Darling Downs Health.

3.4 DATA COLLECTION METHODS TO BE USED AND POPULATION

3.4.1 Methods overview

The central research question for my research was ‘What are the critical experiences that influence the development of professional identity for allied health students during clinical placement in a regional health service?’ To answer this overarching research question, the methods used were document review and focus group discussions (Liamputtong, 2013). In this section, I describe my chosen research methods and how they enabled me to answer my research questions.

3.4.1.1 Methods: Document review

I chose the document review method to examine the overall organisational context of clinical placement learning and its significance on the development of professional identity in allied health students (Mogalakwe, 2009). Examining artefacts, such as health service clinical education documents, helped understand how the workplace context and culture for clinical placements and how the social experience of placement learning is organised (Robert Wood Johnson Foundation, 2006). The document review enabled me to, in part, answer sub-research question one which sought to identify the organisational influences on the development of professional identity in allied health students on placement in Darling Downs Health. The documents reviewed are provided to students prior to and on commencement of their placement and are used by clinical educators for assessment of competence during placement.

In selecting document review as a methodology, I considered the advantages and limitations of this methodology. Advantages of document review methodology relevant to my research were: cost-effectiveness, efficiency in accessing ready availability of documents, lack of obtrusiveness, access to actual documents used and reliability as documents were in existence before they were used as part of my research (Bowen, 2009; Miller & Alvarado, 2005). I considered the limitations of insufficient detail, low retrievability and biased selectivity not to adversely impact on my research (Bowen, 2009).

I implemented quality control criteria for handling documents: authenticity, credibility, representativeness, and meaning as described by Mogalakwe (2009). Authenticity was ensured as documents were sourced from health service Clinical

Education Support Officers who, as authors or users of the documents, could provide genuine copies of documents. Documents reviewed were used by the allied health professions examined in the study and considered to have information relevant to informing the research question. Documents were not produced for the benefit of my research project, ensuring credibility. Documents were representative of the clinical education and competency assessment documents because they were sourced from allied health professions. The document analysis process considered the original purpose of the document, target audience and sought to develop an understanding of the meaning and significance of the document (Bowen, 2009; Mogalakwe, 2009).

3.4.1.2 Method: Focus groups

I identified focus groups as the preferred data collection method to gain participant information. Focus groups provided an opportunity to efficiently interview a small group of people and gain their perspectives on the influence of clinical placements on the development of professional identity (Flynn, Albrecht, & Scott, 2018; Patton, 2015). Focus group discussions used semi-structured questions to explore allied health students, allied health staff representatives and allied health new graduate perceptions of clinical placement experiences which impacted their professional identity - thinking, feeling and acting like a member of their profession. The focus group facilitator remained outside of the discussion, asked clarifying questions and invited comments from more reserved participants. For focus groups where I had workplace relationships with participants an external facilitator was employed, and I facilitated focus groups for students and new graduates. Refer to sections 4.2.2.1; 4.3.2 and 4.2.4.

Strengths of focus groups relevant to my research were: they replicate natural settings, are useful in exploratory research; identify a range of views in a group setting, have limited researcher influence and issues are identified by participants. Focus groups provided a cost-effective method for data collection and the opportunity for interactions among participants to enhance data quality (Patton, 2015). Given my research was conducted in a regional health service, I considered the impacts of videoconference technology on focus group discussions. Flynn et al. (2018) reported the challenge of conducting focus groups across disperse geographic distances, impacts of limited access to research funding and impacts of patient care requirements on clinician time and availability. While there have been some variations reported,

Flynn et al. (2018) found that videoconference technology provided adequate opportunities for participation and yielded richness of data. Based on these findings and my personal experiences using videoconference technology, I considered that risks outweighed the ease for the inclusion of participation in focus group discussions.

I considered potential disadvantages and risks of focus groups but did not consider these be significant enough to preclude their use. To minimise risks for participants, I separated the groups to enable participants to feel able to fully express their opinions (Plummer, 2017). For example, separate groups for allied health professional Directors and clinical educators were arranged. When focus group participants are not acquainted with each other, the dynamics and flow of the group can be interrupted (Plummer, 2017). To reduce the impact of this, the facilitator commenced each focus group with personal introductions (Plummer-D'Amato, 2008; Plummer, 2017). At the commencement of the group, the facilitator provided overview of ground rules supporting confidentiality to participants with diverse opinions (Patton, 2015). To enable best outcomes of the focus group, the moderator played a key role in explaining the purpose of the group, facilitating discussion, and managing group dynamics (Plummer, 2017; Stalmeijer, McNaughton, & Van Mook, 2014).

3.4.2 Research questions and methods

I used the qualitative research approaches of document review and focus group discussions to answer the research questions for this research. The methods used to answer each research question are summarised in Table 3-1.

Table 3-1
Research questions and investigation methods

Research Questions	Investigation method
RQ 1: What are the critical experiences that influence the development of professional identity for allied health students during clinical placement in a regional health service?	Triangulation of data from: • Document review • Allied health staff focus groups • Allied health student focus groups • Allied health new graduate focus groups
Sub-RQ 1: What are the organisational influences on the development of professional identity in allied health students placed in Darling Downs Health?	Document review Allied health staff focus groups

Research Questions	Investigation method
Sub-RQ 2: From the perspective of current allied health students, what are the critical experiences which shape the development of professional identity once they are placed in Darling Downs Health?	Allied health student focus groups
Sub-RQ3: What are the perspectives of recent allied health graduates, on the impact of their clinical placement learning on the development of professional identity?	Allied health new graduate focus groups
RQ2: How can these findings improve clinical placement design?	Triangulation of data from: • Document review • Allied health staff focus groups • Allied health student focus groups • Allied health new graduate Focus groups

I conducted this research in three phases (Refer to Table 3-2). Dividing the research into phases allowed me to address each of the sub-research questions and triangulate results to answer the two main research questions. The first phase explored organisational influences on professional identity. Phase two examined student perspectives and phase three explored new graduate perspectives. Phases two and three of the research were conducted concurrently based on access to allied health students and new graduates as participants. I determined that running these two phases concurrently would be the most time-efficient for data collection and not adversely impact on the participation of either group, given they do not have any interrelationships within the placement environment.

Table 3-2
Phases of this research

Phases of research
Phase 1: Organisational influences on professional identity
Phase 2: Allied health student perspectives
Phase 3: Allied health new graduate perspectives

3.5 THEORETICAL FRAMEWORK CHOSEN

3.5.1 Applying the literature to this research

In this section, I explain how I have used literature reported in Chapter 2 to inform my research design.

3.5.2 Conceptual framework overview from the literature

From my literature review, I have developed an illustration of concepts in the development of professional identity for allied health students (Refer to Figure 2-2). This conceptual model represents professional identity development is a dynamic process which is influenced by transitions moving from one phase of learning and career development to another (Deppoliti, 2008; Hammond et al., 2016; Noble et al., 2015; Pratt, Rockmann, & Kaufmann, 2006). It shows that early influences of gender, family influences experiences with health professionals (Sharpless et al., 2015; Valutis et al., 2012; Vieira et al., 2017) and begin the process of professional identity development which is built on by university learning and placement experiences (Ashby et al., 2016; Kinn & Aas, 2009; Lordly & MacLellan, 2012; Trede et al., 2012). In this illustration, I have illustrated both university and clinical placements, given that placements take place during the university curriculum. The literature highlights a number of influences on professional identity development during clinical placement learning. These are the healthcare context; organisational influences; professional socialisation and communities of practice. The healthcare context is becoming increasingly complex as it battles the burden of disease with demands for cost and time efficiencies (Brownie et al., 2014; Frenk et al., 2010). Student experiences and are influenced by these demands when they complete clinical placements. As students

enter a health service workplace their learning and identity are influenced by policies, procedures and the culture of the workplace (Johnson et al., 2012; Weaver et al., 2011). Socialisation during clinical placement learning takes place within a workplace community of practice both with members of students' own and other professions (Cruess & Cruess, 2016; Li et al., 2009; Morley, 2016; Steinert, 2016; Wenger, 1998).

Literature also helped inform the parameters of my research. Cruess et al. (2016a) reported three domains of identity – individual, relational, and collective domains. The concept of three domains of identity cemented my intention to capture organisational elements and student and new graduate self-report on an organisational, workgroup (interpersonal) and personal factors impact the development of professional identity. A similar perspective reporting facilitators or barriers to student learning on placement was also proposed by Grenier (2015) who noted influences of individual, environmental, educational, institutional aspects of placement. My research considered the impact of organisational factors on the development of professional identity. This literature reinforced my decision to examine not only what is happening for the student on placement through new graduate and student participation, but to also examine elements of the organisation through document review and staff focus groups.

While I have illustrated professional identity formation throughout health professional training and recognised that professional identity formation continues throughout one's career, the focus of my research was on understanding more about the impacts on professional identity development during clinical placement.

3.5.3 Developing professional identity through beginning to think, act and feel like a health professional

The definition of professional identity I have used for my research comes from the medical education literature I have reviewed. Merton (1957) proposed that through medical education a student develops knowledge and skills and a professional identity:

'so that he [sic] comes to think, act and feel like a physician.' (p. 7).

The definition by Merton (1957) has continued to be used in medical education research (Cruess et al., 2014). While Merton's statement refers to medical education, I believe it could equally apply to other health professions. As described in Section 2.4.2, examination of professional identity has been conducted by a number of allied

health professions, thus highlighting the importance of professional identity for allied health professions (Adams et al., 2006; Ashby et al., 2016; Boehm et al., 2015; Clarke et al., 2014; Dancza, 2016; Hammond et al., 2016; Harrison & Healy, 2016; Ikiugu & Rosso, 2003; Lordly & MacLellan, 2012; Mylrea et al., 2017; Noble et al., 2015). Furthermore, the conceptual framework for professional identity described by Mylrea et al. (2017) has been built upon the work of Merton (refer to Section 2.5.5.2). My experience of working in clinical education mirrors the statement by Merton (1957) that the aim of student education is to support students to think, act and feel like a member of their profession. Elements included in the definition by Merton (1957) are to 'think, act and feel like a health professional'. From this point, throughout my thesis, I will italicise the elements of *think, act and fee*l for emphasis.

The original definition from Merton ordered the elements as '*think, act and feel'*, however, I have reviewed this order and use the order of '*think, feel and ac*t'. My decision has been based on my experience in clinical education and my assumptions that on placement students are gaining competence in the thinking element and that their feeling of connection in the clinical placement then supports a student to act as a health professional. Therefore, from this point forth I will refer to '*think, feel and act* as a health professional'. Further details of how I have defined these elements in my research for data analysis coding is provided in Section 4.5.1.

3.5.4 *Think/feel/act* framework

Mylrea et al. (2017) examined the development of professional identity in pharmacy students using the concepts of *think, feel and act* like a health professional embedded in the definition of professional identity I identified when reviewing the literature for my research. I have obtained kind permission from Mylrea et al. (2017) to reproduce their illustration for my research (Refer to Figure 2-3). This illustration shows the overlay of self-determination theory and developing professional identity through beginning to *think, feel and act* like a health professional. The illustration used by Mylrea et al. (2017) brings together influences on professional identity formation I have identified in my literature review and is informed by the definition of professional identity by Merton (1957) – to *think, act and feel* like a health professional. Mylrea et al. (2017) argued that self-determination theory elements of competence, relatedness and autonomy support identity development. They link competence with the development of mastery and thinking like a health professional. Feeling links to

relatedness and the need to have connections with others and acting links to autonomy in organising one's experience and actions. I have considered these links in the development of my focus group questions and data analysis codes.

3.6 ESTABLISHING TRUSTWORTHINESS

It has long been noted that traditional methods of quality control used in quantitative research are not applicable for qualitative research (Hanson et al., 2011; Krefting, 1991; Liamputtong, 2013; Yardley, 2000). A number of conceptual models for evaluating the trustworthiness of qualitative research have been developed (Krefting, 1991; Leung, 2015). Four criteria developed by Lincoln and Guba (1989), are referenced by a number of authors (Graneheim & Lundman, 2004; Hanson et al., 2011; Krefting, 1991; Liamputtong, 2013) have become the 'gold standard' for qualitative researchers evaluating rigour and trustworthiness of qualitative research. These measures to achieve trustworthiness are credibility, transferability, dependability and confirmability (Graneheim & Lundman, 2004; Hanson et al., 2011). To establish trustworthiness for my research I have used the work of Guba and Lincoln (Liamputtong, 2013) and have also considered the concepts for trustworthiness outlined by other authors (Curtin & Fossey, 2007; Elo & Kyngäs, 2008; Krefting, 1991; Leung, 2015; Liamputtong, 2013). Table 3-3 describes approaches I have used to establish trustworthiness for my research.

To establish credibility, researchers need to ensure that they identify and describe those participating in the research (Elo et al., 2014) to establish that their findings can be regarded as truth (Liamputtong, 2013). I have represented perceptions as they were experienced and perceived by participants through the use of representative quotes (Krefting, 1991). Member checking of focus group transcripts provided participants with the opportunity to comment on transcripts and check that data was representative of their experiences (Curtin & Fossey, 2007). My review of the literature and theory generated by previous investigators provided a theoretical context for my research. I consciously decided to limit my research to one health service to enable me to pay close attention to the socio-cultural context where participants worked or were undertaking placements. I also included focus group questions to help understand the impacts of the regional health service context. I have used triangulation of data from more than one data source (document review and focus groups) and participant group (allied health staff, students and new graduates) and

applied skilled focus group techniques to develop deep insight into the phenomena being studied. I have sought to present my findings in a well presented and meaningful format (Kitto, Chesters, & Grbich, 2008) to describe the multiple realities of participants as accurately as possible (Krefting, 1991).

Transferability considers the degree to which research findings can be generalised or applied to other groups, context or settings (Liamputtong, 2013). I have provided thick descriptions of my research processes documenting rationale, research methods, data gathering, and analysis so readers can follow what I did (Curtin & Fossey, 2007). I have described the regional health service context where my research was conducted so readers can determine the transferability of results to their setting and context. I drew on my supervisor's advice and expertise to support my commitment to meet expectations of competence in data collection and in-depth analysis. One supervisor was familiar with the regional health service context, while the other brought an outsider's perspective to considering the research context. Triangulation of data across methods of enquiry (document review and focus groups) and participant groups (health service staff, students, new graduates) was used to achieve a well-rounded understanding of the topic. Researcher triangulation with three researchers analysing data was used to compensate for single researcher bias and capture a holistic view of data (Curtin & Fossey, 2007).

To ensure dependability, the research process must be logical, clearly documented and research findings are shown to "fit" the data that have been collected (Liamputtong, 2013). I have provided a detailed description of my data collection and analysis. More than one member of the research team completed data analysis and I completed peer debriefing with supervisors to review insights during data collection and analysis. The coherence of the fit of the philosophical perspective and research question has been explained in Section 3.1.3. Presentation of preliminary research results at conferences allowed me to check data analysis and gain new insights into my topic from others in the field of allied health and education.

Confirmability ensures that interpretations of findings do not derive from researcher imagination but are clearly linked to data (Liamputtong, 2013). In my research, confirmability was addressed by recording detailed procedures for data collection, analysis, and development of interpretations. I have acknowledged my active participation in the research process (Curtin & Fossey, 2007) and influences of

the researcher, topic and participants (Kitto et al., 2008) using a written journal and supervision meetings

Table 3-3
Ensuring trustworthiness

Trustworthiness	Approaches used in this research
Credibility	• Triangulation of data from more than one data source (document review and focus groups) and participant group perspective (allied health staff, students and new graduates) • Skilled focus group techniques to develop deep insight into phenomena • Consideration of context as the naturalistic setting of regional healthcare at a point in time • Supervisor experience and expertise for peer review • Member checking • Gathering data until no new insights occur
Transferability	• Detailed descriptions of procedures and research methods- setting, sample, and results enable readers to determine whether results are transferable to their setting
Dependability	• Detailed description of research methods • Rigorous methods of sampling, data collection, and data analysis • More than one researcher completed data analysis • Peer debriefing with the research team to review insights during data collection and analysis • Checking of data analysis through several conference presentations with emerging insights gained
Confirmability	• Thick description for recording procedures for data collection, analysis and development of interpretations • Acknowledgement of the researcher as active participant in research process • Reflexivity acknowledging complex influences of the researcher, topic and participants using written journal and supervision meetings

Source: Developed for this research based on Hanson et al. (2011)

3.7 ETHICAL CONSIDERATIONS

3.7.1 Ethical approval

Ethics approval for this research was obtained from University of Southern Queensland Human Research and Ethics Committee (H17REA228) and Darling

Downs Health Human Research and Ethics Committee (HREC/17/QTDD/74). See Appendix F and Appendix G for copies of approval letters. The research met conditions for National Health and Medical Research Council (NHMRC) National Statement on Ethical Conduct in Human Research. All participants received participant information (Appendix H and Appendix I) providing details of the research, anticipated risks and benefits to participation in the research and provided written informed consent prior to participation in focus group discussions (Patton, 2015, p. 497). Participants were encouraged to seek further information to answer questions or concerns before signing the consent form (Appendix J). The health service supported participation in the research during work hours and no payments were provided to participants.

3.7.2 Data protection

Collection of personal contact details from participants with their consent occurred during this research for the purposes of inviting participation on focus group discussions and distribution of final research report. I collected the following personal data for this research:

• Collection of allied health student preferred email address to receive focus group invitation

• Collection of allied health student, staff representatives and new graduate's preferred email address to receive final research report.

Email contact details were stored separately to focus group data. Email contact details for participants indicating their wish to receive the final research report were destroyed following the distribution of the research report.

All data were collected in a non-identifiable manner, identifying details were removed from focus group interviews on transcription and each participant was be assigned a code (NHMRC National Statement on Ethical Conduct in Human Research Section 1). To protect privacy all quotes used in this research and dissemination were de-identified and assigned a focus group descriptor and number and participant number (for example, Focus group descriptor: Director; focus number:1 Participant 2 = Director 1.2).

For the duration of this research, hard copy forms were stored in a locked filing cabinet in the lockable office of the principal investigator. All electronic files were

stored on a password-protected computer in Darling Downs Health research drive on the secure Department of Health, Queensland server. On completion of the research, all paper-based records were stored in the secure research storage situated in the Toowoomba Hospital library. Research documentation will be retained for five years following final publication and then permanently deleted from computer files and hard copies shredded. Data was stored on a password protected secure Department of Health, Queensland server.

3.8 CHAPTER SUMMARY

This chapter explains the philosophy and research paradigm for this study and the rationale for decisions made. I have described how the literature informed the research and introduced the theoretical framework for the study. I have overviewed data collection methods used to address my research questions. My position as an insider in the workplace is considered and strategies used to establish the trustworthiness of the study are provided. Ethics issues and procedures implemented are provided. In the next chapter, I will describe the process of doing the research.

Chapter 4: Doing the research

4.1 CHAPTER OVERVIEW

The previous chapter described the process undertaken to develop the design of my research. This chapter provides details of the procedures for data collection and analysis of data to answer my research questions. I outline procedures for data collection for each phase of the study, processes used for developing a sample and sampling data. The final section explains the framework I have used for data analysis.

4.2 PROCEDURE FOR DATA COLLECTION

I conducted data collection in three phases. Qualitative data was collected from the examination of organisational policies and documents and focus group discussions. A summary of the data collection procedures, tools, and methods for each phase is provided in Table 4-1. Further explanation of each data collection method will be provided within this section.

Table 4-1
Phases of research and data collection methods

Study phase	Data collection procedure	Data collection tools
Phase 1 **Organisational Influences**	Examination of health service clinical education documents and competency assessment tools used during allied health placements in the health service	Content and thematic analysis for review of organisation documents with consideration of their impact on student professional identity (beginning to *think, feel and act* like a member of their profession).
	Allied health staff representative focus groups comprising professional Directors, Clinical Education Support Officers, clinical educators	Semi-structured interview questions designed by the researcher based on the review of literature in the fields of medicine, nursing and allied health examining the development of professional identity in students.
Phase 2 **Allied health student perspectives**	Focus group discussions	Semi-structured interview questions designed by researcher and based on the review of literature in the fields of medicine, nursing and allied health examining the development of professional identity in students.
Phase 3 **Allied health new graduate perspectives**	Focus group discussions	Semi-structured interview questions designed by the researcher based on literature, demographic sheet.

4.2.1 Responsiveness with data collection

During data collection, I endeavoured to allow my approach to be responsive to discoveries and adjusted accordingly (Hanson et al., 2011). Firstly, I had considered including only new graduates who had completed a clinical placement in the health service, however, I decided against this as it would have reduced my pool of new graduate participants. Secondly, I had initially explored using a document review template based on the literature review to analyse documents, however, modified this approach when I chose to use the *think/feel/act* framework (refer to Appendix L). Thirdly, during data analysis from staff focus groups (professional Director, Clinical

Education Support Officers, clinical educators), it became clear that I need to ask students and new graduates additional questions in order to be able to answer all my research questions. I have detailed these amendments to my research approaches in other sections in this chapter.

4.2.2 Data collection Phase 1: Organisational influences

To answer my research question about the organisational influences on the development of professional identity during clinical placement, I collected two forms of data. I reviewed health service clinical placement documents for allied health and conducted focus groups with staff representing three stakeholder groups involved in clinical education (allied health professional Directors, Clinical Educators, and allied health Clinical Education Support Officers).

4.2.2.1 Data collection: Organisational influences. Review of health service clinical education documents

Document analysis is described as 'a systematic procedure for reviewing or evaluating documents - both printed and electronic (computer-based and Internet-transmitted) material' (Bowen, 2009, p. 27). The purpose of document review is to develop an understanding of the meaning of what the document contains and its significance to the phenomena being studied (Mogalakwe, 2009). I used document review to provide data on the context in which the research participants operate and the environment in which students enter on placement; provide supplementary research data and verify findings or corroborate evidence (Bowen, 2009). I chose document review methodology (Mogalakwe, 2009) to analyse documents that contained information on the context in which students were completing their placement (Bowen, 2009).

The document review used in this research was based on the process described by O'Leary (2007). This process included: planning the review (creating list of documents, undertaking groundwork to consider sampling strategy and what type of data to be gathered from the documents); gathering and organising the documents; interrogating the documents, refining the review by modifying plans as required and finally, analysing the data (O'Leary, 2007). Refer to Table 4-2 for a detailed summary of document review actions completed in this research. A list of documents to be reviewed was created, contact made with Clinical Education Support Officers to

arrange access to electronic copies of the documents, documents reviewed using the deductive framework, and data analysed in themes.

Table 4-2
Document review actions

Plan	
Create a list of documents to explore.	• Allied health professions of nutrition and dietetics, occupational therapy, physiotherapy, speech pathology, social work and psychology as per definition of allied health in the broader study • Documents met inclusion criteria including: Information provided to students following their initial contact regarding placement (e.g. welcome email, student handbook); orientation documents (e.g. orientation PowerPoint presentation, student orientation folder); Health service documents (e.g. Darling Downs Health values document) and documents assessing student skills and competency development on placement
Seek ethical approval.	• Documents form part of daily working tools in clinical education • Ethics approval obtained from health service and University
Conduct preliminary groundwork to determine whether documents will be accessible.	• Initial consultations with allied health Clinical Education Support Officers about project aims, and proposed method for access to documents at Clinical Education Support Officers meeting 24 October 2017. Support was received supported by all Clinical Education Support Officers. • Researcher to email Clinical Education Support Officers with a list of requested documents. • Electronic copies of documents requested, if available.
Consider and plan for any translation needs.	• All documents in English
Develop an appropriate sampling strategy.	• Limited number of documents. • Documents in use in Darling Downs Health at a fixed point in time (November 2017-February 2018)
Consider what types of data to gather from the documents.	Thematic data analysis using a deductive framework- *think/feel/act*

Gather	
Gather relevant documents	• List of documents emailed to Clinical Education Support Officers with a request for electronic copies of documents. • Follow inclusion and exclusion criteria
Develop and employ a scheme for organising and managing the documents.	• Complete review template for each document to provide a data overview • Transfer data onto matrix table • Save in research file
Make copies of original documents that can be annotated	• Hard copies of documents were printed and coded using handwritten notes
Review	
Assess the authenticity and credibility of the 'text'.	• Documents were considered to be authentic as they were is current use in the health service and supplied by Clinical Education Support Officers using them
Explore the 'agenda' of the document and look for any biases.	• Document review template noting "implicit" references to professional identity
Interrogate	
Extract background information on author, audience, purpose, style.	• May be noted within the document or may not be available
Explore content	• Document review template
Look for 'witting evidence' (what the document was meant to impart) and 'unwitting evidence' (everything else you can glean from the documents).	• Witting evidence • Unwitting evidence
Reflect/Refine	
View document analysis as an iterative and ongoing process.	• Review of documents both before and after allied health staff focus groups. Read documents first then review focus group transcriptions to get the feel of data
Reflect on any difficulties associated with gathering the data, reviewing the sources, and exploring the content.	• Complete reflective diary
Modify the plan based on your reflections.	• Initial plans to use document review template, revised and deductive framework of *think/feel/act* applied

Gather, review, and interrogate additional documents as needed.	• No additional documents identified or reviewed
Analyse Data	
Extract the data.	• Hard copies of documents analysed using handwritten notes then data transferred to tables in Word documents.

Source: Developed for this research. Based on O'Leary (2007)

4.2.2.2 Data Collection: Organisational Influences. Focus group discussions with allied health staff representatives

Three separate focus groups with a purposive sample of allied health staff representatives were held to explore participant perceptions of how clinical placements support allied health students begin to *think, feel and act* as a health professional. The allied health staff represented the professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, speech pathology, and social work. The three groups of allied health staff included: professional Directors, Clinical Education Support Officers and clinical educators. The three groups were chosen to provide a range of perspectives from professional Directors who provide governance within their profession; experienced clinical educators who provide day to day learning experiences and assessment for students during placement and Clinical Education Support Officers who provide placement coordination and support. Allied health staff focus groups were conducted during December 2017. Details of data collection from allied health professional Directors, Clinical Education Support Officers and clinical educators is shown in Table 4-3.

Table 4-3 *Allied health staff focus groups*

	Focus group number 1. Allied health professional Directors	Focus group number Clinical Education Support Officers	Focus group number 3. Clinical educators
Date conducted	11 December 2018	12 December 2018	12 December 2018
Location	6 Toowoomba	7 Toowoomba	5 Toowoomba, 1 participant linked via videoconference
Participants	6 invited 6 attended	7 invited 7 attended	6 CEs invited: N&D, OT, PT, Psych, SP, SW 4 CEs attended: N&D, OT, Psych, SP
Clinical Profile	Professional governance to services provided in their profession	Support to allied health clinical education	General hospital = 2 Mental health = 1 Rural generalist = 1
Focus group facilitator	External facilitator	External facilitator	External facilitator
Transcription	Transcription service	Transcription service	Transcription service

Abbreviations: CE = Clinical educator; CESO = Clinical Education Support Officer; N&D = Nutrition & Dietetics; OT = Occupational Therapy; PT = Physiotherapy; Psych = Psychology; SP = Speech Pathology; SW = Social Work

Through my education role in the health service, I was known to professional Directors, Clinical Education Support Officers, and some clinical educators, therefore a facilitator external to the health service was employed to conduct these groups. The external facilitator was an experienced researcher with a psychology background from the local university. The role of the focus group facilitator was to moderate and encourage participation in discussion (Patton, 2015). The external focus group facilitator provided me with field notes at the completion of the focus groups.

Staff focus groups for professional Directors, Clinical Education Support Officers were conducted at the largest hospital in health service. Participants at other hospitals across the health service were able to link into the focus group using videoconference technology (refer to Table 4-3). All staff attended the focus group sessions during working hours and only participants and the external facilitator were present during staff focus groups. Table 4-4 provides details of semi-structured interview questions used for the focus groups (Also refer to Appendix M). All focus

groups were audio-recorded using two separate audio-recording devices to insure against data loss due to equipment failure. Focus group sessions lasted, on average between 50 – 60 minutes. Data were transcribed verbatim into Microsoft Word documents by a professional transcription service. De-identified transcripts were returned to participants for checking to ensure their views had been represented accurately. Identifying details were removed and transcripts were stored on password-protected health department servers for the duration of the research. I developed a participant identification system using focus group descriptor and number and participant number (Focus group descriptor: Director; focus number:1 Participant 2 = Director 1.2).

Focus group semi-structured questions

Questions for the professional Director, Clinical Education Support Officer and clinical educator focus groups were developed from review of literature in the fields of medicine, nursing and allied health examining the development of professional identity in students and my experience in allied health clinical education. Focus group questions (Refer to Appendix M, N, O) and rationale for their inclusion are shown in Table 4-4. Questions were reviewed by the research team and agreement reached on questions to be used. The standardised open-ended questions covered perception of the impacts of placement relationships and professional identity socialisation and the impact of health service organisational structures on the development of professional identity. The order of framework elements for focus groups was linked to the definition of *think, act and feel* and subsequently reviewed in the data analysis phase to be: *think/feel/act*.

Table 4-4
Rationale for allied health staff focus group questions

Focus Group Questions	Rationale
1. What is your perception of the impact of clinical placements in supporting students to *think, act and feel* like a member of their profession?	Designed to develop an understanding of perceptions of allied health staff about the impact of clinical placement on developing professional identity
2. How do you think relationships with Clinical Educators impact students in beginning to *think, act and feel* like a member of their profession?	Designed to develop an understanding about perceptions of allied health staff on the influence of clinical educators on developing professional identity

3. How do you think contact with others in their profession (including students) impact students in beginning to *think, act and feel* like a member of their profession?	Start to explore the impact of socialisation into an allied health profession on placement (Cruess et al., 2014; Wald, 2015; Wilson et al., 2013)
4. How do you think contact with staff and/or students from other professions impact students in beginning to *think, act and feel* like a member of their profession?	Explore the impacts of working as a member of the student's profession with members of other professions while on placement (Wald, 2015; Weaver et al., 2011)
5. How do you think contact with patients impact students in beginning to *think, act and feel* like a member of their profession?	Develop an understanding of the impact of patient contact and its influence on the development of professional identity (Jaye et al., 2010; Ó Lúanaigh, 2015; Pitkala & Mantyranta, 2003; Wald, 2015; Wong & Trollope-Kumar, 2014)
6. What are the health service organisational structures supporting student experiences in beginning to *think, act and feel* like a member of their profession?	Explore the significance of placement context and organisational structures on the development of professional identity (Jaye et al., 2010; Walker et al., 2014)

4.2.3 Data collection Phase 2 Focus groups allied health students

I conducted four separate focus groups with a convenience sample of allied health students completing clinical placements in Darling Downs Health to explore student perceptions of how their clinical placements supported them to begin *to think, feel and act* as a health professional. Allied health students invited to participate were from the professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, speech pathology, and social work. I facilitated student focus groups at the largest hospital in health service with a videoconference connection available for participants at hospitals located in more regional settings in the health service. Students from some professions had experience using videoconference technology as they had used this technology during weekly tutorial sessions while on placement. Students attended the focus group sessions during working hours and only participants and the researcher were present during focus groups. Details of data collection from allied health students is shown in Table 4-5

Table 4-5
Allied health student data collection

	Focus group 4. Student	Focus group 5. Student	Focus group 9. Student	Focus group 11. Student
Date conducted	21 March 2018	22 August 2018	3 September 2018	6 September 2018
Location	2 video conference	1 Toowoomba 2 video conference	1 video conference	6 Toowoomba
Participants	2 OT Recruitment: allied health student tutorial held on 19 March attended by 2 OT, 1 PT, 2 SP	3 OT Recruitment: allied health student tutorial held on 13 August attended by 4 PT, 3 OT, 2 SP.	1 SW (unable to attend focus group on 22/08/2018)	2 N&D, 2 PT, 2 SP Recruitment: allied health student tutorial held on 3/09/2018 attended by 4x SP, 2 SW, 2 Psych
Clinical profile	Rural generalist = 2	Outpatients = 1 Rural generalist = 2	Rural generalist = 1	General hospital = 6
Focus group facilitator	Researcher	Researcher	Researcher	Researcher
Transcription	Researcher	Transcription service	Researcher	Transcription service

Abbreviations: N&D = Nutrition & Dietetics; OT = Occupational Therapy; PT = Physiotherapy; Psych = Psychology; SP = Speech Pathology; SW = Social Work

Semi-structured interview questions used for the student focus groups (Refer to Appendix N) and the rationale for their use are described in Table 4-6. While analysing data from allied health staff focus groups, I identified that my original questions did not provide sufficient data or explicitly seek student perspectives on how research findings could improve clinical placements. I, therefore, determined the need to include three additional questions (as shown in Table 4-6). Additional questions asked during allied health student focus groups were:

• How did introduction and orientation documents influence beginning to *think, act and feel* like health professional?

• What are the regional impacts or placement differences and their impact on beginning to *think, act and feel* like health professional?

• What are your suggestions for future placements to support students beginning to *think, act and feel* like health professional?

Table 4-6
Rationale for allied health student focus group questions

Focus Group Questions	Rationale
1. What is your perception of the impact of clinical placements in supporting students to *think, act and feel* like a member of their profession?	Designed to develop an understanding of perceptions of allied health students about the impact of their clinical placement on developing professional identity
2.How do you think relationships with Clinical Educators impact students in beginning to *think, act and feel* like a member of their profession?	Designed to develop an understanding of perceptions of allied health students on the influence of clinical educators on developing professional identity.
3. How do you think contact with others in their profession (including students) impact students in beginning to *think, act and feel* like a member of their profession?	Start to explore the impact of socialisation with members of student's own profession during placement on the development of professional identity (Cruess et al., 2014; Wald, 2015; Wilson et al., 2013)
4. How do you think contact with staff and/or students from other professions impact students in beginning to *think, act and feel* like a member of their profession?	Explore the impacts of working as a member of the student's profession with members of other professions while on placement (Wald, 2015; Weaver et al., 2011)
5. How do you think contact with patients impact students in beginning to *think, act and feel* like a member of their profession?	Develop an understanding of the impact of patient contact and its influence on the development of professional identity. (Jaye et al., 2010; Ó Lúanaigh, 2015; Pitkala & Mantyranta, 2003; Wald, 2015; Wong & Trollope-Kumar, 2014)
6. What are the health service organisational structures supporting student experiences in beginning to *think, act and feel* like a member of their profession?	Explore the significance of placement context and organisational structures on the development of professional identity (Jaye et al., 2010; Walker et al., 2014)
Additional questions asked during allied health student focus groups	
How did introduction and orientation documents influence beginning to *think, act and feel* like health professional?	Explore student perceptions of organisational documents on the development of professional identity
What are the regional impacts/placement differences and their impact on beginning to *think, act and feel* like health professional?	Explore student perceptions of the impacts of regional placement experiences on the development of professional identity
What are your suggestions for future placements to support students beginning to *think, act and feel* like health professional?	Explore student perceptions of suggestions which could be implemented to support future student experiences and the development of professional identity

Focus groups were scheduled within a week after I attended the allied health student tutorial where information about the research was provided and students

invited to indicate their interest to receive an invitation to attend a focus group. Students who indicated interest in attending the focus group were sent an email invitation by the researcher. A total of twenty-two students attended the three allied health student tutorials where they were invited to participate in this research. At the commencement of the focus group, students were invited to complete a demographics sheet to collect placement location data. (Refer to Appendix K).

All focus groups were audio-recorded using two separate audio-recording devices to insure against data loss due to equipment failure. Focus group sessions lasted, on average between 50 – 60 minutes. Data were transcribed verbatim into Microsoft Word documents by a professional transcription service or the researcher (refer to Table 4-7 for details of transcriptions). The decision to use professional transcription was driven by financial and time management considerations. De-identified transcripts were returned to participants for checking to ensure they represented their views accurately. Identifying details were removed and transcripts were stored on password-protected health department servers for the duration of the research. I developed a participant identification system using focus group descriptor and number and participant number (e.g. Focus group descriptor: Director; focus number:1 Participant 2 = Director 1.2).

4.2.4 Data collection Phase 3 Focus groups allied health new graduates

I conducted four separate focus groups with a convenience sample of allied health new graduates working in Darling Downs Health during 2018. Allied health new graduates from the professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, speech pathology, social work were invited to participate in focus groups. While initial plans had been to include only new graduates who had completed a placement in Darling Downs Health and were working in Darling Downs Health at the time of the study, this limited the number of possible participants. All new graduates working in Darling Downs Health at the time of focus group recruitment were subsequently invited to participate in new graduate focus groups. Details of data collection from allied health students is shown in Table 4-7.

Table 4-7
Allied health new graduate data collection

	Focus group 5. New graduate	**Focus group 6. New graduate**	**Focus group 7. New graduate**	**Focus group 10. New graduate**
Date conducted	20 June 2019	11 July 2019	8 August 2019	26 September 2019
Location	2 video conference	2 Toowoomba, 2 video conference	1 Toowoomba	4 Toowoomba
Participants	1 OT, 1 SP 8 invitations sent	4 participants –2 OT, 2 PT 7 email invitations, 3 apologies received	1 OT (unable to attend focus group 6) 2 email invitations, 1 apology received	1 N&D, 1 SW, 2 PT 4 email invitations
Clinical profile	Rural generalist = 2	General hospital = 2 Rural generalist =2	General hospital = 1	General hospital = 4
Focus group facilitator	Researcher	Researcher	Researcher	Researcher
Transcription	Researcher	Researcher	Transcription service	Transcription service

Abbreviations: N&D = Nutrition & Dietetics; OT = Occupational Therapy; PT = Physiotherapy; SP = Speech Pathology; SW = Social Work

I facilitated new graduate focus groups at the largest hospital in health service with a videoconference connection available for participants located at other hospitals in the health service. New graduates were familiar with the use of videoconference technology to link to health service meetings and professional development sessions. Three of the four new graduate focus group sessions were conducted during working hours, with one focus group conducted at the major hospital in the morning prior to the workday commencing. Only participants and the researcher were present during focus groups. Semi-structured interview questions used for the focus groups (Refer to Appendix O) and their rationale for inclusion is shown in Table 4-8.

While analysing data from allied health staff focus groups, I identified that my original questions did not explicitly seek new graduate perspectives on how research findings could improve clinical placements. I, therefore, determined the need to

include two additional questions for the new graduate focus groups (as shown in Table 4-8). These two additional questions sought information about the impact of regional placement experiences on professional identity and explored new graduate suggestions that could be implemented to support future student experiences and the development of professional identity. Additional questions I asked new graduates:

• What are the regional impacts/placement differences and their impact on beginning to *think, act and feel* like health professional?

• What are your suggestions for future placements to support students beginning to *think, act and feel* like health professional?

At the commencement of the focus group, new graduates were invited to complete a demographics sheet demographic from used to collect placement location data (refer to Appendix K).

Table 4-8
Rationale for allied health new graduate focus group questions

Focus Group Questions	Rationale
1. What is your perception of the impact of clinical placements in supporting students to *think, act and feel* like a member of their profession?	Designed to develop an understanding of perceptions of allied health new graduates about the impact of their clinical placements on developing professional identity
2.How do you think relationships with Clinical Educators impact students in beginning to *think, act and feel* like a member of their profession?	Designed to developing understanding about perceptions of allied health new graduates on the influence of clinical educators on developing a professional identity. Expect to hear a range of perspectives given new graduates have completed a number of placements during their pre-entry education
3. How do you think contact with others in their profession (including students) impact students in beginning to *think, act and feel* like a member of their profession?	Start to explore the impact of socialisation with members of new graduate's own profession during placement on development of professional identity (Cruess et al., 2014; Wald, 2015; Wilson et al., 2013)
4. How do you think contact with staff and/or students from other professions impact students in beginning to *think, act and feel* like a member of their profession?	Explore the impacts of working as a member of new graduates' profession with members of other professions while on placement (Wald, 2015; Weaver et al., 2011)
5. How do you think contact with patients impact students in beginning to *think, act and feel* like a member of their profession?	Designed to develop an understanding of impact of patient contact and its influence on development of professional identity. (Jaye et al., 2010; Ó Lúanaigh, 2015; Pitkala & Mantyranta, 2003; Wald, 2015; Wong & Trollope-Kumar, 2014)

6. What are the health service organisational structures supporting student experiences in beginning to *think, act and feel* like a member of their profession?	Explore the significance of placement context and organisational structures on the development of professional identity (Jaye et al., 2010; Walker et al., 2014)
Additional questions asked during allied health new graduate focus groups	
What are the regional impacts/placement differences and their impact on beginning to *think, act and feel* like health professional?	Explore new graduate perceptions of the impacts of regional placement experiences on the development of professional identity
What are your suggestions for future placements to support students beginning to *think, act and feel* like health professional?	Explore new graduate perceptions of suggestions which could be implemented to support future student experiences and the development of professional identity

All focus groups were audio-recorded using two separate audio-recording devices to ensure against data loss due to equipment failure. Focus group sessions lasted, on average between 50 – 60 minutes. Data were transcribed verbatim into Microsoft Word documents by a professional transcription service or researcher (refer to Table 4-7). Identifying details were removed and transcripts were stored on password-protected health department servers for the duration of the project. I developed a participant identification system using focus group descriptor and number and participant number (e.g. Focus group descriptor: Director; focus number:1 Participant 2 = Director 1.2). Transcripts were returned to participants for checking.

4.3 SAMPLE AND SAMPLING

The phenomena being studied guided my sampling approach (Groenewald, 2004). I used both convenience and purposive sampling (Liamputtong, 2013; Tong et al., 2007). Organisational influences were studied using a purposive sample (Liamputtong, 2013) of health service documents and allied health staff whose role supports clinical education of allied health students on placement. Allied health student and new graduate perspectives were obtained using convenience sampling. I invited participation from allied health students and new graduates who were conveniently able and willing to participate in focus groups (Liamputtong, 2013).

4.3.1 Sample and sampling Phase 1: Organisational influences

A purposive convenience sampling approach was used for data collection when exploring the organisational influences on the development of professional identity for allied health students on placement. I sought participants and documents which provided rich and in-depth information about the organisational influences on

professional identity development for allied health students (Liamputtong, 2013; Tong et al., 2007).

4.3.1.1 Sample and sampling Phase 1: Organisational influences: Document review

Clinical Education documents provided to students by the health service prior to and during placement and competency assessment documents were reviewed. Documents reviewed were a purposive, cross-sectional sample of clinical education documents in use in the health service during November 2017-February 2018 (Bowen, 2009; Liamputtong, 2013; Tong et al., 2007). Documents were included based on inclusion/exclusion criteria I developed for this research (refer to Table 4-9).

Table 4-9
Document review inclusion and exclusion criteria

Inclusion	Exclusion
• **Documents used in allied health professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, social work, and speech pathology** • **Health service documents for student welcome, information, orientation, Darling Downs Health student handbooks** • **Documents developed by Queensland Health state-wide clinical education programs adapted for Darling Downs Health context** • **Handbooks, PowerPoint orientation presentations, orientation handbooks** • **Documents in current use** • **Student placement competency assessment documents**	• University produced documents including subject handbooks, practice placement handbooks and manuals • Documents not in current use • Documents from other health professions (e.g. medicine, nursing and other allied health professions)

4.3.1.2 Sample and sampling Phase 1: Organisational influences: Allied health staff focus groups

A purposive convenience sample (Liamputtong, 2013) of allied health staff were identified as being able to provide in-depth knowledge of clinical education. The staff focus groups comprised: Professional Directors providing professional governance; clinical educators providing day to day clinical education for students on placement and Clinical Education Support Officers who coordinate placements. These groups

were able to provide a comprehensive understanding of organisational influences on clinical placements. Three separate focus groups were conducted to enable participants to express their perspectives with freedom from line management and professional management involvement within the group. Refer to Table 4-10 for detail of the clinical education roles of allied health staff participating in focus groups. For inclusion in the focus groups, participants were required to be available to attend a focus group on the scheduled dates in December 2017.

Table 4-10
Composition of allied health staff focus groups

Focus group participants	Role in clinical placement education
Allied health professional Directors from professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, social work, and speech pathology	• Responsible for professional governance and oversight across the health service • Operational manager of Clinical Education Support Officers and some Clinical Educators
Clinical Education Support Officers (CESOs) a from professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, social work, and speech pathology and the allied health Clinical Education portfolio holder)	• Health service staff responsible for clinical education coordination • clinical educator and student support • Oversight of placement quality and capacity building
Experienced allied health clinical educators from professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, social work, and speech pathology	• Health service clinicians who take on the primary responsibility for the student supervision and education during their placement. clinical educators were considered for inclusion in the study if they had greater than two years of clinical experience and had supervised student placements. (In their first two years of practice new graduates are not required to take on responsibility for student education)

Recruitment allied health Directors

I recruited allied health professional Directors via email to their Queensland Health staff email account inviting them to participate in a focus group discussion on 13 December 2017. Where the Director was unable to attend due to leave, the person acting in their role participated in the focus group. One week prior to the focus group I sent an email appointment to participants with focus group details and participant information sheet (refer to Appendix H). All participants accepted the invitation to participate in the focus group. Written consent was obtained at the commencement of the focus group.

Recruitment of Clinical Education Support Officers

Allied Health Clinical Education Support Officers and the allied health Clinical Education portfolio holder, were recruited via email I sent to their Queensland Health staff email account inviting them to participate in a focus group discussion on 11 December 2017. A copy of the project Participant Information Sheet was included in the email invitation (refer to Appendix H). All participants accepted the invitation to participate in the focus group. Written consent was obtained from all participants in the Clinical Education Support Officer focus group at the commencement of the focus group.

Recruitment of allied health clinical educators

I requested allied health Clinical Education Support Officers to suggest names of clinical educators from their profession who could be invited to participate in a focus group. I sent an email invitation to participate in the focus group on 12 December 2017 to the clinical educator's Queensland Health staff email account. If the clinical educators was unable to attend the focus group, I progressed down the list provided by the Clinical Education Support Officer until a clinical educator from that profession was available to attend. Clinical educators were considered for inclusion in the study if they had greater than two years of clinical experience and had supervised student placements. In their first two years of practice allied health staff are not required to take on the role of clinical educator for student education. A Participant Information Sheet was included in the email invitation (refer to Appendix H). A Clinical Educator from all allied health professions accepted the invitation to participate in a focus group. Written consent was obtained from all participants in the clinical educator focus group

at the commencement of the focus group. Participants joining the focus group via videoconference emailed written consent forms to me prior to the focus group.

4.3.2 Sample and sampling Phase 2 Allied Health student experiences

A convenience sample (Liamputtong, 2013) of allied health students was recruited based on allied health students on placement at the time of scheduled allied health student tutorials in 2018 and willingness to participate in the research.

As agreed with the health service in Human Research and Ethics Committee Site Specific Assessment, I attended three allied health student tutorials during 2018 (19 March 2018; 13 August 2018 and 3 September 2018) and provided an overview of research and invitation to participate (refer to Appendix I). Students interested in receiving an invitation to participate in the focus group provided a contact email address using the consent form (refer to Appendix J). Students attending the tutorial via videoconference were invited to email me with contact details if willing to participate in the research. Following attendance the student tutorial, I sent an email invitation to participate in the focus group to students' preferred email account, prior to the scheduled focus group. Written consent was obtained from all participants in the student focus groups at the commencement of the focus group. Participants joining the focus group via videoconference emailed written consent forms to me prior to the focus group.

4.3.3 Sample and sampling Phase 2 Allied Health new graduate experiences

A convenience sample of allied health new graduates was recruited based on their availability and willingness to participate in the research (Liamputtong, 2013). I liaised with allied health Clinical Education Support Officers from professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, speech pathology, social work to identify allied health new graduates working in Darling Downs Health during May 2018. A total of 52 new graduates were identified by allied health Clinical Education Support Officers as working in Darling Downs Health comprising nutrition and dietetics (n=2), occupational therapy (n=10), physiotherapy (n=16), psychology (n=9), speech pathology (n=6), and social work (n=9). I sent emails to 44 new graduates using their Queensland Health staff email account with an invitation to participate in a focus group. The participant information sheet and consent form were attached to the email invitation. At the time of emailing new graduates, only

44 new graduates were listed on the Queensland Health email address list indicating that eight of new graduates originally identified had left the health service.

Where new graduates responded and indicated their willingness to attend a focus group, I sent an Outlook email appointment with focus groups details, Participant information sheet and consent form (Refer to Appendix H and Appendix J). To further support recruitment and increase the response rate, I attended nutrition and dietetics, physiotherapy, occupational therapy, and social work new graduate support meetings on 6 June 2018 to provide information about the study and invite new graduates to participate in scheduled focus groups. I also used face to face conversations with new graduates at the main hospital to provide invitations to participate in the research when incidental contact arose. Reminder emails were sent to individuals one week prior to the scheduled focus group. Written consent was obtained from all participants in the new graduate focus groups at the commencement of the focus group. Participants joining the focus group via videoconference emailed written consent forms to me prior to the focus group.

4.4 DATA ANALYSIS

Data from this study were analysed using Braun and Clarke's six-step process of thematic analysis (Braun & Clarke, 2006; Braun et al., 2019; Buetow, 2010). I chose this method to analyse data as it provided a clearly described method of identifying patterns of meaning to answer my research questions. It also provided a method of focussing across the data set enabling me to scan data and develop a sense of shared meaning and experiences.

The steps I took for thematic analysis are shown in Table 4-11. These steps were: familiarisation with the data; succinct coding of data; searching for themes using *think/feel/act* framework; reviewing themes; defining and naming themes; and writing up findings (Braun & Clarke, 2006; Braun et al., 2019). I conducted coding by reading transcripts and documents to get an overall sense of the data and jotting notes. A list of initial codes was identified using the think/feel/act framework. The data was then searched for themes in codes and themes mapped in relation to research questions. Table 4-11 shows themes and their descriptors. Further subthemes were refined and named as described in sections 5.4.3, 5.4.4 and 5.4.5 Review of themes and subthemes was conducted in consultation with supervisors.

Thematic analysis is described to straddle three main elements which necessitate a researcher make choices to inform data analysis (Braun & Clarke, 2006). Data coding and analysis can be an inductive process (driven from the data/bottom up) or deductive approach applying theoretical knowledge or framework (top down) (Braun & Clarke, 2006; Braun et al., 2019). I chose to use a deductive framework for thematic analysis using the definition of professional identity applied for this study- to *think, feel and act* as a member of the profession'. In this research, I used a constructivist lens to examine how the world is constructed. The third decision involves the 'level' at which themes will be identified - at an experiential level or with a critical orientation (Braun & Clarke, 2006; Braun et al., 2019). Both experiential (understanding how participants understood the phenomena) and critical orientations to data were used for this research.

Table 4-11

Thematic analysis steps applied in this research

Thematic analysis step	Actions taken in this study
1. **Familiarisation with data**	• Accuracy of transcripts checked against audio recordings. • Transcripts read and re-read • Points of interest noted • Researcher perspective considered (personal experiences brought by the researcher noted in reflective diary) • Consideration of how participants make sense of their experience. • Information relevant to research questions noted
2. **Generate initial codes**	• Deductive theory (derived from literature *think/feel/act* framework) applied to data • Codes used to capture both semantic/obvious and latent/ underlying implicit meanings • Items coded that potentially answer the research question
3. **Search for themes**	• Data searched for themes in codes which capture aspects important to research questions • Themes generated • Data reviewed to identify areas of similarity/overlap • Themes mapped in relation to research questions • Consideration of how themes work together to tell the overall story of data
4. **Review themes**	• Themes reviewed for how they answer research questions • Themes checked against extracts of data and explored to consider whether the theme worked in relation to the data

		• Amount of data to support themes checked to determine if the theme is "thick" or "thin" • Coherency of themes checked to ensure they are not too wide-ranging and diverse
5.	**Define and name themes**	• Themes defined clearly to present their central idea • Research questions answered • Extracts selected to describe what is interesting and why
6.	**Produce the report**	• Themes summarised - core issue and brief extracts to provide specific examples • Conclusions drawn across the whole analysis

Source: Developed for this research based on Braun and Clarke (2006) and Braun et al. (2019)

4.4.1 Responsiveness in data analysis

In my initial study design, while I had determined the use of thematic analysis would best enable me to answer my research questions, I had not determined whether to use a deductive or inductive approach (Braun & Clarke, 2006; Braun et al., 2019). In the early stages of my research, I developed a document review template based on my literature review (refer to Appendix L) and had planned to use an inductive framework for thematic analysis. Following further exploration of the literature, I decided to use a deductive framework for analysis linked to the definition of professional identity used for this study. Due to the workplace-focussed and applied nature of professional doctoral research, I made this decision as I felt this would be easy to describe and become memorable when explaining results and actions which could be implemented in the workplace. The deductive framework I chose was based on the work of Mylrea et al. (2017) exploring the development of professional identity in pharmacy. It is also based on the definition from Merton (1957) of professional identity used for my research: 'to *think, act and feel* like a member of the profession' (Dall'Alba, 2009; Merton, 1957) which I have subsequently re-ordered to the *think/feel/act* framework. The conceptualisation of the links between self-determination theory and the development of professional identity illustrated by Mylrea et al. (2017) immediately resonated with me as a simple way to visually represent the concepts of professional identity (Refer to Figure 2-3). I determined that using this framework would bring consistency in the use of language and be a way to easily explain my findings to my audience

Throughout my study during my data analysis, I was able to progressively present my findings at allied health and regional health conferences. These presentations affirmed my decision to use the *think/feel/act* deductive framework as it helped provide a framework for describing my study findings. The 2018 SHAPE International Symposium (Society for Health Administration Programs in Education) was attended by university representatives in the fields of education and health administration. Questions at the end of my presentation at the SHAPE Symposium examined the impacts of regional placement experiences on professional identity. The 2018 Services for Rural and Remote Allied Health (SARRAH) conference was attended by health professionals, university representatives and policymakers with an interest in rural and remote service delivery. Questions following my presentation at SARRAH queried actions that could be taken to support students on placement. At the 2018 Occupational Therapy Association (Queensland/Northern Territory) conference, a university colleague asked about how the *think/feel/act* elements in the diagram by Mylrea et al. (2017) intersected to develop professional identity. Queensland Health, Allied health Professions Office clinical education training day, October 2018, was attended by a range of allied health clinical educators and University staff. Their questions following my research presentation examined workplace actions that could be implemented to support professional identity development. Reflection on these presentations and audience questions further supported my consideration of how to represent my research through conceptualising professional identity in diagrammatic format.

4.4.2 Framework for analysis- *think/feel/act*

Transcripts were analysed using thematic analysis with a deductive framework (Braun & Clarke, 2006; Braun et al., 2019). An overview of the *think/feel/act* framework I used for analysis with a definition for each element of analysis, codes, and descriptors is shown in Table 4-12. I used this table to underpin my data analysis to provide a consistent approach to interpreting the data.

Table 4-12
Framework for thematic analysis

Element of analysis	Elements	Code	Descriptors
***Think* /competence**	Students need to be effective in dealing with the environment through knowledge and skill development	Quality learning	Placement experiences and structures supporting student learning and the development of competence. Beginning to think like a health professional and develop competence in working as a health professional. Expectations of student learning on placement.
***Feel* /relatedness**	Self-determination theory describes the need to have a close, affectionate relationship with others; others listening and responding	Socialisation/ Connectedness *'the vibe'*	Socialisation, relationships, and connections with Clinical Educators, members of their own profession, other professions, and patients. May be described by participants as positive or negative.
***Act/* autonomy**	Students supported to explore, take initiative, develop and implement solutions in practice.	Gaining independence – *'unzipping the student suit'*	Gaining skills and independence in providing services or care as a health professional. Being viewed by their own profession, other professions or patients as a contributor to health service delivery. Self-directed actions supporting learning (e.g. supervision, reflection).

4.5 CHAPTER SUMMARY

This chapter explained the processes used in conducting my research. It explained sampling and data collection and the framework for data analysis – *think, feel and act* like a health professional. In the next chapter, my analysis of data will present the reader with patterns of results and how they are analysed for relevance to the research questions.

Chapter 5: Using my results to modify a framework for professional identity development

5.1 OVERVIEW OF CHAPTER

In this chapter, I present data and provide analysis of this data collected using the methodology outlined in Chapters 3 and 4. When referring to participant quotes, I will use italics to distinguish their words from the remainder of the text. I provide further analysis of data collected within the context of the literature referenced in Chapter 2. I also explain how I have used my analysis of results to modify the framework for professional identity development described by Mylrea et al. (2017). In Chapter 6, I will discuss these results in the context of a regional health service setting.

5.2 REFINING THEORETICAL FRAMEWORK

Throughout the course of this research, my work has evolved from referring to professional identity to using the statement by Merton (1957) that professional identity is to *think, act and feel* like a health professional. This has been influenced by my reflections on participant comments, feedback from conference presentations and discussion during meetings with my supervisors. During initial discussions about my research project within the health service, several colleagues suggested that professional identity is a 'problem' for some professions more than others. All allied health professions have engaged in my research focus group discussions about how clinical placements can support the development of professional identity. Developing professional identity is essential for all health professionals as evidenced by the number of studies examining professional identity across allied health professions (Boehm et al., 2015; Clarke et al., 2014; Crossley & Vivekananda-Schmidt, 2009; Dancza, 2016; Davis, 2006; Hammond et al., 2016; Harrison & Healy, 2016; Herbert & Ashby, 2015; Ikiugu & Rosso, 2003; Kearns & McArdle, 2012; Lindquist et al., 2006; Lordly & MacLellan, 2012; Moorhead et al., 2016; Roulston et al., 2018; Wiles, 2013). Like Wiles (2013), I have determined that professional identity can be a confusing concept, however, the definition by Merton (1957) helps to clarify the elements of professional identity formation and has guided my investigation. Using

the definition by Merton (1957) has enabled me to answer the research questions by substituting *think, feel and act* as a health professional as a way of explaining what I have chosen to mean by professional identity.

5.3 DESCRIPTION OF DATA COLLECTED

5.3.1 Description of research participants

To obtain data to answer my research questions, participants included: staff supporting clinical education, students and new graduates from allied health professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, social work, speech pathology. (Refer to Tables 5-1, 5-2, 5-3, and 5-4 for participant details). Staff supporting clinical education included in the research were Clinical Education Support Officers, professional Directors, and clinical educators. Clinical Education Support Officers are responsible for clinical education coordination across the health service including student placements and learning activities. One Clinical Education Support Officer is employed for each allied health profession. Professional Directors are responsible for all aspects of professional governance and practice, including clinical education, for their profession within the health service. Clinical Educators are clinicians who had greater than two years of clinical experience and took on the primary responsibility for student supervision and education during their placement.

Tables 5-1 and 5-2 provide details of research participants by profession and role. A total of 40 allied health staff and students participated in this research project. Six allied health professional Directors from the professions of nutrition and dietetics, occupational therapy, physiotherapy, psychology, social work and speech pathology participated in a focus group. The allied health Clinical Education Support Officer focus group was attended by seven Clinical Education Support Officers representing nutrition and dietetics, occupational therapy, physiotherapy, podiatry, psychology, social work and speech pathology. The seventh participant in the Clinical Education Support Officer focus groups was the clinical education sponsor for allied health. Four Clinical Educators from nutrition and dietetics, occupational therapy, psychology and speech pathology attended the focus group for Clinical Educators. A total of twelve allied health students participated in four focus groups. Students represented the allied health professions of nutrition and dietetics (n=2), occupational therapy (n=5),

physiotherapy (n=2), speech pathology (n=2) and social work (n=1). New graduates (n=11) from the professions of nutrition and dietetics (n=1), occupational therapy (n=4), physiotherapy (n=4), speech pathology (n=1) and social work (n=1) participated in one of four focus groups.

Over half of the participants (n=23) were allied health students and new graduates. New graduates were considered for inclusion if they were working in the health service within their first two years of practice in their profession. Occupational Therapy represented the largest number of participants (n=12). The smallest professional representation was psychology, (n=3) comprising psychology staff, with no psychology students or new graduates participating.

Table 5-1
Research participants by role

Participant role	Number of participants
Professional Director	6
Clinical Educator	4
Clinical Education Support Officer	7
Allied Health new graduate	11
Allied Health student	12

Note: The clinical education sponsor who reports to Executive Director of Allied Health about allied health clinical education attended the Clinical Education Support Officer focus group.

Table 5-2
Research participants by Allied Health Profession

Allied health profession	Number of participants
Nutrition & Dietetics	6
Occupational Therapy	12
Physiotherapy	8
Psychology	3
Speech Pathology	6
Social Work	4

5.3.2 Description of data collected Phase 1: Organisational documents

I reviewed a total of twenty clinical education documents (refer to Appendix P). These documents comprised competency and organisational documents that met the inclusion criteria for review (as listed in Table 4-9). I considered that documents included in this review were authentic given the fact that they were in current use at the time of my research (Miller & Alvarado, 2005).

I reviewed seven competency documents. Competency assessment documents are used to provide formative and summative feedback and assessment during clinical placements. They are formal assessment tools used to evaluate students undertaking professional practice placements in order to certify they meet the university requirements for obtaining the clinical degree. The assessment tools are provided to the workplace by universities who have the final oversight for student academic outcomes resulting from their clinical placement. For some professions (nutrition and dietetics, psychology, and social work) the competency assessment tool was authored by the University, while for the remaining professions (occupational therapy, physiotherapy, and speech pathology) the competency tool was authored by the University in collaboration professional associations and standardised for use throughout the profession (Rodger et al., 2016; Turpin et al., 2011).

Clinical education documents are more informal documents used within the allied health professions in the health service setting to provide students with information in relation to their placement, set expectations for student behaviour and learning and provide orientation to the workplace setting. These documents do not directly contribute to university assessment requirements for students. I examined thirteen organisational documents (including student orientation documents, orientation presentations, and student handbooks). A total of five orientation documents and student handbooks were adapted from state wide clinical education program documents by health service Clinical Education Support Officers. Refer to Appendix Q which provides further details of author, purpose and target audience for each document reviewed.

5.3.3 Description of data collected Phase 1: Allied health staff focus groups

Seventeen allied health staff participated in three separate focus groups. Refer to Table 5-3 for participant data for allied health staff focus groups.

Table 5-3
Participant data allied health staff focus groups: professional Directors, Clinical Education Support Officers, clinical educators.

Focus group	Participant information
Focus group 1 **Allied Health Professional Directors (n=6)**	
Professions	Physiotherapy, Speech pathology, Occupational Therapy, Psychology, Social Work, Nutrition & Dietetics
Gender	Male=1 Female=5
Experience in Director role	>1year - 13.5 Years Average 5.9 years
Focus group 2 **Allied Health Clinical Education Support Officers (n=7)**	
Professions	Physiotherapy, Speech pathology, Occupational Therapy, Psychology, Social Work, Nutrition & Dietetics, Podiatry (Clinical Education Sponsor)
Gender	Male=1 Female=6
Experience in Clinical Education Support Officer role	>1 year - 12 years Average 7 years
Focus group 3 **Allied Health clinical educators (n=4)**	
Professions	Speech pathology, Occupational Therapy, Psychology, Nutrition & Dietetics
Gender	Male=0 Female=4
Experience in clinical role	7 years - 22 years Average 16.3 years

Group 1 comprised allied health professional Directors from nutrition and dietetics, occupational therapy, physiotherapy, psychology, speech pathology, and social work. Professional Directors from all allied health professions were represented in the research. Five female and one male professional Director participated. Experience in the Director role ranged from less than one year to 13 ½ years.

Group 2 included six allied health Clinical Education Support Officers and one podiatrist who holds the clinical education portfolio for allied health in the health service. In the Clinical Education Support Officer focus group, all allied health professions were represented with one male and six females participating. Experience in their Clinical Education Support Officer role ranged from less than one year to 12 years.

The third group was comprised of four female Clinical Educators. Experience as a Clinical Educator ranged from seven to 22 years. The professions of social work and physiotherapy were not represented in the Clinical Educator focus group.

Transcripts were analysed using thematic analysis with a deductive framework (Braun & Clarke, 2006; Braun et al., 2019) as described in Table 4-12.

5.3.4 Description of data collected Phase 2: Allied health student focus groups

Twelve allied health students participated in four focus groups. Participants in allied health student focus groups were: nutrition and dietetics (n=2), occupational therapy (n=5), physiotherapy (n=2), speech pathology (n=2) and social work (n=1).

My review of the literature indicated that factors such as gender, family experiences in healthcare and previous roles in healthcare impacted professional identity development. To capture this information, I developed a demographics form that was completed by students at the commencement of focus groups (see Appendix K). All allied health students who participated in focus groups were completing a clinical placement in the health service where the research was conducted. One student had a previous role in healthcare as an allied health assistant. Three of the twelve students (27%) had a family member working in healthcare. Three students (27%) had completed a regional placement in addition to their current placement in Darling Downs Health. The caseloads for current placements reported by the students were: rural generalist (n=4); rehabilitation (n= 3); mental health (n=1) and inpatients (n=3). I have not undertaken any further analysis of demographics factors and their potential impact on the development of professional identity within this research. Demographics have been provided for descriptive purposes only.

Students represented all allied health professions, except psychology. The emphasis of psychology clinical placements to attain face to face contact with clients often results in non-clinical activities not being considered a priority by psychology

students (K. Troy, Clinical Education Support Officer, personal communication, October 8, 2018).

5.3.5 Description of data collected Phase 3: Allied health new graduate focus groups

Eleven allied health new graduates working in their first two years of practice in their profession participated in four focus groups. New graduates from the professions of nutrition and dietetics (n=1), occupational therapy (n=4), physiotherapy (n=4), speech pathology (n=1), and social work (n=1) attended. No psychology new graduates participated. Refer to Table 5-4 for demographic details for allied health new graduate focus groups.

Table 5-4

Demographic details for allied health new graduate focus groups

Allied Health New Graduates (n=11)
4 Focus groups conducted
Physiotherapy (4), Speech Pathology (1), Occupational Therapy (4), Social Work (1), Nutrition & Dietetics (1)
73% (n=8) completed a clinical placement in DDH
81% (n=9) completed regional placement of 5-10 weeks at any location
n=0 previous role in health care
63% (n=7) have family member in healthcare
Current area of practice (as reported by new graduates): • General physical n=6; • Rural generalist n=3; • Paediatrics & acute n=1 • Aged care n=1

Demographic details, based on my literature review of factors impacting on the development of professional identity, were collated from the demographics sheet completed by new graduates at the commencement of each focus group. Eight out of the eleven participants (73%) had completed a clinical placement in Darling Downs Health. Nine participants (81%) had completed a regional placement of 5-10 weeks duration at any regional location. None of the participating new graduates had previously worked in healthcare. Seven of the new graduates (63%) reported a family member also working in healthcare. New graduates reported their current area of clinical practice as: general physical (n=6); rural generalist (n=3); paediatrics (n=1)

and acute care (n=1). Further analysis of impact of demographic factors on results has not been undertaken within this research.

5.4 FINDINGS

I continued reviewing my developing revisions of the *think/feel/act* framework for professional identity based on the work of Mylrea et al. (2017) as I examined my data to answer my research questions. In the following sections, I describe my results using the *think/feel/act* framework I developed for my research.

5.4.1 Triangulation of results

In this section, I triangulate data collected to answer my research question: 'What are the critical experiences that influence the development of professional identity for allied health students during clinical placement in a regional health service?' To answer this question, I drew on the definition of professional identity I have used for my research, 'beginning to *think, act and feel* like a member of a profession' (Merton, 1957, p. 7) which provided the framework for my data analysis and was described in Chapter 4. I have used tables to map data for each research question by mapping participant roles in clinical education across the *think/feel/act* framework (Castleberry & Nolen, 2018; Miles & Huberman, 1994). All data sources, document review, and focus groups were able to be defined using the *think/feel/act* framework as shown in Table 5-5. Appendices S and R provide details of mapping competency units across allied health documents and clinical education documents using the *think/feel/act* framework. Using tables to map data, I have identified areas of overlap and difference in results from allied health staff supporting clinical education, students and new graduates. I have continued to build on my modifications to the framework by framework with illustrations of this shown in Figure 6-4.

Table 5-5

Mapping all data sources using the think/feel/act framework

Data source	Framework element		
	Think	Feel	Act
Organisational documents	X	X	X
Allied health staff focus groups	X	X	X
Allied health student focus groups	X	X	X
Allied health new graduate focus groups	X	X	X

Source: Developed for this research based on Miles and Huberman (1994)

5.4.2 Overview of results

To answer my overall research question, I report on the placement influences supporting allied health students to *think, feel and act* as a health professional. I have presented the triangulated results from all forms of data using the *think/feel/act* framework. The *think* theme and subtheme is presented first, with the *feel* and *act* with and overview of themes and subthemes following.

The importance of clinical placements for student professional identity formation was described by a clinical educator: "*I think the impact of clinical placement is ultimately everything about how it makes them come and grow to be a professional*". (Clinical Education Support Officer 3.3)

To illustrate how clinical placement learning supports students to *think, feel and act* like a health professional, I have drawn on representative quotes from three participants which, I believe, sum up each of the framework elements

• *Thinking* describes the unique learning experiences which provide skill development and development of profession-based competence by students. This concept is summed up by one student who said "*You wouldn't get that if you were watching a lecturer. You can only get that from being on the ground*." (Student 4.1)

• *Feeling* connected in the workplace with clinical educators and others in their profession and not feeling like a burden was illustrated by a student who commented that in the health service "*it's like we're an asset to them rather than actually just another thing they have to drag aroun*d". (Student 8.2)

• *Acting* like a health professional through the development of independence and autonomy on placement was described in the following analogy provided by a staff member:

> *I do a little spiel about you might be sitting here today a bit nervous, you're feeling more like a student. I'm hoping as the weeks go on - I kind of talk about this analogy of unzipping their student suit and at (sic) the end they step out of it and I want them to leave here feeling like a speech pathologist.* (Clinical Education Support Officer 2.4)

5.4.3 Findings: *Thinking* like a health professional

The *thinking* theme can be summed up as placement learning experiences to support the development of competence as a health professional. Five subthemes were identified in the *thinking* theme:

- Learning supported by clinical educator collaboration and relationship
- Learning in the workplace
- Learning through working with patients
- Learning underpinned by expectations
- Learning experiences '*in the country'*

Differences across the data sources were noted (Refer to Table 5-6).

Table 5-6
Findings: Thinking like a health professional

Data source	Themes
Organisational influences- Documents	Documents • Learning supported by clinical educator collaboration and relationship • Learning within the workplace • Learning through working with patients • Learning underpinned by expectations
Allied health staff focus groups	Focus groups • Clinical educator supporting learning • Balance learning opportunities • Developing knowledge for practice • Applying professional theory

Students	• Hands-on experience • Clinical educator supports learning
New graduates	• Clinical educator expectations and supporting me to reach them • Negative experiences

Within documents the *thinking* theme described learning opportunities during placement which support students to develop knowledge for practice. Allied Health staff focus groups highlighted aspects of placement organisation that support learning including the student-clinical educator relationship and their collaboration with students for learning; learning about the workplace and expectations underpinning learning. Clinical educators explained how they planned and balanced students learning experiences in a regional setting to expose them to as many experiences as possible, such as inpatient wards, outreach visits, overnight trips and a variety of patient age groups and clinical presentations. Students and new graduates placed more emphasis on clinical educator actions and learning experiences available on placement. New graduates were the only group to explicitly describe negative impacts on thinking and learning experiences.

5.4.3.1 Learning supported by Clinical Educator collaboration and relationship

In documents and all focus groups, the importance of student relationships with their clinical educator was identified. References to this included: clinical educator attitudes and actions, supporting student learning and their development of identity as a professional. Ways to enable student-clinical educator relationships on placement were reported by participants as clinical educators collaborating with students to identify learning goals; providing feedback and using supervision sessions to support learning. Students noted ways clinical educators support them to develop clinical reasoning for patients care, including equipping students to make their own decisions, asking reflective questions, supporting students to become their "*own therapist*" and not a "*cookie-cutter*" version of the clinical educator and using unexpected learning opportunities. Attributes of clinical educators identified by participants to support

learning included: respect and trust in students; setting high expectations of student performance; being supportive; letting students explore and feel their own way through situations; encouraging and creating a safe environment for students to start making decisions as emerging therapists.

One student summed up the importance of student relationships with their clinical educator. " *Having the support* [from clinical educator] *definitely really… gets you in that right direction, whereas not having the support just doesn't really do anything for your confidence.*" (Student 11.3) New graduates described how clinical educators supported learning by taking "*the time to find what your strengths were and what your areas of weakness were so they could try to build on your capacities*." (New graduate 5.2) Another participant explained: "*I think she* [clinical educator] *did really well with having these really high expectations and supporting me to reach it and then continuing to just build and so it made me work harder*." (New graduate 6.4)

Students reported a variety of ways clinical educators support learning including: empowering students to take responsibility for their own learning; provide opportunities for students to observe the clinical educator; clinical educators asking reflective questions; mentoring and supervision. A student recounted the role played by the clinical educators:

> *sometimes it can feel like they* [the clinical educator] *want you to become a 'mini me' but she's* [clinical educator] *very good at nurturing us as emerging clinicians like you know, as encouraging you to be like authentic in your role even though you still have a lot of parts that you still need to ask questions on, but she's very good at encouraging us to keep going towards it*. (Student 4.2)

Students explained valuing clinical educator's supervision to support reasoning, through allowing them to explore problem-solving and develop plans for patient care. This quote illustrates the reports of several students:

> *I think a lot of it comes back to that mentoring, that supervision, that you can't buy that. You can't buy having somebody who's been in the profession on the ground for quite some time and evaluate what they're doing and let you explore and feel your own way through*. (Student 9.1)

Other actions which supported learning are exemplified in the following quotes: "*understanding what it is like to work in the health system*" (New graduate 5.2);

”*ability to have that open discussion about a case like you would with a peer*” (New graduate 5.1); the way clinical educators explain things, encouraging students to observe and ask questions, being encouraged to work shadow with others in the profession and having clinical educators ”*share their experiences like as a student and when they started out*.” (New graduate 10.3)

The Psychology Clinical Practicum Competencies Rating Scale explicitly states students must work collaboratively with their supervisor and accept supervisory input. Other documents, such as social work orientation documents and Occupational Therapy Student Handbook, encourage students to work towards developing a collaborative relationship with their clinical educator.

Professional Directors identified a number of clinical educator attributes contributing to quality learning. These include acting as a role model, setting expectations, providing quality feedback, ability to adapt to students learning style, being knowledgeable about their own profession and their ability to reflect and communicate well. One professional Director explained the importance of clinical educators:

> *Good supervision would be one of the factors, … a good supervisor that supports the development of the individual and also has that ability to be open with the student and that they're learning, they're finding their way. Especially for psychology because we do four years of study and then the placement is the first time, they* [the student] *ever see anyone. So, having a good supervisor is really important*. (Director 1.1)

Documents present ways students take responsibility for their learning by asking questions, asking for help and seeking to expand their knowledge through feedback and reflection. The occupational therapy student orientation manual specifies students are: “*to record feedback given by CE* [clinical educator] *and to actively work towards addressing this and implementing strategies accordingly*.” The development of a learning contract is referenced by all professions in placement documents. The speech pathology student manual states:

> *as your course information outlines, you are required to develop a clinical contract with your CE/s* [clinical educator/s]. *We encourage you to reflect on your previous clinical experiences and the standards expected in the marking*

criteria as you draft your contract. This contract will need to be discussed, completed and signed in the first two weeks of your placement.

A new graduate identified how negative experiences impacted on their placement:

I had one placement where there was very minimal supervision, it was just like, "You're here to get through our caseload. Just get into it." Not being questioned really on what you're doing. Not being challenged by the CE [clinical educator] *at all. It didn't help. I felt like that was my placement and it wasn't enjoyable at all because I was just like struggling through the whole thing.* (New graduate 6.2)

5.4.3.2 Learning within the workplace

Documents and focus groups highlighted opportunities for learning in the workplace during placements. This included a reference to learning about the roles of other health professionals; participation in student tutorials; attending professional development sessions and learning about the health system and non-clinical aspects of practice. One new graduate explained the value of work shadowing with other professions: "*I also think working with other disciplines taught me a lot about my job as well.*" (New graduate10.4) Another participant added how shadowing with others in the workplace supported their patient care: "*I did some shadowing on speech and what they do and that kind of helped me then in my assessments of patients, like ask the questions that would also help them.*" (New graduate 10.1)

Document references to learning about the workplace included references to completion of mandatory training modules prior to placement and learning about workplace policies and procedures such as Code of Conduct; privacy and confidentiality requirements; documentation guidelines and personal, co-worker and patient safety. An overview of the health service, department structure and staff roles were also provided in orientation documents. Expectations of student interactions in the workplace are listed in the health service values document as "*being present and engaged in meetings*" and "*being curious and enquiring and advocating for their professional role*". Learning from others in the workplace through observing their treatment, participation in multidisciplinary team activities such as case conferences and training opportunities was referenced. Formal workplace learning opportunities

such as student tutorials and attendance at profession-based meetings and training was encouraged.

Student learning was guided by the development of learning goals with their clinical educator. One clinical educator noted: *"in psychology the clinical educator plays a fairly important role in talking to the student about their interests, and their goals for the prac* [placement] *to line up a work area that might help them to achieve those goals…*" (Clinical educator 3.4) Clinical educator placement activities described by all allied health staff groups as underpinning learning were: facilitating clinical reasoning, feedback and supervision. Several participants in each of the allied health staff focus groups also described learning experiences provided by the health service such as student tutorials and students attending professional development events. Clinical educators identified the role played by Clinical Education Support Officers in supporting learning. They explained that Clinical Education Support Officers were involved in placement preparation, orientation, and providing weekly tutorial/education sessions. Clinical Education Support Officers provided student orientation to "*learn about how Queensland Health as an organisation works.*" (Clinical educator 3.3) Another clinical educator explained that "*they also have the CESO* [Clinical Education Support Officer] *that they can go to. It's not just one point of contact… getting that perspective from different people as well*." (Clinical educator 3.2)

For students to begin to *think, feel and act* like a member of their profession they need to demonstrate underpinning competencies identified by their profession. Competency assessment supports students to develop their competence and is another way placement facilitates student development of professional identity - covering workplace actions to *think, feel and act* as a health professional. There are similarities in elements in the competency assessments across the allied health professions. The use of competency tools for assessment is described in several orientation manuals:

The assessment methodology used by students will correspond to their particular university curriculum. Formal assessment will be conducted at mid-unit and end-unit using the APP [Assessment of Physiotherapy Practice Student Assessment Tool]. (Physiotherapy orientation manual)

and implied:

> *…to familiarise self with SPEF-R* [Student Review of Professional Practice Placement©] *assessment tool and clarify with CE* [clinical educator] *how the domains could be demonstrated in the specific practice placement setting.* (Occupational Therapy orientation manual)

Clinical Education Support Officers described how placements provide students with opportunities to take theoretical knowledge from university and apply theory to the patient care. Clinical Education Support Officer 2.3 said:

> *they've been learning theory at university and how you actually apply that when you have a live client in front of you and working with them on their situation. So, it's developing that link between theory and practice.*

"*Hands-on"* experience during placement included seeing a wide variety of different clinical presentations. One student explained how placement tutorials encourage students to link learning with professional theory:

> "*We have the Thursday tutes* [tutorials] *on top of the university tutes which I think re-directs us to the OT* [occupational therapy] *frameworks and take us back to the basics that we might have forgotten because we're so in the moment with it all*." (Student 8.1)

5.4.3.3 Learning through working with patients

Working with patients was mentioned in all focus groups and documents as an essential part of the placement. Learning through working with patients was described in nine documents with references to communicating with patients, respecting them and maintaining confidentiality and partnering with patients through seeking consent and treatment planning. Applying the theory and frameworks from students' profession to patient care is referenced in documents from three professions (occupational therapy, psychology, and social work). Developing treatment goals in collaboration patients is emphasised in competency assessment documents. Competency assessment documents for physiotherapy, occupational therapy, and speech pathology require students to demonstrate competence through the patient treatment process – gaining consent, assessment, goal setting, selecting and implementing appropriate assessment, monitor progress, and discharge planning.

Students and new graduates described their feelings when patients or their families sought their advice and input or when they provided services to patients. One

new graduate said that when explaining therapy to patients: "*you realise that like how much you know at that point and how much you can offer other people. Like how much you can offer to them, being a physio or whatever*…" (New graduate 6.2) One new graduate summed up feelings about seeing the impact of their treatment for patients, "*I'd see what my therapy was doing. I'd see the change that it made to their lives and that was really rewarding*." (New graduate 6.4)

Contact with members of other health professionals is encouraged and is considered essential to support effective patient care: "*Arrange to observe as many other professionals at work within your service, as you can learn a lot from other professions*." (Psychology orientation manual) The physiotherapy orientation manual states: [students should] *'demonstrate an awareness of individual health worker's roles – PT, SW, OT, nurse, specialist doctors, speech therapists, and refer to them appropriately*' (Physiotherapy orientation manual).

One Director described the importance patient contact supporting learning: "*You just see when they have had interactions with patients, they get so excited because they are applying all of their knowledge and this is actually why they got into it, was to help people probably*." (Director 1.6)

A clinical educator identified the need for flexibility in patient care and managing learning when things do not go as expected:

> *Because things do not always go to plan and building in that flexibility of well sometimes, you're expecting that you're going to be able to assess this person, but for a thousand and one different reasons that doesn't end up happening. Okay, what can we take from this? In an ideal world you would have got to do that again, but you haven't been able to, so how can we be flexible around some of those things*. (Clinical educator 3.1)

Working with patients was also described by new graduates to supported learning. New graduate 6.3 summed this up saying:

> *of course, there are standouts from placement, but I think you can always take something away from each patient. That's going to in some way, shape or form affect your clinical identity. Because everyone is so unique and sometimes those patients who you just want to get rid of because they are doing your head in taught you the most.* (New graduate 6.3)

Another new graduate shared about their placement in acute stroke and neurosurgical wards which reinforced his understanding of what he knew about his profession:

> *There was a lot of time spent just talking with patients and their families and explaining like, the course of the treatment…and you realise how much you can offer to them, being a physio* [physiotherapist] *or whatever and it backs up and shows you how much you can offer to them.* (New graduate 6.2)

One Clinical Education Support Officer said:

> *I think that's extremely significant because it is really indicating that they've taken that transition from being a student to being a practitioner. So, I think that's a really vital part of that development, is when they're actually starting to see people and interact with real life.* (Clinical Education Support Officer 2.5)

5.4.3.4 Learning underpinned by expectations

Workplace expectations of students were described in orientation documents, student handbooks, and the health service values document. Expectations included tasks to be completed prior to placement, such as completion of mandatory training modules and expectations of student behaviour and engagement in learning during placement. For the profession of psychology, expectations in the student handbook are linked to professional guidelines from the Australian Psychological Association. Expectations of student contact with members of their own profession were to demonstrate respect, participate in professional activities such as meetings, professional development and show willingness to present information to staff (Physiotherapy orientation manual).

One clinical educator explained their perspectives about giving students expectations of their learning and development during placement saying:

> *giving them very clear expectations about the growth that you would expect them to have as a student to professional. I think that's from day one, or even before placement, but this is what I expect you to do, to learn to grow in terms of that clinical reasoning as a student to professional…Having that element of belief in them. I think it begins by having that expectation that I'd expect you to grow into being someone who is a professional, not only in understanding*

ethical behaviour, but demonstrating clinical reasoning, and working that out with the patient via the multidisciplinary team. (Clinical educator 3.3)

She continued explaining how she has become:

more forthright in terms of my expectations…For example, if you know that you're going to go and see someone, the expectation is that you would have the session planned to show me well in advance, not just at the minute that you're about to do the session. (Clinical educator 3.3)

5.4.3.5 Learning experiences 'in the country'

The influence of regional clinical placement experiences on learning was mentioned in all focus groups and referred to in clinical placement documents. Participants noted differences between regional experiences and metropolitan placements, including differences in the pace of work, a "*friendliness*" in smaller teams and the breadth of learning opportunities with diversity in caseloads and the age groups serviced in regional areas. Other unique learning experiences included overnight outreach trips and consideration of the level of effort for regional patients to attend appointments.

In regional placements, students see: "*different client groups, different diagnostic groups, particularly when you are seeing infants all the way through to people who are in the end stage of life. You're kind of getting to see a lot of different things.*"(New graduate 5.2) The breadth of learning experiences on a regional placement, variety of client presentations and caseload diversity is illustrated by the following quotes: (in regional settings you are) "*Getting the hands-on experience with a variety of different presentations*." (Student 4.1) They went on to say, "*it's not as fast paced as some of the bigger hospitals, but we are seeing a massive range of things.*" (Student 4.1)

If you go out on a rural placement where you will see everything: women's health, paediatrics, the whole lot…orthopaedic, rehab [rehabilitation], *the whole lot… expose students to as many of those experiences because that's what they'll get if they work rurally…* (Clinical Education Support Officer 2.6)

Another participant said: "*We're exposed to a little more variety... whereas if you're in a larger hospital you might be just sort of in your specialised area a bit."*

(Student 11.3) Learning experiences in the country were described by another participant:

> *The amount of opportunities to learn new information has been amazing. Just the encouragement to "go and have a look at this or go and check this out". And different learning that's available… I would never have got those experiences anywhere else. So, the depth and breadth of the placement is totally invaluable. Could not have asked for better in that regard.* (Student 9.1)

Another participant explained *"You get to see a lot of different things… it builds up the skill sets along the way… It made me really think about things in a more global context*." They went on to say that on a regional placement *"you get to see the beginning and end stage* [of life]." (New graduate 5.2)

A new graduate explained that regional placements:

> *enable you to understand a lot of the lifestyle factors which in rural and remote areas are the challenges and barriers that a lot of people that you work with go through to come and see you and be part of the therapeutic process.* (New graduate 5.2)

They later described learning about the impact of a regional setting for patients: "*When you're in a rural setting … you have to take into account so many different factors".* (New graduate 5.2)

Students may be provided with health service accommodation while completing their placement in a regional area. Both students and new graduates explained how staying in accommodation provided an opportunity to learn from others about their role and service area provided during conversations in accommodation.

For one profession, a link is provided in the welcome email to a video where previous students describing their regional placement experiences and share strategies for managing learning in an unfamiliar regional environment. The health service values document suggests students use strategies to support work life balance and stress management. The physiotherapy student orientation manual describes the support provided to students on regional placement by Clinical Education Support Officers and outreach visits for therapy as opportunities for learning.

5.4.4 Findings: *Feeling* like a health professional

The *feeling* theme describes socialisation and connectedness supporting development of professional identity. Table 5-7 reports finding for this theme from each data source. Participants described both experiences and attitudes which supported connectedness and also shared negative experiences. Documents described workplace culture and practices supporting connectedness within the workplace. Allied health staff identified the culture of the workplace supporting students and clinical education and connections within the workplace, especially the influences of the regional setting. Students described aspects of the workplace culture welcoming and supporting students on placement, including connection with clinical educators, Clinical Education Support Officers, and workplace colleagues. New graduates identified supportive aspects of regional placement experiences as well as noting the impact of some negative experiences on placement. One new graduate described both positive and negative experiences of workplace connectedness on placement:

> *having them treat you as the physio, instead of looking down on you as the student. Because I've had both. I've had placements where the educator has just looked down on me as a student and is being really condescending. Then I've had other placements where they're completely opposite, very friendly, very open and I think that is what makes a difference.* (New graduate10.3)

Table 5-7
Findings: Feeling like a health professional

Data source	Themes
Organisational influences- documents and allied health staff focus groups	• Clinical education culture • Connectedness to own and other professions • Supportive clinical educator Documents • Connections in the workplace • Culture/attitude of workplace • The country vibe
Students	• Acceptance, welcome and sense of community in the workplace • Being treated as part of client care team • Relationship with clinical educator • Regional accommodation
New graduates	• Positive workplace culture

- Clinical educators
- Clinical Education Support Officers
- Regional impacts
- Negative experiences

Three subthemes were identified in the *feeling* theme:

• connections in the workplace

• culture/attitude of the workplace

• the country vibe.

The quote from a student I believe best illustrates students feeling connected in the workplace is as follows: "*almost like we're an asset to them rather than actually just another thing they have to drag around.*" (Student 8.2)

5.4.4.1 Connections in the workplace

Workplace connections for students were identified by all focus groups. Professional Directors spoke of attending student orientation and all groups identified connections for students within their profession and opportunities to connect with members of other professions. Opportunities to work shadow with members of students own and other professions were described by clinical educators, students, and new graduates. Staff, students, and new graduates commented on the connectedness facilitated by students and staff sitting together at lunch time compared to placement locations where students are segregated during meal breaks. One new graduate said "*lunch every day is always good. You get to know the people as opposed to colleagues*." (Student 11.1) Another participant described "*coming to lunch with all of the professions rather than having students at one table and health professionals at another table.*" (Clinical educator 3.2) Two participants described how this came as a "*surprise*" to some students who had completed placements in metropolitan areas where students took meal breaks in a separate area. This contact increased access to opportunities to build professional relationships with members of students' own and other professions.

The aim of the placement is to develop professional competence and achieve entry into the community of practice on placement. The documents made explicit reference to strategies to support learning and opportunities for connection with others available on placement. This is illustrated in the following quotes: "*Students are also*

encouraged to develop friendly working relationships with peers, supervisors and colleagues" (Psychology orientation manual), and

> *Social Work students are provided with the opportunity to maximise their professional and inter-professional health learning while on placement by attending tutorials and other professional development*. (Social Work welcome email)

Professional Directors attending orientation to welcome students and answer questions was described by students as supporting a sense of connectedness. Other aspects of the health service reported to support social connectedness included: collective support within multidisciplinary teams for student learning on placement and availability of hospital-based accommodation for students during placement providing opportunities for social connection and support. Clinical educators identified the Clinical Education Support Officer role as important in providing a point of contact and support for students independent from their clinical educator. Connectedness to the role of a health professional was implicitly described in handbooks through wearing the university student uniform and identification badge.

Treating students as a member of the team and providing opportunities such as being actively involved in case conferences and participating in professional development days and profession-based meetings were identified by Clinical Education Support Officers as helping students feel connected to their profession. Several other examples of how students could be connected in the workplace were provided. These included: encouraging students to formally meet with members of other professions to discuss their roles, participating in-home visits with other professionals and work shadowing with members of their own and other professions. Meeting with other professionals to individually discuss and negotiate treatment plans was also identified as helping students feel like a member of their health profession.

One participant described how contact with patients during placements supported students to feel like a health professional identifying the excitement shown by students as they apply their knowledge to provide patient care. The unique connections with patients and their families that a regional setting provides were also identified as a key part of the regional placement experience:

I think being in a rural setting you do get to see the beginning to end stage. I think being in a metro setting and only doing a couple of days a week you would go in and see patients and you would assume that they potentially pass away or they get better or something happened and then you get there the next week and their name's not on the board anymore and you just move onto the next one. I think in a rural setting you actually really do get to see what happens. You get to be involved in those end stages and working with the family a bit more. So, I think that working with the patient and then you know knowing that they're going to pass away. I think was not so much an "ahh" moment for me but more of a 'I had an impact' type of moment. Just knowing that ok this does happen, this is our role, and this is how we can be supportive to the family as well. (New graduate 5.1)

Acceptance and welcoming of students enabled their sense of connection to the community in the workplace. One student illustrated their perception of clinical education in the main hospital in the health service:

I get the impression that [name of] *Hospital has a lot more respect for students, and you're more part of the system than you are like an add on. But it seems here that students are very much a part of the system, and how everything works. That's kind of a nice feeling. I was having a good chat to* [clinical educator name] *about it and people are taking on students and it's just a part of the culture which is nice… I think also people are friendlier…* (Student 8.1)

Another student told how clinical educators were excited to have a student on placement:

almost like we're an asset to them rather than actually just another thing they have to drag around…They've got a couple of patients where they're saying 'oh we couldn't have done a therapy block with them, but you can do a therapy block with them so we'll sign them up and actually get them off the wait list.'. (Student 8.2)

Feeling accepted was described by another student:

I suppose I've been really lucky, so I've felt that everybody has accepted me and that came down to having a good introduction. So, I got taken around to all the different parts of the hospital, to everybody and introduced. So, I do feel that

helped. And [name of town] *seems to have a lot of students so I do feel that just makes that precedent that students are there, so they're quite on board with that*. (Student 9.1)

A number of students commented on the student-clinical educator relationship, with one student saying:

it's extremely important and valuable that relationship that you have with your clinical educator. That respect and rapport. I really appreciate that with [clinical educator name] *that she come with a very non-confrontational manner and very much like that she's asking questions...* (4.2)

Half the students recounted the opportunities to connect and develop relationships with staff during meal breaks. Some students described this as a contrast to previous placement experiences. Two quotes illustrating this connectedness are:

With the last place…lunchtimes were completely segregated…so you didn't feel as close to them or connected … Whereas I know here everyone sits together for lunch and you have a bit of a chat so you can build more of a relationship with people which is nicer. (Student 11.3)

Another student added:

No one's gone 'oh geez, that's a drama I don't want a student'. I've not felt like that at all. I've felt that everyone wants to share their bit of knowledge and share a bit of their technique and just the way that they do. (Student 9.1)

Other students shared about the learning opportunities from being included in team stories and discussions:

It's the whole allied health office, which means you get all the office discussions about the different cases and get to hear the same case of different professional points of view. (Student 8.2)

Another student elaborated:

It's like those shared clients when you've got - I think that was the physio where they said yes, she's fine. She can transfer, so you transfer in the shower, she can transfer from a wheelchair, whatever. The OT said but from our point of view she's doesn't have the cognitive aspect to actually be able to follow those steps. So even if you can see from a physio point that she has - like her muscles work

and she can transfer - there's more issues that we're seeing. From that sort of - again it's underlining the difference of the different professions, and how they need to work together. (Student 8.2)

Connections with allied health professionals from other professions were highlighted by one student *"I think having conversations with other allied health professionals and having them treat me as a team member…"* (Student 11.2)

5.4.4.2 Workplace culture

Directors described how clinical education is core business and an expectation for staff in the health service. One professional Director described the culture as being "*the way we do things*." The importance of the clinical educator relationship in helping students feel respected and valued was summed up by one new graduate "*the clinical educator relationship is the biggest determinant in placement and confidence*" (New graduate 6.1). A number of students and new graduates described the impact of clinical educators who were passionate about their work. A new graduate said: "*I thought, when I grow up, I want to be just like her* [clinical educator]." (New graduate10.2)

The health service commitment to clinical education was summed up in the psychology student manual:

The [name of health service] *encourages education and at all times there will be medical doctors undertaking specialty training and students on placement from various universities and discipline backgrounds, including medical students, nursing students and other allied health trainees.* [Name of Health Service] *staff are familiar with having students on placement and your placement may be one of many, at any given time.* (Psychology manual)

Some documents had a warm and welcoming tone which enabled connectedness while others had a more professional tone. An example of one style of communication in the documents is:

Welcome to Speech Pathology in the [name of Health Service]*! .... This orientation package will provide much of the information needed for you to settle in and become adjusted to the way things operate within* [the Health Service]. *The information provided is not exhaustive, so please feel free to approach your Clinical Education Support Officer,* [name] *or your Clinical Educator with any*

further questions. Separate orientation information is available for each of the work areas.

We hope you enjoy your placement here and take away many new clinical skills and positive memories of your time with us. All the best for the coming weeks! (Speech Pathology Manual)

In contrast to the quote above, this quote from another profession is a more prescriptive approach:

Students are requested to contact the department by email or phone at least two weeks prior to arrival to discuss accommodation requirements and expectations of the clinical placement. (Physiotherapy Student Orientation Manual)

Language used in documents potentially brought students into the workplace community of practice and connected them through use of inclusive pronouns such as "we"' or "us" or distanced them by addressing them as "the student" or "you". Eleven of the 13 documents described aspects of contact with students own and other professions, with references about respect for and communication with other professions; and developing an understanding of professional roles through observation, liaison and interprofessional learning opportunities such as tutorials.

The psychology manual highlighted the value of contact with other professions and provided students with strategies to make connections:

Where can I find more information?

Ask!! Your colleagues are the best sources of information regarding their training and theoretical models. Conversations around multidisciplinary collaboration are best achieved when you consult with your particular team about their models, preferences, guidelines.

Learning about other disciplines can only expand your ideas about "best practice" and lead to you becoming a more well-rounded clinician. (Psychology manual)

Arrange to observe as many other professionals at work within your service, as you can learn a lot from other professions. (Psychology manual)

The occupational therapy welcome email describes their profession's valuing of student contribution to projects on placement, '[Name of Health Service] *OTs value*

the opportunity to partner with students in the completion of a project to support our service delivery'.

The health service perspective of clinical education was described by a professional Director:

we try to actually see the students as contributors to the service rather than a burden to the service, so that it's that welcoming them in and what they can contribute- what we can learn from them as well as what they can learn from us. (Director1.4).

Contribution to service delivery through projects was also referenced in a number of documents. Another professional Director added: "*So you're pretty much just saying that you're treating them* [students] *like a genuine part of the team."* (Director1.5)

A Clinical Education Support Officer explained there is:

> *broad support for student placements as a whole and the great value that students bring to both our increase in clinical activity but also the development of staff because bringing students here ensures staff keep contemporary knowledge of what's going on in their professions*. (Clinical Education Support Officer 2.5)

The expectation of staff to participate in providing clinical placements was highlighted:

> *with our staff there's an expectation that clinical education is pretty much core business. If you're not going to be involved in that then you might not fit into our culture.* (Director1.5)

New graduates shared about "*places they did enjoy*" (New graduate 6.4) where they were:

> *feeling welcomed and having educators who were really passionate about their work. And the things that you were doing really made me more engaged and passionate about it as well. When I saw how passionate they were, it connected me with the profession … and be kind of 'ok this is the place for me'.* (New graduate 6.4)

New graduates detailed aspects of workplace culture supporting their inclusion and connectedness. One new graduate described their perception of the attitude of staff

as "*their attitude was very much like, we are colleagues… that you have something to share, to bring to the table. We can assist you in that final transition* [to practitioner]." (New graduate 6.1) Social activities supporting connectedness included participation in World Physiotherapy Day, being invited by other professionals to trivia after hours and "*having conversations with other allied health professionals and having them treat me as a team member…*" (Student 11.2). One new graduate recounted the "*openness with the other OTs …if my educator wasn't there or wasn't free, I could go to anyone.*" (New graduate 6.4) They went on to describe feeling valued when a senior medical staff member connected with them as a student:

> *There was one time where the consultant ignored the reg* [registrar] *and came and talked to me and so that was kind of like doctor hierarchy with the highest of the highest consultant having that respect for OT and me as a student.* (New graduate 6.4)

Another way students connect with each other on placement was through the tutorial sessions provided by Clinical Education Support Officers.

A number of participants described the importance of the student-clinical educator relationship. They described situations where clinical educators asked students for their opinions: "*I suppose it helped when they were ready to listen to your ideas"* (New graduate 6.1) and where it was "*like working alongside your Clinical Educator not like just working underneath them*." (New graduate 6.4)

Examples of negative workplace connections were also described by students and new graduates. A new graduate described the negative experience of a placement setting where:

> *the students became a burden in a sense...The first two, maybe three days, my primary CE wasn't there. She'd worked the week-end so someone else had to take us and wasn't very happy about that. So, from the start, even taking us from like the waiting area, you could just tell, like the mood was bad, she was just grumpy... I mean like first impressions.* (New graduate 6.2)

Another new graduate described the significant impact of negative placement experiences:

> *I had placements where I hadn't felt included. Like, I haven't felt like I've been I've been wanted there. That was quite a negative impact on my career*

progression as a physio … But in saying that I had placements after that in which I did feel included… Thank goodness. (New graduate 10.3)

5.4.4.3 The country vibe

For many students, regional placements take them away from friends and usual support networks with some students staying in health service accommodation. Clinical educators noted the support provided to students by Clinical Education Support Officers as another contact person for students in the health service. A number of students noted how in the regional health service students were respected and "*part of the system*" with one student commenting "*on the first day we were h*ere [clinical educator name] *said we're actually really excited to have a student, we're really keen to have you here, which was sort of like – I don't know seems like in other places it's like , 'oh yeah we'll take a student.'* (Student 8.2) All groups noted the impacts of the teams in regional areas being co-located which facilitated more involvement with other professions. Accommodation provided a "s*ocial environment which creates a safe space for us to share our experiences on our placement…*'" (Student 4.1)

Orientation manuals provide information about availability of student accommodation with one profession sharing photos of the accommodation and activities available in the regional towns in the health service.

The impact of the regional health service context on relationships and social connectedness was described by participants. One participant said: "*I think feeling part of the team is a big thing for students, and that does help their identity*.' (Clinical Education Support Officer 2.6) Directors suggested that students in regional areas are more likely to feel part of the bigger multidisciplinary team due to more opportunities for informal and formal socialisation such as sitting with the team for lunch.

They noted the need to support students completing regional placements who are living away from friends and family:

I'm not sure about the disciplines, but all of our students will come from somewhere else. As well as thinking about the workplace environment, there's also thinking about the work/life balance stuff, and … what it then means to be away from family, friends, managing all those kinds of things. That I think has been just as important as the clinical stuff in managing and supporting some of those sorts of things. (Clinical educator 3.1)

The experience of staying in regional accommodation and connecting with other staff and students was described by five students. They detailed debriefing with others in the evenings as they prepared meals, sharing experiences and having staff members from other professions share their wisdom and experiences. Student 11.5 said:

> *It's quite social because of the shared dining and kitchen. So, at dinner time there's always people around to talk to and I notice we all kind of talk about our day and they're all students in similar situations debriefing about our day.* (Student 11.5)

One student explained how the support provided from these connections in accommodation translated into the workplace:

> *It opens up space for them to share wisdom with us. Like, 'you know hey I really struggled with this as a student'. And they go 'oh, so did I or I'm struggling with that right now.' … I think it also creates a safe space, like it translates into the hospital as well. Like when we go to MDT* [multidisciplinary team] *meeting and you have that one person across the room who just gives you that smile when you're in the MDT meeting and you're like 'yes ok I have got this. I can present this'. That sometimes is the confidence boost that you need to be able to just go "Here's my handover of the care that we've been giving so far".* (Student 4.2)

Other students also commented on the social connections gained through accommodation during placements in regional locations:

> *I think it creates a safe space over at the nursing quarters where we've been having most of these discussions with Physios, doctors and nurses. That social environment creates a safe space for us to share our experiences on our placement so far...* (Student 4.1)

> *There aren't as many people on my level* [in accommodation block] *but I definitely do see them most of the time now. It's good to have a kind of chat with them. It kind of makes you relax a little bit more when you get home. We can relax and debrief a little bit with someone…* (Student 11.3)

> *I wouldn't call it a friendship, but there's a couple of nurses there who are regulars and so we have a few chats.* (Student 11.2)

The impact of regional placement locations was described by one new graduate as being a "c*ulture shock. Being in a completely different area, different community, and everything sort of taken away for that five weeks and you just have to do what you can*." (New graduate10.3) They continued "*I think that a smaller team is probably a bit more welcoming to students*." (New graduate 10.3) This was echoed by another participant who said "*I found that bigger hospitals were more set in their protocols and procedures…But in smaller hospitals it's more relaxed. I think that helps you feel more at home and more settled in that environment and want to learn a bit more.*" (New graduate10.4) Inclusion of students in learning experiences was described by (New graduate 10.1): "*I think in a rural setting, or even* [name of main town]*, if you have a complex patient, you're more likely to ask the student to come and watch you just because you're more aware of them.*" Others described how students were encouraged to ask questions or spend time with others in their profession.

One new graduate shared their perceptions of "*being in a rural location you're living there as well. So, you're either in the* [staff] *quarters or close by so you get more of a sense of what the town's like. What the dynamic is like, what the economics are and what is impacting for patients in that particular area*" (New graduate 5.1) In contrast, another new graduate reported their challenges on a regional placement:

> *That was probably the hardest part… away from family, in a small flat town that doesn't really have much to offer. Living in the nurse's quarters, that was a bit like a jail. It wasn't great for the psychological aspects of feeling like you had a community there, and you belonged there… Towards the end, there were some other students, and we would go down to the pub and play trivia and do things around town.* (New graduate 10.3)

Another new graduate explained the connection with other professionals:

> *…in the metro* site*… you were aware of other professions, but you really didn't have much involvement with them. But, in the rural site you were in the same office, you had lunch together, you know what people did*. (New graduate 5.1)

5.4.5 Findings: *Acting* like a health professional

The *acting* theme describes students gaining skills and independence in providing services and care as a health professional. Table 5-8 reports findings for this theme from each data source.

Table 5-8
Findings: Acting like a health professional

Data source	Themes
Organisational influences- documents and allied health staff focus groups	• Graded learning under clinical educator supervision • Contribution to service delivery • Recognition as a health professional Documents • Gaining independence and autonomy in working with patients • Graded learning under clinical educator supervision • Contribution to service delivery • Recognition as a health professional
Students	• Becoming our own therapist with clinical educator support • Recognised as therapist by patient, and others
New Graduates	• Build professional knowledge and capacity • Develop autonomy and independence • Patient care

Documents and allied health staff described graded learning enabling student contribution to service delivery and recognition as a health professional. For students, the *act* theme was linked to students "*becoming their own therapist*" with graduated clinical educator support, developing confidence and being recognised as therapist by patients and others. New graduates described building professional knowledge and skills and developing autonomy and independence through seeing the benefits of student therapy for patients.

The *act* subtheme descriptor was gifted to me by a participant who described how she talks to students about "*unzipping their student suit*" during orientation to placement. This describes so eloquently what this theme is about - the transition from student to acting as a health professional. Clinical Education Support Officer 2.4 said:

> *I do a little spiel that you might be sitting here today a bit nervous, you're feeling more like a student. I'm hoping as the weeks go on, you'll unzip your student suit and at the end* [of placement] *step out of it. I want them to leave here feeling like a speech pathologist.* (Clinical Education Support Officer 2.4)

Five subthemes were identified in the *acting* theme:

- Gaining independence

- Autonomy
- Working with patients
- Being recognised by own and other professions
- Regional experience

5.4.5.1 Gaining independence

Clinical educators described how they supported student independence through creating opportunities for independence, supporting learning with graded learning experiences, increasing complexity of cases and building student confidence. The graded support of clinical educators was described by two new graduates with one student illustrating their experience of this process:

> *My educator was really good at sort of tapering off the level of support as the weeks progressed. This was my first adult placement ever, so she was really good at nurturing me in those first few weeks when I had no idea what I was doing and she was helping me with understanding assessment and things like that and the role that I was supposed to do, management and admin* [administration] *wise as well. Then slowly as the weeks went on, she would just taper off and lessen support but still check in to see if I'm okay and if I had any questions and provide opportunities for reflection and feedback and debriefing.* (Student 11.6)

Several references in documents are made to students as members of the profession or student health professionals, and factors which identify students as such - dress/uniform requirements for the profession or wearing a name badge identifying as student member of the profession. The Speech Pathology orientation manual gives clear expectations of student members of the profession:

> *The* [name of health service] *Speech Pathology Department prides itself on a very high standard of professional conduct at all times. It is expected that students also assume the same standard of professional conduct. While on placement you are presenting as a professional speech pathologist to your multidisciplinary team, to the whole Department and also to your student colleagues. It is also pertinent to remember that your CE must also be shown this same level of professional respect at all times*. (Speech Pathology orientation manual)

Orientation documents reference student dress standards and uniform requirements, wearing student identification badge and introducing self as a student:

> *The way you dress has an impact on your clients, their family and friends, your peers and the general public. It is important to wear clothes that show you respect the people you work with and assists you to engage and build rapport with them. You are also representing the* [name of health service] *and so it is important that you look professional. It is expected that you wear appropriate professional dress for the hospital environment. ... Your student identification badge is to be worn at all times during the placement.* (Speech Pathology orientation manual)

The *act* theme described contribution to service delivery through scaffolded care to patients, and professional theory supporting recognition as a professional by own and other professions. Scaffolded care to patients was described by Clinical Education Support Officers and clinical educators. Clinical educators explained how they initially give students specific tasks during treatment sessions then progress to students running the whole session: "*Early on we may give them some specific tasks to do with the patient, but maybe they wouldn't do the whole session, the whole assessment of whatever.*" (Clinical educator 3.3)

A Clinical Education Support Officer described how in the second half of placement, clinical educators support increasing student independence through pulling back and giving students more independence. This transition to acting more like a health professional is best summarised in the following quote: "*initially the supervisor will be there* [on ward rounds] *...but as the placement progresses, they* [students] *will be there and they will be the ones that will speak*." (Clinical Education Support Officer 2.6)

One student summed this up in the following quote about the clinical educator supporting them as an emerging occupational therapist:

> *I think one thing that's been particularly valuable for me and my relationship with my supervisor at the moment is that she is very good at equipping us to make our own decisions and we can draw on her experience as required. A lot of the focus around our supervision sessions and informal on the run sort of supervision is empowering us to make our own decisions and reason through a*

problem independently… We can always ask questions but she's very much encouraging us and making a safe environment for us to start making our own decisions as emerging OTs. (Student 4.1)

A student detailed how their clinical educator: "*was student led… she doesn't give me the answer straight away. She makes me work for it… but in the long run when you get the answer it builds confidence.*" (Participant 11.1)

Being exposed to clinical educators who demonstrated passion in their roles and implement professional theory into their practice was described by one new graduate as influential in their learning. The new graduate described how the impact of the clinical educator's passion for their work had been evident during the placement, despite the impacts of a health condition. The new graduate went on to say*: 'It solidified for me the sort of OT* I *wanted to be... I don't want to be like* [other clinician], *I don't want to be disconnected from my profession*.' (New graduate 7.1)

The benefits of having support balanced with independence was described by several new graduates:

You need the time supervised and to learn the clinical and shadowing and all of that. But then the growth that happens when someone is not watching and it's all on you is really huge as well. (New graduate 7.1)

Another new graduate added:

I definitely think having more autonomy and having the independence to see yourself as the therapist and not just as the student and also your clinical facilitator facilitating that helps definitely with the identity of becoming a physio. (New graduate 10.3)

New graduate 10.4 gave an example of the clinical educator supporting them to act as the professional:

I was on ortho [orthopaedics ward] *and we have regular ward rounds and team meetings, and my educator, after the second week, was saying to me- 'You speak up. I'm not going to say anything now'. So being responsible for communicating to the wider team and then the team knowing 'okay we need to ask the student*

those questions now because it's their patient'. I guess it's them making you feel like you know the patient and they trust your opinion. (New graduate 10.4)

One student summarised watching students from another profession as their clinical educator enabled their contribution to medical handover meetings. Student 9.1 said:

I would watch in the med [medical] *handover how the physio would look towards the student to say where that patient was at, not the physio* take *the lead. She would throw it to the students and say, 'Guys do you want to update everyone?'* (Student 9.1)

5.4.5.2 Autonomy

In one student focus group, a conversation between participants clearly illustrated the development of student autonomy on placement through clinical educator support.

Sometimes it can feel like they want you to become a 'mini you' but she's [Clinical Educator's] *very good at nurturing us as emerging clinicians, encouraging you to be authentic in your role even though you still have a lot of parts that you still need to ask questions on and have that support but she's very good at encouraging use to keep going towards it.*' (Student 4.2). Another participant continued: '*what* [name of participant] *was saying before about our supervisor encouraging us to become our own therapist and not sort of a mould from her or be a cookie cutter version of her."* (Student 4.1)

A clinical educator described giving autonomy from a supervisor's perspective:

The amount of interaction and autonomy within that interaction depends on where the student is within the course of their placement. Early on we may give them some specific tasks to do with the patient, but maybe they wouldn't do the whole session. As the placement continues you might build on clinical tasks. (Clinical educator 3.3)

In documents reviewed students are encouraged to show initiative and take responsibility for their actions in learning. The psychology manual describes the stages from being a beginning practitioner to competence and emphases the need to balance autonomy and dependency needs. The Social Work Evaluation (competency)

document explicitly assesses that students have and obtain knowledge for effective practice and demonstrate skills required to implement knowledge into practice.

Placement was described by allied health staff to support implementation of professional theory in practice:

> *they've been learning theory at university and how you actually apply that when you have a live client in front of you when working with them on their situation. So, it's developing that link between theory and practice*. (Clinical Education Support Officer 2.3)

5.4.5.3 Working with patients

Working with patients was mentioned in all focus groups and documents as an essential impact of placement. One Clinical Education Support Officer said:

> *I think that's extremely significant because it is really indicating that they've taken that transition from being a student to being a practitioner. I think that's a really vital part of that development when they're actually starting to see people and interact with real life.* (Clinical Education Support Officer 2.5)

Students and new graduates described their feelings when patients or their families sought their advice and input or when they provided education to patients. New graduates spoke of the impact of their therapy as a student for patient's treatments: "*I'd see what my therapy was doing. I'd see the change that it had made to their lives and that was really rewarding"* (New graduate 6.4). A similar comment was made by another new graduate:" reviewing *patients and you can see that what you put in place to begin with they've followed, and it's helped them to improve*." (Student 11.5). The impact of treating patients in the workplace context was described by Student 4.2 who said: "*it definitely does make you feel like, 'ahh this is so what I'm studying for'*." (Student 4.2)

An approach to including patients and their families in their treatments was described by Student11.3:

> *In my last placement I tried to include the family in most things that I did. It was good because in the end there was one family that would always come and find me for all their questions…That gives you a bit more confidence that they believe that you know, and you can give them all that information*. (Student 11.3)

Another new graduate spoke of how they linked back to professional models when treating patients:

> *It probably drove me back to my models because I think it's through the use of my models that I'm best at considering the client holistically and as a person. So, hearing those stories and realising they're a person makes me want to think, "how can I achieve the best outcome for them?" So, it kind of drives me to my theory that that is how I think you feel like an OT when you're connected with your theory. Theory is what connects you to your profession*. (New graduate 7.1)

5.4.5.5 Recognised by own and other professions, patients and their families

Several students and new graduates described how having other health professionals ask for their input "*makes me feel like I'm getting there*" [beginning to *think, feel, and act* as a health professional] (Student 11.2). Participants provided examples of being recognised by doctors and other health professionals as able to provide advice about patient care. Examples were also provided of when other professionals implemented student advice on patient care. One graduate said:

> *I think from the acute placement I had it was that when the physios* or *doctors or someone had the confidence to ask me an OT* question. *Or listen to my input, was a nice turning point*. (New graduate 6.4)

Documents encourage students to advocate for the role of their profession within the multidisciplinary team, consult and coordinate with others in teams to work effectively for patient care. Other references are made to students contact with referrers, discussing their planned treatment with other professionals and following up patient care.

Interaction with patients and their families was identified by Clinical Education Support Officers and clinical educators as an important part of transitioning from student to act as a health professional. Recognition of student contribution as a member of the multidisciplinary by other professionals was considered as a defining moment in professional identity as highlighted by one participant:

> *I supported a student who was working in paediatrics and there was a young girl who was coming under the Department of Child Safety and the team were trying to decide whether to discharge her or keep her in until the child safety matters were dealt with. The student was there by herself this day at the end of*

her placement, and the specialist actually turned to her and said, 'What do you think we should do?', and the student said, 'We shouldn't discharge her' and the specialist said, 'okay'. For her, that was a really defining moment, that she was a professional. (Clinical educator 3.2)

Participants gave examples of how students are recognised as the treating clinician when "*the patient's relative or whoever asks them the question rather than their supervisor who is also sitting in the room"* (Clinical Education Support Officer 2.1). Another participant commented: "*It's not until the students are actually there by themselves with the patient interacting that they actually feel that confidence and probably feel more like the health profession*." (Clinical Education Support Officer 2.6) One participant described how students received confirmation of their care by others, "*having that validation occur as well with other students or other team members just really confirmed that what they did was the right thing or that they did well in something...*" (Clinical Education Support Officer 2.5)

Being recognised by patients or the team as a health professional who contributed to patient care was described by several students:

"*Having them ask my opinions on things or come to me and say," we saw this, this or this, what do you think of this?"* (Student 11.2)

Another student stated how they experienced being valued by the team when working with the patients:

When you end up working on a case with multiple allied health professionals, they don't really view you as a student. They kind of value your contribution and ask you about what you have found with assessment, how they've [the patient] *performed in your sessions and they're not going to your clinical educator to ask these things*. (Student 11.6)

This was further reinforced by a student explaining how other health professionals sought their input into patient care:

"*I think it's just other allied health professionals coming to you, recognising that you're the speechie* [speech pathologist] *who is dealing with this person… rather than sort of either looking for it in a note or calling your CE*.' (Student 11.2)

One student described the impact treating patients had on developing confidence in service provision and their identity in the health professional role:

> *It is a lot about that patient contact. You sit there and talk to them and hear part of their story. As you're talking to them and your brain is going at 1000 times per hour and you're seeing everything as occupations what's going on for this client right now. Sitting there and piecing all of it together. It does build my sense of professional identity. And as I start piecing it all together, I think 'actually I know something here'. One thing that I did find really cool the other day was when I did an initial* [assessment] *with a client and then we did a home visit. Even though my supervisor was there she* [the patient] *asked me a question. She turned around to me and asked me a question and I was like 'you know you see me as a therapist'. It was a bit of an encouragement in that moment as she recognised me as the therapist.* (Student 4.2)

A number of students and new graduates described how having other health professionals ask for their input "*makes me feel like I'm getting there*" [beginning to *think, feel, and act* as a health professional]. (Student 11.2)

5.4.5.6 Regional experience

Regional placement experiences were identified to provide students with a broad variety of learning experiences with a diverse caseload, enabling them to see "*beginning and end stages of life"*. One participant noted developing an understanding about regional patient experiences: "*It made me really think about things in a more global context. You are focussing on so many things. If they* [the patient] *are coming from a really faraway place and they're got a lot going on socially, environmentally you manage that to minimise your input in people's lives but maximise the outcome."* (New graduate 5.2) One participant described a regional placement experience of participation in care: "*the consultant and the visiting consultant would see me as the OT and then they'd ask for my opinion and they'd say 'ok'. or 'Is this patient actually safe for discharge?' And you know if you advocated for a patient and said, 'I think they need x, y and z; they'd actually respond and say yep ok'.*' (New graduate 6.3)

One new graduate reported their experiences in a small regional hospital:

> *I was just so blown away when the senior medical officer came and asked my opinion about discharging a patient, as a student. And was totally willing to go*

with whatever I said ...whereas I've been in a hospital before where doctors have been like 'Why are you talking to me?', 'Who are you?', 'What do you know?' Don't associate with me basically. So, it definitely helped my confidence to feel like you actually are an integral part of the team in decisions. (New graduate 6.1)

Similar examples were shared by three other participants with participants in one focus group noting the influence of the size of the hospital on hierarchy and culture, with smaller teams perceived to be more accepting of student contributions to services. Having team members and nursing staff ask questions of the student rather than the educator was reported by students as "*consolidating it* [identity]" (New graduate 10.3) Another new graduate added:

From the acute placement I had it was that when the physios or the doctors or someone had the confidence to ask me an OT question. Or listen to my input. It was a nice turning point. (New graduate 6.2)

5.4.6 Findings summary

All documents and focus groups provided information about clinical placement influences supporting students to *think, feel and act* as a health professional. All data highlighted the critical influence of the clinical educator, the importance of workplace culture and perspectives on clinical education which influence students either positively or negatively. One new graduate put into words the differences in *thinking, feeling and acting* as a health professional as their placements progressed:

I'm thinking across my four placements, and probably say that it was by the third placement [I did across] *the year that I started to feel, think, act and feel more like a physio. The first two placements I was just so concerned about what am I doing, how am I doing this, how am I making sure that I'm doing everything correctly. But as I decided to relax a bit more and got the hang of it, I could start to think more about what's this physio team like, how are they acting, what do they do on a day-to day basis, and how can I mimic that.* (New graduate 10.4)

5.4.6.1 Variations across professions and individuals.

Participants reported variations among students including: personality, age, interpersonal skills, learning style, and past work experience including contact with patients. Placements provided opportunities to refine and develop skills through

experience. One clinical educator noted that some students had not had previous work experience or been in a professional setting prior to placement and noted how placements helped develop interpersonal skills *"so even just the language they use with a patient, or with their colleagues or other students, … you see that grow over time.*" (Clinical educator 3.2)

Most staff participants agreed that student success also depends on student attitude to work. As one Director noted that, in her experience, the most successful placements were when students came with an attitude of:

> *I'm going to treat this as my workplace … I'm a student here to learn how to function in this workplace, rather than be a passive person waiting to have information imparted to me…Those students behave in a different way and say, 'What can I do to contribute to this service?' … 'What else can I do?', 'Can I learn?' 'Can I organise the morning tea?'* (Director 1.4)

Some professions, such as psychology and social work, were more likely to have students who had previous careers. The impacts of prior careers on *thinking, feeling and acting* as a member of one's profession meant that students entering these professions were often older, had an already established professional identity from other careers and could bring life experiences to placement. This was described by a professional Director:

> *one of the things we've found is they don't see themselves as starting back down at the bottom of another profession and so sometimes they can overstep the mark… We have nurses, teachers, engineers and all sorts of things that retrain as psychologists and they bring professional skills with them and identity with them but sometimes they're probably potentially a bit overconfident and they don't realise what they don't know. They'll still be perceived in the workforce as a student on placement*. (Director 1.1)

Examination of these factors has not been included in this study, although has been included in this chapter given, they were identified by participants and point to opportunities for exploration in future studies.

5.5 TRIANGULATION OF RECOMMENDATIONS FOR DEVELOPING PROFESSIONAL IDENTITY

My second research question was: “How can these findings improve clinical placement design in regional settings?”. I have analysed data from focus groups using the *think/feel/act* framework for both explicit and implicit reference to suggestions about how to improve clinical placements. During focus groups I asked students and new graduates for suggestions to improve placements supporting professional identity. I had not initially included specific questions seeking this information from student and new graduate focus groups, however after reviewing initial data from staff focus groups, I included two additional questions, as shown in Chapter 4 Sections 4.2.3 and 4.2.4. When analysing data to answer this research question I have not considered or differentiated suggestions and current workplace practices. Therefore, some student or new graduate suggestions may already be in place in the health service or some allied health professions may be using some of these practices while other allied health professions may not be currently using these practices.

In the first part of this section I have represented student and new graduate responses separately. I have done this to capture differences in the student and new graduate responses which may have been influenced by their different points in their learning and placement practice experience. New graduates participating in focus groups for this study were in their first two years of practice following graduation. Given they had completed their pre-entry professional university learning and been working in the health service for a period, it could be expected that their perspectives would have some similarities to and some differences from students. Students had completed some clinical placements, but I suggest the possibility that they ‘may not know what they don’t know.’

A summary of combined student and new graduate suggestions for placements linked to themes in the *think/feel/act* framework is shown in Table 5-9. I have included columns highlighting student and new graduate suggestions as well as a column representing an overall summary of suggestions. This layout allows readers to consider the potential variations from impacts of student and new graduate placement experiences. Table 6-1 details actions for regional placements supporting allied health students *thinking, feeling and acting* as a health professional. These suggestions are also represented in Figure 6-2.

5.5.1 Summary of student and new graduate suggestions

Both students and new graduates suggested encouraging students to reflect on placement experiences. They suggested providing opportunities for students to receive feedback from Clinical Educators to further explore and unpack students written reflections. The need for Clinical Educators to provide clear expectations of students was identified by both students and new graduates. One student contrasted expectations from two placement experiences illustrating their perception of the importance of expectations for learning:

> *everything has been very detailed in what is expected of us and what our goals are. Even down to the weekly feedback. Our supervisor has been giving us our strengths, what we need to improve on, our goals, what she expects next week. So, it's really kind of broken down for us. Whereas at my last place, not to throw anyone under the bus, but there was no clear expectations and it was almost a bit blasé. I don't know if I really gained much out of my last placement.* (Student 11.4)

Work shadowing and opportunities to work with both members of students' own profession and other professions was also suggested by both students and new graduates. They noted that shadowing helps to understand the role and scope of other professions and how they interact with their own profession for patient care. Creating a workplace culture welcoming and valuing students was identified to enable the whole team to be aware of students so they could include them in learning activities during the placement. Other suggestions identified in previous paragraphs were from either the student or new graduate groups. Further exploration of actions which could be taken to incorporate student and new graduate suggestions within the context of a regional health service will be provided in Chapter 6.

5.5.1.1 Student suggestions supporting Thinking as a health professional

Student suggestions for supporting *thinking* as a health professional included a variety of ways to support student learning. They suggested designated times for reflection with written feedback from clinical educators on reflections. Students identified the importance of scheduled supervision sessions as a time to reflect and debrief with their clinical educator. They wanted to be given as many opportunities and experiences as possible during their placement. Opportunities for learning in the workplace which students identified included: client contact and providing patient

care, attending in-services and professional development sessions and learning workplace systems and processes. Some students also noted the value of learning through completing a project, such as developing and presenting an in-service about their profession's role to other professionals. Students noted some tensions between sometimes feeling sheltered in their placement with wanting to learn about a "*day on the job, including all aspects of everything I don't necessarily see*." (Student 11.6) versus being eager for patient contact. Student 11.1 described the eagerness for patient care: "*my previous placement was really slow and so on this one I am happy to get as many patients in as I can from start to finish".* Students noted the importance of having detailed and clear expectations in contrast to receiving no clear expectations from their clinical educators. Several students suggested the continuation of tutorial sessions facilitated by Clinical Education Support Officers. These tutorials were reported as being an important way to link students completing placements in more isolated regional centres with student peers in other locations and provide time for students to reflect and debrief. One student suggested running workshops on relevant topics, such as preparing discharge reports, rather than just reading about them.

5.5.1.2 New graduate suggestions supporting Thinking as a health professional

New graduates commented on the varying structures of clinical placements across allied health professions. They reported placements may be part-time, full time or part-time placements combined with university attendance. New graduates who had experienced a part-time placement combined with university attendance expressed a preference for block placements reporting that they did not have opportunities to review the same patients over time because they were only attending placement two days per week. One new graduate said:

> *I did my prac* [clinical placement] *at a large metropolitan hospital, with a really big team of dietitians. The way our prac was run, was that we just did two days a week on placement for the whole semester, which being in a really large team was already a different kind of group of dietitians, and only being there two days a week it's very hard to feel like part of the team. It was very much dietitians and students, which doesn't really help to make you feel like part of the team.* (New graduate 10.1)

New graduates recommended that students spend time with members of their own profession working in different service areas and with other professions to cement understanding of other professional roles in patient care. Discussion of complex cases within the profession was also encouraged both informally and in organised sessions.

The importance of making clinical educator expectations explicit was identified by one new graduate:

> *I know the only place that I really struggled with was one which I didn't understand what was expected of me. So, by having that sort of outlined about what the goals are, what the expectations are of you as a student is probably the biggest help*. (New graduate 10.3)

To support student inclusion in learning, new graduates reported benefits for the use of the pre-placement learning profile and encouraged its use by professions who are not currently using it. This learning profile was described to capture information about students learning style, university curriculum requirements during placement and indicators of student stress. It is completed by the student and sent to clinical educator prior to student arrival on placement. New graduates also noted the importance of discussing learning goals "*from the start*" (New graduate 11.3). They suggested that these strategies enable the clinical educator and student to "*get it clear from the start and work together*" (Student 11.3).

5.5.1.3 Student suggestions Feeling like a health professional

To support feeling like a health professional, students suggested creating a culture where students are welcomed, valued, feel like part of the team and had their contributions valued. One student suggested this was "*not having the attitude that because you're a student you don't have to go to that*" (Student 6.1). Students underlined the importance of the student–clinical educator relationship during placement. One student provided an example of the importance of the student-clinical educator relationship:

> *…the clinical educator having a chat with the student about what is the best way for them to learn things. Having that clear from the start, 'how do you like to learn', 'how do you like to receive feedback?' 'How would you like me to do that?' It's got to work both ways as well. I mean it can't always be the clinical educator telling the student. You've got to work together and find a way that*

works best for both of them. I think that relationship is very, very important and if it's not there it makes it very difficult to kind of fix that and work on it… Having that relationship-building from the start is a big deal I think.' (Student 11.3)

One student focus group noted that "*the first couple days of placement are critical.*" (Student 11.1) These initial days on placement help set the scene, provide expectations and link them to others in the workplace. Peer support sessions for students facilitated by Clinical Education Support Officers were described as "*fantastic*" and students suggested these should continue. Clinical Education Support Officer visits to students at regional sites were encouraged.

5.5.1.4 New grad suggestions Feeling like a health professional

New graduates identified the benefits of the whole team being aware of students on placement, "*so they can offer for students to shadow and invite students to 'see things*' which helps students know '*they're thinking of you*'" (New graduate 10.3). Similarly, new graduates suggested clinical educators and others in the workplace share stories, experiences from practice and case discussions with students during placement. For example," so *the physios in our group, if we have a complex case, we'd have a discussion about it and get ideas and input from other physios."* (New graduate 10.4)

They also suggested encouraging opportunities for debriefing safely within the profession or with other students where staff share their experiences and what they've learned. In each focus group, new graduates emphasised the importance of encouraging students to take meal breaks and share lunch with other team members. One participant described the value of students having the opportunity to complete regional placements saying, "*I think just to give the students the idea of 'if you go rurally, this is what it's going to be like.' As a student I was hating the thought of working rurally but it's worked out quite well*." (New graduate 6.2)

5.5.1.5 Student suggestions Acting like a health professional

To support *acting* like a health professional, students suggested organising "*everyday like a real physio* [or member of their profession] – *we're there to learn what this particular area of practice is like, even if it's not quite relevant to us"* (Student 8.1). Using professional values and emphasising clinical reasoning and theory to underpin practice was suggested. A new graduate noted how much they value

placement experiences "w*hen it links into everything I've learnt and I'm actually working and doing*" (Student 11.4). In one focus group participants requested that students be provided with a swipe card to easily access areas of the workplace. The students also requested access to a workplace email account with one student saying: "*I've had email addresses at all my previous placements, and I found them very helpful if I had to contact someone professionally or email new staff or something*." (Student 11.6) Another student agreed with the need for an email account adding: "*…particularly when you are being pushed to be more independent and you're starting to write reports and interact with other professionals outside of the hospital and their only point of contact for your is through your CE* " (Student 11.2)

5.5.1.6 New graduate suggestions Acting like a health professional

New graduates highlighted the need to balance student autonomy with hands-on experience and educating. They identified the need to provide more guidance and in the initial week or two then to begin to support more independence. Stopping and taking meal breaks was encouraged to provide opportunities for contact with others in their own profession and other students as an opportunity to debrief about patient care.

Table 5-9
Suggestions to support professional identity development

Theme	Subthemes	Student suggestions	New Graduate suggestions	Combined suggestions
Learning experiences *Thinking*/ Competence	Learning supported by CE relationship and collaboration	• Designated reflection time • CESO sessions supporting time to reflect and debrief	• Feedback from CEs on written reflections NG	• Support to designated reflection, with CE feedback on written reflections • Supervision as a time to reflect and debrief
	Learning within the workplace	• Attend in-services, professional development • Give as many opportunities as you can • Swipe card • Email account • Workshops on documentation e.g. discharge reports • Want to learn behind the scenes tasks/ a day on the	• Encourage students to spend time with other professionals and the same profession • Prefer placement blocks compared to part-time placements because students didn't get to review the same patients because they worked 2 days/week	• Provide as many learning opportunities as possible • Encourage students to spend time with other professionals and the same profession • Swipe card • Email account so can contact others professionally • Learn about behind the scenes

		job, but eager for patient contact • Quality improvement projects • Prefer learning on the job to online orientation	• More contact with people in the profession	tasks Vs eager for patient contact • Prefer placement blocks to enable to review patients over time (compared to part-time 2 days/week) • Quality improvement projects • Prefer learning on the job compared to online modules used in some health services
	Learning through working with patients	• Want to learn behind the scenes tasks, a day on the job Vs eager for patient contact	• Discussion of complex cases	• Eager for patient contact but also want to learn behind the scenes tasks • Discussions with other professionals and students about complex cases
	Learning underpinned by expectations	• Everything detailed Vs no clear expectations	• Having explicit CE expectations • CE and students get clear from the start, work together • Discuss goals from the start • The pre-placement questionnaire used by some professions /learning profile- students may be more included to put these things in writing	• Detail CE expectations explicitly • CE and student discuss goals from the start and work together on meeting goals • Pre-placement questionnaire/ learning profile supports students to be more included by putting experiences in writing before placement
	Learning experiences 'in the country'	• Tutorials		• Continue student tutorials facilitated by CESO
Socialisation *Feeling*/ relatedness	Connections in the workplace	• Continue peer support/tutorial sessions- fantastic • CE student relationship important	• CEs/people share their stories and experiences • Shadow and case discussion e.g. complex case discussions when physio model to students	• CE-student relationship is important • CEs and others in profession share their stories and experiences with students; support and model

			• Students having lunch with team • Encourage students take breaks, come have lunch with us	discussions about complex cases • Provide opportunities for work shadow with own and other professions • Encourage students to take breaks and have lunch with the team • Continue peer support sessions/tutorials for students
	Culture/ attitude of the workplace	• Create a culture where students are welcomed and valued, students feel like part of the team and can contribute • Not having the attitude that 'because you're a student you don't have to go to that' • The first couple of days are critical	• Whole team aware of students and can offer to shadow • Debrief safely with profession and students • Staff share their experiences and what they've learned • Shadowing others invited to see other things	• Create a culture where students are welcomed and valued, students feel like part of the team, can contribute, valued • The whole team being made aware of students and can offer to shadow • Provide opportunities to debrief safely with the profession and other students • Staff share their experiences and what they've learnt • Invitations for other professional for student to shadow or see other things
	The country vibe	• CESO visit students at regional sites	• Provide experience of working in regional locations	• Encourage to experience regional placement opportunities • CESO visits to students at regional sites
'Unzip student suit' *Act*/ autonomy	Gaining independence	• Use professional values, emphasis clinical reasoning, and professional theories • Every day like a real physio-		• Support students to use professional theory and clinical reasoning to support patient care

			• Provide learning experiences which support students to learn about the practice in their area of placement
Autonomy	• Student attitude to placement	• In the initial week or two provide more guidance then support more independence • Balance autonomy and educating / hands-on experience	• Balance autonomy and educating /hands-on experiences. Provide more guidance in initial weeks then support more independence
Working with patients			• Value working with patients when it links into everything students have learned
Recognised by own profession and others		• Students have lunch with the team • Encourage students to prioritise breaks- stop and break. Gives more contact with people in the profession and other students to debrief	• Encourage students to prioritise meal breaks, have lunch with the team. This gives more contact with people in profession and other students to debrief.

Notes: Abbreviations CE = Clinical Educator; CESO = Clinical Education Support Officer; physio = physiotherapy; NG = new graduate

5.6 CHAPTER SUMMARY

This chapter has provided results from document review and focus groups to answer each sub question and combined the results to answer the overall questions for this research. Chapter 6 will consider the implications of these results within a regional health service and for theory policy and implementation in practice.

Chapter 6: Conclusion: My research in action

6.1 INTRODUCTION

My research has contributed to the body of knowledge in clinical education through the application and modification of the framework illustrated by Mylrea et al. (2017) of *thinking, acting and feeling* like a health professional to identify factors supporting the development of professional identity during clinical placement. I have answered the research questions posed for my research by identifying factors supporting professional identity during clinical placement and have used results to develop recommendations to support the development of professional identity during regional placements. This discussion chapter will be framed to consider the implications of my research for clinical education in regional health service settings. Practice and policy implications and suggestions for future research will also be discussed in this chapter.

6.2 CONCLUSION ABOUT RESEARCH ISSUES

The main outcomes of this research were the identification of three overall themes about the influence of clinical placements in the development of professional identity: *thinking, feeling and acting* like a health professional (Refer to Figure 6-1). These themes answer my research question:

What are the critical experiences that influence the development of professional identity for allied health students during clinical placement in a regional health service?

Using a framework of *think/feel/act,* the themes I have identified are:

1) *Thinking* supported by quality learning

2) *Feeling* supported by socialisation in the workplace community of practice

3) *Acting* supported by workplace affordances.

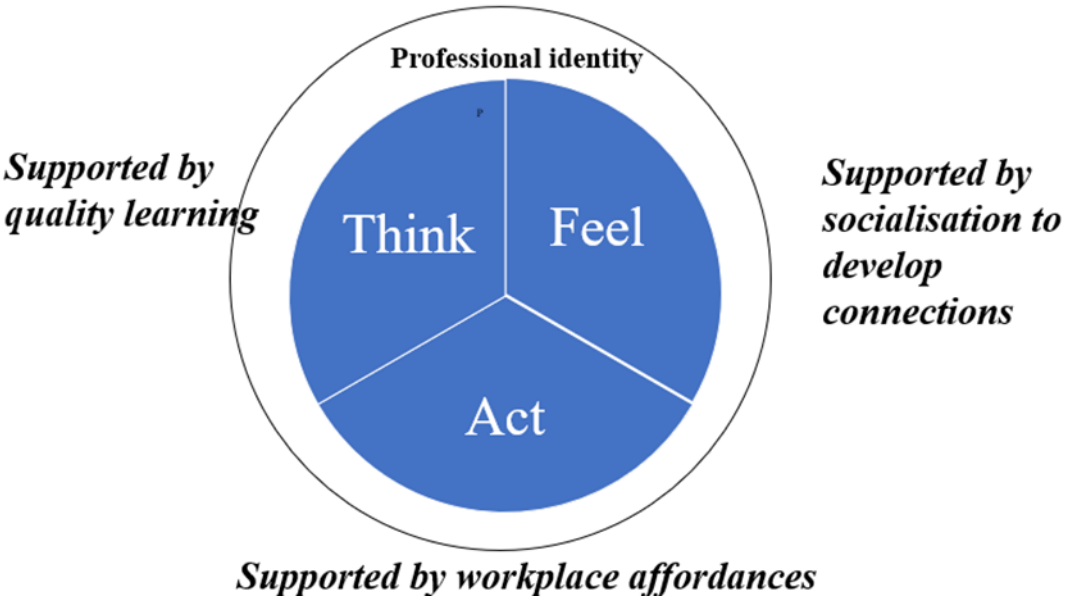
To answer the second overall research question ‘How can these findings improve clinical placement design in regional settings?’, I have identified actions that can be

implemented during clinical placements to support the development of professional identity (refer to Section 6.2.4).

Some elements of the themes I have identified are well known and supported in clinical education literature, while other findings may have more relevance to regional health service contexts, such as those where the research was conducted.

Figure 6-1

Themes identified to answer overall research question.



6.2.1 Theme one: *Thinking* – supported by quality learning

The overall theme of *thinking* supported by quality learning considers the importance of clinical educators supporting quality learning in the workplace, learning through working with patients and the implications for learning in regional placement settings.

6.2.1.1 Quality learning

Investigation of quality learning experiences on clinical placement has been the subject of many articles and reviews (Hummell, 1997; Kilminster & Jolly, 2000; Kirke, Layton, & Sim, 2007; Rodger, Fitzgerald, Davila, Millar, & Allison, 2011;

Siggins Miller Consultants, 2012). These reviews highlighted the importance of the clinical educator-student relationship facilitating a graded approach to learning with supervision, encouragement of reflection, and feedback (Gibson et al., 2019; Kilminster & Jolly, 2000; Rodger, Fitzgerald, et al., 2011). My research also noted the importance of the clinical educator-student relationship where clinical educators collaborate with students to identify learning goals, provide feedback and use supervision sessions to support learning. As highlighted by many other authors, clinical educators play a key role in supporting students learning and skill development (Bonello, 2001; Flott & Linden, 2016; Kilminster & Jolly, 2000; Lefevre, 2005; Manninen, Henriksson, Scheja, & Silén, 2015; Matthew-Maich et al., 2015; Perry et al., 2018; Rodger, Fitzgerald, et al., 2011; Siggins Miller Consultants, 2012; Smith et al., 2018(a); Telio et al., 2015). The supervisory relationship with clinical educators is considered to be the most important single factor influencing the effectiveness of supervision (Kilminster & Jolly, 2000). This was also articulated in my research with one new graduate commenting: "*the CE relationship is the biggest determinant in placement and confidence.*" (New graduate 6.1) Where the clinical educator-student relationship is collaborative, a genuine partnership for learning is maximised (Hummell, 1997; Perry et al., 2018; Rodger, Fitzgerald, et al., 2011). Supervision has often been recorded as a key part of placement learning promoting readiness for practice (Manninen et al., 2015; Miehls, Everett, Segal, & du Bois, 2013; Moores & Fitzgerald, 2017; Morgan, 1991; Roulston et al., 2018; Smith et al., 2018(a)). In my research, supervision was also highlighted as a critical factor supporting learning. One participant in my research considered how clinical educators enable students to learn from unexpected situations. Literature also asserts that learning from unexpected situations encountered during regional placements can be supported through formal and informal supervision, reflection (Morgan, 1991; Naidoo & van Wyk, 2016) and effective feedback (Telio et al., 2015; Wearne, 2016).

Constructive feedback from clinical educators helps students develop competence in practice (Hummell, 1997; Newton, Henderson, Jolly, & Greaves, 2015; Rodger, Fitzgerald, et al., 2011; Roulston et al., 2018; van de Ridder, Stokking, McGaghie, & ten Cate, 2008). A graded program of learning drawing on learning goals can enable a graded approach to student learning on placement (Hummell, 1997; Rodger, Fitzgerald, et al., 2011). Similar findings were noted in my study where

students gave examples of ways clinical educators support them in developing clinical reasoning for patient care. Clinical educators were reported to enable the development of clinical reasoning by equipping students to make their own decisions, asking reflective questions, supporting students to become their own therapist and not a "*cookie-cutter*" version of their clinical educator.

During workplace learning clinical educators act as a positive role model for student learning (Ashby et al., 2016; Babenko-Mould, Iwasiw, Andrusyszyn, Laschinger, & Weston, 2012; Bearman & Molloy, 2017; Brown et al., 2013; Carr & Gidman, 2012; Cruess & Cruess, 2006; Dybowski & Harendza, 2014; Foster & Roberts, 2016; Wilson et al., 2013). One student summed up the importance of the clinical educator relations: "*having the support* [from clinical educator] *definitely really… gets you in that right direction, whereas not having the support just doesn't really do anything for your confidence*." (Student 11.3) In my research, attributes of clinical educators identified to support learning include: respect and trust in students, high expectations, being supportive, letting students explore and feel their own way through, encouraging and creating a safe environment for students to start making decisions. These results mirror findings from other studies (Bennett, 2003; Greer, Pokorny, Clay, Brown, & Steele, 2010; Higgs & McAllister, 2005; Hummell, 1997; Johnson et al., 2016; Matthew-Maich et al., 2015; Naidoo & van Wyk, 2016; Perram et al., 2016; Rodger et al., 2014). Gibson et al. (2019) conducted a systematic review of the literature to examine skills and qualities in allied health clinical educators. In their review, they identified the skills and qualities of effective clinical educators to support learning to include: personal qualities of clinical educators, provision of skilful feedback, teaching skills, fostering collaborative learning, understanding expectations, organisation and planning, and acting as a role model in their professional role. Participants in my research also noted how clinical educators who were inspiring and passionate about supporting learners had a positive impact on their learning. A similar finding was reported by Francis et al. (2016) whose study of the characteristics of ideal practice educators (clinical educators) identified that one very favourable characteristic was clinical educators with genuine enthusiasm about their profession. Another way of describing this clinical educator attribute is 'being inspirational' (Perram et al., 2016; Silva, Troncon, & Panúncio-Pinto, 2019). Students reported valuing clinical educators who were passionate about their profession.

6.2.1.2 Learning within the workplace

The importance of authentic workplace learning is well documented (Billett, 2002, 2016; Billett, Noble, & Sweet, 2018; Frenk et al., 2010; Koontz, Mallory, Burns, & Chapman, 2010; Korpi, Piirainen, & Peltokallio, 2017; Parboosingh, 2002). Billett (2016) described three keys for making health workplaces effective for learning: the practice experience, activities and interactions available in the workplace, and the individual student epistemology. He explained how healthcare workers learn through work and what contributes to this learning. Firstly, 'just doing it' helps to acquire procedural, conceptual and dispositional knowledge. Secondly, the social and physical environments in the workplace give learners clues and cues about learning and performing tasks. Thirdly, (Billett, 2016) described how workplaces provide opportunities for a practice where learners can hone their skills and finally, how guidance from experienced workers assists in securing knowledge that is difficult to learn. Newton et al. (2015) explained how workplace learning allows students to learn by doing and provides opportunities to apply theory from their academic learning and contextualise it to the workplace. The importance of opportunities to apply theory in practice during placement learning was also described by participants in my research.

Workplaces provide formal and informal opportunities for learning. They enable students to develop understanding of their profession and how it works in real workplaces (Korpi et al., 2017). Learning opportunities on placement noted by participants in my research included: learning about the roles of other health professionals, participation in student tutorials, attending professional development sessions and learning about the health system and non-clinical aspects of practice. While not formal learning, Parboosingh (2002) asserts that lunch time conversations form an important source of knowledge and learning about how to care for patients. Spending time with staff during meal breaks was also mentioned in each of the focus groups in my research.

Learning about the roles of others in the workplace was raised by several participants in my research. They described how learning about other professions helped to understand the roles of others in patient care and cement understanding of their own professional role. One student participant also described how they had changed their practice in patient assessment to consider how other professions could help meet the needs of their patients. The concept of 'interprofessional familiarisation'

was described by (Arndt et al., 2009) as socialisation with the goal of introducing students to the roles and functions of professions outside of their own profession. They assert that socialisation facilitated by shadowing other professions helps students to articulate their professional role and identity in the healthcare environment (Arndt et al., 2009). Another benefit of shadowing with other professions was described as changing the views of other professions and their roles previously held by students and developing relationships in the healthcare team (Hood, Cant, Leech, Baulch, & Gilbee, 2014). Furthermore, Reeves, Freeth, McCrorie, and Perry (2002) assert that experiences with other professions are valued by students who believe they help effectively prepare them for future practice.

6.2.1.3 Learning through patients

Placements provide opportunities to develop competence by engaging in practice and working with patients (Dall'Alba & Sandberg, 1996). For an adult learner facing a meaningful problem, such as caring for a patient, naturally promotes learning (Parboosingh, 2002). A professional Director in my research noted the excitement students show when they work with patients and apply their theoretical knowledge in the practice environment. Students and new graduates also reported the impacts of learning through working with patients. Fiddes, Brooks, and Komesaroff (2013) argues that patients have played a key role in teaching since Hippocrates. They assert that textbook learning for students becomes a means to an end and the best teaching is taught by the patient themselves. Furthermore, Pitkala and Mantyranta (2003) state that "patient contacts are a much more important source of development of professional identity than previously expected"(p. 158). Pitkala and Mantyranta (2003) explained how medical students become more secure and self-confident in their roles and professional identity as a student-physician through contact with patients. Participants in my research also described the value to their learning from explaining their profession to patients and in doing so realising the knowledge they possess and what they can offer through their professional skills. One participant described the learnings she achieved through working with a patient whose behaviour was challenging and who was difficult to engage with. Similar benefits from challenging situations with patients were noted by other students, new graduates and clinical educators (Plack, 2006). Direct "hands-on" contact with patients was identified by

physiotherapy students as one of the factors influencing the quality of clinical learning environments (Morris, 2007).

6.2.1.4 Learning experiences 'in the country'

Regional placements have been encouraged as a strategy for recruitment of medical, nursing and allied health staff with the experience of students completing regional clinical placements being extensively studied (Johnson & Blinkhorn, 2011; McAllister et al., 1998; Smith et al., 2018(b); Smith et al., 2018(a); White & Humphreys, 2014). Regional placements provide opportunities for "hands-on" learning with consideration of physical and social features of the setting (Daly, Roberts, Kumar, & Perkins, 2013). Through connecting and socialisation with others in the workplace, students are able to negotiate boundaries within the learning spaces in the community. While not specifically referencing regional placements, Ellaway, Cooper, Al-Idrissi, Dubé, and Graves (2014) argued that to help students enter learning spaces they need orientation to culture, social and practical aspects of the regional workplace. This could apply to orientation in regional placements where students can benefit from orientation to community culture, values, and practices; social orientation, making connections with other students and staff in the workplace and practice orientation such as workplace tours.

Staying in shared accommodation during placement also creates opportunities for informal learning from other students and members of the multidisciplinary team (McKinlay et al., 2016). Smaller co-located multidisciplinary teams in regional areas provide increased opportunities for students to develop relationships with team members and develop an understanding of the roles of other professions and how they relate to the student's profession. These experiences can also support students' learning about multidisciplinary team work and interprofessional collaboration for patient care (Johnston et al., 2017; Thackrah et al., 2017).

6.2.2 Theme two: Feeling supported by socialisation in the workplace community of practice

The second overall theme of feeling supported by socialisation in the workplace community of practice considers the impacts of workplace culture on student learning, how students are socialised into the workplace community of practice and considerations for learning in regional workplaces.

6.2.2.1 Socialisation supporting participation in the workplace community of practice

How newcomers are socialised into an organisation can have a greater impact on them than what they learn (Ashforth et al., 2007; Jones, 1986; Van Maanen & Schein, 1977). Lave and Wenger (2012) consider learning as a social activity taking place in a community of practice. Student participation in learning on placement can be described as legitimate peripheral participation in the workplace community of practice (Lave & Wenger, 2012). While on placement, students move from participation as outsiders where they are initially involved in simple tasks that help them understand the work and goals of the workplace community. As students develop mastery in these simple tasks, they move to become more and more central in the functioning of the community and could be said to join the community of practice. Student transition into the community of practice is supported by clinical educators, Clinical Education Support Officers, other staff and patients (Cruess et al., 2014; Jaye & Egan, 2006; Ó Lúanaigh, 2015; Plack, 2006; Wald, 2015; Weaver et al., 2011; Wilson et al., 2013).

Socialisation in the workplace community of practice can support students to develop professional identity (Lave & Wenger, 2012). Strategies supporting student socialisation and transition into the community of practice include: creating a welcoming community, actively engaging students in joining the community, expanding the emphasis on explicitly addressing role modelling, experiential learning, and reflection (Cruess et al., 2017). Workplace actions to welcome students to placement, such as a welcome tutorial from professional Directors, can reduce student anxiety and support connectedness (Flott & Linden, 2016; Gilbert & Brown, 2015). Socialisation can be further facilitated by providing opportunities for students to connect with members of their own and other professions during morning tea and lunch breaks, scheduling opportunities for students to experience work shadowing and modelling from members of their own professions and creating opportunities for contact and role modelling within the multidisciplinary team. Including students in meal breaks with clinical educators and other staff rather than segregating them was highlighted as a positive socialisation experience in all focus groups in my research. Sharing lunch space with students was also noted by Francis et al. (2016) to enable student-clinical educators relationships which facilitate learning. Houghton (2016) explained the concept of team mentoring where the whole team mentors the student

and helps facilitate their 'belonging' Socialisation with other professions was also described by several participants in my study as helping to understand their role in the healthcare team thus cementing their professional identity.

Student nurses described feelings of belongingness when the managers and nurses in the workplace were welcoming and accepting of them (Levett-Jones, Lathlean, McMillan, & Higgins, 2007). A similar finding was made by Gilbert and Brown (2015) who also reported that the attitudes of health professionals affect student feelings of self-esteem and belonging. Gilbert and Brown (2015) asserted that feeling acceptance into a workplace group is further supported by affirmation from staff and patients. My study identified the importance of student connections with others in the workplace to support the development of professional identity.

Workplace actions can encourage or discourage students from joining the community of practice. Heroes and villains in the workplace were described by Foster and Roberts (2016). They described heroes as "attractive, altruistic, caring and clever" while villains were described as "direct" or 'bullies" (Foster & Roberts, 2016, p. 1). Francis et al. (2016) explained that the quality of student–clinical educator relationships may be enhanced by favourable clinical educator qualities such as interpersonal skills but limited by unfavourable characteristics. Participants in the study of physiotherapy students conducted by Plack (2006) described the importance of exposure to both positive and negative role models during placement. One participant in my research reported how experiencing interactions with a clinical educator with good interpersonal skills contrasted with one with less professionalism. The participant reported that this highlighted for them the value of professional skills in practice. In contrast, the study of student nurse socialisation during placement conducted by Thomas, Jinks, and Jack (2015) reported those who experienced negative attitudes felt "horrible and vulnerable" (p. 8). Thomas et al. (2015) asserted that these negative attitudes and interactions during placement can impact on the student learning journey and transition to practice. A small number of examples of negative workplace connections were described by students and new graduates in my research. One new graduate described an experience where they perceived staff felt like students were a "*burden*" and another described feeling like students were "*looked down upon*". Findings from my research identify how clinical educators, members of the students' professions and other professions can help students progress from outsiders into full

participation in the placement community of practice (Cruess et al., 2014; Jaye et al., 2010; Wilson et al., 2013).

6.2.2.2 Workplace culture

The workplace learning environment plays a unique part in student learning. In their search of literature analysing the clinical learning environment, Flott and Linden (2016) identified the importance of the organisational culture considering the organisation's view on the importance of student education, organisational policies and emphasis on providing quality patient care affecting learning experiences of students. Similarly, Jaye et al. (2010) theorised that organisational culture is influenced by social aspects of the workplace and the impacts of patient care and can influence student feelings of belonging in the workplace (Walker et al., 2014). In my research, clinical education was described as "*core business*", "*what we do*" and so intertwined with an organisational culture that "*If you're not going to be involved in that then you might not fit into our culture.*" (Director 1.5) Provision of clinical education is listed as a key performance indicator in the Darling Downs Health Allied Health Operational Plan (2018-2019) (Darling Downs Hospital and Health Service, 2017a). The expectation for staff contribution to student education was also emphasised by professional Directors in their focus group.

Workplaces impose expectations for student behaviours and learning during their clinical placement (Billett, 2004). My research identified how expectations of students and their participation in learning and the workplace were outlined in student handbooks, orientation presentations and welcome emails sent to students. The health service values document also provided explicit expectations of student behaviour mapped against the health service values and contrasted these with unacceptable behaviours. Plack (2008) described a learning triad comprising the student on placement, the clinical educator and the workplace environment as critical to the learning process. Student orientation sessions provide an opportunity to create an initial impression of the workplace to both set expectations and welcome the student to the health service. Houghton (2016) emphasised the importance of orientation in setting up effective student-clinical educator relationships and reducing student anxiety.

The health service context has been identified as having an impact on professional identity development (Jaye et al., 2010; Walker et al., 2014) by

influencing student feelings of belonging and connection to the workplace (Naylor et al., 2016; Walker et al., 2014). Siggins Miller Consultants reported the need for workplace cultures promoting clinical education through actively supporting learning, and development of positive learning relationships in the workplace (Siggins Miller Consultants, 2012). Participants in my research described the health service where the study was conducted as viewing clinical education as part of "*core business*" and students as active participants in their learning and contribution to service delivery.

The health service emphasis on providing quality patient care while facilitating student learning was noted by Flott and Linden (2016) and Houghton (2016). Clinical educators play a dual role when students are on placement being responsible for providing quality patient care and student education (Carr & Gidman, 2012; Casares et al., 2003; Hall, Poth, Manns, & Beaupre, 2015; Sholl et al., 2017). Clinical educators, as members of the workplace community of practice, have a vital role in facilitating student connection and socialisation with their profession and others in the multidisciplinary team to support professional identity formation (Cruess et al., 2014). The attitude of staff towards one another and students was identified by Dunn and Hansford (1997) as playing a key role in student perceptions of a positive learning environment. Similar findings were noted in my research with participants commenting on the acceptance of students within teams, and their professions and noting how some clinical educators are passionate about providing education for students.

Dedicated clinical education portfolio holders or support roles in the workplace (such as Clinical Education Support Officers in this research) support quality learning and assisting to facilitate connectedness (Flott & Linden, 2016). Participants in this research described actions performed by Clinical Education Support Officers to support clinical placements. These actions included: support to students living away from home, support to clinical educators and students during placement, provision of education opportunities for students and within the profession and helping to set culture of clinical education as an essential part of service delivery.

6.2.2.3 Country connections

Regional placements have been encouraged as a strategy for recruitment of medical, nursing and allied health staff with the experience of students completing regional clinical placements being extensively studied (Johnson & Blinkhorn, 2011;

McAllister et al., 1998; Siggins Miller Consultants, 2012; Smith et al., 2018(b); White & Humphreys, 2014). Orientation forms a key strategy to facilitate student transition to the regional placement setting (Rodger, Fitzgerald, et al., 2011). Students benefit from orientation to community culture, values and practices; social orientation and connection making with other students and those in the workplace and practice orientation such as workplace tours.

Provision of resources and facilities, such as accommodation, helps to support student placements. In regional Australia, many students live in hospital-based accommodation with other staff and students while completing their placements. Separation from supports such as family and friends can be challenging for students completing regional placements however, social isolation can be reduced through connectedness in the workplace and peer support from other students (Edmunds & Harris, 2015). Furthermore, the experience of living away from home and usual supports can be supported through social connections and peer support from those with whom students live (Thackrah et al., 2017; Webster et al., 2010).

6.2.3 Theme three: Acting supported by workplace affordances

The final overall theme of acting supported by workplace affordances identifies how workplaces provide opportunities to students to support their participation in learning and engagement in healthcare service delivery through the development of autonomy and independence. Billett and Sweet (2015) described invitational qualities of physical and social circumstances on placement as "affordances" (p. 117). These opportunities or affordances could include engaging in practice experiences such as ward rounds, teaching with patients, clinical experiences, attending meetings and meeting with other professionals or students (Billett & Sweet, 2015). They may be positive and inclusive of students or conversely can exclude or marginalise students. My research identified how the workplace provided opportunities for students to gain independence and autonomy through working with patients and being recognised as a health professional. The context of regional healthcare can impact on student affordances.

6.2.3.1 Gaining independence and autonomy through working with patients

Mylrea et al. (2017) states 'the development of professional identity involves a focus on who the student is becoming, as well as what they know or can do, and

requires authentic learning experiences such as practice exposure and interaction with role models (p. 1).' In my research, I have considered gaining independence and autonomy as students being supported to explore, take initiative, develop and implement solutions in practice. Development of competence through gaining skills and increasing autonomy supports student movement from lay person to member of their profession (Cruess & Cruess, 2006). Billett (2002) proposes that the participatory practices of the workplace shape and guide activities and support that the workplace affords to learners. He explains that "situational and political processes underpin workplace affordances" (Billett, 2002, p. 1). Participants in my research described situational affordances such as invitations to present at ward round, being encouraged to contribute to workplace projects, creating opportunities for independence, supporting learning with graded experiences and complexity of cases and building student's confidence. I propose that situational affordances such as these contribute to *acting* like a health professional.

In another work, Billett (2004) describes the interaction of workplace affordances and constraints impacting on learning within the workplace environment. Workplaces are seen to regulate student participation in learning activities in an intentional structured way. The need to balance ensuring quality patient care with affording students the opportunity to take on greater responsibility is very real in the healthcare environment (Hauer et al., 2014). The trust in and trustworthiness of students has been identified as an important factor in affording or allowing students to take the initiative and more responsibilities in patient care (Clouder & Adefila, 2017). The factors influencing a clinical educator's trust in a student are related to the supervisor (clinical educator), trainee (student), the supervisor–trainee relationship, the task, and workplace context (Hauer et al., 2014). Graduated supervision to enable students to take on increasing clinical responsibilities is carefully managed by clinical educators who balance risk and student responsibilities (Clouder & Adefila, 2017; Sholl et al., 2017). Trust has been shown to influence clinical educator willingness for students to take on responsibility (Clouder & Adefila, 2017; Greer et al., 2010). Clinical educators also work to find the right balance of supporting and challenging student learning (Matthew-Maich et al., 2015).

In my research, clinical educators described how they set up learning opportunities for students such as contributing to ward rounds, work shadowing with

other professionals, and outreach trips. In addition to these opportunities, students are exposed to other learning opportunities in the workplace context. This includes access to activities (such as staff meetings and ward rounds); access to people (role models, others in their profession, patients); access to history (such as workplace politics), and access to challenges (such as activities designed by the clinical educator to challenge the student) (Plack, 2006). With these opportunities provided, students are supported to gain knowledge and practice skills through increasing and staged independence (Perry et al., 2018). Through graduated supervision, students are empowered to take on increased and more demanding responsibilities.

Staff, students and new graduates in my research reported how opportunities for increased independence and autonomy were set up with patients. Newton et al. (2009) state that how student nurses are permitted to participate in healthcare settings during placements is central to their skill development and formation of occupational identity. Participants in my research described students providing scaffolded care to patients and clinical educators "*pulling back*" during the second half of placements as students gained more independence. They also described how graded learning enabled students to increase their confidence in providing care. Symbols of moving towards independence in my research included referring to students as members of their profession, professional dress or uniform requirements and student use of workplace email accounts to liaise with others in the patient care team in a professional manner.

Despite being provided with workplace affordances, learning is dependent on how students engage with these opportunities (Billett & Sweet, 2015; Clouder, 2003; Hauer et al., 2014). Johnson et al. (2016) clearly states that the learner is autonomous and needs to do the learning. Davis (2006) further reiterates the responsibility for professional identity lies with both the student and with the workplace community of practice. While not investigated within this research, it is critical to remember that the workplace is not exclusively responsible for the student uptake of opportunities and that this is an interplay between students and the practice setting (ten Cate et al., 2010). The workplace community of practice therefore may provide affordances for student learning which are not taken up by students.

The relationship between students and their clinical educator has been described a critical in developing student independence (Clouder & Adefila, 2017; Manninen et al., 2015; Perry et al., 2018). During clinical placements clinical educators create

learning opportunities (Barbaro-Brown, 2010; Liljedahl et al., 2016) and scaffold strategies for students to think for themselves (Clouder & Adefila, 2017). Students and new graduates explained how clinical educators created opportunities for student participation in regular workplace practices such as ward round reporting. Participants also reported how learning activities were graded to support student learning and the development of increased independence. Clinical educators use learning strategies such as case discussion, observations, and reflection to support student learning and gain an understanding of student competence in practice (Plack, 2006). Student participants in my research described how their clinical educators guided them in their reasoning and encouraged them to use their professional theory in practice. Two participants described how their clinical educator helped them to "*emerg*e" in their profession and did not pressure them to be "*a mini-me*".

Multiple opportunities for students to practice with clients was stated by Bogo (2015) as being one of the critical factors promoting student learning. Opportunities or affordances for students to take the initiative in patient care were described in my research with several participants describing situations where students were afforded the opportunity to advise other members of the healthcare team of their professional recommendations for patients. Referral from other health professionals could be seen as an implicit rite of passage into the workplace community of practice (Monrouxe, 2010). Participants also spoke of the impact of patients and family members seeking their advice as students. They reported how this positively influenced their perception of themselves as a member of their profession.

6.2.3.2 Regional placement experiences

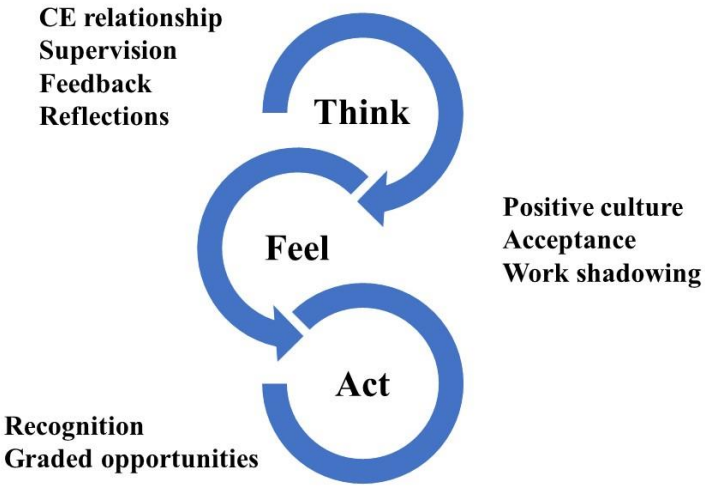
Placements in regional areas can provide students with unique affordances and opportunities which are different to urban tertiary hospitals (Daly, Perkins, et al., 2013). They provide a range of diverse learning opportunities (Siggins Miller Consultants, 2012) and promote practical skills and clinical competence (Couper, Worley, & Strasser, 2011). These different regional placement experiences can include taking increased responsibility for clinical skills and being included as an active member of the clinical care team (Daly, Perkins, et al., 2013). Students completing regional placements may be in settings where teams are smaller and different professionals are co-located (Siggins Miller Consultants, 2012). Opportunities to experience multidisciplinary and interprofessional care and collaboration can be

enhanced in these smaller close-knit teams (Johnston et al., 2017; Siggins Miller Consultants, 2012; Thackrah et al., 2017).Participants in my research described the broad variety of learning experiences such as "*hands on learning*" and learning from other professionals, during regional placements. They described opportunities for students to actively contribute to patient care being afforded by members the healthcare team and spoke of support and acceptance from other team members. Several participants described the culture of regional teams supporting student learning. They described instances where doctors asked students for their input into patient care decisions. One participant highlighted how regional placement experiences also enable students to begin to understanding barriers to accessing healthcare experienced by patients living outside of major centres.

6.2.4 How can the findings of this research improve clinical placements in a regional healthcare setting?

Suggestions to improve how clinical placements can support the development of professional identity helps answer Research Question 2: How can these findings improve clinical placement design in regional settings? These suggestions have been both explicitly stated by participants and implicitly identified during data analysis. In this section I will explain how research findings can translate into workplace actions supporting student learning during regional clinical education learning experiences (refer to Figure 6-2 and Table 6-1 for a summary of placement actions). I use the *think/ fee/act* framework to structure my description of the suggestions.

Figure 6-2
Overview of recommended actions for regional clinical placements supporting allied health students thinking, feeling and acting as a health professional



6.2.4.1 Thinking as a health professional - providing diverse learning experiences

Placements providing a general range of clinical experiences have been shown to be more effective in promoting better skill integration (Johnston et al., 2017). Planned consideration of the learning opportunities available during regional placements can support student skill development and confidence as students transition to practice (Roulston et al., 2018). Clinicians coordinating student placement learning, therefore, play a key role in recognising and capitalising on regional learning opportunities such as the breadth of service delivery and clinical presentations and experience of the diverse aspects of regional practice.

Participants in my research described how regional placements provide unique opportunities for personal and professional learning and support student development of professional identity (Johnston et al., 2017; Siggins Miller Consultants, 2012; Smith et al., 2018(a); Young et al., 2016). In many regional locations, clinicians providing placements often work as generalists and provide services across the lifespan to inpatients, outpatients and outreach to adjacent communities (Daly, Perkins, et al., 2013; McAllister et al., 1998). This provides increased opportunities for skill development and performance success in a range of areas through access to a variety

and breadth of learning experiences (Daly, Perkins, et al., 2013; Johnson et al., 2016; Thackrah et al., 2017).

6.2.4.2 Feeling like a health professional – facilitating student connectedness in the workplace

Workplace actions to welcome students to placement, such as welcome from professional Directors, can reduce student anxiety and support connectedness (Flott & Linden, 2016). Socialisation can be further facilitated by providing opportunities for students to connect with members of their own and other professions during meal breaks; scheduling opportunities for students to experience work shadowing and modelling from members of their own profession and creating opportunities for contact and role modelling within the multidisciplinary team. Participation in smaller co-located multidisciplinary teams can be facilitated to support learning about multidisciplinary team work and interprofessional collaboration in patient care (Johnston et al., 2017; Thackrah et al., 2017).

Students completing regional placements may live in hospital-based accommodation with other staff and students. This experience of living away from home can be supported through social connections and peer support from those with whom they live (Edmunds & Harris, 2015; Smith et al., 2018(a); Thackrah et al., 2017; Webster et al., 2010) and creates opportunities for informal learning from other students and members of the multidisciplinary team (McKinlay et al., 2016).

The health service context has been identified as having an impact on students feeling like a health professional by influencing students' feelings of belonging and connection to the workplace (Naylor et al., 2016; Walker et al., 2014). The need for workplace cultures to actively support learning and promote the development of positive learning relationships in the workplace has been well documented (Siggins Miller Consultants, 2012). Participants described the context of the regional health service where the research was conducted as viewing clinical education as part of core business and students as active participants in their learning and contribution to service delivery.

6.2.4.3 Acting as a health professional - grading learning to support independence and autonomy for practice

Experiencing the diversity of regional practice supports the development of student learning and preparedness for practice (Thackrah et al., 2017; Webster et al.,

2010). Structuring graded learning experiences and providing role modelling facilitates skill development (Rodger, Fitzgerald, et al., 2011). Learning from unexpected situations encountered during regional placements can be supported by clinical educators through formal and informal supervision, reflection (Naidoo & van Wyk, 2016) and effective feedback (Wearne, 2016).

Table 6-1

Recommended actions for regional clinical placements supporting allied health students thinking, feeling and acting like a health professional

Framework dimension and theme	Actions for regional clinical placements supporting framework dimensions
Thinking / competence Supported by quality learning	• Facilitate constructive student learning relationships with clinical educators • Promote individualised learning opportunities captialising on the breadth of clinical experiences in regional practice • Support opportunities for students to learn about all aspects of working as a health professional (e.g. behind the scenes patient scheduling, day to day non-clinical tasks) • Provide clear service and clinical educator expectations of student learning on placement • Support clinical educators to provide quality learning experiences through upskilling, best practice education principles, supervision and feedback practices • Link professional theory gained in the curriculum with practice experiences • Continue Clinical Education Support Officers support to supervision, time to reflect and debrief through tutorials • Encourage students to spend time with other professionals and own profession to learn about their roles
Feeling / relatedness Supported by Socialisation in workplace community of practice	• Establish and nurture a workplace which supports and values student education • Provide students with connections to the workplace (e.g. Director welcome, students join team during meal breaks) • Encourage collective support within multi-disciplinary team for students, through welcoming, work shadowing and learning opportunities (e.g. Whole team aware of students and offer to shadow) • Develop student connections to own profession, other professions, and care for patients • Utilise accommodation (where available) to support social and informal learning opportunities for students • Encourage opportunities for staff sharing experiences, stories, case discussions • Encourage students to take breaks and join the team for lunch
Acting / autonomy Supported by workplace affordances	• Value and support student contribution to patient care (e.g. projects completed on placement to support service delivery) • Encourage referrals for patient care by other professions made to students treating patients, rather than through clinical educators

'unzipping the student suit'	• Support student understanding of their profession's role and contribution to patient care and how they fit with other professions • Promote student reflection on practice (independently and during supervision with clinical educators) • Balance autonomy and educating - initially provide more guidance then support independence • Make links to previous learning

Throughout the course of this research, I have reflected on findings from my research and begun to implement changes to my practice as a Clinical Education Support Officer coordinating clinical placements for occupational therapy students across a regional health service. Some findings have affirmed existing practices and some findings have resulted in new practices. I have continued to: support orientation to health service systems and processes, encourage the occupational therapy team to welcome and include students in conversation at meal breaks, link previous curriculum learning to current experiences during weekly tutorials, and encourage the valuing of student contribution to service delivery through student presentations on projects and Darling Downs Health media stories. A change resulting from my research was the production of a Director of occupational therapy student welcome video which is now included in the student orientation emails to more formally welcome students to the health service for placement and staff in-services. I have delivered staff in-service sessions "Promoting a positive learning environment" which aimed to help create a positive workplace culture within occupational therapy supporting clinical education. Occupational therapy staff who participated in these in-service sessions play an active role in providing clinical placements and supporting students undertaking placements with other staff. Attendees were provided with a reflection worksheet to identify aspects in their practice to "start", "stop" and "keep" doing. Feedback from these initiatives has been positive. Students report the welcome video reduced their anxiety about commencing placement, helped them feel welcomed into the health service and identified the health service as one which values student education. These actions further enable my finding of supporting student connections into the workplace community of practice.

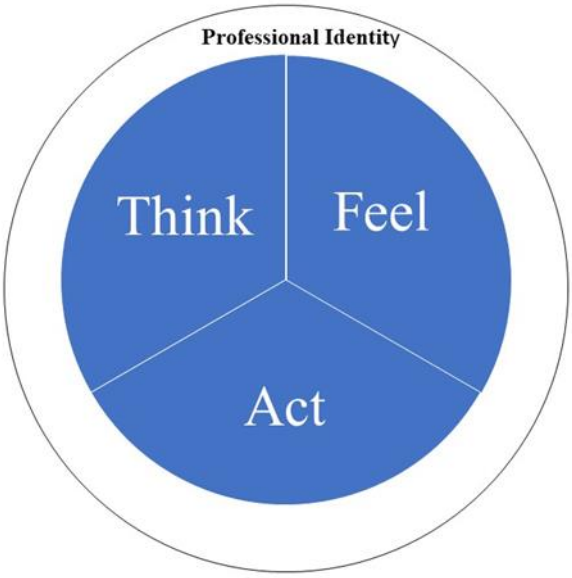
6.3 IMPLICATIONS FOR THEORY

The findings of this research contribute to existing literature and theory on professional identity by adding to the understanding of what factors can shape professional identity during regional clinical placements. My interest in this topic was initially sparked after reading the study by Ashby et al. (2016) reporting that 98% of occupational therapy students identify the importance of placement and socialisation for the development of professional identity. This study did not examine the factors contributing to the development of professional identity during clinical placement. After examining the literature, I determined this gap needed to be filled to provide the best clinical placement learning experiences possible to support the development of allied health students as health professionals. Literature in the fields of medical, nursing and allied health education provided several theoretical frameworks and diagrammatic representations for the development of professional identity (described in Chapter 2). The framework which best suited the definition of professional identity I used in my research was illustrated by (Mylrea et al., 2017). This framework provided a simple visual representation of the intersection of the elements of *think/act/feel* in developing a professional identity. In my research, I did not link these professional identity elements to self-determination theory as (Mylrea et al., 2017) had done because I had not included an examination of student factors, such as motivation, in my research. Initially, I thought this diagram described elements in the development of professional identity well. However, as my research progressed, I became increasingly uncertain about whether or how the *think/feel/act* elements overlap as illustrated by Mylrea et al. (2017). I questioned "how" or "if" the elements interact to develop a professional identity. When analysing data, I developed a modified version of the model by (Mylrea et al., 2017) which, I believe, provided a better explanation for the findings of my research.

In my revision of the conceptual diagram by Mylrea et al. (2017), I propose that professional identity is better represented as *think/feel/act* segments rather than a Venn diagram with overlapping sections. I have earlier explained (Chapter 3 Section 3.5.3) my decision to change the order of elements in the professional identity definition. I represent professional identity as a circle encapsulating the *think/feel/act* elements of professional identity with subthemes providing further context (Refer to Figure 6-3). The size of the elements is not representative or explanatory. My research has

identified that each of the *think/feel/act* elements is present during clinical placement learning and the quality of placement learning experiences can be improved by enhancing each of these elements. Further explanation of details for actions to enhance the development of professional identity during placement learning is found in Section 6.2.4.3.

Figure 6-3
My modifications to the conceptual diagram by Mylrea et al. (2017)



The use and understanding of the concept of professional identity is difficult to define with many different definitions and concepts (Wiles, 2013). This was reinforced by one participant who said:

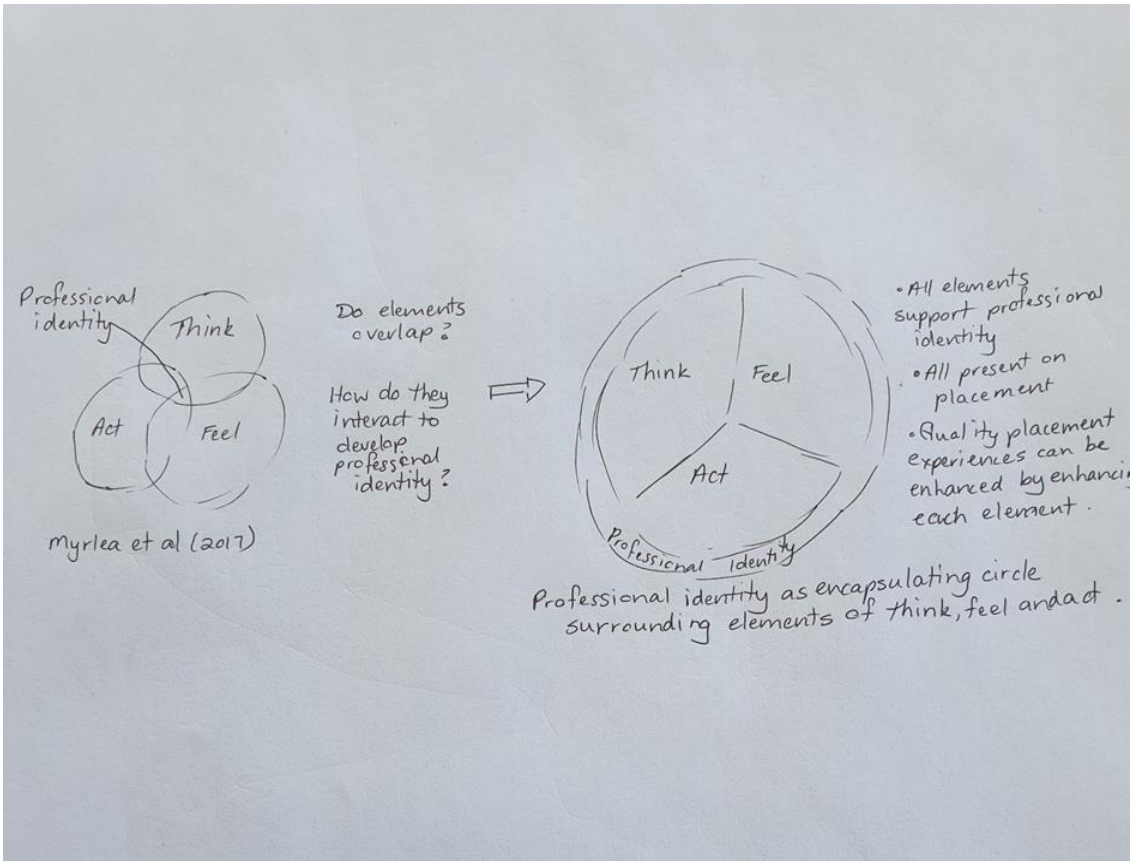
> *I think* [name of researcher] *is trying to capture something that's very difficult to articulate and while it's hard to articulate, to then put stuff in action I suppose, have plans or a prescriptive step-wise plan to – if the result is we want students feeling professional, but it seems quite a difficult thing to plan. So, it's something we probably do subconsciously, innately with the feel of the program* [clinical education in the health service]. (Clinical Education Support Officer 2.4)

The ongoing dialogue among academics about the concept of professional identity reinforces the need for simple diagrammatic representation of professional identity and a better understanding of actions which can be taken during placement to shape professional identity (Wiles, 2013). My revision of the conceptual diagram by

Mylrea et al. (2017) contributes to the theory on professional identity development (Refer to Figure 6-4). I have made the decision to retain this diagram in its handwritten form to illustrate the progress of thinking involved. Elements of this diagram are also represented in Figures 6-1, 6-2 and 6-3.

Figure 6-4

My revision of the conceptual diagram by Mylrea et al. (2017) throughout my research



6.4 POLICY AND PRACTICE IMPLICATIONS FOR REGIONAL PLACEMENTS

Findings of my research can inform clinical education policy and practice by affirming some current practices and highlighting the importance of clinical placements and the Clinical Education Support Officer role. Furthermore, my research has provided suggestions which can be implemented during regional clinical placements to support the development of professional identity. These suggestions could readily be incorporated into both regional and metropolitan clinical placement experiences.

6.4.1 Importance of clinical placement experiences

My research aligns with other authors who highlight the importance of placement learning experiences (Billett, 2002, 2016; Billett et al., 2018; Brown et al., 2015; Frenk et al., 2010; Koontz et al., 2010; Korpi et al., 2017; McBride et al., 2015; Mylrea et al., 2017; Parboosingh, 2002; Siggins Miller Consultants, 2012). In the period 2010 to 2016, there was a 100% increase in the number of students commencing allied health entry level training programs (Clinical Excellence Division. Queensland Health, 2019). As the number of students undertaking allied health courses continues to grow, and cohort numbers increase, there is increased demand for placement learning opportunities (McBride et al., 2015). While universities are increasingly looking to supplement placement numbers through onsite university-run student clinics, simulated patient experiences and 'role-emerging' placements (Brown et al., 2015), the need for students to undertake authentic workplace learning is often stated (Billett, 2002; Billett, 2004; Billett, 2016; Billett et al., 2018; Frenk et al., 2010; Koontz et al., 2010; Korpi et al., 2017; Mylrea et al., 2015; Parboosingh, 2002; Trede et al., 2012; Volpe et al., 2019).

The growing demand for clinical placements will increasingly necessitate students being allocated clinical placements in regional areas (Brown et al., 2015; McBride, Fitzgerald, Costello, & Perkins, 2018; McBride et al., 2015; Rodger et al., 2008). Numerous investigations of student experiences in regional clinical placement in Australia have been undertaken (Brown et al., 2015; Johnson & Blinkhorn, 2011; McAllister et al., 1998; Smith et al., 2018(b); Smith et al., 2018(a); White & Humphreys, 2014). It is argued that regional placements provide students with enhanced opportunities for learning, a range of hands-on and holistic experiences, opportunities to gain cultural understanding, multidisciplinary experience and exposure to interprofessional practice (Siggins Miller Consultants, 2012). My research contributes to knowledge about the importance of placement learning by identifying ways clinical placements influence the development of professional identity and suggesting strategies that support the development of student professional identity.

6.4.2 Importance of the Clinical Education Support Officer role

Findings of my research affirm the importance of the Clinical Education Support Officer role as a dedicated role supporting students and clinical educators within the health service. The Clinical Education Support Officer role was established in

Queensland Health as part of the Clinical Education Workload Management Initiative (CEWMI - 'the initiative'). Clinical Education Support Officer roles were funded to:

• Manage risk associated with novice learning in healthcare

• Build the confidence, skill, knowledge and capability of allied health professional in clinical education

• Provide coordination of logistical elements for placements in consultation with university programs. (McBride et al., 2015)

Participants in the professional Director, Clinical Education Support Officer and student focus groups noted the importance of the Clinical Education Support Officer role in supporting regional placement learning experiences. Clinical Education Support Office actions described to support placements included: preparation for placements, orientation of students to placement and the health service context, support to students during placement, supports to clinical educators during challenging student situations and supporting new graduates to transition to clinical education of students. These Clinical Education Support Officer actions were identified as influencing clinical educator capacity and increasing clinical educator willingness to engage in clinical education through providing placements (McBride et al., 2015) and supporting their dual roles as clinician and educator (Carr & Gidman, 2012). By encouraging and supporting clinical educators to enable student access to the full range of clinical experiences on placement, the Clinical Education Support Officer plays a key role in developing a workplace community of practice for learning (Plack, 2006). Within Queensland Health considerable attention is given to embedding a quality placement learning experiences (Fitzgerald & Costello, 2018). The value of the Clinical Education Support Officer role in reviewing and monitoring the quality of placements through exit surveys and support clinical educator reflection on challenging placements was also noted in focus groups.

The challenge of social isolation, and separation from family and social supports during regional placements was reported by Edmunds and Harris (2015) and Francis-Cracknell et al. (2017). In my research, clinical educators noted the value of the Clinical Education Support Officers as "*another contact for students*' and '*supporting student work life balance during* [regional] *placements."* Supported clinical placement experiences in regional areas have been identified to increase student interest in

returning to a regional area and lead to recruitment opportunities (McAllister et al., 1998; Siggins Miller Consultants, 2012; Smith et al., 2018(b)).

My findings affirm the continued value of the Clinical Education Support Officer role and the need to maintain these roles into the future. McBride et al. (2015) examined the impact of the implementation of Clinical Education Support Officer roles on placement capacity and workload management across five allied health professions (medical radiation, nutrition and dietetics, occupational therapy, physiotherapy, speech pathology) within Queensland Health. They found that the Clinical Education Support Officer positions were seen as a major factor in staff taking more students on placement. The support provided by Clinical Education Support Officers in coordinating placements, supporting clinical educators before and during placements and providing contact with universities were valued by staff and managers. Similar findings about the importance of a clinical education coordinator role were reported by Francis-Cracknell et al. (2017) who examined student and clinical educator perspectives on what strategies can enhance student engagement in non-metropolitan placements. They found that dedicated clinical education coordinator positions, that perform similar functions to the Clinical Education Support Officer roles, had a positive influence on student placement experiences during non-metropolitan placements. Findings about the importance of Clinical Education Support Officer role in my research echo those reported by McBride et al. (2015) and Francis-Cracknell et al. (2017).

6.4.3 Responding to a changing healthcare environment

The healthcare environment is experiencing many challenges including population demands, epidemiological and demographic transitions, technological innovation and professional differentiation (Frenk et al., 2010). ten Cate et al. (2010) explained how future health professionals will need to respond to constant changes in healthcare including evolutions in roles, protocols and standards of care, organisation and systems changes, and demands from increasingly well-informed patients. To meet these challenges, Frenk et al. (2010) suggest the need for actions linking the health and education systems. At a regional health service level, provision of clinical placement learning experiences in the authentic healthcare environment will enable students, when they become future professionals, to have contact with the changing demands of health environment and its patients. Nancarrow et al. (2014) strongly advocate for the

importance of student training to be situated in clinical environments, as advocating for trainee health professionals can best be done while located in the clinical environment with support delivered through outsourced university training.

It is in this increasingly complex healthcare environment with pressures to control the cost of care that improved service delivery models are being investigated and implemented (Brownie et al., 2014). The Clinical Education Support Officer focus group spoke of changes in health service with extended scope of practice, case management, project and education roles. This further underpins the importance of placements in the healthcare environment to provide contact with these models and develop students as healthcare professionals prepared for future practice.

Mackenzie and O'Toole (2017) highlight the importance of students being exposed to a broad range of experiences that authentically replicate the demands of future practice. Through these authentic workplace experiences students are seeking to enable their transition to practice. The opportunity to experience and develop understanding of health systems and processes and experience a '*real workday*' was identified as critical in student and new graduate focus groups. Through clinical placements the health service affords students the experience of learning in an authentic practice environment.

6.4.4 Interprofessional care and collaboration and professional identity

The World Health Organisation has led action on interprofessional education and interprofessional collaboration with the development of a Framework for Action Interprofessional Education and Collaborative Practice (Darling Downs Health, 2019b). These principles of interprofessional education and collaboration have been increasingly adopted within healthcare in Queensland. Darling Downs Health has initiated several actions to encourage the implementation of interprofessional practice and collaboration. The actions taken by the health service to date have included exploration of opportunities for professionals in service teams to work more collaboratively and conducting interprofessional workshop sessions for allied health, medical and nursing students on placement. A strong professional identity is needed to become a member of both one's profession and the patient healthcare team (Stull & Blue, 2016). The *thinking* and *acting* elements of professional identity explored in my research are necessary for competence in patient care and *feeling* connected in the workplace to one's own and other professions enables best patient care.

The concept of multiple identities, such as an identity as a member of their profession, and also an identity as a member of the patient care team, was raised in the Clinical Education Support Officer focus group. One participant queried: "*So is it your identity as a professional working within health versus a specific discipline?*" (Clinical Education Support Officer 2.1) Several authors have written about health professionals having multiple identities, such as the identity as a doctor and healthcare worker (Burford, 2012) or a pharmacist having multiple identities of medicine maker, scientist and dispenser (Elvey, Hassell, & Hall, 2013). Wald (2015) suggests the importance of designing medical, nursing and health professional education to develop both a professional identity and a group identity. While not investigated in my research, it is interesting to see consideration of this concept in focus group discussions.

Health professional education has been successful in equipping students with a uniprofessional identity as a member of their profession, but it has been suggested that this could become a major barrier to interprofessional collaboration (Khalili, 2013; Khalili et al., 2013). In their research, Khalili et al. (2013) developed a conceptual framework to guide interprofessional socialisation to support interprofessional collaboration. In contrast to Khalili's work, my research reports the value students and new graduates place on learning about the role of other professions in healthcare and the presence of opportunities for contact with other professions. Furthermore, my research reports the suggestion from new graduates and students for the health service to continue to provide opportunities for students to work shadow with other professionals during placement. My findings echo the opinions of authors who wrote that students reported that knowing more about other professions clarified their understanding of their own profession (American Occupational Therapy Association, 2016; Jakobsen, Hansen, & Eika, 2011). One participant described how contact with other professions was valuable as it helps students to understand their role and how it interacts with the roles of others. While interprofessional education is important, the need for balance in education between the uniprofessional identity with the identity of a healthcare team was recommended by Lidskog, Löfmark, and AhlströM (2008).

My research reports the availability of opportunities for interprofessional socialisation in the regional healthcare context where allied health teams are co-located in the same office, take meal breaks together and actively support opportunities for students to spend time observing other professions. Jones, McAllister, and Lyle

(2015a) illustrate the importance of interprofessional collaboration in regional service delivery contexts which can often lack a range of health professionals necessitating the need for extended roles and practice scope for healthcare professionals. The opportunities for allied health students to be exposed to other healthcare professions during placement is therefore critical as part of their learning and professional identity formation. One participant described their experience of supporting students from other professions to support interprofessional collaboration:

> *I think an example, I've also worked in a community travelling team. Often as the dietician I would take physio , OT students for the day, I think it really does give you the opportunity to explain the role of your specific discipline, but it also gives the student the knowledge, to be able to have meaningful conversations with the other professions as well, so that, they're not just speaking in an MDT* [multidisciplinary team meeting] *about their profession.*
>
> *They might say - we might have had a case conference, and the student might have been out on a home visit with their supervisor as an OT. They have come back and said, look, we had a look in the fridge and noticed that there was hardly any food there, and they're living off X, Y, and Z. The patient has pressure sores and they said they've lost a bit of weight, is that a good referral for you, or something like that.*
>
> *It just gives the student, I guess you're showing them what your role is, and actually if they're able to observe the kind of things that you would look at within a home visit, or even just a consult on the ward. I guess its kind of giving the student the knowledge of not just what the role is of that specific discipline, but also what's a good referral, and what are other things that I can be looking at. Not just in my own little bubble of a dietician, what else can I be looking at if I go out on a home visit and I see they're furniture walking, or something like that, can I provide that as commentary back to the OT , or physio , just those kinds of things.*
>
> *I think that's incredibly beneficial for the students to have that exposure as well.* (Participant 3.2)

With increasing opportunities for participation in interprofessional education in curriculum and workplace settings, consideration needs to be given to student

readiness for exposure to interprofessional education and experiences. Stull and Blue (2016) reported a decline of student's attitudes to their own and other professions following an introductory interprofessional education workshop in first year curriculum. They noted these findings support the concept of successive stages of professional identity formation. Student and new graduate participants in my research were in their third or final years of undergraduate study. They may potentially have more experience than students at an earlier stage in their studies and further developed professional identity which may explain their suggestion for continued exposure to other professions as they were in a later year in their undergraduate training.

6.4.5 Applying findings to policy and practices

The findings from my thesis have the potential to influence clinical education practices for allied health professions in Australia. Although my research was conducted in one regional health service examining allied health perspectives, the transferability of these findings could be considered by other healthcare professions such as medicine and nursing with consideration of their clinical placement context. Readers will be in the best position to determine what aspects of my findings are most relevant to their service context by considering what affirms their clinical education practice or what new practices can be implemented.

Findings from my research have impacted clinical education practice in several ways. Firstly, throughout the research I have made conference presentations at regional and remote healthcare, allied health and occupational therapy conferences. These presentations have provided explicit actions which could be implemented into clinical education practice. While results of these actions have not been measured, anecdotal feedback provided by participants noted how the presentations had affirmed aspects or their practice and provided practical suggestions which could be incorporated into their clinical education practice. Secondly, I have presented results to the health service Clinical Education Support Officers and occupational therapists in workshop format and workplace rules of thumb developed. Thirdly, I have published my findings to add to scholarly research. A list of publications and conference presentations is provided in Appendix T. Appendix U contains a copy of a publication linked to this research. My contribution to the understanding of professional identity development will help implement education and placement strategies and the importance of this is noted by Monrouxe (2010).

Furthermore, to support the implementation of my research findings in practice I have collated findings from my research. In Table 6-2, I present a checklist of practices which can be implemented during clinical placements to support the development of professional identity. I have organised these checklist practices using the themes from this research: *thinking* supported by quality learning; *feeling* supported by socialisation in workplace community of practice; and *acting* supported by workplace affordances. Some practices may already be in place within health services and if this is the case, their inclusion in the checklist will affirm actions already taken by the health service. Other actions not yet in practice could be considered by health services for future inclusion in clinical placement practice experiences.

Table 6-2

Checklist of practices supporting allied health students to develop professional identity during regional clinical placements

Framework element	Practices supporting professional identity development
Thinking supported by quality learning	• Clinical educator support to learning through graded learning, clinical reasoning, feedback, supervision, developing learning goals, applying professional theory • Clinical educator collaboration with students to facilitate learning • Clinical educator providing students with clear expectations and support to meet them • Providing balanced learning opportunities • Supporting a variety of learning opportunities – tutorials, workshop sessions, attend professional development sessions, case discussions • Learning about health service systems, non-clinical aspects of role, and the roles of other health professionals • Proximal access swipe card for students • Health service email account for students • Capitalise on regional learning opportunities, such as, varied caseloads, overnight and outreach trips, and learning from others also staying in accommodation
Feeling supported by socialisation in workplace community of practice	• Workplace culture with expectations for provision of clinical education where students feel respected and valued • Supportive clinical educator relationships with students • Connections with student's own and other professions through providing work shadowing opportunities, and socialisation during meal breaks • Provision of placement accommodation in regional areas • Support for regional placements, such as Clinical Education Support Officer support, encouraging connections in accommodation, supporting students to develop an understanding of the local town, and enabling connections with members of multidisciplinary teams co-located in the office

Framework element	Practices supporting professional identity development
Acting supported by workplace affordances	• Graded learning under clinical educator supervision • Initial support in the first few days to orientate students to placement and their role • Clinical educators supporting students to develop independence in patient care through opportunities such as speaking at ward rounds, and becoming responsible for patient care • Build student's professional knowledge and capacity through patient care • Encouraging student contribution to service delivery through participation in projects and patient care

Results from my research could also apply to enabling the smooth transition of new graduates into the health workplace. New graduates and recruits enter the workplace with professional knowledge attained during their university education. As identified in my research, further support to enable new graduates to *think* like a health professional is required through learning workplace systems and processes and is facilitated by supervision, feedback and learning the roles of other professionals. Adopting a positive workplace culture to welcome and accept new graduates will support connectedness to support them to *feel* like a health professional. In addition, social supports through developing workplace relationships and social connections through conversations at meal breaks, and opportunities to connect with those in one's own profession and other professions was identified in my research. *Acting* like a health professional can be enabled for a new graduate through graded opportunities to begin service delivery and facilitating smooth transitions to becoming the treating professional in the caseload.

6.5 CONTRIBUTION TO WORKPLACE

This section describes the contributions made from my research to knowledge, learning and workplace practices. Completion of my research has enabled me to develop exploratory findings and recommendations for implementation about how clinical placements in a regional health service can support the development of professional identity for allied health students.

6.5.1 Research project outputs

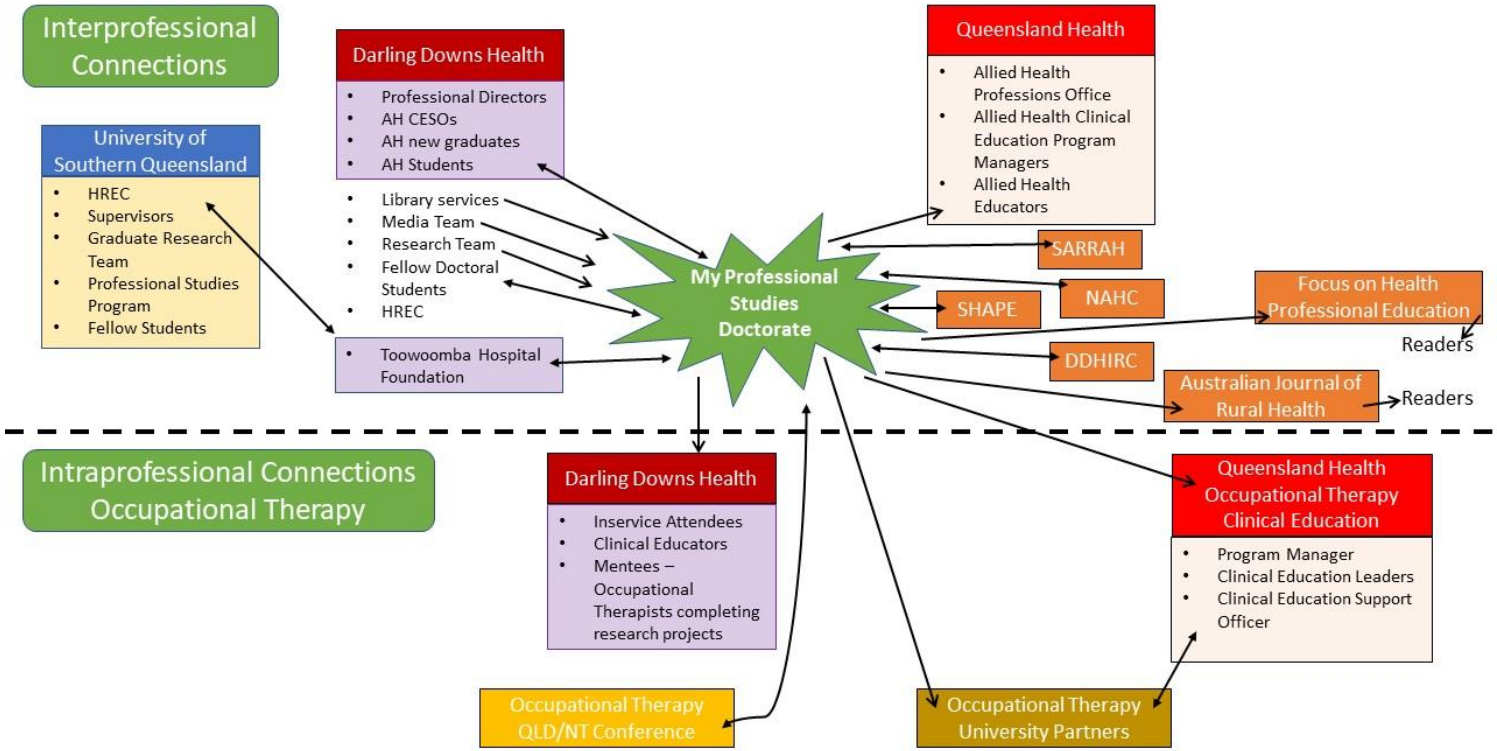
The influence of professional studies doctorates on practice and the workplace is described by Boud, Fillery-Travis, Pizzolato, and Sutton (2018) as being classified under three broad categories:

- Creation and adoption of practices and products
- Establishment of new processes, networks and relationships
- Ideas crossing organisational or international boundaries.

I believe the outcomes of my Professional Studies Doctoral research project has contributed under each of these categories. Firstly, I have contributed to the creation and adoption of practices in student clinical placement education through the revision of a professional identity framework to support students to *think, feel and act* like a health professional. I have organised the recording of a video by the Director of Occupational Therapy welcoming students to placement in the health service. My research has also contributed to a Fact Sheet explaining professional identity for use in the Occupational Therapy Clinical Education Program. Secondly, through completion of my research I have developed new networks and relationships. Bullen, Young, McArdle, and Ellis (2018) described an outcome of Professional Studies Doctorates to be interdisciplinary collaboration within the workplace. My experiences during the completion of this research project mirror this assertion. Figure 6-5 shows a mind map illustrating of the interdisciplinary relationships I have established during my research within the health service, throughout Queensland Health and the university sector. Thirdly, my ideas developed in the research have crossed organisational, national and international boundaries. I have presented my results at conferences and in publications which can be accessed by both national and international audiences (Refer to Appendix T and U). Results of the research have also been presented via oral presentations at state-wide, national and regional conferences. Key findings have been communicated via the Allied Health Professions Office of Queensland, Queensland Health Clinical Education training day and through in-service training sessions. Final results of the research were made available to participants via a written summary report at the end of the research. -

Figure 6-5

Intra-professional interrelationships and connections achieved through completion of my research project.



6.5.2 Triple dividend contribution

Completion of Professional Studies research degrees provide a triple dividend by benefitting the individual, their organisation and adding to the academic body of knowledge (Johnson, 2001; Lester & Costley, 2010). This research has provided a range of benefits, both for me personally and for my employer, Queensland Health (Johnson, 2001; Lester & Costley, 2010). I have contributed to the professional body of knowledge to solve the 'issues' of developing professional identity on clinical placements and have developed a diagrammatic framework to illustrate my findings.

6.5.2.1 Institutional and workplace contributions

This research has contributed to the knowledge and practices in clinical education in allied health professions addressing the issue of what happens on clinical placement to support the development to professional identity. Findings have informed clinical education practices within the health service and allied health clinical education programs. The health service and state department of Queensland Health has benefited from the contribution to professional and organisational knowledge. The research has contributed to meeting Darling Downs Health Strategic Plan 2017-2020 strategic directive of demonstrating a commitment to learning, research, innovation and education in regional healthcare (Darling Downs Hospital and Health Service, 2018). Strategies to achieve this include- L3: Enhance relationships with the tertiary education sector and L4: Develop collaborative research partnerships. Measures of success for this directive include: an increase in the number of Darling Downs Health staff successfully undertaking research projects and publishing (Darling Downs Hospital and Health Service, 2018). Darling Downs Health Allied Health Division Operational Plan 2018-2019 states the importance of learning and research for the health service. Deliverable L1 states this as: 'Demonstrate a commitment to learning, research, innovation and education in rural and regional health'. Key actions in this element are to encourage and support clinicians to contribute to the body of professional knowledge. My research demonstrates my contribution to the professional body of knowledge in allied health clinical education.

The health service has been recognised for supporting quality and innovation through showcasing my research at state and national conferences. This research has

been used to educate about strategies which can be implemented during clinical placements to support students to *think, feel and act* as a professional at Queensland Health, Allied Health Clinical Education Forum. Existing clinical education resources within the Occupational Therapy Clinical Education Program which support development of professional identity on placement have been shared at the state occupational therapy conference to upskill occupational therapy clinical educators.

6.5.2.2 Personal contributions

When I commenced the Doctor of Professional Studies Program (DPRS) at the University of Southern Queensland, I completed a Curriculum Vitae tool. The Curriculum Vitae tool is used to help students identify and formulate learning goals. My learning goals were to:

- improve my skills in writing to a logical flow and developing a logical argument

- develop skills in developing ideas and theories to link my research project ideas to credible theoretical frameworks.

Developing these skills has been a daily exercise of reflection, evaluation and re-evaluation with guidance from my supervisors. Developing my research proposal, grant application, conference abstracts, journal articles and thesis necessitated that I write with a logical flow to develop an argument. Each of these documents has required a different writing style for their audience, thus further expanding my writing experience. Reviewing the literature began my search for theoretical frameworks relevant to my research. I reviewed and evaluated these frameworks and through mind mapping and sketching developed my conceptual framework.

I have been encouraged as I reflect on my growing confidence in research and writing processes throughout this research. I have drawn on my growing skill set to help others in my workplace initiate and undertake quality improvement and research projects. This research has also enabled me to model life-long learning and reflection to workplace colleagues. My participation in the Doctor of Professional Studies Program has also assisted me to meet the Allied Health Professional Registration Association (Australian Health Practitioner Regulation Agency, 2019) professional development learning requirements for ongoing professional registration. Through completion of this research I have continued my strong record of research, publication

and research dissemination in the professional setting of Queensland Health. My commitment to ongoing research in the health service has been recognised with the Darling Downs Hospital and Health Service Advanced Researcher Award in 2018 and as a finalist in the Research category in 2020.

6.5.2.3 Academic contributions

My research project contributes to the gap in knowledge about the impact of clinical placements on the development of professional identity for allied health students and considers actions which can be incorporated into placement learning experiences. My research sits in the National Science and Research Priorities – Health capabilities stream. It contributes to developing better models of healthcare service and delivery in rural and regional areas. Allied health is a growth area and both Federal and State governments are looking at ways to train and retain health professionals in regional areas and increase efficiency of service delivery. My research makes a strong contribution to training of future health professionals. My work also aligns with University of Southern Queensland strategic research agenda to pursue engaged research that makes a difference to communities. My work-based project supports the University of Southern Queensland's goal of strong industry collaboration and building partnerships.

6.6 LIMITATIONS

My research has been primarily concerned with conducting an exploratory research focussing on one regional health service. During the progress of my research several limitations became apparent. I have taken the advice of Lingard (2015) in writing about the limitations of my research. Lingard (2015) proposed that there are three approaches authors use when writing limitations sections. Firstly, authors can take "The confessional" approach asking readers to forgive flaws in the research. Secondly writers could take "The Dismissal" approach acknowledging concerns but dismissing their importance or thirdly, "The Reflective" approach laying out aspects of the research design creating uncertainties about the knowledge contribution, noting the nature of uncertainties and their implications (Lingard, 2015, p. 136). I have taken a reflective approach to discussing the limitations of my research and describing uncertainties and their implications.

My decision to conduct my research in a workplace setting may explain the impacts on recruitment for participants in the research. Allied health staff recruitment and participation in the research was impacted by workload and clinical care demands impacting their availability to attend focus groups and the need to attend to phone calls interrupting their participation in focus groups. The sampling of clinical educators for invitation to participate via nomination from Clinical Education Support Officers may have meant that the sample had greater representation of clinical educators who had strong interest in or opinions about clinical placements. Clinical care demands were reported by some professions to prevent their attendance at the clinical educator focus group. While attempts were made to ensure a representative clinical educator sample, the small sample size and availability of participants to attend meant that not all professions or service types were represented.

The agreement I reached with the health service to recruit students at allied health student tutorials meant I had no access to students who did not attend the tutorials but may have been interested in participating in focus groups. Some students indicated that they were unable to attend the tutorial due to workload demands and other students may have chosen not to attend the tutorial where recruitment took, place based on the topic for the session. In addition, the timing of my invitation to students (at beginning of some tutorials and at end of the tutorial for others) may have influenced student engagement as some students were late arriving and other students left the tutorial early. With the variations in clinical education placement experiences noted in Table 1-2, recruitment was unable to account for variations in the length of placements. While the impact of recruitment strategies is noted, the data I obtained has been triangulated across participant groups and methods.

The impact of variations in results across allied health profession cannot be concluded from my research as not all allied health professions were represented in all stakeholder focus groups. Non-participation of psychology new graduates may have been influenced by their university experiences which place a heavy emphasis on involvement in and conduct of research projects (K. Troy, Clinical Education Support Officer, personal communication, October 8, 2018). Variations across professions may have also impacted recruitment. Allied health professions have a variety of placement lengths and timing within the curriculum. For example, social work and psychology placements run for up to 22 weeks, while physiotherapy placements are five weeks

long. This may have resulted in students from professions with shorter placement blocks being less able to participate in the focus groups. The greatest number of participants in this project was from my profession of occupational therapy. While, this representation of occupational therapists may have impacted results, the information provided in this study can form a starting point for further investigation.

My use of the framework by Mylrea et al. (2017) formed the basis of data analysis, however my adaption of the *think/feel/act* elements and development of my own criteria for the elements meant I was not able to examine the impacts of aspects of self-determination theory in my research. I am therefore unable to draw conclusions from my results about the impacts of student factors such as the role of motivation in the development of identity (Mylrea et al., 2017). Further examination of the impacts of student factors would enhance understanding of my findings.

My decision to conduct my research within one regional health service enabled me to consider the impacts of the workplace context on clinical placement practices. I have been able to examine clinical education documents for the health service and obtain perspectives for allied health professional Directors who oversight clinical education in the health service to support my understanding of the workplace context. I have not been able to separate out responses from students and new graduates to isolate their perspectives about placement experiences in the health service where the research was conducted. The inclusion of student and new graduate experiences across a range of placement experiences has enabled me to gain a broader perspective of my topic. By limiting my research to one health service I am not able to conclusively claim transferability of results, however, would suggest that readers consider the applicability of my findings to their workplace context.

The limitations of my research are acknowledged; however, I argue that they do not detract from the significance of my findings. Strengths of my research include the understanding this is the first known exploration of allied health student perspectives on the impact of clinical placements on the development of professional identity in a regional context. The suggestions my research provides to enhance clinical placement design, remain for the limitations do not detract from strengths but provide a platform for future research (as suggested in Section 6.8).

6.7 REFLECTIONS ON METHODOLOGY

For this research I have conducted a qualitive research project using document review and focus groups to collect my data. My reflections on conducting such a research project in a regional health service may benefit future researchers.

To obtain data from participants who were located at regional hospital sites, video conference technology available in the health service was used to link them into focus groups. While I consider video conference to be an effective means of communication and health service staff are familiar with its use, those less familiar with the technology (students and new graduates) benefit from instruction when using the video conference technology and availability of staff onsite who can support their use of video conference equipment. Technical difficulties with the video conference connections are always a possibility and did affect one focus group. The technical difficulties were rectified in time for the participant to re-join the focus group discussion. The focus group facilitator plays a key role in connecting participants using video conference at the far site to the group at the host site, ensuring they are invited to contribute to discussion and are included in the conversation. This is especially critical when there are larger numbers of participants or very articulate participants at the host site. My reflections about using videoconference technology for focus group data collection are echoed by Flynn et al. (2018). Flynn et al. (2018) asserted that videoconference technology was an effective means of collecting data from focus groups and yielded rich data. I have written previously on the use of videoconference technology for facilitating student education and support during placements and my reflections from this research remain the same as my earlier experiences (Furness & Kaltner, 2015).

Given my close working relationships with allied health staff (professional Directors, Clinical Education Support Officers and clinical educators), I employed an external facilitator to conduct these groups (Råheim et al., 2016). Choice of the facilitator was a critical one to the outcomes for data collection. The facilitator I employed was a Doctor of Philosophy Candidate with a background in psychology. While they had some familiarity with clinical placements from their psychology studies, they had a more limited understanding of health service jargon, processes and allied health professions other than psychology. To enable the facilitator to best engage with data collection, I provided a comprehensive overview of the drivers for the

research, aims, research questions and briefing on the focus group questions. At the completion of the focus groups the facilitator provided me with field notes about each focus group. Field notes included information about timing, arrival of attendees, interruptions in groups and questions arising in the groups. These notes proved very valuable in developing my understanding of the context of each group. I believe these strategies enabled me to get best engagement with data from focus groups which I did not facilitate.

My choice to use focus groups for data collection was influenced by the availability of research funding to employ a facilitator and timeframes within which my research was conducted. Consideration of the use of individual interviews for data collection was made, however, the use of focus groups was determined to be more efficient. I determined the richness of data arising from the interactions between participants and ability to maximise contact with participants appropriate to enable me to answer my research questions.

6.8 IDENTIFIED NEED FOR FURTHER RESEARCH

My research found that that clinical placement experiences can support the development of allied health student's professional identity through:

- *thinking* supported by quality learning;
- *feeling* supported by socialisation in workplace community of practice
- *acting* supported by workplace affordances.

These findings should be of interest to Universities, allied health professional Directors and staff involved in clinical education because they provide guidance to help underpin clinical placement learning and this the transition of future health professionals to practice. Universities in many allied health professions in Queensland provide training for Clinical Educators and the finding that *thinking* element of professional identity is unpinned by quality learning further supports the provision of this training to equip Clinical Educators in their teaching role. Professional Directors in Queensland Health have operational line management for some members of their profession and professional oversight for all members of their profession in the health service. My findings about the importance of student socialisation in workplace community of practice and creation of workplace affordances should be of interest to

professional Directors in guiding them to create a workplace culture and practices encouraging quality clinical education. For staff involved in clinical education the finding that *acting* supported by workplace affordances should encourage reflection on current practices. Understanding practices to support students to *think, feel and act* as a health professional can inform clinical educators' practice during placements.

These results open the door to studies that examine student factors impacting on engagement in placement learning experiences during placement. Such work could examine these student engagement factors such as motivation in relation to self-determination theory (Deci et al., 1994; Mylrea et al., 2017) .

The concept of dual identity (Khalili, 2013) or multiple professional identities (Burford, 2012) - as a member of a profession and as a health professional or member of patient care team - has not been explored in my research, however was raised by some participants. Further examination of the concepts of dual identity would be beneficial given the increasing emphasis on interprofessional care and collaboration where health professionals operate as a member of their profession in collaboration with others as a member of the patient care team.

My research focussed on one regional health service with the aim of including consideration of the impact of the workplace environment and culture. Future research could look to broadening the number of study sites to examine the impacts of clinical placement across several health services in Queensland and consider impacts of regional and metropolitan placement learning experiences. This would be beneficial to developing strategies which could be used in both regional and metropolitan clinical placements to support the development of professional identity.

One Clinical Education Support Officer in my research shared their thoughts that professional identity evolves over time. They said: *'...maybe there's no single turning point. I think it's something that probably evolves over time after a number of different exposures to a variety of different tasks….*' (Participant 2.5) Examination of the differences for allied health students at different points in their undergraduate training could help identify whether different strategies play a role in professional identity development at different points throughout the student learning journey (Goldie, 2012; Monrouxe & Poole, 2013; Stull & Blue, 2016).

I have conducted an exploratory study which focussed on examining the perspectives of stakeholders (allied health staff, students and new graduates) about the influence of clinical placements supporting development of professional identity. In, Section 6.4.2, I have suggested actions from results of my research which could support allied health student development of professional identity on placements. Further research could be conducted to examine the implementation and impact of any changes in practice resulting from this research.

6.9 CONCLUSIONS

This research is the first known study examining the impact of clinical placement experiences on the development of professional identity in allied health students in a regional health service. I have identified clinical placement factors supporting allied health students to *think, feel and act* as a health professional and reported suggestions and strategies which can be implemented to support the development of professional identity. I have extended on the work of previous researchers such as Mylrea et al. (2017) by refining their conceptual framework examining the development of professional identity. My findings can be accessed by university and health service staff involved in clinical placement education to implement strategies which can support the development of professional identity.

Appendices

A. Australian Standard Geographical Classification Remoteness Areas (ASGC-RA 2006)
B. Terms used in literature which refer to clinical placements
C. Literature review search terms
D. Defining professional identity
E. Defining professional socialisation
F. Human Research and Ethics Committee Approval Darling Downs Health
G. Human Research and Ethics Committee Approval University of Southern Queensland
H. Participant Information Sheet Allied Health staff
I. Participant Information Sheet Allied Health Student
J. Consent Form
K. Demographics Sheet Allied Health New Graduates
L. Document review template (superseded)
M. Focus group questions Allied Health staff
N. Focus group questions Allied Health students
O. Focus group questions Allied Health new graduates
P. Documents reviewed by profession
Q. Documents reviewed purpose of document
R. Mapping competency units across allied health documents using *think/feel/act* framework
S. Mapping clinical education documents using *think/feel/act* framework
T. Conference presentations and publications arising from Candidature
U. Publication Australian Journal of Rural Health

APPENDIX A

AUSTRALIAN STANDARD GEOGRAPHICAL CLASSIFICATION REMOTENESS AREAS (ASGC-RA 2006)

Australian Standard Geographical Classification Remoteness Areas ASGS-RA (2006)	Descriptor
RA1 – Major cities – Highly accessible	Relatively unrestricted accessibility to a wide range of goods and services and opportunities for social interaction
RA2 – Inner Regional - Accessible	Some restrictions to accessibility of some goods, services and opportunities for social interaction
RA3 – Outer Regional -Moderately accessible	Significantly restricted accessibility of goods, services and opportunities for social interaction
RA4 – Remote -	Very restricted accessibility of goods, services and opportunities for social interaction
RA5 – Very remote	Locationally disadvantaged - very little accessibility of goods, services and opportunities for social interaction

Source: (Australian Bureau of Statistics, 2018) and Descriptors from (Australian Longitudinal Study on Women's Health, 2003)

APPENDIX B

TERMS USED IN LITERATURE WHICH REFER TO CLINICAL PLACEMENTS

Clinical placement term	Reference
Clinical education	(Rodger, Fitzgerald, et al., 2011)
Clinical education experience	(Recker-Hughes et al., 2014)
Clinical fieldwork	(Occupational Therapy Council of Occupational Therapy Council of Australia, 2012)
Clinical learning environment	(Newton, Jolly, Ockerby, & Cross, 2010)
Clinical supervision	(McAllister, 2005);
Clinical placement	(Rodger, Fitzgerald, et al., 2011)
Clinical training	(Allied Health Professions Office of Queensland, 2014)
Field education, field placements	(Allied Health Professions Office of Queensland, 2014; State of Allied Health Professions Office of Queensland, 2017a; Stepteau-Watson, 2012)
Fieldwork education, fieldwork supervision	(McAllister, 2005)
Fieldwork	(Rodger, Fitzgerald, et al., 2011)
Fieldwork placement	(Allied Health Professions Office of Queensland, 2017a)
Placements	(Occupational Therapy Council of Occupational Therapy Council of Australia, 2012)
Practice education	(Allied Health Professions Office of Queensland, 2014, 2017a; Ashby et al., 2016; Brown et al., 2015; Occupational Therapy Council of Occupational Therapy Council of Australia, 2012)
Practical professional placement	(Turpin et al., 2011)
Professional education	(Rodger, Fitzgerald, et al., 2011)
Work based learning	(Cruess et al., 2016a)
Work integrated learning	(Walker et al., 2014)

APPENDIXC

LITERATURE REVIEW SEARCH TERMS

Database	Search terms	Yield
CINAHL	PI	4022
	PI + AH	72
	PI + Clinical placement	48
	PI+ AH + Medicine + nursing	14
	PI formation	162
	PI + PIS + AH students	3
	PI + clinical placement + rural	1
	Clinical placement + rural	244
	PI + physiotherapy	36
	PI + occupational therapy	156
	PI + speech pathology	2
	PI + social work	309
	PI + psychology	0
	PI + dietetics	12
	PI + dentistry	8
Medline	PI +AH	60
	PI + AH + clinical placement	0
	PS + AH + PI	0
PubMed	PI + AH	70
	PS + AH	26
	AH + clinical placement	121
Scopus	PI + Clinical placement	9

Abbreviations: PI=Professional identity; AH=Allied health; PIS=Professional identity socialisation

APPENDIX D

DEFINING PROFESSIONAL IDENTITY - RESEARCH NOTES

Reference	Research notes
(Adams et al., 2006, p. 56)	"Attitudes, values, knowledge, beliefs and skills shared with others in professional group and relates to professional role being undertaken."
(Ashby et al., 2016, p. 233)	"the recognition of beliefs, attitudes, values, knowledge, skills and understanding of one's role, within the context of the professional group to which you belong."
(Crossley & Vivekananda-Schmidt, 2009).	Professional identity is a state of mind identifying oneself as a member of a professional group.
(Cruess et al., 2014, p. 1447)	"a set of characteristics or a description that distinguishes a person of thing from others" from Oxford English Dictionary cited by (Cruess et al., 2014)
(Cruess et al., 2014, p. 1447) p 1447	"Physician's identity is a representation of self, achieved in stages over time during which the characteristics, values, and norms of the medical profession are internalized, resulting in an individual thinking, acting and feeling like a physician."
(Holden et al., 2015, p. 762)	Professional identity formation definition adopted by University of Texas Transformation in Medical Education (TIME) - 'Professional identity formation is the transformative journey through which one integrates the knowledge, skills, values, and behaviours of a competent, humanistic physician with one's own unique identity and core values. This continuous process fosters personal and professional growth through mentorship, self-reflection and experiences that affirm the best practices, traditions, and ethics of the medical profession. The education of all medical students is founded on professional identity formation.'
(Jebril, 2008, p. 53)	"Professional identity refers to an ongoing adaptive learning and evolving developmental process of identification with a profession, during which an interaction of professional traits, defining factors, socio-cultural influences, personality characteristics, personal abilities and preferences, within the environmental contexts, determines one's professional self, as well as, the extent of individual's perception of the level of integration of professional self, professional and professional values and characteristics into one's behaviour."
(Kururi et al., 2016, p. 176)	Schein, 1978 in Kururi, 2016: "Professional identity develops over time and helps provide insight into the contents of practices and the values of one's own and other's professions". Hall (1987), Watts (1987), and McCallum and Austin (2000) "describe professional identity as an attitude, a value, knowledge, beliefs, and skills of learners that are shared with other members within a professional group". Kururi "a subjective self-conceptualisation associated with a role adopted in work."
(Slay & Smith, 2011, p. 85)	"Professional identity is defined as one's professional self-concept based on attributes, beliefs, values, motives, and experiences."
(Vivekananda-Schmidt et al., 2015)	Professional self- identity definition "the degree to which an individual identifies with his or her professional group".
(Wald, 2015, p. 702)	Professional identity Formation (Holden et al in Wald) "Professional identity formation is the transformative journey through which one integrates the knowledge, skills, values and behaviours of a competent, humanistic physician with one's own unique identity and core values. This continuous process fosters personal

	and professional growth through mentorship, self-reflection, and experiences that affirm the best practices, traditions, and ethics of the medical profession. The education of all medical students is founded on professional identity formation."
(Wald, 2015)	Medical professional's identity "a representation of self, achieved in stages over time during which the characteristics, values, and norms of the medical profession are internalized, resulting in an individual thinking, acting and feeling like a physician".
(Wiles, 2013)	Three common usages of term professional identity- in relation to desired traits; collective sense to convey identity of profession; process in which each individual comes to have a sense of self as a social worker – (Final usage is interpretation for Wiles' study)
(Wilson et al., 2013, p. 370)	Coulehan in Wilson" Professional identities represent the physician's interpretation of what being a good doctor means and the manner in which he or she should behave." Skorikov & Vondracek "Professional identity represented by a complex structure of meanings in which the individual links his or her motivation and competencies with acceptable career roles" Wilson et al uses above authors in their definition which incorporates: • A complex structure that the individual uses to link their motivations and competencies to their career role • The development of professional values, actions, and aspirations • An ongoing process of self-reflection on the identity of the individual.

APPENDIX E

DEFINING PROFESSIONAL SOCIALISATION - RESEARCH NOTES

Reference	Research notes
(Ajjawi & Higgs, 2008, p. 134)	"process of preparation for professional role. Key aspects - social and internalisation of professional norms and values"
(Adams et al., 2006, p. 56)	"Professional socialisation is the process by which a person develops an identity as a member of their profession through acquiring knowledge, and skills through socialisation." Professional socialisation "is the complex process by which a person acquires the knowledge, skills, and sense of occupational identity that are characteristic of a member of that profession. It involves the internalisation of the values and norms of the group into the person's own behaviour and self-concept."
(Bartlett et al., 2009, p. 17)	Vollmer and Mills' definition cited in (Bartlett et al., 2009) "Professional socialisation is the process through which individuals learn the attitudes, values, and beliefs of their chosen profession and develop a commitment to a professional career". In order to add reference to contemporary thinking on professional attributes required in the workplace.
(Brown et al., 2013, p. 565)	"...a process whereby a person gains the knowledge, skills and identity that are characteristic of a profession and is a developmental process of adult socialisation"
(Cornelissen & Van Wyk, 2007, p. 826)	"…refers to the acquisition of values, attitudes, skills and knowledge pertaining to a profession."
(Cruess et al., 2014, p. 1448)	Oxford Dictionary definition cited by (Cruess et al., 2014, p. 1448) "the process by which a person learns to function within a particular society or group by internalizing its values and norms."
(Goodare, 2015, p. 39)	"Socialisation in nursing ongoing and complex process by which professional role, incorporating skills, knowledge, and behaviours, is learned and the individual consciously and subconsciously seeks their sense of occupational identity, and perfecting this process is crucial."
(Merton et al., 1957, p. 278)	"process by which people selectively acquire the values and attitudes, the interests, skills and knowledge- in short, the culture- current in groups of which they are or seek to become a member."

(Mariet, 2016, p. 1)	"process of internalisation and development of an occupational identity is known as professional socialisation."
(Naylor et al., 2016, p. 131)	Professional socialisation is "the process of acquiring specialist knowledge, skills, attitudes and values through integration into community of practice which leads to students forming a coherent identity of self as a professional in that community".
(Schill, 2017, p. 16)	"Professional socialisation as a process by which an individual develops the requisite skills, knowledge, attitudes, and beliefs necessary for successful transition to professional status."
(Vivekananda-Schmidt et al., 2015, p. 1)	Professional self-identity "the degree to which an individual identified with his or her professional group."
(Dalton, 2008)	"...a subconscious process whereby individuals internalise behavioural norms and standards and form a sense of self and commitment to a professional field"(Weidman, Twale and Stein, 2001, p 6) in (Dalton, 2008)

APPENDIX F
HUMAN RESEARCH AND ETHICS COMMITTEE APPROVAL DARLING DOWNS

Enquiries to: W Friend
Telephone: (61 7) 4616 6696
Facsimile: (61 7) 4616 5099
Our Ref: HREC/17/QTDD/74

Queensland Government

Medical Services

Darling Downs Hospital and Health Service

Pechey Street Toowoomba
PMB 2 Toowoomba
Queensland 4350 Australia
Telephone +61 7 4616 6151
Facsimile +61 7 4616 5099
www.health.qld.gov.au/darlingdowns
ABN 64 109 516 141

Ms Linda Furness
Allied Health
Cossart House
TOOWOOMBA

Dear Ms Furness

HREC Reference number: HREC/17/QTDD/74
Project title: Exploratory study examining critical experiences and influences on professional identity (PI) of Allied Health (AH) students during clinical placement in a regional health service.

Thank you for submitting the above project for ethical and scientific review. This project was considered by the Darling Downs Hospital and Health Services Human Research Ethics Committee (HREC).

This HREC is constituted and operates in accordance with the National Health and Medical Research Council's (NHMRC) *National Statement on Ethical Conduct in Human Research (2007), NHMRC and Universities Australia Australian Code for the Responsible Conduct of Research (2007)* and the *CPMP/ICH Note for Guidance on Good Clinical Practice*. Attached is the HREC Composition with specialty and affiliation with the Hospital (Attachment I).

I am pleased to advise that the Human Research Ethics Committee has granted approval of this research project at the following sites:

- Toowoomba Hospital
- Goondiwindi Hospital
- Stanthorpe Hospital
- Warwick Hospital
- Chinchilla Hospital
- Dalby Hospital

The documents reviewed and approved include:

Document	*Version*	*Date*
Application	AU/10/3901316	26 September 2017
Response to request for further information		26 September 2017
Protocol	V1.1	26 September 2017

Patient Information Sheet - Online survey students	V1.1	26 September 2017
Patient Information Sheet - AH representatives	V1.2	26 September 2017
Patient Information Sheet - New graduates focus group	V1.2	26 September 2017
Patient Information Sheet - AH students focus group	V1.2	26 September 2017
Survey design	V1.1	24 August 2017
Consent form Focus group AH student AH Rep AH new graduate	V1.1	24 August 2017
Consent Form AH student	V1.1	24 August 2017
Letter of invitation to participant: AH new graduate	V1.1	24 August 2017
Letter of invitation to participant: DDHHS AH reps	V1.1	24 August 2017
Letter of invitation to participant: AH student	V1.1	24 August 2017
CESO script AH student invitation to participate in survey	V1.1	24 August 2017
Focus group questions AH students	V1.1	24 August 2017
Focus group questions AH reps	V1.1	24 August 2017
Focus group questions new graduates	V1.1	24 August 2017

Please note the following conditions of approval:

1. The Principal Investigator will immediately report anything which might warrant review of ethical approval of the project in the specified format, including:
   Unforeseen events that might affect continued ethical acceptability of the project.
   Serious Adverse Events must be notified to the Committee as soon as possible. In addition the Investigator must provide a summary of the adverse events, in the specified format, including a comment as to suspected causality and whether changes are required to the Patient Information and Consent Form. In the case of Serious Adverse Events occurring at the local site, a full report is required from the Principal Investigator, including duration of treatment and outcome of event.

2. Amendments to the research project which may affect the ongoing ethical acceptability of a project must be submitted to the HREC for review. Major amendments should be reflected in a revised online NEAF (accompanied by all relevant updated documentation and a cover letter from the principal investigator, providing a brief description of the changes, the rationale for the changes, and their implications for the ongoing conduct of the study). Hard copies of the revised NEAF, the cover letter and all relevant updated documents with tracked changes must also be submitted to the HREC coordinator as per standard HREC SOP. Further advice on submitting amendments is available from http://www.health.qld.gov.au/ohmr/html/regu/regu_home.asp

3. Amendments to the research project which only affect the ongoing site acceptability of the project are not required to be submitted to the HREC for review. These amendment requests should be submitted directly to the Research Governance Office/r (by-passing the HREC).

4. Proposed amendments to the research project which may affect both the ethical acceptability and site suitability of the project must be submitted firstly to the HREC for review and, once HREC approval has been granted, then submitted to the RGO.

5. Amendments which do not affect either the ethical acceptability or site acceptability of the project (e.g. typographical errors) should be submitted in hard copy to the HREC coordinator. These should include a cover letter from the principal investigator providing a brief description of the changes and the rationale for the changes, and accompanied by all relevant updated documents with tracked changes.

6. The HREC will be notified, giving reasons, if the project is discontinued at a site before the expected date of completion.

7. The Principal Investigator will provide an annual report to the HREC and at completion of the study in the specified format.

8. The Health Service administration and the Human Research Ethics Committee may inquire into the conduct of any research or purported research, whether approved or not and regardless of the source of funding, being conducted on hospital premises or claiming any association with the Hospital; or which the Committee has approved if conducted outside the Hospital and Health Service.

A copy of this approval must be submitted to the Research Governance Officer with a completed Site Specific Assessment (SSA) Form for authorisation from the CE or Delegate to conduct this research at the Health Service.

Once authorisation to conduct the research has been granted, please complete the Commencement Form (Attachment II) and return to the office of the Human Research Ethics Committee.

The HREC wishes you every success in your research.

Yours sincerely

A.M.O'S

Angela O'Shea
Chair
Darling Downs Hospital and Health Service
Human Research Ethics Committee

3/10/17.

APPENDIX G

HUMAN RESEARCH AND ETHICS COMMITTEE APPROVAL UNIVERSITY OF SOUTHERN QUEENSLAND

OFFICE OF RESEARCH
Human Research Ethics Committee
PHONE +61 7 4631 2690| FAX +61 7 4631 5555
EMAIL human.ethics@usq.edu.au

16th October 2017

Mrs Linda Furness

Dear

The USQ Human Research Ethics Committee has recently reviewed your responses to the conditions placed upon the ethical approval for the project outlined below. Your proposal is now deemed to meet the requirements of the *National Statement on Ethical Conduct in Human Research (2007)* and full ethical approval has been granted.

Approval No.	H17REA228
Project Title	Exploratory Study Examining Critical Experiences and Influences on Professional Identity (PI) of Allied Health (AH) Students During Clinical Placement in a Regional Health Service.
Approval date	16th October 2017
Expiry date	3rd October 2020
HREC Decision	**Approved**

The standard conditions of this approval are:

(a) Conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal required by the HREC
(b) Advise (email: human.ethics@usq.edu.au) immediately of any complaints or other issues in relation to the project which may warrant review of the ethical approval of the project
(c) Make submission for approval of amendments to the approved project before implementing such changes
(d) Provide a 'progress report' for every year of approval
(e) Provide a 'final report' when the project is complete
(f) Advise in writing if the project has been discontinued, using a 'final report'

For (c) to (f) forms are available on the USQ ethics website:
http://www.usq.edu.au/research/support-development/research-services/research-integrity-ethics/human/forms

Yours sincerely,

Dr Mark Emmerson
Ethics Officer

APPENDIX H

PARTICIPANT INFORMATION SHEET ALLIED HEALTH STAFF

University of Southern Queensland

Participant Information for USQ Research Project Focus group

Project Details

Title of Project: **Exploratory study examining critical experiences and influences on professional identity (PI) of Allied Health (AH) students during clinical placement in a regional health service.**

Human Research Ethics Approval Number:

Research Team Contact Details

Principal Investigator Details

Ms Linda Furness
Email: linda.furness@health.qld.gov.au
Telephone: (07) 4616 5073
Mobile: 0437 104 222

Other Investigator/Supervisor Details

Dr Jenny Ostini
Email: jenny.ostini@usq.edu.au
Telephone: (07) 3470 4825

Other Investigator/Supervisor Details

Dr Anna Tynan
Email: anna.tynan@health.qld.gov.au
Telephone: (07) 4699 8056

Description

The purpose of this project is to develop a better understanding students' perspectives of the impact of clinical placement experiences on the development of professional identity.

The research team requests your assistance to complete an online survey to provide information about your perceptions of the critical experiences and influences on professional identity during placement in a regional area.

This project is being undertaken as part of a Doctor of Professional Studies Project.

Participation

Your participation will involve contributing your thoughts and ideas in a group discussion (focus group) that will take approximately 60-90 minutes of your time.

The focus group will take place at Toowoomba Hospital Campus. Invitations to participate in the focus group will be sent via email appointment and provide details of date, time, venue, videoconference dial in details.

Questions will include: What experiences during placement do you perceive as critical to your identity as an occupational therapist/physiotherapist/speech language pathologist etc?; How has your contact with members of your profession/ other professions or patients contributed to beginning to think, feel and act like a member of your profession? and How do you believe this has impacted on your professional identity?

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You will be unable to withdraw data collected about yourself after you have participated in the survey. If you wish to withdraw from the project, please contact the Research Team (contact details at the top of this form).

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland or your clinical placement or future employment in Darling Downs Hospital and Health Service.

Expected Benefits

Through participating in the evaluation you have the opportunity to inform strategies for support and education of allied health students on clinical placements in regional areas. You may or may not find it of any personal benefit to participate.

Risks

Participation in this project has low or negligible risk of side effects to you. Risk is limited to inconvenience involved in completing the focus group.

Sometimes thinking about the sorts of issues raised in the focus group can create some uncomfortable or distressing feelings. If you need to talk to someone about this immediately please contact Lifeline on 13 11 14. You may also wish to consider consulting your General Practitioner (GP) for additional support.

Privacy and Confidentiality

All comments and responses will be treated confidentially unless required by law.

The audio recording will be destroyed at the completion of the project.
The recording will be transcribed by a professional transcription company.
Only the research team and transcriber will have access to the recording.
Participants who do not wish to have their input recorded will not be able to participate in the project.

Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy and Darling Downs Hospital and Health Service Data Management policy.

Consent to Participate

We would like to ask you to sign a written consent form (attached) to confirm your agreement to participate in this project. On this consent form, please indicate your preferred email address to receive the online survey. Please return your signed consent form to your CESO at the end of your orientation session.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au. The Ethics Coordinator is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Alternatively, participants may contact the HREC Coordinator, Darling Downs Hospital & Health Service HREC, on 07 4616 6696 or by email TWB_Research_and_Ethics@health.qld.gov.au

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

APPENDIX I
PARTICIPANT INFORMATION SHEET ALLIED HEALTH STUDENT

University of Southern Queensland

Participant Information for USQ Research Project Focus group

Project Details

Title of Project: **Exploratory study examining critical experiences and influences on professional identity (PI) of Allied Health (AH) students during clinical placement in a regional health service.**

Human Research Ethics Approval Number:
HREC/17/QTDD/74 (DDHHS) and H17REA228 (USQ)

Research Team Contact Details

Principal Investigator Details

Ms Linda Furness
Email: linda.furness@health.qld.gov.au
Telephone: (07) 4616 5073
Mobile: 0437 104 222

Other Investigator/Supervisor Details

Dr Jenny Ostini
Email: jenny.ostini@usq.edu.au
Telephone: (07) 3470 4825

Other Investigator/Supervisor Details
Dr Anna Tynan

Description

The purpose of this project is to develop a better understanding students' perspectives of the impact of clinical placement experiences on the development of professional identity.

The research team requests your assistance to complete an online survey to provide information about your perceptions of the critical experiences and influences on professional identity during placement in a regional area.

This project is being undertaken as part of a Doctor of Professional Studies Project.

Participation

Your participation will involve contributing your thoughts and ideas in a group discussion (focus group) that will take approximately 60-90 minutes of your time.

The focus group will take place at Toowoomba Hospital Campus. Invitations to participate in the focus group will be sent via email appointment and provide details of date, time, venue, videoconference dial in details. A maximum of 10-12 participants will be invited to participate in the focus group.

APPENDIX J
CONSENT FORM

University of Southern Queensland

Consent Form for USQ Research Project Focus Group

Project Details

Title of Project: **Exploratory study examining critical experiences and influences on professional identity (PI) of Allied Health (AH) students during clinical placement in a regional health service.**

Human Research Ethics Approval Number:
HREC/17/QTDD/74 (DDHHS) and H17REA228 (USQ)

Research Team Contact Details

Principal Investigator Details
Ms Linda Furness
Email: linda.furness@health.qld.gov.au
Telephone: (07) 4616 5073
Mobile: 0437 104 222

Other Investigator/Supervisor Details
Dr Jenny Ostini
Email: jenny.ostini@usq.edu.au
Telephone: (07) 3470 4825
Mobile:

Other Investigator/Supervisor Details
Dr Anna Tynan
Email: anna.tynan@health.qld.gov.au
Telephone: (07) 4699 8056

Statement of Consent

- Have read and understood the information document regarding this project.
- Have had any questions answered to your satisfaction.
- Understand that if you have any additional questions you can contact the research team.
- Understand that the focus group will be audio recorded.
- Understand that you are free to withdraw at any time, without comment or penalty.
- Understand that you can contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au if you do have any concern or complaint about the ethical conduct of this project.
- Understand that this study has also been reviewed and approved by Darling Downs Hospital and Health Service Human Research and Ethics Committee. Participants may contact the HREC Coordinator, Darling Downs Hospital & Health Service HREC, on 07 4616 6696 or by email TWB_Research_and_Ethics@health.qld.gov.au
- Are over 18 years of age.

- Agree to participate in the project.

Participant Name	
Participant Signature	
Date	

At the end of the study, the final results will be made available to you via a written summary report.

If you wish to receive a copy of this report, please provide your email contact details below:

Email contact details to receive report	

APPENDIX K

DEMOGRAPHICS SHEET ALLIED HEALTH NEW GRADUATES

University of Southern Queensland

Participant Information for USQ Research Project Focus Group

Project Details

Title of Project: **Exploratory study examining critical experiences and influences on professional identity (PI) of Allied Health (AH) students during clinical placement in a regional health service.**

Human Research Ethics Approval Number: DDHHS HREC/17/QTDD/74 & USQ H17REA228

Demographic Details

- What is your allied health profession? (Please check correct box)
  - ☐ Physiotherapy
  - ☐ Occupational therapy
  - ☐ Social work
  - ☐ Psychology
  - ☐ Speech pathology
  - ☐ Nutrition and Dietetics

- Please indicate the practice area of your current employment (Please check relevant box)
  - ☐ General physical
  - ☐ Mental health
  - ☐ Aged care
  - ☐ Rural generalist
  - ☐ Paediatrics
  - ☐ Other, please specify _____

- Have you previously worked in health care role (Please circle)
  - yes/ no

- Do you have a family member who has worked in a health care role (Please circle)
  - yes/ no

- Please provide information about your clinical placements

Placement number	Placement length (weeks) 4, 5, 7, 8, 10, 12, 22 weeks	Location- metro/regional/remote
1		
2		
3		
4		

- Have you had a placement in Darling Downs Hospital and Health Service? (Please circle)
  - yes/ no

Thank you for taking the time to help with this research project.

APPENDIX L

DOCUMENT REVIEW TEMPLATE FOR CONTENT ANALYSIS BASED ON LITERATURE (SUPERSEDED)

Document review questions	Literature
○ **Reference to professional identity**	(Dall'Alba, 2009; Mylrea et al., 2017)
○ **Reference to strategies to support PI**	(Cruess & Cruess, 2016; Wald, 2015; Wilson et al., 2013)
Competence (*Think*) (Dall'Alba, 2009; Mylrea et al., 2017)	
○ **Reference to competencies related to profession**	(Mylrea et al., 2017)
Relatedness (*Feel*) (Dall'Alba, 2009; Mylrea et al., 2017)	
○ **Reference to socialisation/contact with members of own profession**	Relationships influence adoption of prof values (Cruess et al., 2014; Wald, 2015; Wilson et al., 2013)
○ **Reference to contact with other professions**	Relationships influence adoption of prof values (Wald, 2015; Weaver et al., 2011)
○ **Reference to contact with patients**	Relationships influence adoption of prof values (Jaye & Egan, 2006; Ó Lúanaigh, 2015; Pitkala & Mantyranta, 2003; Wald, 2015; Wong & Trollope-Kumar, 2014)
Autonomy (*Act*) (Dall'Alba, 2009; Nicola-Richmond, Pepin, & Larkin, 2016)	
○ **Competencies related to profession self-organise experiences and actions e.g. clinical reasoning, self-education, reflection, use of small group teaching to support intrinsic motivation**	(Jaye & Egan, 2006; Mylrea et al., 2017; Pitkala & Mantyranta, 2003; Wong & Trollope-Kumar, 2014)

APPENDIX M
FOCUS GROUP QUESTIONS ALLIED HEALTH STAFF

Impact of clinical placement on the development of professional identity

Focus Group

Allied Health organisational representatives

Scene setting

- Today's discussion is focused on your experiences and perceptions of the impact of clinical placement experiences in Darling Downs Hospital and Health Service on the development of allied health students' identity as a professional- beginning to think, act and feel like a member of the profession.
- Our discussion is being audio recorded. The transcription of our discussion will be used for analysis to tease out the range of themes that emerged in this focus group to inform a survey design for further data collection.
- As participants, your role is to discuss as openly as possible, your impressions, thoughts and experiences. Share examples if you can.
- As facilitator, my role is to help you stick to the ground rules, stay on track with the topic, support everyone to have a say, and prompt the discussion with some questions if needed.
- Before we start, it's important to establish some ground rules so that everyone can be heard, and the transcriber can distinguish what is said.

Ground rules

- Confidentiality within the group – we don't report to others outside of this group who said what.
- It's OK to mention students/patients/staff by their names, we will de-identify them in the transcript.
- One person speaks at a time without interruption.
- Stay curious – work on understanding what others mean and suspend judgement about whether you think they're right or wrong.

- Respect others' views even if you disagree.
- Permission to express all of your views even if you think some of them may be unpopular.
- Give everyone a chance to participate.
- If anyone is affected by discussions today, they are encouraged to seek the support of their supervisors and to use the services of the Employee Assistance Scheme for any support they may require. EAS can contacted for support on 1800 604 640 (24/7).
- Voice check – for transcriber

Each participant says their name and work role.

This focus group is part of an exploratory study and considers-

How the health service contributes to allied health students' *thinking, feeling and acting* like a health professional and a member of the patient's care team?

Question 1:

What is your perception of the impact of clinical placements in supporting students to *think, act and feel* like a member of their profession?

Question 2:

How do you think relationships with Clinical Educators impact students in beginning to *think, act and feel* like a member of their profession?

Questions 3:

How do you think contact with others in their profession (including students) impact students in beginning to *think, act and feel* like a member of their profession?

Question 4:

How do think contact with staff and/or students from other professions impact students in beginning to *think, act and feel* like a member of their profession?

Question 5:

How do think contact with patients impact students in beginning to *think, act and feel* like a member of their profession?

Question 6:

What are the DDHHS organisational structures supporting student experiences in beginning to *think, act and feel* like a member of their profession?

Any other comments?

Thank you for your contribution to this study.

APPENDIX N
FOCUS GROUP QUESTIONS ALLIED HEALTH STUDENTS

Impact of clinical placement on the development of professional identity

Focus Group

Allied Health students

Scene setting

- Today's discussion is focused on your experiences and perceptions of the impact of your clinical placement experiences in Darling Downs Hospital and Health Service on the development of professional identity- beginning to think, act and feel like a member of your profession.
- Our discussion is being audio recorded. The transcription of our discussion will be used for analysis to tease out the range of themes that emerged in this focus group to inform a survey design for further data collection.
- As participants, your role is to discuss as openly as possible, your impressions, thoughts and experiences. Share examples if you can.
- As facilitator, my role is to help you stick to the ground rules, stay on track with the topic, support everyone to have a say, and prompt the discussion with some questions if needed.
- Before we start, it's important to establish some ground rules so that everyone can be heard, and the transcriber can distinguish what is said.

Ground rules

- Confidentiality within the group – we don't report to others outside of this group who said what.
- It's OK to mention students/patients/staff by their names, we will de-identify them in the transcript.
- One person speaks at a time without interruption.
- Stay curious – work on understanding what others mean and suspend judgement about whether you think they're right or wrong.
- Respect others' views even if you disagree.

- Permission to express all of your views even if you think some of them may be unpopular.
- Give everyone a chance to participate.
- If anyone is affected by discussions today, they are encouraged to seek the support of their clinical educator, or university student support services.
- Voice check – for transcriber

Each participant says their name and work team.

The aim of this research is to develop a better understanding of the impact of clinical placement experiences on the development of professional identity of AH students.

Question 1:

What experiences during placement in DDHHS have helped you begin to *think, act and feel* like a member of your profession?

Question 2:

How have your relationships with your Clinical Educator/s impacted you in beginning to *think, act and feel* like a member of your profession?

Questions 3:

How has your contact with others in your profession (including students) impacted you in beginning to *think, act and feel* like a member of your profession?

Question 4:

How has your contact with staff and/or students from other professions impacted you in beginning to *think, act and feel* like a member of your profession?

Question 5:

How has your contact with patients impacted you in beginning to *think, act and feel* like a member of your profession?

Any other comments?

Thank you for your contribution to this study.

APPENDIX O*FOCUS GROUP QUESTIONS ALLIED HEALTH NEW GRADUATES*

Impact of clinical placement on the development of professional identity

Focus Group

Allied Health new graduates

Scene setting

- Today's discussion is focused on your experiences and perceptions of the impact of your student clinical placement experiences on the development of your identity as a professional- beginning to think, act and feel like a member of your profession.
- Our discussion is being audio recorded. The transcription of our discussion will be used for analysis to tease out the range of themes that emerged in this focus group to inform a survey design for further data collection.
- As participants, your role is to discuss as openly as possible, your impressions, thoughts and experiences. Share examples if you can.
- As facilitator, my role is to help you stick to the ground rules, stay on track with the topic, support everyone to have a say, and prompt the discussion with some questions if needed.
- Before we start, it's important to establish some ground rules so that everyone can be heard, and the transcriber can distinguish what is said.

Ground rules

- Confidentiality within the group – we don't report to others outside of this group who said what.
- It's OK to mention students/patients/staff by their names, we will de-identify them in the transcript.
- One person speaks at a time without interruption.
- Stay curious – work on understanding what others mean and suspend judgement about whether you think they're right or wrong.

- Respect others' views even if you disagree.
- Permission to express all of your views even if you think some of them may be unpopular.
- Give everyone a chance to participate.
- If anyone is affected by discussions today, they are encouraged to seek the support of their supervisors and to use the services of the Employee Assistance Scheme for any support they may require. EAS can contacted for support on 1800 604 640 (24/7).
- Voice check – for transcriber

Each participant says their name and work team.

This focus group seeks to examine your perceptions of your clinical placements on the development of professional identity as you look back through the eyes as a working allied health professional. Some questions will be similar to those from your earlier involvement in the study.

Question 1:

As you look back through the lens of a working professional, what placement experiences do you believe were critical in supporting you to *think, act and feel* like a member of your profession?

Question 2:

How did your relationships with your Clinical Educator impact you in beginning to *think, act and feel* like a member of your profession?

Questions 3:

How did your contact with others in your profession (including students) impact you in beginning to *think, act and feel* like a member of your profession?

Question 4:

How did your contact with staff and/or students from other professions impact you in beginning to *think, act and feel* like a member of your profession?

Question 5:

How did your contact with patients impact you in beginning to *think, act and feel* like a member of your profession?

Question 6:

How do you think beginning to *think, act and feel* like a member of your profession

impacted on your work readiness?

Question 7:

What suggestions do you have in relation to clinical placements which could support the development of allied health students in beginning to *think, act and feel* like a member of their profession?

Any other comments?

Thank you for your contribution to this study.

APPENDIX P

DOCUMENTS REVIEWED BY PROFESSION

Allied Health Profession	Competency document	Organisational document
All allied health professions	• None	• Allied Health Clinical Education; Darling Downs Health Values for students
Speech Pathology	• Competency Assessment in Speech Pathology Assessment Booklet (COMPASS)	• Darling Downs Health Student Orientation Manual
Physiotherapy	• End Immersion Summative Assessment Summary	• Darling Downs Health Toowoomba Physiotherapy Department Student Orientation Manual, 2016
Psychology	• Clinical Psychology Practicum Competencies Rating Scale End Placement Review Form (CψPRS-EP), The University of Queensland	• Darling Downs Health Psychology Student Orientation Manual • Ready Set Go Orientation presentations and fact sheets: Confidentiality, Documentation, Multidisciplinary team.
Nutrition and Dietetics	• Individual Case Management Form Guide, Griffith University	• Darling Downs Health Western Cluster allied health Dietetics Pre-Placement Pack • Nutrition and Dietetics Student Induction Manual Darling Downs Health • Student welcome email template
Social Work	• Social Work Final Evaluation Report, The University of Queensland • Social Work Evaluation, Central Queensland University	• Placement confirmation letter template • On boarding 2017 student orientation presentation
Occupational Therapy	• Student Practice Evaluation Form *Revised Edition Package (SPEF-R)* ©	• Student welcome email template • Student Practice Placement Handbook • Occupational Therapy Student Orientation presentation

APPENDIX Q

OVERVIEW OF DOCUMENTS REVIEWED PURPOSE OF DOCUMENT

Document	Author and publication date	Purpose (stated or implied)	Target audience
Orientation Documents			
Allied Health Clinical Education: DDHHS Values for students (All Allied Health Professions)	DDHHS AH CESO, 2017	Orientation overview of health service values expected actions for students (implied)	Document provided to AH students at orientation
DDHHS Student Orientation Manual (Speech Pathology)	Adapted in health service from Queensland Health template (date unknown)	Orientation and placement information for students (implied)	Speech Pathology students
DDHHS Toowoomba Physiotherapy Department Student Orientation Manual	Adapted in health service from Queensland health template (updated 2016)	Orientation and placement information for students (implied)	Physiotherapy students
DDHHS Psychology Student Orientation Manual	DDHHS Psychology CESO (date unknown)	Orientation and placement information for students (implied)	Pscyhology students
Psychology Ready Set Go Orientation power point presentations and fact sheets: **Confidentitality** **Documentation** **Multidisciplinary team** **Supervision** **Making the most of placement** **Self care**	Adapted in health service from Queensland Health template (date unknown)	Orientation and placement information for students (implied)	Psychology students
DDHHS Western Cluster AH Dietetics Pre-Placement Pack	DDHHS Senior Dietician Western Cluster (developed 2016, updated 2017)	Orientation and placement information for students (implied)	Nutrition and Dietetics students
Nutrition and Dietetics Student Induction Manual DDHHS	DDHHS Dietician CESO (2013)	Orientation and placement information for students (implied)	Nutrition and Dietetics students
Student welcome email template (Nutrition and Dietetics)	DDHHS Dietetics CESO (date unknown)	Orientation and placement information for students (implied)	Nutrition and Dietetics students
Placement confirmation letter template (Social Work)	Social Work and Welfare Clinical Education Program (date unknown)	Orientation and placement information for students (implied)	Social Work students
Onboarding 2017 student orientation power point presentation(Social Work)	Adapted in health service from Queensland Health template (date unknown)	Orientation and placement information for students (implied)	Social Work students

Student welcome email template (Occupational Therapy)	Occupational Therapy Clinical Education Program. Adapted for DDHHS (adapted 2017)	Orientation and placement information for students (implied)	Occupational Therapy students
Student Practice Placement Handbook (Occupational Therapy)	Adapted in health service from Queensland Health template (updated 2017)	Orientation and placement information for students (implied)	Occupational Therapy students
Occupational Therapy Student Orientation power point presentation	OTCEP . Adapted for DDHHS (updated 2017)	Orientation and placement information for students (implied)	Occupational Therapy students
Competency Assessment Documents			
Social Work Final Evaluation Report	The University of Queensland (date unknown)	Competency Assessment	Social Work final placement evaluation completed by clincial educators for students and university
Social Work Evaluation	Central Queensland University (date unknown)	Competency Assessment	Social Work placement evaluation completed by clincial educators for students and university
Indiviudal Case Management Form Guide (Nutrition and Dietetics)	Griffith University (2015)	Competency Assessment	Nutrition and Dietetics placement evaluation completed by clincial educators for students and university
Clinical Psychology Practicum Competencies Rating Scale End Placement Review Form (CψPRS-EP)	The University of Queensland, Australia (date unknown)	Competency Assessment	Psychology placement evaluation completed by clincial educators for students and university
End Immersion Summative Assessment Summary (Physiotherapy)	The Unversity of Queensland, Australia (date unknown)	Competency Assessment	Physiotherapy placement evaluation completed by clincial educators for students and university
Competency Assessment in Speech Pathology Assessment Booklet (COMPASS)	The Speech Pathology Association of Australia Limited (2006) Copyright	Competency Assessment	Speech pathology placement evaluation completed by clincial educators for students and university
Student Practice Evaluation Form *Revised Edition Package (SPEF-R)* © *(Occupational Therapy)*	The University of Queensland. Division of Occupational Therapy, School of Health and Rehabilitation Sciences (2008)	Competency Assessment	Occupational Therapy placement evaluation completed by clincial educators for students and university

Abbreviations: DDHHS=Darling Downs Health Service; AH=Allied health; CESO=Clinical Education Support Officer

APPENDIX R

MAPPING COMPETENCY UNITS ACROSS ALLIED HEALTH DOCUMENTS USING THINK, FEEL, ACT FRAMEWORK

Document and sub-element	Think	Feel	Act
Speech Pathology Competency Assessment in Speech Pathology (COMPASS®) units of competency			
• **Reasoning**	x		x
• **Communication**		x	x
• **Lifelong learning**			x
• **Professionalism**			x
• **Assessment**	x	x	x
• **Analysis and interpretation**	x		x
• **Planning of speech pathology intervention**	x		
• **Speech pathology intervention**			x
• **Plan, maintain and deliver speech pathology service**	x		x
Physiotherapy University of Queensland Competency Assessment			
Professional behaviour:			
• **Demonstrates an understanding of patient/client rights and consent**		x	x
• **Demonstrates commitment to learning**			x
• **Demonstrates ethical, legal and culturally sensitive practice**	x		x
• **Demonstrates teamwork**		x	
Communication			
• **Communicates effectively and appropriately – verbal /non-verbal**		x	x
• **Demonstrates clear and accurate communication**		x	
Assessment			
• **Conducts an appropriate patient/client interview**	x	x	x
• **Selects and measures relevant health indicators and outcomes**	x		x
• **Performs appropriate physical assessment procedures**	x		x
Analysis and planning			
• **Appropriately interprets assessment findings**	x		x
• **Identifies and prioritises patient's /client's problems**		x	x
• **Sets realistic short- and long-term goals with the patient**		x	x
• **Selects appropriate intervention in collaboration with patient/client**		x	x
Intervention			
• **Performs interventions appropriately**	x		x
• **Monitors the effects of intervention**	x		x
• **Progresses intervention appropriately**	x		x
• **Undertakes discharge planning**	x		x
Evidence Based Practice			
• **Applies evidence-based practice in patient care**	x		
Risk management			
• **Identifies adverse events and near misses and minimises risk associated with Assessment and intervention**			x
Psychology Assessment			
• **Relational skills**		x	
• **Clinical assessment skills**		x	x
• **Formulation and intervention skills**	x		x
• **Psychometric skills**	x		x
• **Scientist practitioner approach**	x		x
• **Personal capacities**		x	x

• **Ethical practice**		x	x
• **Professional skills**	x	x	x
• **Response to supervision**	x	x	
Nutrition and Dietetics			
Positively influences the health of individuals			
• **Applies an evidence-based approach to nutrition and dietetics services**	x		
• **Facilitates optimal food choice and eating behaviours for health**	x		x
Applies critical thinking and integrates evidence into practice			
• **Uses best available evidence to inform practice**	x		
Collaborates with clients and stakeholders			
• **Communicates appropriately with individuals, groups, organisations from various cultural, socio-economic, organisational and professional backgrounds**		x	x
• **Builds capacity of and collaborates with others to improve nutrition and health**		x	x
• **Collaborates within and across teams effectively**		x	x
Social Work			
• **Values and ethics**	x		x
• **Professionalism**			x
• **Culturally responsive and inclusive practice**		x	
• **Knowledge for practice**	x		
• **Applying knowledge to practice**	x		x
• **Communication and interpersonal skills**		x	x
• **Information recording and sharing**		x	x
• **Professional development and supervision**	x	x	x
Occupational Therapy SPEF-R®			
• **Professional behaviour**			x
• **Self-management skills**			x
• **Co-worker communication**		x	x
• **Communication skills**		x	x
• **Documentation**	x		x
• **Information gathering**		x	x
• **Service provision**	x		x
• **Service evaluation**	x		x
• **Professional behaviour**	x		x

Source: Developed for this research based on Miles and Huberman (1994)

APPENDIX T

MAPPING CLINICAL EDUCATION DOCUMENTS USING THINK, FEEL, ACT FRAMEWORK

Document	Think	Feel	Act
Allied Health Clinical Education: Darling Downs Health Values for students (All allied health Professions)	x	x	x
Darling Downs Health Student Orientation Manual -Speech Pathology	x	x	x
Darling Downs Health Toowoomba Physiotherapy Department Student Orientation Manual	x	x	x
Darling Downs Health Psychology Student Orientation Manual	x		x
Psychology 'Ready Set Go' Orientation presentations and fact sheets: **Confidentitality** **Documentation** **Multidisciplinary team** **Supervision** **Making the most of placement** **Self care**	x	x	x
Darling Downs Health Western Cluster allied health Dietetics Pre-Placement Pack		x	x
Nutrition and Dietetics Student Induction Manual Darling Downs Health	x	x	
Student welcome email template (Nutrition and Dietetics)	x		
Placement confirmation letter template (Social Work)	x	x	
Onboarding 2017 student orientation presentation (Social Work)	x	x	x
Student welcome email template (Occupational Therapy)	x	x	
Student Practice Placement Handbook (Occupational Therapy)	x	x	x
Occupational Therapy Student Orientation power point presentation	x	x	x

Source: Developed for this research based on Miles and Huberman (1994)

APPENDIX T

CONFERENCE PRESENTATIONS AND PUBLICATIONS ARISING FROM CANDIDATURE

Oral Presentations arising from thesis

2018

- Furness, L., Ostini, J., & Tynan, A. (2018) *How can a regional health service contribute to Allied Health students beginning to think feel and act like a health professional?* Paper presented at the Society for Health Administration in Education Programs, SHAPE Symposium 2018, Griffith University. Brisbane, Queensland.

- Furness, L., Ostini, J., & Tynan, A. (2108) *Examining the influences on Professional identity development in Allied Health students during placement in a rural and regional health service*. Paper presented at the Services for Australian Rural and Remote Allied Health (SARRAH) conference 2018 Changing Landscapes, Changing Lives, Darwin.

- Furness, L., Fitzgerald, C., Tynan, A., & Ostini, J. (2108) *What supports allied health students on placement to begin to think, feel and act as a health professional?* Paper presented at the Allied Health Clinical Education Forum, Queensland Health. Allied Health Professionals Office of Queensland. Brisbane.

- Furness, L., Fitzgerald, C., Tynan, A.; & Ostini, J. (2108) *What supports occupational therapy students on placement to begin to think, feel and act as a health professional?* Paper presented at the Occupational Therapy Australia NT-QLD Regional Conference 2018. Gold Coast, Queensland.

2019

- Furness, L., Ostini, J., & Tynan, A. (2019) *What supports allied health students on placement to begin to think, feel and act as a health professional?* Paper presented at the National Allied Health Conference, August 2019. Brisbane, Queensland.

- Furness, L., Tynan, A., & Ostini, J. (2019) *Applying learnings from clinical placement experiences to enable a bright future for the Darling Downs Health workforce.*
  Paper presented at the Darling Downs Health Innovations and Research Collaboration Showcase, October 2019. Toowoomba, Queensland.

Publications

- Furness, L., Tynan, A., & Ostini, J. (2019) What supports allied health students to think, feel and act as a health professional in a rural setting? Perceptions of allied health staff. *Australian Journal of Rural Health. 1*–8. https ://doi.org/10.1111/ajr.12557

- Furness, L., Tynan, A., & Ostini, J. (Under review) What students and new graduates perceive supports them to think, feel and act as a health professional in a rural setting. *Australian Journal of Rural Health.*

- Furness, L., Tynan, A., & Ostini, J. (Under review) Words in action – examining what clinical education placement documents contribute to thinking, feeling and acting like a health professional. *Focus on Health Professional Education*.

APPENDIX U
PUBLICATION AUSTRALIAN JOURNAL OF RURAL HEALTH

Received: 13 March 2019 | Revised: 19 June 2019 | Accepted: 15 July 2019
DOI: 10.1111/ajr.12557

ORIGINAL RESEARCH

AJRH The Australian Journal of Rural Health | WILEY

What supports allied health students to *think, feel and act* as a health professional in a rural setting? Perceptions of allied health staff

Linda Furness MPST[1,2,3,4] | **Anna Tynan PhD**[1,2,5] | **Jenny Ostini PhD**[1]

[1]School of Linguistics, Adult and Specialist Education, University of Southern Queensland, Toowoomba, Qld, Australia
[2]Queensland Health, Darling Downs Hospital and Health Service, Toowoomba, Qld, Australia
[3]Queensland Health, Townsville Hospital and Health Service, Townsville, Qld, Australia
[4]School of Allied Health Sciences, Griffith University, Nathan, Qld, Australia
[5]Rural Clinical School, The University of Queensland, Toowoomba, Qld, Australia

Correspondence
Linda Furness, PMB 2, Toowoomba Hospital, Toowoomba, Qld., Australia.
E-mail: linda.furness@health.qld.gov.au

Funding information
Toowoomba Hospital Foundation, Grant/Award Number: THF 2018 R1-01

Abstract

Objective: Clinical placements in rural locations provide student health professionals with diverse learning opportunities. Engaging in clinical work and learning from role models and peers in the workplace are primary ways students develop professional skills, behaviour and identities as a health professional. The purpose of this study was to examine the influences supporting allied health students undertaking clinical placements in a rural health service to *think, feel and act* as a health professional from the perspective of allied health staff.

Design: A qualitative study comprising focus group discussions was conducted.

Setting: The study was conducted in a rural health service in Queensland, Australia.

Participants: Seventeen allied health staff whose roles support clinical placement education in the health service

Main outcome measures: This study identified clinical placement factors which can support allied health students *thinking, feeling and acting* as a health professional.

Results: Thematic analysis was used to understand staff perceptions of how rural placements support students to *think, feel and act* as a health professional. Key placement actions included taking advantage of the diverse learning experiences in a rural area, facilitating student connectedness in the workplace and grading learning to support independence and autonomy for practice.

Conclusions: Findings from this study show that the diverse work environment and experiences in a rural setting provide unique opportunities for students to begin to *think, feel, and act* as a health professional. Strategies identified might be applied in other similar contexts.

KEYWORDS
clinical education, research and education, rural and remote education, student placements, teaching and learning

1 | INTRODUCTION

The purpose of medical education, as argued by Merton et al,[1,2] is to provide a novice with knowledge and skills to enable him to have a professional identity where he *thinks, feels and acts* like a physician (italics added for emphasis by authors). Whilst this perspective refers to medical education, it could equally apply to other health professions.

The importance of authentic learning experiences on clinical placement and exposure to role models has been highlighted as being critical in the placement learning.[3] Mylrea et al[4] identified the role of the concepts of competence, relatedness and autonomy within the self-determination theory and the need to provide support to students in these areas to increase sense of professional identity. The conceptual framework illustrated by Mylrea et al[4] parallels the aspect definition provided by Merton et al[1] and used in this research—to *think feel and act* like a member of the profession.

Rural clinical placements provide unique opportunities for personal and professional development and hands-on learning.[5] Authentic learning experiences during rural placements can have a positive effect on skills, knowledge and attitudes and enhance confidence in students.[6] Students report that access to a broad range of clinical experiences and the associated knowledge gained, access to good clinical mentors, and the unique relationships with the community and patients in a small town, can improve their rural placement experiences.[7,8] To date, minimal research has looked specifically at the influence a rural placement has on supporting allied health students to *think, feel and act* as a health professional and what this can mean for supporting students in these settings.

This paper examines the perspectives of allied health staff on the impacts of clinical placements in a rural health service in Australia supporting allied health students to *think, feel and act* as a health professional. Many studies have considered the perspectives of students in relation to clinical placements, yet to the author's knowledge studies investigating the perspective of both allied health staff and clinical educators (CEs) supporting clinical placements in rural areas have not been completed. Staff perspectives are considered to be important because in isolation, students as novice learners might not have a comprehensive understanding of the range of influences on their development as professionals. This study forms one part of a broader study investigating staff, student and organisational influences on the development of professional identity during clinical placements in a rural setting.

What is already known on this subject:

- Clinical placements in rural locations provide allied health students with diverse learning opportunities, both personally and professionally.
- Clinical placements intend to support successful transition of students to practice, for safe practice and patient care, however, minimal research has been conducted about how placements in rural settings support students to *think, feel and act* like a health professional.

What this study adds:

- This paper examines perspectives of allied health staff about the influences a clinical placement in a rural health service has on supporting allied health students to *think, feel and act* as a health professional.
- The diverse work environment and experiences during clinical placements in a rural setting provide unique opportunities for students to begin to *think, feel, and act* as a health professional.
- This study identifies actions for rural clinical placements which can support allied health students to *think, feel and act* as a health professional.

2 | METHODS

2.1 | Setting

The study was conducted in a rural health service in Queensland, Australia, which covers approximately 90 000 km^2 and services approximately 300 000 people.[9]

2.2 | Design

Thematic analysis was used to develop an understanding of allied health staff perceptions of clinical placement influences on supporting allied health students to *think, feel and act* as a health professional. Data collection took place during December 2017.

2.3 | Participants and recruitment

A purposive convenience sample of Clinical Education Support Officers (CESOs),[10] professional Directors and CEs were invited to participate in focus groups by email from principal researcher. CESOs are responsible for clinical education coordination across the health service including student placements and learning activities, with one CESO representing a particular allied health profession. Professional Directors are responsible for all aspects of professional governance and practice, including clinical education, for their profession within the health service. CEs are clinicians who had >2 years clinical experience and took on the primary responsibility for the student's supervision and education during their placement. Allied health professions included physiotherapy, occupational therapy, dietetics, speech therapy, social work and psychology. An email invitation to participate in a focus group was sent to six Professional Directors, seven CESOs and six CEs. All staff agreed to participate in a focus group. All Directors and CESOS invited attended the focus groups, however due to clinical care demands four out of the six invited CEs attended the focus group.

TABLE 1 Focus group questions and rationale

Focus group questions	Rationale
1. What is your perception of the impact of clinical placements in supporting students to *think, act and feel* like a member of their profession?	Designed to develop understanding of perceptions of allied health staff about the impact of clinical placement on supporting students to *think, act and feel* like a member of their profession
2.How do you think relationships with Clinical educators impact students in beginning to *think, act and feel* like a member of their profession?	Developing understanding about perceptions of AH staff on the influence of clinical educators on supporting students to *think, act and feel* like a member of their profession
3. How do you think contact with others in their profession (including students) impact students in beginning to *think, act and feel* like a member of their profession?	Start to explore impact of socialisation into an AH profession on placement
4. How do think contact with staff and/or students from other professions impact students in beginning to *think, act and feel* like a member of their profession?	Explore impacts of working as a member of student's profession with members of other professions whilst on placement
5. How do think contact with patients impact students in beginning to *think, act and feel* like a member of their profession?	Develop understanding of impact of patient contact and its influence on supporting students to *think, act and feel* like a member of their profession
6. What are the health service organisational structures supporting student experiences in beginning to *think, act and feel* like a member of their profession?	Explore significance of placement context and organisational structures on supporting students to *think, act and feel* like a member of their profession

Source: Developed for this research.

2.4 | Data collection

Focus group questions were developed from review of literature in medicine, nursing and allied health examining the development of professional identity. Questions covered perception of the impacts of placement relationships, socialisation and health service organisational structures on supporting students to *think, feel and act* as a health professional. The rationale for focus group questions is shown in Table 1. Focus groups were held during work hours at the central hospital with a video conference link available for participants at other sites. Focus groups were audio taped and transcribed verbatim.

2.5 | Data analysis

Transcripts were checked for accuracy by the primary author against audio recordings and returned to participants for comment and correction. Deductive thematic analysis applying Braun and Clarke's six step process was performed.[11] These steps were as follows: familiarisation with the data; succinct coding of data; searching for themes; reviewing themes; defining and naming themes; and writing up findings.[11] The deductive framework for data coding is shown in Table 2.

2.6 | Ethics approval

Ethical approval was received from the University of Southern Queensland (H17REA228) and Darling Downs Hospital and Health Service (HREC/17/QTDD/74). Informed consent was obtained from all participants. To protect privacy, all quotes have been de-identified and assigned a code.

3 | RESULTS

Three focus groups were conducted with seventeen allied health staff representatives. Participant's demographic details are outlined in Table 3. Focus group themes are reported using the framework of supporting students to *think, feel and act* as a health professional (refer to Table 4) and Box 1 provides representative participant quotes.

3.1 | Thinking like a health professional

Participants identified that during a rural placement, students have an opportunity to experience a broad range of clinical presentations through working in rural generalist roles. CEs

TABLE 2 Framework for data analysis- codes and code definitions

Code	Code definition
Thinking/competence	References to supporting development of mastery
Feeling/relatedness	References to connections with and care for others
Acting/autonomy	References to self-organising experiences and actions

Source: Developed for this research, adapted from Mylrea et al. ([4]).

TABLE 3 Demographic details of focus group participants

Focus group 1 **Allied Health Professional Directors (n = 6)**	
Professions	Physiotherapy, Speech Pathology, Occupational Therapy, Psychology, Social Work, Nutrition & Dietetics
Gender	Male=1 Female=5
Experience in role	>1-13.5 y
Focus group 2 **Allied Health Clinical Education Support Officers (n = 7)**	
Professions	Physiotherapy, Speech Pathology, Occupational Therapy, Psychology, Social Work, Nutrition & Dietetics, Podiatry (Clinical Education Sponsor)
Gender	Male = 1 Female = 6
Experience in role	>1-12 y
Focus group 3 **Allied Health clinical educators (n = 4)**	
Professions	Speech Pathology, Occupational Therapy, Psychology, Nutrition & Dietetics
Gender	Male = 0 Female = 4
Experience in role	7-22 y

Source: Developed for this research.

TABLE 4 Themes: Placement factors supporting students to think, feel and act as a health professional

Framework dimension	Themes
Thinking/Quality learning	• Breadth of learning experiences in rural setting • CE support to learning • Expectations that students will think and act as professional • Consolidating learning through feedback, reflection, supervision, and clinical reasoning • Differences between workplace and university learning
Feeling/socialisation and connectedness	• Culture of clinical education in workplace—how students are treated, Director's welcome, culture nurtures and values students • Teams and professions support students to learn about own and other professions
Acting/gaining independence "unzipping the student suit"	• Graduated learning and contact with patients under CE supervision • Progress to independence • Recognition as professional by others • Student contribution to service

Abbreviation: CE, clinical educator.

Source: Developed for this research.

explained how they planned and balanced student's learning experiences in a rural setting to expose them to as many experiences as possible, such as inpatient wards, outreach visits, overnight trips and a variety of patient age groups and clinical presentations.

All groups referred to the importance of the relationship with the CE including attitudes and actions, in supporting student learning and development of identity as a professional. Directors identified CE factors contributing to quality learning: acting as a role model, setting expectations, providing quality feedback, ability to adapt to student's learning style, being knowledgeable about their own profession and their ability to reflect and communicate well. CESOs described how placements provide students with opportunities to take theoretical knowledge from university and apply theory to the patient care.

3.2 | Feeling like a health professional

The impact of the rural health service context on relationships and social connectedness was described by participants. They noted the need to support students completing rural placements who are living away from friends and family. Inclusion in social aspects of lunch and morning

Box 1 Representative participant quotes

Supporting students to think as a health professional

- "(I'm)..more forthright in terms of my expectations….For example, if you know that you're going to go and see someone, the expectation is that you would have the session planned to show me well in advance, not just at the minute that you're about to do the session." Participant 3.3
- "If you go out on a rural placement where you will see everything: women's health, paediatrics, orthopaedics, rehab, the whole lot… expose students to as many of those experiences because that's what they'll get if they work rurally." Participant 2.6
- ''If you give them opportunity to think independently, and to demonstrate their reasoning independently, and give them confidence to have a go, that makes a huge impact on that transition from student to professional I think." Participant 3.1
- "..they've been learning theory at university and how you actually apply that when you have a live client in front of you and working with them on their situation. So it's developing that link between theory and practice." Participant 2.3

Supporting students to *feel* like a health professional

- "I think within the mental health service it's often teams that will come together to support a student." Participant 1.3
- "We're so physically close, you don't have to go and look for each other, which is nice. I think that is what helps students identify how well a multidisciplinary team can work, when they see us all having a bit of a joke together and things like that as well." Participant 3.3
- "..it probably helps you understand your role a little bit better because you can see how the broader team interacts together and yep, they fit in here and I fit in here. So that would help build your identity." Participant 1.5

Supporting students to *act* as a health professional

- "I supported a student who was working in paediatrics and there was a young girl who was coming under the Department of Child Safety and the team were trying to decide whether to discharge her or keep her in (hospital) until the child safety matters were dealt with. The student was there by herself this day, was at the end of her placement, and the specialist actually turned to her and said, 'What do you think we should do?', and the student said, 'We shouldn't discharge her' and the specialist said, 'okay', and for her that was a really defining moment, that she was a professional." Participant 2.3
- "..particularly in that second half of placement….the structure that's important there in enabling that independence and the educator will pull back and the student will be given more independence, they have to voice that clinical reasoning." Participant 2.6

tea was described by two participants as a "surprise" to some students who had completed placements in metropolitan areas. This increased accessibility to opportunities to build professional relationships with members of their own profession, other professions. The unique connections with patients and their families that a rural setting brings were also identified as a key part of the rural placement experience.

Directors suggested that students in rural areas are more likely to feel part of the bigger multidisciplinary team due to more opportunities for informal and formal socialisation such as sitting with the team for lunch. Treating students as a member of the team and providing opportunities such as being actively involved in case conferences and participating in professional development days and profession meetings was identified by CESOs as helping students feel connected to their profession. Encouraging students to formally meet with members of other professions to discuss their roles, participate in home visits with other professionals, work shadowing with others in own profession and other professions; and individually discuss and negotiate treatment plans with other professionals was identified as integral to helping students feel like a member of their health profession. One participant described how contact with patients during placements supported students to feel like a health professional identifying the excitement shown by students as they apply their knowledge to provide patient care.

3.3 | Acting like a health professional

CESOs described how CEs support student learning through a graduated access to patients. CEs described how they initially give students specific tasks during treatment sessions then progress to students running the whole session. A CESO described how in the second half of placement, CEs support increasing student independence through pulling back and giving students more independence. This transition to acting more like a health professional is best summarised in the following quote:

> ..initially the supervisor will be there (on ward rounds)...but as the placement progresses they (student) will be there and they will be the ones that will speak.
>
> Participant 2.6

Interaction with patients and their families was identified by CESOs and CEs as an important part of transitioning from student to act as a health professional. Recognition of the student's contribution as a member of the multidisciplinary team by other professionals was also considered as a defining moment in acting as a health professional. Student's contribution to the health service through projects was described by one Director as supporting them to act as a health professional.

> … we actually see the students as contributors to the service rather than a burden to the service, so that it's that welcoming them in and what they can contribute – what we can learn from them as well as what they can learn from us….
>
> Participant 1.4

4 | DISCUSSION

This study examined the perspectives of allied health staff about the impacts of clinical placements in an Australian rural health service on allied health students *thinking, feeling and acting* as a health professional. The results show that participants acknowledged the unique experiences a rural placement might have on developing students as a health professional. These results will be discussed with consideration of actions which can support student learning during rural clinical education (refer to Table 5 for a summary of placement actions).

4.1 | Thinking as a health professional—providing diverse learning experiences

Placements providing a general range of clinical experiences have been shown to be more effective in promoting better skill integration.[12] Planned consideration of the learning opportunities available during rural placements can support student skill development and confidence as students transition to practice.[13] Clinicians coordinating student placement learning, therefore, play a key role in recognising and capitalising on rural learning opportunities such as breadth of service delivery and clinical presentations and experience of the diverse aspects of rural practice.

Participants in this study described how rural placements provide unique opportunities for personal and professional learning and support students' development of professional identity.[3,8,12,14] In many rural locations, clinicians providing rural placements often work as generalists and provide services across the lifespan to inpatients, outpatients and outreach to adjacent rural communities. This provides increased opportunities for skill development and performance success in a range of areas through access to a variety and breadth of learning experiences.[5,12,15]

4.2 | Feeling like a health professional—facilitating student connectedness in the workplace

Workplace actions to welcome students to placement, such as welcome from senior managers, can reduce student anxiety and support connectedness.[16] Socialisation can be further facilitated by providing opportunities for students to connect with members of their own and other professions during meal breaks; scheduling opportunities for students to experience work shadowing and modelling from members of their own profession and creating opportunities for contact and role modelling within the multidisciplinary team. Participation in smaller co-located multidisciplinary teams can be facilitated to support learning about multidisciplinary team work and interprofessional collaboration in patient care.[12,15]

Students completing rural placements might live in hospital-based accommodation with other staff and students. This experience of living away from home can be supported through social connections and peer support from those with whom they live[14,15,17,18] and creates opportunities for informal learning from other students and members of the multidisciplinary team.[19]

The health service context has been identified as having an impact on students feeling like a health professional by influencing student's feelings of belonging and connection to the workplace.[20,21] The need for workplace cultures to actively support learning and promote development of positive learning relationships in the workplace has been well documented.[3] Participants described the context of the rural health service where the study was conducted as viewing clinical education as part of core business and students as active participants in reciprocal learning and contribution to service delivery.

TABLE 5 Actions for rural clinical placements supporting AH students *thinking, feeling and acting* as a health professional

Framework dimensions	Themes	Actions for rural clinical placements supporting framework dimensions
Thinking/ competence	Quality learning	• Promote individualised learning opportunities capitalising on the breadth of clinical experiences in rural practice • Provide clear service and CE expectations of student learning on placement • Facilitate constructive student learning relationships with CEs • Support CEs to provide quality learning experiences through upskilling, best practice education principles, supervision practices • Link professional theory gained in curriculum with practice experiences
Feeling/ relatedness	Socialisation/ Connectedness "the vibe"	• Establish and nurture a workplace which supports and values student education • Provide students with connections to the workplace (eg Director welcome, students join team during meal breaks) • Encourage collective support within multidisciplinary team for students, through welcoming, work shadowing and learning opportunities • Develop students' connections to own profession, other professions, and care for patients • Utilise rural accommodation (where available) to support social and informal learning opportunities for students
Acting/ autonomy	Gaining independence—"unzipping the student suit"	• Value and support student contribution to patient care (eg projects completed on placement to support service delivery) • Encourage referrals for patient care by other professions made to students treating patients, rather than through CE • Support student understanding of their profession's role and contribution to patient care and how this fits with other professions • Promote student reflection on practice (independently and during supervision with CE)

Abbreviation: CE, clinical educator.

Source: Developed for this research.

4.3 | Acting as a health professional-grading learning to support independence and

Experiencing the diversity of rural practice supports development of students' learning and preparedness for practice.[15,17] Structuring graded learning experiences and providing role modelling facilitates skill development.[22] Learning from unexpected situations encountered during rural placements can be supported by CEs through formal and informal supervision, reflection[23] and effective feedback.[24]

4.4 | Limitations

The principal researcher (LF) was known to participants therefore, an external focus group facilitator was employed. Recruitment of CE participants through CESO nomination might have resulted in selection of CEs known to be motivated to support student education. Because of clinical care demands, some professions were not represented in the CE focus group and therefore slightly differing professional views might have been missed. Students were not included in this present study and will be included in a separate study to examine their perspectives of how clinical placements can support them to *think, feel and act* as a health professional.

5 | CONCLUSION

This study examines allied health staff perspectives and suggests actions which could support allied health students *think, feel and act* as a health professional during clinical placements. Due to the diverse work environment and experiences, clinical placements in a rural setting provide unique opportunities for students to begin to *think, feel, and act* as a health professional. Student attributes and engagement with available learning opportunities has not been considered as part of this study. Therefore, further exploration of the perspectives of allied health students is required and will be the subject of future investigations.

ACKNOWLEDGEMENTS

The authors would like to thank participants and the Toowoomba Hospital Foundation for Research Scholarship Funding

CONFLICT OF INTEREST

The authors declare they have no completing interests

AUTHOR CONTRIBUTIONS

LF was responsible for research design, data acquisition, analysis and interpretation and drafting the manuscript. AT and JO assisted with helping formulate research design, data analysis, and reviewing drafts. All authors have read and approved the final manuscript.

DISCLOSURE

Research scholarship funding provided by Toowoomba Hospital Foundation (THF 2018 R1-01). This research has not been previously published in part or in full elsewhere.

ORCID

Linda Furness https://orcid.org/0000-0002-3507-6430

REFERENCES

1. Merton RK, Kendall PL, Reader GG. *The Student-Physician: Introductory Studies in the Sociology of Medical Education*. Cambridge, MA: Harvard University Press; 1957.
2. Cruess RL, Cruess SR. Professionalism and professional identity formation: the cognitive base. In: Cruess RL, Cruess SR, Steinert Y, eds. *Teaching Medical Professionalism: Supporting the Development of a Professional Identity*, 2nd edn. Cambridge: Cambridge University Press; 2016:5–25.
3. Siggins Miller Consultants. *Promoting Quality in Clinical Placements: Literature Review and National Stakeholder Consultation*. Adelaide, SA: Health Workforce Australia; 2012. https://www.adea.com.au/wp-content/uploads/2013/08/Promoting-quality-in-clinical-placements-report-20130408.pdf. Accessed Nov 10 2018.
4. Mylrea MF, Sen Gupta T, Glass BD. Developing professional identity in undergraduate pharmacy students: a role for self-determination theory. *Pharmacy*. 2017;5(2):1–9.
5. Daly M, Perkins D, Kumar K, Roberts C, Moore M. What factors in rural and remote extended clinical placements may contribute to preparedness for practice from the perspective of students and clinicians? *Med Teach*. 2013;35(11):900–907.
6. Bennett P, Jones D, Brown J, Barlow V. Supporting rural/remote primary health care placement experiences increases undergraduate nurse confidence. *Nurse Educ Today*. 2013;33(2):166–172.
7. White S, Humphreys N. Undergraduate physiotherapy students' expectations and perceptions of rural/regional clinical placements. *Aust J Rural Health*. 2014;22(4):172–178.
8. Young L, Lindsay DB, Ray RA. What do beginning students, in a rurally focused medical course, think about rural practice? *BMC Med Educ*. 2016;16(1):310.
9. Darling Downs Hospital and Health Service. Queensland Government; 2018. https://www.health.qld.gov.au/darlingdowns/locations. Accessed Nov 18 2018.
10. McBride LJ, Fitzgerald C, Morrison L, Hulcombe J. Pre-entry student clinical placement demand: can it be met? *Aust Health Rev*. 2015;39(5):577–581.
11. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77–101.
12. Johnston C, Newstead C, Sanderson M, Wakely L, Osmotherly P. The changing landscape of physiotherapy student clinical placements: An exploration of geographical distribution and student performance across settings. *Aust J Rural Health*. 2017;25(2):85–93.
13. Roulston A, Cleak H, Vreugdenhil A. Promoting readiness to practice: which learning activities promote competence and professional identity for student social workers during practice learning? *J Soc Work Educ*. 2018;54(2):364–378.
14. Smith T, Sutton K, Pit S, et al. Health professional students' rural placement satisfaction and rural practice intentions: A national cross-sectional survey. *Aust J Rural Health*. 2018;26(1):26–32.
15. Thackrah RD, Hall M, Fitzgerald K, Thompson SC. Up close and real: living and learning in a remote community builds students' cultural capabilities and understanding of health disparities. *Int J Equity Health*. 2017;16(1):1–10.
16. Flott EA, Linden L. The clinical learning environment in nursing education: a concept analysis. *J Adv Nurs*. 2016;72(3):501–513.
17. Webster S, Lopez V, Allnut J, Clague L, Jones D, Bennett P. Undergraduate nursing students' experiences in a rural clinical placement. *Aust J Rural Health*. 2010;18(5):194–198.
18. Spiers M, Harris M. Challenges to student transition in allied health undergraduate education in the Australian rural and remote context: a synthesis of barriers and enablers. *Rural Remote Health*. 2015;15(2):1–17.
19. McKinlay E, Gallagher P, Wilson C, Gray L, McHugh P, Pullon S. Social learning, shared accommodation and interprofessional education: I think those conversations that you have at the dinner table. *J Interprof Educ Pract*. 2016;5(1):1–6.
20. Walker S, Dwyer T, Broadbent M, Moxham L, Sander T, Edwards K. Constructing a nursing identity within the clinical environment: The student nurse experience. *Contemp Nurse*. 2014;49(1):103–112.
21. Naylor S, Ferris C, Burton M. Exploring the transition from student to practitioner in diagnostic radiography. *Radiography*. 2016;22(2):131–136.
22. Rodger S, Fitzgerald C, Davila W, Millar F, Allison H. What makes a quality occupational therapy practice placement? Students' and practice educators' perspectives. *Aust Occup Ther J*. 2011;58(3):195–202.
23. Naidoo D, van Wyk J. Fieldwork practice for learning: Lessons from occupational therapy students and their supervisors. *Afr J Health Prof Educ*. 2016;8(1):37–40.
24. Wearne S. Effective feedback and the educational alliance. *Med Educ*. 2016;50(9):891–892.

How to cite this article: Furness L, Tynan A, Ostini J. What supports allied health students to *think, feel and act* as a health professional in a rural setting? Perceptions of allied health staff. *Aust. J. Rural Health*. 2019;27:489–496. https://doi.org/10.1111/ajr.12557

Bibliography

Adams, K., Hean, S., Sturgis, P., & Clark, J. M. (2006). Investigating the Factors Influencing Professional Identity of First-Year Health and Social Care Students. *Learning in Health and Social Care, 5*(2), 55-68. https://doi.org/10.1111/j.1473-6861.2006.00119.x

Ajjawi, R., & Higgs, J. (2008). Learning to Reason: A Journey of Professional Socialisation. *Advances In Health Sciences Education: Theory And Practice, 13*(2), 133-150. https://doi.org/10.1007/s10459-006-9032-4

Allied Health Professions Office of Queensland. (2014). *Queensland Health Clinical Placement Capacity and Offers of Clinical Placements for Allied Health Professions - a Guide for Hospital and Health Services*. https://www.health.qld.gov.au/__data/assets/pdf_file/0012/151032/placement-guide.pdf

Allied Health Professions Office of Queensland. (2017a). *Allied Health Students Health and Wellbeing - Guide for Hosptial and Health Services*. https://www.health.qld.gov.au/__data/assets/pdf_file/0034/693367/ah-health-wellbeing.pdf

Allied Health Professions Office of Queensland. (2017b). *Clinical Learning Framework for Allied Health Learners. Pre-Entry Students and Recent Graduates a Guide for Hospital and Health Services*. https://qheps.health.qld.gov.au/__data/assets/pdf_file/0024/2044455/clf-ah-learners-guide.pdf

Allied Health Professions Office of Queensland. (2019). *Clinical Placement Activity Data 2012 to 2018*. https://www.health.qld.gov.au/ahwac/html/cet

American Occupational Therapy Association. (2016). Occupational Therapy Fieldwork: Value and Purpose. *American Journal of Occupational Therapy, 70*((Suppl.2) 7012410060), 1-2. https://doi.org/10.5014/ajot.2016.706S06

Arndt, J., King, S., Suter, E., Mazonde, J., Taylor, E., & Arthur, N. (2009). Socialization in Health Education: Encouraging an Integrated Interprofessional Socialization Process. *Journal of Allied Health, 38*(1), 18-23. https://doi.org/10.1097/00001416-201010000-00012

Ashby, S., Adler, J., & Herbert, L. (2016). An Exploratory International Study into Occupational Therapy Students' Perceptions of Professional Identity. *Australian Occupational Therapy Journal, 63*(4), 233-243. https://doi.org/10.1111/1440-1630.12271

Ashby, S., Gray, M., Ryan, S., & James, C. (2015). Maintaining Occupation-Based Practice in Australian Mental Health Practice: A Critical Stance. *The British Journal of Occupational Therapy, 78*(7), 431-439. https://doi.org/10.1177/0308022614564168

Ashforth, B. E., Sluss, D. M., & Saks, A. M. (2007). Socialization Tactics, Proactive Behavior, and Newcomer Learning: Integrating Socialization Models. *Journal of Vocational Behavior, 70*(3), 447-462. https://doi.org/10.1016/j.jvb.2007.02.001

Australian Association of Social Workers. (2012). *Australian Social Work Education and Accreditation Standards (A.S.W.E.A.S.) 2012. Guideline 1.2: Guidance on field education programs.* https://www.aasw.asn.au/document/item/3553

Australian Bureau of Statistics. (2018). *The Australian Statistical Geography Standard (A.S.G.S.) Remoteness Structure*. http://www.abs.gov.au/websitedbs/d3310114.nsf/home/remoteness+structure)

Australian Health Practitioner Regulation Agency. (2019). *Continuing Professional Development*. https://www.ahpra.gov.au/Registration/Registration-Standards/CPD.aspx

Australian Longitudinal Study on Women's Health. (2003). *Aria Scores: Index of Accessibility/Remoteness.* https://www.alswh.org.au/images/content/pdf/InfoData/Data_Dictionary_Supplement/DDSSection5ARIA.pdf

Australian Physiotherapy Council. (2017). *Guidelines for Accreditation. Entry-Level Physiotherapy Practitioner Programs of Study*. https://dashboard.physiocouncil.com.au/media/1266/guidelines-for-accreditation-v10-08062017.pdf

Babenko-Mould, Y., Iwasiw, C. L., Andrusyszyn, M.-A., Laschinger, H. K. S., & Weston, W. (2012). Effects of Clinical Practice Environments on Clinical Teacher and Nursing Student Outcomes. *Journal of Nursing Education, 51*(4), 217-225. https://doi.org/10.3928/01484834-20120323-06

Baldwin, S. (2013). Exploring the Experiences of Nurses Studying Professional Doctorates. *British Journal of Nursing, 22*(8), 476-483. https://doi.org/10.12968/bjon.2013.22.8.476

Barbaro-Brown, J. (2010). Who Do We Think We Are: Interdisciplinary Dissonance and the Development of Professional Identity. *Journal of Foot and Ankle Research, 3(Suppl 1)*(1). https://doi.org/10.1186/1757-1146-3-S1-O3

Bartlett, D. J., Deborah Lucy, S., Bisbee, L., & Conti-Becker, A. (2009). Understanding the Professional Socialization of Canadian Physical Therapy Students: A Qualitative Investigation. *Physiotherapy Canada. Physiotherapie Canada, 61*(1), 15-25. https://doi.org/10.3138/physio.61.1.15

Bearman, M., & Molloy, E. (2017). Intellectual Streaking: The Value of Teachers Exposing Minds (and Hearts). *Medical Teacher, 39*(12), 1284-1285. 10.1080/0142159X.2017.1308475

Bennett, P., Jones, D., Brown, J., & Barlow, V. (2013). Supporting Rural/Remote Primary Health Care Placement Experiences Increases Undergraduate Nurse Confidence. *Nurse Education Today, 33*, 166-172. 10.1016/j.nedt.2012.02.015

Bennett, R. (2003). Clinical Education: Perceived Abilities/Qualities of Clinical Educators and Team Supervision of Students. *Physiotherapy, 89*(7), 432-440. http://10.1016/S0031-9406(05)60077-6

Billett, S. (2002). Toward a Workplace Pedagogy: Guidance, Participation, and Engagement. *Adult Education Quarterly, 53*, 27-43. https://doi.org/10.1177%2F074171302237202

Billett, S. (2004). Workplace Participatory Practices : Conceptualising Workplaces as Learning Environments. *Journal of Workplace Learning, 16*(6), 312-324. https://doi.org/10.1108/13665620410550295

Billett, S. (2016). Learning through Health Care Work: Premises, Contributions and Practices. *Medical Education, 50*(1), 124-131. https://doi.org/10.1111/medu.12848

Billett, S., Noble, C., & Sweet, L. (2018). Pedagogically-Rich Activities in Hospital Work- Handovers, Ward Rounds and Team Meetings. In C. Delany & E. Molloy (Eds.), *Learning and Teaching in Clinical Contexts. A Practical Guide.* (pp. 207-220): Elsevier.

Billett, S., & Sweet, L. (2015). Participatory Practices at Work: Understanding and Appraising Healthcare Students Learning through Workplace Experiences. In J. C. Steven & J. During (Eds.), *Researching Medical Education.* (pp. 117-128): Wiley.

Boehm, J., Tanner, B., Lowrie, D., Bonassi, M., Brown, N., Thomas, Y., & Cordier, R. (2015). Exploring Emerging Occupational Therapy Identity and the Development of Graduate Attributes among Occupational Therapy Students. *The British Journal of Occupational Therapy, 78*(8), 499-507. https://doi.org/10.1177/0308022614562585

Bogo, M. (2015). Field Education for Clinical Social Work Practice: Best Practices and Contemporary Challenges. *Clinical Social Work Journal, 43*(3), 317-324. https://doi.org/10.1007/s10615-015-0526-5

Bonello, M. (2001). Fieldwork within the Context of Higher Education: A Literature Review. *The British Journal of Occupational Therapy, 64*(2), 93-99. https://doi.org/10.1177/030802260106400207

Boud, D., Fillery-Travis, A., Pizzolato, N., & Sutton, B. (2018). The Influence of Professional Doctorates on Practice and the Workplace. *Studies in Higher Education, 43*(5), 914-926. https://doi.org/10.1080/03075079.2018.1438121

Boudreau, J. D. (2016). The Evolution of an Undergraduate Medical Program on Professionalism and Identity Formation. In R. Cruess, S. Cruess, & Y. Steinert (Eds.), *Teaching Medical Professionalism* (pp. 217-231): Cambridge University Press.

Bourner, T., Bowden, R., & Laing, S. (2001). Professional Doctorates in England. *Studies in Higher Education, 26*(1), 65-83. https://doi.org/10.1080/03075070020030724

Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal, 9*(2), 27-40. https://doi.org/10.3316/QRJ0902027

Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology, 3*(2), 77. https://doi.org/10.1191/1478088706qp063oa

Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic Analysis. In P. Liamputtong (Ed.), *Handbook of Research Methods in Health Social Sciences* (https://doi.org/10.1007/978-981-10-5251-4_103pp. 843-860): Springer.

Brown, J., Stevens, J., & Kermode, S. (2013). Measuring Student Nurse Professional Socialisation: The Development and Implementation of a New Instrument. *Nurse Education Today, 33*(6), 565-573. https://doi.org/10.1016/j.nedt.2012.06.013

Brown, T., McKinstry, C. E., & Gustafsson, L. (2015). The Need for Evidence and New Models of Practice Education to Meet the 1000 Hour Requirement. *Australian Occupational Therapy Journal, 63*(5), 352-356. https://doi.org/10.1111/1440-1630.12239

Brownie, S., Thomas, J., McAllister, L., & Groves, M. (2014). Australian Health Reforms: Enhancing Interprofessional Practice and Competency within the Health Workforce. *Journal of Interprofessional Care, 28*(3), 252-253. https://doi.org/10.3109/13561820.2014.881790

Buetow, S. (2010). Thematic Analysis and Its Reconceptualization as 'Saliency Analysis'. *Journal of Health Services Research & Policy, 15*(2), 123-125. https://doi.org/10.1258/jhsrp.2009.009081

Bullen, B., Young, M., McArdle, C., & Ellis, M. (2018). Visual Metaphors for the Professional Doctorate. *Diabetic Foot Journal, 21*(2), 115-118. https://www.diabetesonthenet.com/journals/issue/475

Bunniss, S., & Kelly, D. R. (2010). Research Paradigms in Medical Education Research. *Medical Education, 44*(4), 358-366. https://doi.org/10.1111/j.1365-2923.2009.03611.x

Burford, B. (2012). Group Processes in Medical Education: Learning from Social Identity Theory. *Medical Education, 46*(2), 143-152. https://doi.org/10.1111/j.1365-2923.2011.04099.x

Burford, B., Morrow, G., Rothwell, C., Carter, M., & Illing, J. (2014). Professionalism Education Should Reflect Reality: Findings from Three Health Professions. *Medical Education, 48*(4), 361-374. https://doi.org/10.1111/medu.12368

Burns, E., Fenwick, J., Schmied, V., & Sheehan, A. (2012). Reflexivity in Midwifery Research: The Insider/Outsider Debate. *Midwifery, 28*(1), 52-60. https://doi.org/10.1016/j.midw.2010.10.018

Cambridge University. (2019). *Cambridge Dictionary*. https://dictionary.cambridge.org/dictionary/english/work-shadowing

Carr, H., & Gidman, J. (2012). Juggling the Dual Role of Practitioner and Educator: Practice Teachers' Perceptions. *Community Practitioner, 85*(2), 23-26. https://www.communitypractitioner.co.uk/journal

Casares, G. S., Bradley, K. P., Jaffe, L. E., & Lee, G. P. (2003). Impact of the Changing Health Care Environment on Fieldwork Education: Perceptions of Occupational Therapy Educators. *Journal of Allied Health, 32*(4), 246-251. https://www.ingentaconnect.com/content/asahp/jah/2003/00000032/00000004/art00005

Castleberry, A., & Nolen, A. (2018). Thematic Analysis of Qualitative Research Data: Is It as Easy as It Sounds? *Currents in Pharmacy Teaching and Learning, 10*(6), 807-815. https://doi.org/10.1016/j.cptl.2018.03.019

Cheek, J. (2004). At the Margins? Discourse Analysis and Qualitative Research. *Qualitative Health Research, 14*(8), 1140-1150. https://doi.org/10.1177/1049732304266820

Christiansen, C. H. (1999). Defining Lives: Occupation as Identity: An Essay on Competence, Coherence, and the Creation of Meaning. *American Journal of Occupational Therapy, 53*(6), 547-558. https://doi.org/10.5014/ajot.53.6.547

Clarke, C., Martin, M., Sadlo, G., & de-Visser, R. (2014). The Development of an Authentic Professional Identity on Role-Emerging Placements. *The British Journal of Occupational Therapy, 77*(5), 222-229. https://doi.org/10.4276/030802214X13990455043368

Clinical Excellence Division. Queensland Health. (2019). *Queensland Health Allied Health the Last 10 Years - Achievements and Ongoing Challenges* https://www.health.qld.gov.au/__data/assets/pdf_file/0027/835092/10-year-achievements-report.pdf

Clouder, L. (2003). Becoming Professional: Exploring the Complexities of Professional Socialization in Health and Social Care. *Learning in Health & Social Care, 2*(4), 213-222. https://doi.org/10.1046/j.1473-6861.2003.00052.x

Clouder, L., & Adefila, A. (2017). Empowerment of Physiotherapy Students on Placement: The Interplay between Autonomy, Risk, and Responsibility. *Physiotherapy Theory & Practice, 33*(11), 859-868. https://doi.org/10.1080/09593985.2017.1357153

Cornelissen, J., & Van Wyk, A. (2007). Professional Socialisation: An Influence on Professional Development and Role Definition. *South African Journal of Higher Education, 21*(7), 826-841.

Couper, I., Worley, P., & Strasser, R. (2011). Rural Longitudinal Integrated Clerkships: Lessons from Two Programs on Different Continents. *Rural and Remote Health, 11*(2), 1-11. https://doi.org/10.22605/rrh1665

Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (2nd ed.). SAGE Publications.

Creswell, J. W. (2013). *Qualitative Inquiry and Research Design : Choosing among Five Approaches*. SAGE Publications.

Creswell, J. W. (2014). *Research Design : Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications.

Crossley, J., & Vivekananda-Schmidt, P. (2009). The Development and Evaluation of a Professional Self Identity Questionnaire to Measure Evolving Professional Self-Identity in Health and Social Care Students. *Medical Teacher, 31*(12), e603-e607. https://doi.org/10.3109/01421590903193547

Cruess, R., Cruess, S., & Steinert, Y. (Eds.). (2016a). *Teaching Medical Professionalism : Supporting the Development of a Professional Identity* (2nd ed.): Cambridge University Press.

Cruess, R. L., & Cruess, S. R. (2006). Teaching Professionalism: General Principles. *Medical Teacher, 28*(3), 205-208. https://doi.org/10.1080/01421590600643653

Cruess, R. L., & Cruess, S. R. (2016). Professionalism and Professional Identity Formation: The Cognitive Base. In R. L. Cruess, S. R. Cruess, & Y. Steinert (Eds.), *Teaching Medical Professionalism. Supporting the Development of a Professional Identity* (2nd ed., pp. 5-25): Cambridge University Press.

Cruess, R. L., Cruess, S. R., Boudreau, J. D., Snell, L., & Steinert, Y. (2014). Reframing Medical Education to Support Professional Identity Formation. *Academic Medicine, 89*(11), 1446-1451. https://doi.org/10.1097/ACM.0000000000000427

Cruess, R. L., Cruess, S. R., Boudreau, J. D., Snell, L., & Steinert, Y. (2015a). 'Additional Suggestions for Facilitating Professional Identity Formation': In Reply to Weissman. *Academic Medicine, 90*(6), 697-698. https://doi.org/10.1097/ACM.0000000000000727

Cruess, R. L., Cruess, S. R., Boudreau, J. D., Snell, L., & Steinert, Y. (2015b). A Schematic Representation of the Professional Identity Formation and Socialization of Medical Students and Residents: A Guide for Medical Educators. *Academic Medicine, 90*(6), 718-725. https://doi.org/10.1097/ACM.0000000000000700

Cruess, R. L., Cruess, S. R., & Steinert, Y. (2016b). Amending Miller's Pyramid to Include Professional Identity Formation. *Academic Medicine, 91*(2), 180-185. https://doi.org/10.1097/ACM.0000000000000913

Cruess, R. L., Cruess, S. R., & Steinert, Y. (2017). Medicine as a Community of Practice: Implications for Medical Education. *Academic Medicine, 93*(6), 185-191. https://doi.org/10.1097/ACM.0000000000001826

Curtin, M., & Fossey, E. (2007). Appraising the Trustworthiness of Qualitative Studies: Guidelines for Occupational Therapists. *Australian Occupational Therapy Journal, 54*(2), 88-94. https://doi.org/10.1111/j.1440-1630.2007.00661.x

Dall'Alba, G. (2009). *Learning to Be Professionals* (Vol. 4). Springer Science & Business Media.

Dall'Alba, G., & Sandberg, J. (1996). Educating for Competence in Professional Practice. *Instructional Science, 24*(6), 411-437. https://doi.org/10.1007/bf00125578

Dall'Alba, G. (2009). Learning Professional Ways of Being: Ambiguities of Becoming. *Educational Philosophy and Theory, 41*(1), 34-45. https://doi.org/10.1111/j.1469-5812.2008.00475.x

Dalton, L. (2008). *Professional Socialisation and Identitfy Formation in Rural Health Education.* University of Tasmania,

Dalton, L., Routley, G., & Peek, K. (2008). Rural Placements in Tasmania: Do Experiential Placements and Background Influence Undergraduate Health Science Student's Attitudes toward Rural Practice? *Rural and Remote Health, 8*(3), 962-962. https://www.rrh.org.au/journal/article/962

Daly, M., Perkins, D., Kumar, K., Roberts, C., & Moore, M. (2013). What Factors in Rural and Remote Extended Clinical Placements May Contribute to Preparedness for Practice from the Perspective of Students and Clinicians? *Medical Teacher, 35*(11), 900-907. https://doi.org/10.3109/0142159X.2013.820274

Daly, M., Roberts, C., Kumar, K., & Perkins, D. (2013). Longitudinal Integrated Rural Placements: A Social Learning Systems Perspective. *Medical Education, 47*(4), 352-361. https://doi.org/10.1111/medu.12097

Dancza, K. (2016). Enabling the Development of Professional Identity through Occupation-Centred Practice. *British Journal of Occupational Therapy, 79*, 7-7. https://espace.library.uq.edu.au/view/UQ:408170

Darling Downs Health. (2019a). *Division of Allied Health Organisational Structure Darling Downs Health*. https://qheps.health.qld.gov.au/__data/assets/pdf_file/0023/1522940/ah-orgstructure.pdf

Darling Downs Health. (2019b). *Framework for Action on Interprofessional Education and Collaborative Practice*. https://www.health.qld.gov.au/cunninghamcentre/activities/074

Darling Downs Hospital and Health Service. (2016). *Darling Downs Health Locations*. https://www.health.qld.gov.au/darlingdowns/locations

Darling Downs Hospital and Health Service. (2017a). *Darling Downs Health Allied Health Operational Plan*. https://qheps.health.qld.gov.au/__data/assets/pdf_file/0034/1939426/ddhhs-opplan-ah.pdf

Darling Downs Hospital and Health Service. (2017b). *Darling Downs Hosptial and Health Service Annual Report 2016-2017*. https://www.health.qld.gov.au/__data/assets/pdf_file/0035/677447/ddhhs-annualreport-web.pdf

Darling Downs Hospital and Health Service. (2018). *Darling Downs Hospital and Health Service Strategic Plan 2016-2020 (2018 Update)*. https://www.health.qld.gov.au/darlingdowns/pdf/ddhhs-strategicplan-summary.pdf

Davis, J. (2006). The Importance of the Community of Practice in Identity Development. *Internet Journal of Allied Health Sciences & Practice, 4*(3), 8p-8p. https://nsuworks.nova.edu/ijahsp/vol4/iss3/5/

Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. R. (1994). Facilitating Internalization: The Self-Determination Theory Perspective. *Journal of Personality, 62*(1), 119-142. https://doi.org/10.1111/j.1467-6494.1994.tb00797.x

Department of Health. Victoria. (2014). *Best Practice Clinical Learning Environments, the Best Practice Clinical Learning Environment Framework* https://www2.health.vic.gov.au/health-workforce/education-and-training/building-a-quality-health-workforce/bpcle-framework

Deppoliti, D. (2008). Exploring How New Registered Nurses Construct Professional Identity in Hospital Settings. *Journal of Continuing Education In Nursing, 39*(6), 255-262. http://dx.doi.org/10.3928/00220124-20080601-03

Derdall, M., Olson, P., Janzen, W., & Warren, S. (2002). Development of a Questionnaire to Examine Confidence of Occupational Therapy Students During Fieldwork Experiences. *Canadian Journal of Occupational Therapy, 69*(1), 49-56. https://doi.org/10.1177/000841740206900105

Dew, K. (2007). A Health Researcher's Guide to Qualitative Methodologies. *Australian and New Zealand Journal of Public Health, 31*(5), 433-437. https://doi.org/10.1111/j.1753-6405.2007.00114.x

Dieticians Association of Australia. (2019). *National Competency Standards for Dieticians*. https://daa.asn.au/maintaining-professional-standards/ncs/

Dunn, S. V., & Hansford, B. (1997). Undergraduate Nursing Students' Perceptions of Their Clinical Learning Environment. *Journal of Advanced Nursing, 25*(6), 1299-1306. https://doi.org/10.1046/j.1365-2648.1997.19970251299.x

Dybowski, C., & Harendza, S. (2014). "Teaching Is Like Nightshifts…": A Focus Group Study on the Teaching Motivations of Clinicians. *Teaching and Learning in Medicine, 26*(4), 393-400. https://doi.org/10.1080/10401334.2014.910467.

Edmunds, M., & Harris, M. (2015). Challenges to Student Transition in Allied Health Undergraduate Education in the Australian Rural and Remote Context: A Synthesis of Barriers and Enablers. *Rural and Remote Health, 15*(2), 1-17. www.rrh.org.au/journal/article/3069

Edwards, H., & Dirette, D. (2010). The Relationship between Professional Identity and Burnout among Occupational Therapists. *Occupational Therapy in Health Care, 24*(2), 119-129. https://doi.org/10.3109/07380570903329610

Ellaway, R. H., Cooper, G., Al-Idrissi, T., Dubé, T., & Graves, L. (2014). Discourses of Student Orientation to Medical Education Programs. *Medical Education Online, 19*(1). https://doi.org/10.3402/meo.v19.23714

Elliott-Schmidt, R., & Strong, J. (1995). Rural Occupational Therapy Practice: A Survey of Rural Practice and Clinical Supervision in Rural Queensland and Northern New South Wales. *Australian Journal of Rural Health, 3*(3), 122-131. https://doi.org/10.1111/j.1440-1584.1995.tb00164.x

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative Content Analysis: A Focus on Trustworthiness. *SAGE Open, 4*(1), 1 - 10. https://doi.org/10.1177/2158244014522633

Elo, S., & Kyngäs, H. (2008). The Qualitative Content Analysis Process. *Journal of Advanced Nursing, 62*(1), 107-115. https://doi.org/10.1111/j.1365-2648.2007.04569.x

Elvey, R., Hassell, K., & Hall, J. (2013). Who Do You Think You Are? Pharmacists' Perceptions of Their Professional Identity. *International Journal of Pharmacy Practice, 21*(5), 322-332. 10.1111/ijpp.12019

Fiddes, P. J., Brooks, P. M., & Komesaroff, P. (2013). The Patient Is the Teacher: Ambulatory Patient-Centred Student-Based Interprofessional Education Where the Patient Is the Teacher Who Improves Patient Care Outcomes. *Internal Medicine Journal, 43*(7), 747-750. https://doi.org/10.1111/imj.12197

Fitzgerald, C., & Costello, C. (2018). *Clinical Educator Preparation: Focussing on Supervision Capability and Quality in Education*. Allied Health Professions Office Clinical Educator and New Graduate videoconference series. Slide Format. Queensland Health. Queendland Government.

Flott, E. A., & Linden, L. (2016). The Clinical Learning Environment in Nursing Education: A Concept Analysis. *Journal of Advanced Nursing, 72*(3), 501-513. https://doi.org/10.1111/jan.12861

Flowers, P. (2009). *Research Philosophies - Importance and Relevance*. https://blogs.warwick.ac.uk/files/cesphd/flowers_2009.pdf

Flynn, R., Albrecht, L., & Scott, S. D. (2018). Two Approaches to Focus Group Data Collection for Qualitative Health Research:Maximizing Resources and Data Quality. *International Journal of Qualitative Methods, 17*(1), 1-9. https://doi.org/10.1177/1609406917750781

Foster, K., & Roberts, C. (2016). The Heroic and the Villainous: A Qualitative Study Characterising the Role Models That Shaped Senior Doctors' Professional Identity. *BMC Medical Education, 16*(1), 1-11. https://doi.org/10.1186/s12909-016-0731-0

Francis-Cracknell, A., Maver, S., Kent, F., Edwards, E., & Iles, R. (2017). Several Strategies for Clinical Partners and Universities Are Perceived to Enhance Physiotherapy Student Engagement in Non-Metropolitan Clinical Placements: A Mixed-Methods Study. *Journal of Physiotherapy, 63*(4), 243-249. https://doi.org/10.1016/j.jphys.2017.08.008

Francis, A., Hills, C., MacDonald-Wicks, L., Johnston, C., James, D., Surjan, Y., & Warren-Forward, H. (2016). Characteristics of an Ideal Practice Educator: Perspectives from Practice Educators in Diagnostic Radiography, Nuclear Medicine, Nutrition and Dietetics, Occupational Therapy and Physiotherapy and Radiation Therapy. *Radiography, 22*(4), 287-294. https://doi.org/10.1016/j.radi.2016.04.001

Frenk, J., Chen, L., Bhutta, Z. A., Cohen, J., Crisp, N., Evans, T., . . . Kelley, P. (2010). Health Professionals for a New Century: Transforming Education to Strengthen Health Systems in an Interdependent World. *The Lancet, 376*(9756), 1923-1958. https://doi.org/10.1016/S0140-6736(10)61854-5

Frost, H. D., & Regehr, G. (2013). 'I Am a Doctor': Negotiating the Discourses of Standardization and Diversity in Professional Identity Construction. *Academic Medicine, 88*(10), 1570-1577. https://doi.org/10.1097/ACM.0b013e3182a34b05

Furness, L., & Kaltner, M. (2015). Facilitating Student Education and Support Using Videoconference. *Australian Journal of Rural Health, 23*(4), 249-253. https://doi.org/10.1111/ajr.12148

Gibson, S. J., Porter, J., Anderson, A., Bryce, A., Dart, J., Kellow, N., . . . Palermo, C. (2019). Clinical Educators' Skills and Qualities in Allied Health: A Systematic Review. *Medical Education, 53*(5), 432-442. https://doi.org/10.1111/medu.13782

Gilbert, J., & Brown, L. (2015). The Clinical Environment-Do Student Nurses Belong?: A Review of Australian Literature. *Australian Journal of Advanced Nursing, 33*(1), 23. http://www.ajan.com.au/Vol33/Issue1/3Gilbert.pdf

Globerman, J., & Bogo, M. (2003). Changing Times: Understanding Social Workers' Motivation to Be Field Instructors. *Social Work, 48*(1), 65-73.

Goldie, J. (2012). The Formation of Professional Identity in Medical Students: Considerations for Educators. *Medical Teacher, 34*(9), e641-e648. https://doi.org./10.3109/0142159X.2012.687476.

Goldstein, P. A., Storey-Johnson, C., & Beck, S. (2014). Facilitating the Initiation of the Physician's Professional Identity: Cornell's Urban Semester Program. *Perspectives on Medical Education, 3*(6), 492-499. https://doi.org/10.1007/s40037-014-0151-y

Goodare, P. (2015). Literature Review: 'Are You Ok There?' The Socialisation of Student and Graduate Nurses: Do We Have It Right? *Australian Journal of Advanced Nursing, 33*(1), 38-43. https://doi.org/10.1097/ACM.0000000000000700

Graneheim, U. H., & Lundman, B. (2004). Qualitative Content Analysis in Nursing Research: Concepts, Procedures and Measures to Achieve Trustworthiness. *Nurse Education Today, 24*(2), 105-112. https://doi.org/10.1016/j.nedt.2003.10.001

Green, J., & Thorogood, N. (2009). *Qualitative Methods for Health Research*. SAGE Publications.

Greer, A. G., Pokorny, M., Clay, M. C., Brown, S., & Steele, L. L. (2010). Learner-Centered Characteristics of Nurse Educators. *International Journal of Nursing Education Scholarship, 7*(1). https://doi.org/10.2202/1548-923X.1710.

Grenier, M.-L. (2015). Facilitators and Barriers to Learning in Occupational Therapy Fieldwork Education: Student Perspectives. *American Journal of Occupational Therapy, 69*, 1-9. https://doi.org/10.5014/ajot.2015.015180

Groenewald, T. (2004). A Phenomenological Research Design Illustrated. *International Journal of Qualitative Methods, 3*(1), 42-55. https://doi.org/10.1177/160940690400300104

Guba, E. G., & Lincoln, Y. S. (1994). *Competing Paradigms in Qualitative Research*. SAGE Publications.

Gustafsson, L. (2016). Visioning the Future for Practice Education. *Australian Occupational Therapy Journal, 63*(5), 301-302. https://doi.org/10.1111/1440-1630.12332.

Hafferty, F. W. (2016). Socialization, Professionalism, and Professional Identity Formation. In R. L. Cruess, S. R. Cruess, & Y. Steinert (Eds.), *Teaching Medical Professionalism. Supporting the Development of a Professional Identity* (2nd ed., pp. 54-67): Cambridge University Press.

Hafferty, F. W., Michalec, B., Martimianakis, M. A., & Tilburt, J. C. (2016). Alternative Framings, Countervailing Visions: Locating the 'P' in Professional Identity Formation. *Academic Medicine, 91*(2), 171-174. https://doi.org/10.1097/ACM.0000000000000961

Hägg-Martinell, A., Hult, H., Henriksson, P., & Kiessling, A. (2015). Community of Practice and Student Interaction at an Acute Medical Ward: An Ethnographic Study. *Medical Teacher, 38*(8), 1-8. https://doi.org/10.3109/0142159X.2015.1104411

Hall, M., Poth, C., Manns, P., & Beaupre, L. (2015). To Supervise or Not to Supervise a Physical Therapist Student: A National Survey of Canadian Physical Therapists. *Journal of Physical Therapy Education, 29*(3), 58-67. https://doi.org/10.1097/00001416-201529030-00008

Hammond, R., Cross, V., & Moore, A. (2016). The Construction of Professional Identity by Physiotherapists: A Qualitative Study. *Physiotherapy, 102*(1), 71-77. https://doi.org/10.1016/j.physio.2015.04.002

Hanson, J. L., Balmer, D. F., & Giardino, A. P. (2011). Qualitative Research Methods for Medical Educators. *Academic Pediatrics, 11*(5), 375-386. https://doi.org/10.1016/j.acap.2011.05.001

Harrison, G., & Healy, K. (2016). Forging an Identity as a Newly Qualified Worker in the Non-Government Community Services Sector. *Australian Social Work, 69*(1), 80-91. https://doi.org/10.1080/0312407X.2015.1026913

Hauer, K. E., ten Cate, O., Boscardin, C., Irby, D. M., Iobst, W., & O'Sullivan, P. (2014). Understanding Trust as an Essential Element of Trainee Supervision and Learning in the Workplace. *Advances in Health Sciences Education, 19*(3), 435-456. https://doi.org/10.1007/s10459-013-9474-4.

Hayden, J. (1995). Professional Socialization and Health Education Preparation. *Journal of Health Education, 26*(5), 271-279. https://doi.org/10.1080/10556699.1995.10603114

Herbert, L., & Ashby, S. (2015). An Exploratory Study into the Formation of Professional Identity During an Occupational Therapy Entry-Level Program. *Australian Occupational Therapy Journal, 63*(4), 233-243. http://dx.doi.org/10.1111/1440-1630.12271

Hercelinskyj, G., Cruickshank, M., Brown, P., & Phillips, B. (2014). Perceptions from the Front Line: Professional Identity in Mental Health Nursing. *International Journal of Mental Health Nursing, 23*(1), 24-32. https://doi.org/10.1111/inm.12001

Higgs, J., & McAllister, L. (2005). The Lived Experiences of Clinical Educators with Implications for Their Preparation, Support and Professional Development. *Learning in Health & Social Care, 4*(3), 156-171. https://doi.org/10.1111/j.1473-6861.2005.00097.x

Holden, M., Buck, E., Clark, M., Szauter, K., & Trumble, J. (2012). Professional Identity Formation in Medical Education: The Convergence of Multiple Domains. *HEC Forum, 24*(4), 245-255. https://doi.org/10.1007/s10730-012-9197-6.

Holden, M. D., Buck, E., Luk, J., Ambriz, F., Boisaubin, E. V., Clark, M. A., . . . Dalrymple, J. L. (2015). Professional Identity Formation: Creating a Longitudinal Framework through Time (Transformation in Medical Education). *Academic Medicine, 90*(6), 761-767. https://doi.org/10.1097/ACM.0000000000000719

Hood, K., Cant, R., Leech, M., Baulch, J., & Gilbee, A. (2014). Trying on the Professional Self: Nursing Students' Perceptions of Learning About Roles, Identity and Teamwork in an Interprofessional Clinical Placement. *Applied Nursing Research, 27*(2), 109-114. https://doi.org/10.1016/j.apnr.2013.07.003.

Hooper, B. (2008). Stories We Teach By: Intersections among Faculty Biography, Student Formation, and Instructional Processes. *The American Journal of Occupational Therapy, 62*(2), 228-241. https://doi.org/10.5014/ajot.62.2.228

Houghton, C. E., Casey, D., Shaw, D., & Murphy, K. (2013). Students' Experiences of Implementing Clinical Skills in the Real World of Practice. *Journal of Clinical Nursing, 22*(13-14), 1961-1969. https://doi.org/10.1111/jocn.12014

Houghton, T. (2016). Creating an Environment for Learning. *Nursing Standard, 30*(29), 40-48. https://doi.org/10.7748/ns.30.29.40.s46

Hugo Centre for Migration and Population Research. (2019). *Accessibility/Remoteness Index of Australia*. https://www.adelaide.edu.au/hugo-centre/services/aria

Hummell, J. (1997). Effective Fieldwork Supervision: Occupational Therapy Student Perspectives. *Australian Occupational Therapy Journal, 44*(4), 147-157. https://doi.org/10.1111/j.1440-1630.1997.tb00769.x

Ikiugu, M., & Rosso, H. (2003). Facilitating Professional Identity in Occupational Therapy Students. *Occupational Therapy International, 10*(3), 206-225. https://doi.org/10.1002/oti.186

Jakobsen, F., Hansen, T. B., & Eika, B. (2011). "Knowing More About the Other Professions Clarified My Own Profession". *Journal of Interprofessional Care, 25*(6), 441-446. https://doi.org/10.3109/13561820.2011.595849

Jarvis-Selinger, S., Pratt, D. D., & Regehr, G. (2012). Competency Is Not Enough: Integrating Identity Formation into the Medical Education Discourse. *Academic Medicine: Journal of The Association of American Medical Colleges, 87*(9), 1185-1190. https://doi.org/10.1097/ACM.0b013e3182604968

Jaye, C., & Egan, T. (2006). Communities of Clinical Practice: Implications for Health Professional Education. *Focus on Health Professional Education: A Multi-disciplinary Journal, 8*(2), 1-10.

Jaye, C., Egan, T., & Smith-Han, K. (2010). Communities of Clinical Practice and Normalising Technologies of Self: Learning to Fit in on the Surgical Ward. *Anthropology & Medicine, 17*(1), 59-73. https://doi.org/10.1080/13648470903569388

Jebril, M. Y. (2008). *The Evolution and Measurement of Professional Identity.* (http://search.ebscohost.com/login.aspx?direct=true&AuthType=athens&db=psyh&AN=2008-99200-425&site=eds-live), ProQuest Information & Learning,

John, S. (2010). The Influence of Revision on First Person Pronoun Use in Thesis Writing. *Writing & Pedagogy, 1*(2), 227-247. 10.1558/wap.v1i2.227

Johnson, C. E., Keating, J. L., Boud, D. J., Dalton, M., Kiegaldie, D., Hay, M., . . . Molloy, E. K. (2016). Identifying Educator Behaviours for High Quality Verbal Feedback in Health Professions Education: Literature Review and Expert Refinement. *BMC Medical Education, 16*, 1-11. https://doi.org/10.1186/s12909-016-0613-5

Johnson, D. (2001). The Opportunities, Benefits and Barriers to the Introduction of Work-Based Learning in Higher Education. *Innovations in Education and Teaching International, 38*(4), 364-368. 10.1080/14703290110074948

Johnson, G., & Blinkhorn, A. (2011). Student Opinions on a Rural Placement Program in New South Wales, Australia. *Rural Remote Health, 11*(2), 1703. https://www.rrh.org.au/journal/article/1703

Johnson, M., Cowin, L. S., Wilson, I., & Young, H. (2012). Professional Identity and Nursing: Contemporary Theoretical Developments and Future Research Challenges. *International Nursing Review, 59*(4), 562-569. https://doi.org/10.1111/j.1466-7657.2012.01013.x

Johnston, C., Newstead, C., Sanderson, M., Wakely, L., & Osmotherly, P. (2017). The Changing Landscape of Physiotherapy Student Clinical Placements: An Exploration of Geographical Distribution and Student Performance across Settings. *Australian Journal of Rural Health, 25*(2), 85-93. https://doi.org/10.1111/ajr.12302

Jones, D., McAllister, L., & Lyle, D. (2015a). Interprofessional Academic Service-Learning in Rural Australia: Exploring the Impact on Allied Health Student Knowledge, Skills, and Practice. A Qualitative Study. *International Journal of Practice-Based Learning in Health and Social Care, 3*(2), 1-16. https://doi.org/10.18552/ijpblhsc.v3i2.217

Jones, D., McAllister, L., & Lyle, D. (2015b). Stepping out of the Shadows: Allied Health Student and Academic Perceptions of the Impact of a Service-Learning Experience on Student's Work-Readiness and Employability. *Journal of Teaching and Learning for Graduate Employability, 6*(1), 66-87. https://doi.org/10.21153/jtlge2015vol6no1art574

Jones, G. R. (1986). Socialization Tactics, Self-Efficacy, and Newcomers' Adjustments to Organizations. *Academy of Management Journal, 29*(2), 262-279. https://doi.org/10.5465/256188

Kearns, S., & McArdle, K. (2012). 'Doing It Right?'– Accessing the Narratives of Identity of Newly Qualified Social Workers through the Lens of Resilience: 'I Am, I Have, I Can'. *Child and Family Social Work, 17*(4), 385-394. https://doi.org/10.1111/j.1365-2206.2011.00792.x

Kell, C. (2014). Placement Education Pedagogy as Social Participation: What Are Students Really Learning? *Physiotherapy Research International, 19*(1), 44-54. https://doi.org/10.1002/pri.1561

Khalili, H. (2013). *Interprofessional Socialization and Dual Identity Development Amongst Cross-Disciplinary Students.* (http://ir.lib.uwo.ca/etd/1742), The University of Western Ontario,

Khalili, H., Orchard, C., Spence Laschinger, H. K., & Farah, R. (2013). An Interprofessional Socialization Framework for Developing an Interprofessional Identity among Health Professions Students. *Journal of Interprofessional Care, 27*(6), 448-453. https://doi.org/10.3109/13561820.2013.804042

Kilminster, S. M., & Jolly, B. C. (2000). Effective Supervision in Clinical Practice Settings: A Literature Review. *Medical Education, 34*(10), 827-840. https://doi.org/10.1046/j.1365-2923.2000.00758.x

Kinn, L. G., & Aas, R. W. (2009). Occupational Therapists' Perception of Their Practice: A Phenomenological Study. *Australian Occupational Therapy Journal, 56*(2), 112-121. https://doi.org/10.1111/j.1440-1630.2007.00714.x.

Kirke, P., Layton, N., & Sim, J. (2007). Informing Fieldwork Design: Key Elements to Quality in Fieldwork Education for Undergraduate Occupational Therapy Students. *Australian Occupational Therapy Journal, 54*(s1), S13-S22. https://doi.org/10.1111/j.1440-1630.2007.00696.x

Kitto, S. C., Chesters, J., & Grbich, C. (2008). Quality in Qualitative Research. *Medical Journal of Australia, 188*(4), 243-246. https://doi.org/10.5694/j.1326-5377.2008.tb01595.x

Koontz, A. M., Mallory, J. L., Burns, J. A., & Chapman, S. (2010). Staff Nurses and Students: The Good, the Bad, and the Ugly. *MEDSURG Nursing Journal*, *19*(4), 240-246. https://www.amsn.org/sites/default/files/documents/practice-resources/healthy-work-environment/resources/MSNJ_Koontz_19_04.pdf

Korpi, H., Piirainen, A., & Peltokallio, L. (2017). Practical Work in Physiotherapy Students' Professional Development. *Reflective Practice, 18*(6), 821-836. https://doi.org/10.1080/14623943.2017.1361920

Krauss, S. E. (2005). Research Paradigms and Meaning Making: A Primer. *The Qualitative Report, 10*(4), 758-770. https://nsuworks.nova.edu/cgi/viewcontent.cgi?article=1831&context=tqr

Krefting, L. (1991). Rigor in Qualitative Research: The Assessment of Trustworthiness. *American Journal of Occupational Therapy, 45*(3), 214-222. https://doi.org/10.5014/ajot.45.3.214

Kururi, N., Tozato, F., Lee, B., Kazama, H., Katsuyama, S., Takahashi, M., . . . Watanabe, H. (2016). Professional Identity Acquisition Process Model in Interprofessional Education Using Structural Equation Modelling: 10-Year Initiative Survey. *Journal of Interprofessional Care, 30*(2), 175-183. https://doi.org/10.3109/13561820.2015.1092117

Larson, J., Brady, M., Engelmann, L., Perkins, I., & Shultz, C. (2013). The Formation of Professional Identity in Nursing. *Nursing Education Perspectives, 34*(2), 138-138. https://journals.lww.com/neponline/Citation/2013/03000/The_Formation_of_Professional_Identity_in_Nursing.16.aspx

Lave, J., & Wenger, E. (2012). *Situated Learning : Legitimate Peripheral Participation*. Cambridge University Press.

Lefevre, M. (2005). Facilitating Practice Learning and Assessment: The Influence of Relationship. *Social Work Education, 24*(5), 565-583. https://doi.org/10.1080/02615470500132806

Lester, S., & Costley, C. (2010). Work-Based Learning at Higher Education Level: Value, Practice and Critique. *Studies in Higher Education, 35*(5), 561-575. 10.1080/03075070903216635

Leung, L. (2015). Validity, Reliability, and Generalizability in Qualitative Research. *Journal of Family Medicine and Primary Care, 4*(3), 324-327. https://doi.org/10.4103/2249-4863.161306

Levett-Jones, T., & Lathlean, J. (2009). The Ascent to Competence Conceptual Framework: An Outcome of a Study of Belongingness. *Journal of Clinical Nursing, 18*(20), 2870-2879. https://doi.org/10.1111/j.1365-2702.2008.02593.x

Levett-Jones, T., Lathlean, J., McMillan, M., & Higgins, I. (2007). Belongingness: A Montage of Nursing Students' Stories of Their Clinical Placement Experiences. *Contemporary Nurse, 24*(2), 162-174. https://doi.org/10.5555/conu.2007.24.2.162

Li, L. C., Grimshaw, J. M., Nielsen, C., Judd, M., Coyte, P. C., & Graham, I. D. (2009). Evolution of Wenger's Concept of Community of Practice. *Implementation Science, 4*, 1-8. https://doi.org/10.1186/1748-5908-4-11

Liamputtong, P. (2013). *Research Methods in Health : Foundations for Evidence-Based Practice*. Oxford University Press.

Lidskog, M., Löfmark, A., & AhlströM, G. (2008). Learning About Each Other: Students' Conceptions before and after Interprofessional Education on a Training Ward. *Journal of Interprofessional Care, 22*(5), 521-533. https://doi.org/10.1080/13561820802168471

Liljedahl, M., Björck, E., Kalén, S., Ponzer, S., & Bolander Laksov, K. (2016). To Belong or Not to Belong: Nursing Students' Interactions with Clinical Learning Environments - an Observational Study. *BMC Medical Education, 16*, 197- 207. https://doi.org/10.1186/s12909-016-0721-2

Lindquist, I., Engardt, M., Garnham, L., Poland, F., & Richardson, B. (2006). Physiotherapy Students' Professional Identity on the Edge of Working Life. *Medical Teacher, 28*(3), 270-276. https://doi.org/10.1080/01421590600605272

Lingard, L. (2015). The Art of Limitations. *Perspectives on Medical Education, 4*(3), 136-137. https://doi.org/10.1007/s40037-015-0181-0

Lingard, L., & Watling, C. (2016). It's a Story, Not a Study: Writing an Effective Research Paper *Academic Medicine, 91*(12), 1. https://doi.org/10.1097/ACM.0000000000001389

Lordly, D., & MacLellan, D. (2012). Dietetic Students' Identity and Professional Socialization in Preparation for Practice. *Canadian Journal of Dietetic Practice And Research, 73*(1), 7-13. https://doi.org/10.3148/73.1.2012.7

Lundgren-Resenterra, M., & Kahn, P. E. (2019). The Organisational Impact of Undertaking a Professional Doctorate: Forming Critical Leaders. *British Educational Research Journal, 45*(2), 407-424. https://doi.org/10.1002/berj.3503

Mackenzie, L., & O'Toole, G. (2017). Profile of 1 Year of Fieldwork Experiences for Undergraduate Occupational Therapy Students from a Large Regional Australian University. *Australian Health Review, 41*(5), 582-589. https://doi.org/10.1071/AH16006

MacKenzie, N., & Knipe, S. (2006). Research Dilemmas: Paradigms, Methods and Methodology. *Issues in Educational Research, 16*(2), 193-205. https://iier.org.au/iier16/mackenzie.html

Mann, K. V., & Gaufberg, E. (2016). Role Modelling and Mentoring in the Formation of Professional Identity. In R. L. Cruess, S. R. Cruess, & Y. Steinert (Eds.), *Teaching Medical Professionalism. Supporting the Development of a Professional Identity* (2nd ed., pp. 84-96): Cambridge University Press.

Manninen, K., Henriksson, E. W., Scheja, M., & Silén, C. (2015). Supervisors' Pedagogical Role at a Clinical Education Ward - an Ethnographic Study. *BMC Nursing, 14*, 1-8. https://doi.org/10.1186/s12912-015-0106-6

Maranon, A. A., & Pera, M. P. I. (2015). Theory and Practice in the Construction of Professional Identity in Nursing Students: A Qualitative Study. *Nurse Education Today, 35*(7), 859-863. https://doi.org/10.1016/j.nedt.2015.03.014

Mariet, J. (2016). Professional Socialization Models in Nursing. *International Journal of Nursing Education, 8*(3), 143-148. https://doi.org/10.5958/0974-9357.2016.00107.0

Matthew-Maich, N., Martin, L., Ackerman-Rainville, R., Hammond, C., Palma, A., Sheremet, D., & Stone, R. (2015). Student Perceptions of Effective Nurse Educators in Clinical Practice. *Nursing Standard, 29*(34), 45-58. https://doi.org/10.7748/ns.29.34.45.e9640

McAllister, L. (2005). Issues and Innovations in Clinical Education. *Advances in Speech Language Pathology, 7*(3), 138-148. https://doi.org/10.1080/14417040500184993

McAllister, L., McEwen, E., Williams, V., & Frost, N. (1998). Rural Attachments for Students in the Health Professions: Are They Worthwhile? *Australian Journal of Rural Health, 6*(4), 194-201. https://doi.org/10.1111/j.1440-1584.1998.tb00312.x.

McAvoy, V., & Waite, M. (2018). Belongingness: Student Odps' Learning Experiences in Clinical Placements. *Journal of Perioperative Practice, 29*(1-2), 17-23. https://doi.org/10.1177/1750458918788774

McBride, L.-J., Fitzgerald, C., Costello, C., & Perkins, K. (2018). Allied Health Pre-Entry Student Clinical Placement Capacity: Can It Be Sustained? *Australian Health Review, Advanced online publication,*(22 November 2018). https://doi.org/10.1071/AH18088

McBride, L.-J., Fitzgerald, C., Morrison, L., & Hulcombe, J. (2015). Pre-Entry Student Clinical Placement Demand: Can It Be Met? *Australian Health Review, 39*(5), 577-581. https://doi.org/10.1071/AH14156

McKinlay, E., Gallagher, P., Wilson, C., Gray, L., McHugh, P., & Pullon, S. (2016). Social Learning, Shared Accommodation and Interprofessional Education: I Think Those Conversations That You Have at the Dinner Table …. *Journal of Interprofessional Education & Practice, 5*(1), 1-6. https://doi.org/10.1016/j.xjep.2016.07.001

Merton, R. K. (1957). Some Preliminaries to a Sociology of Medical Education. In R. K. Merton, G. G. Reader, & P. L. Kendall (Eds.), *The Student-Physician : Introductory Studies in the Sociology of Medical Education. A Report of the Bureau of Applied Social Research of Columbia University* (pp. 3-81): Harvard University Press.

Merton, R. K., Reader, G. G., & Kendall, P. L. (1957). *The Student-Physician. Introductory Studies in the Sociology of Medical Education*. Harvard University Press.

Miehls, D., Everett, J., Segal, C., & du Bois, C. (2013). Msw Students' Views of Supervision: Factors Contributing to Satisfactory Field Experiences. *Clinical Supervisor, 32*(1), 128-146. https://doi.org/10.1080/07325223.2013.782458

Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis : An Expanded Sourcebook*. Thousand Oaks: SAGE.
Miller, F. A., & Alvarado, K. (2005). Incorporating Documents into Qualitative Nursing Research. *Journal of Nursing Scholarship, 37*(4), 348-353. http://dx.doi.org/10.1111/j.1547-5069.2005.00060.x
Miller, S. E. (2013). Professional Socialization: A Bridge between the Explicit and Implicit Curricula. *Journal of Social Work Education, 49*(3), 368-386. https://doi.org/10.1080/10437797.2013.796773
Mogalakwe, M. (2009). The Documentary Research Method – Using Documentary Sources in Social Research. *Eastern Africa Social Science Research Review, 25*(1), 43-58. https://doi.org/10.1353/eas.0.0006
Monrouxe, L., & Poole, G. (2013). An Onion? Conceptualising and Researching Identity. *Medical Education, 47*(4), 425-429. https://doi.org/10.1111/medu.12123
Monrouxe, L. V. (2010). Identity, Identification and Medical Education: Why Should We Care? *Medical Education, 44*(1), 40-49. https://doi.org/10.1111/j.1365-2923.2009.03440.x
Monrouxe, L. V. (2016). Theoretical Insights into the Nature and Nurture of Professional Identities. In R. L. Cruess, S. R. Cruess, & Y. Steinert (Eds.), *Teaching Medical Professionalism. Supporting the Development of a Professional Identity* (2nd ed., pp. 37-53): Cambridge University Press.
Monrouxe, L. V., Bullock, A., Tseng, H.-M., & Wells, S. E. (2017). Association of Professional Identity, Gender, Team Understanding, Anxiety and Workplace Learning Alignment with Burnout in Junior Doctors: A Longitudinal Cohort Study. *BMJ Open, 7*(12), e017942. https://doi.org/10.1136/bmjopen-2017-017942
Monrouxe, L. V., & Rees, C. E. (2017). *Healthcare Professionalism: Improving Practice through Reflections on Workplace Dilemmas*. John Wiley & Sons.
Moores, A., & Fitzgerald, C. (2017). New Graduate Transition to Practice: How Can the Literature Inform Support Strategies? *Australian Health Review, 41*(3), 308-312. https://doi.org/10.1071/AH15240
Moorhead, B., Bell, K., & Bowles, W. (2016). Exploring the Development of Professional Identity with Newly Qualified Social Workers. *Australian Social Work, 69*(4), 456-467. https://doi.org/10.1080/0312407X.2016.1152588
Morgan, S. A. (1991). Teaching Activities of Clinical Instructors During the Direct Client Care Period: A Qualitative Investigation. *Journal of Advanced Nursing, 16*(10), 1238-1246. https://doi.org/10.1111/j.1365-2648.1991.tb01534.x
Morison, S., Marley, J., & Machniewski, S. (2011). Educating the Dental Team: Exploring Perceptions of Roles and Identities. *British Dental Journal, 211*(10), 477-483. https://doi.org/10.1038/sj.bdj.2011.963
Morley, D. (2016). Applying Wenger's Communities of Practice Theory to Placement Learning. *Nurse Education Today, 39*, 161-162. https://doi.org/10.1016/j.nedt.2016.02.007
Morris, J. (2007). Factors Influencing the Quality of Student Learning on Practice Placements. *Learning in Health & Social Care, 6*(4), 213-219. https://doi.org/10.1111/j.1473-6861.2007.00161.x
Mulholland, S., Derdall, M., & Roy, B. (2006). The Student's Perspective on What Makes an Exceptional Practice Placement Educator. *British Journal of Occupational Therapy, 69*(12), 567-571. http://dx.doi.org/10.1177/030802260606901206

Mylrea, M. F., Gupta, T. S., & Glass, B. D. (2017). Developing Professional Identity in Undergraduate Pharmacy Students: A Role for Self-Determination Theory. *Pharmacy*, *5*(2), 1-9. https://doi.org/10.3390/pharmacy5020016

Mylrea, M. F., Sen Gupta, T., & Glass, B. D. (2015). Professionalization in Pharmacy Education as a Matter of Identity. *American Journal of Pharmaceutical Education*, *79*(9), 1-9. https://doi.org/10.5688/ajpe799142.

Naidoo, D., & van Wyk, J. (2016). Fieldwork Practice for Learning: Lessons from Occupational Therapy Students and Their Supervisors. *African Journal of Health Professions Education*, *8*(1), 37-40. https://doi.org/10.7196/AJHPE.2016.v8i1.536

Nancarrow, S. A., Moran, A. M., & Graham, I. (2014). Preparing a 21st Century Workforce: Is It Time to Consider Clinically Based, Competency-Based Training of Health Practitioners? *Australian Health Review*, *38*(1), 115-117. https://doi.org/10.1071/AH13158

Nancarrow, S. A., Young, G., O'Callaghan, K., Jenkins, M., Philip, K., & Barlow, K. (2016). Shape of Allied Health: An Environmental Scan of 27 Allied Health Professions in Victoria. *Australian Health Review*, *41*(3), 327-335. https://doi.org/10.1071/AH16026

Naylor, S., Ferris, C., & Burton, M. (2016). Exploring the Transition from Student to Practitioner in Diagnostic Radiography. *Radiography*, *22*(2), 131-136. https://doi.org/10.1016/j.radi.2015.09.006

Newton, J. M., Billett, S., & Ockerby, C. M. (2009). Journeying through Clinical Placements – an Examination of Six Student Cases. *Nurse Education Today*, *29*(6), 630-634. https://doi.org/10.1016/j.nedt.2009.01.009

Newton, J. M., Henderson, A., Jolly, B., & Greaves, J. (2015). A Contemporary Examination of Workplace Learning Culture: An Ethnomethodology Study. *Nurse Education Today*, *35*(1), 91-96. https://doi.org/10.1016/j.nedt.2014.07.001

Newton, J. M., Jolly, B. C., Ockerby, C. M., & Cross, W. M. (2010). Clinical Learning Environment Inventory: Factor Analysis. *Journal of Advanced Nursing*, *66*(6), 1371-1381. https://doi.org/10.1111/j.1365-2648.2010.05303.x

Nicola-Richmond, K. M., Pepin, G., & Larkin, H. (2016). Transformation from Student to Occupational Therapist: Using the Delphi Technique to Identify the Threshold Concepts of Occupational Therapy. *Australian Occupational Therapy Journal*, *63*(2), 95-104. https://doi.org/10.1111/1440-1630.12252

Noble, C., Coombes, I., Nissen, L., Shaw, P. N., & Clavarino, A. (2015). Making the Transition from Pharmacy Student to Pharmacist: Australian Interns' Perceptions of Professional Identity Formation. *International Journal of Pharmacy Practice*, *23*(4), 292-304. 10.1111/ijpp.12155

Noble, C., Coombes, I., Shaw, P. N., Nissen, L. M., & Clavarino, A. (2014). Becoming a Pharmacist: The Role of Curriculum in Professional Identity Formation. *Pharmacy Practice*, *12*(1), 1-13. https://pharmacypractice.org/journal/index.php/pp/article/view/380

O'Brien, C. W., Anderson, R., Ayzenberg, B., Chute, P., Farnsworth, T., McLaughlin, R., . . . O'Sullivan Maillet, J. (2017). Employers' Viewpoint on Clinical Education. *Journal of Allied Health*, *46*(3), 131-137. https://www.ingentaconnect.com/contentone/asahp/jah/2017/00000046/00000003/art00004

O'Leary, Z. (2007). *The Essential Guide to Doing Research*. SAGE.

Ó Lúanaigh, P. (2015). Becoming a Professional: What Is the Influence of Registered Nurses on Nursing Students' Learning in the Clinical Environment? *Nurse*

Education in Practice, *15*(6), 450-456. https://doi.org/10.1016/j.nepr.2015.04.005

Occupational Therapy Clinical Education Program. (2019). *Clinical Education Support Officer Handbook*. Brisbane, Queensland: Queensland Government

Occupational Therapy Council of Australia. (2012). *Frequently Asked Questions from Potential Students*. http://www.otcouncil.com.au/accreditation/faq-accreditation/

Parboosingh, J. T. (2002). Physician Communities of Practice: Where Learning and Practice Are Inseparable. *Journal of Continuing Education in the Health Professions*, *22*(4), 230-236. https://doi.org/10.1002/chp.1340220407

Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods : Integrating Theory and Practice : The Definitive Text of Qualitative Inquiry Frameworks and Options*. SAGE Publications, Inc.

Perram, A., Hills, C., Johnston, C., MacDonald-Wicks, L., Surjan, Y., James, D., & Warren-Forward, H. (2016). Characteristics of an Ideal Practice Educator: Perspectives from Undergraduate Students in Diagnostic Radiography, Nuclear Medicine, Nutrition and Dietetics, Occupational Therapy, Physiotherapy and Radiation Therapy. *Radiography*, *22*(4), 295-305. https://doi.org/10.1016/j.radi.2016.04.007

Perry, C., Henderson, A., & Grealish, L. (2018). The Behaviours of Nurses That Increase Student Accountability for Learning in Clinical Practice: An Integrative Review. *Nurse Education Today*, *65*, 177-186. https://doi.org/10.1016/j.nedt.2018.02.029

Pitkala, K. H., & Mantyranta, T. (2003). Professional Socialization Revised: Medical Students' Own Conceptions Related to Adoption of the Future Physician's Role--a Qualitative Study. *Medical Teacher*, *25*(2), 155-160. https://doi.org/10.1080/0142159031000092544

Plack, M. (2006). The Development of Communication Skills, Interpersonal Skills, and a Professional Identity within a Community of Practice. *Journal of Physical Therapy Education*, *20*(1), 37-46. https://journals.lww.com/jopte/Abstract/2006/01000/The_Development_of_Communication_Skills,.5.aspx

Plack, M. (2008). The Learning Triad: Potential Barriers and Supports to Learning in the Physical Therapy Clinical Environment. *Journal of Physical Therapy Education*, *22*(3), 7-18. https://journals.lww.com/jopte/Abstract/2008/10000/The_Learning_Triad__Potential_Barriers_and.2.aspx

Plummer-D'Amato, P. (2008). Focus Group Methodology Part 1: Considerations for Design. *International Journal of Therapy & Rehabilitation*, *15*(2), 69-73.

Plummer, P. (2017). Focus Group Methodology. Part 1: Design Considerations. *International Journal of Therapy & Rehabilitation*, *24*(7), 297-301. 10.12968/ijtr.2017.24.7.297

Pratt, M. G., Rockmann, K. W., & Kaufmann, J. B. (2006). Constructing Professional Identity: The Role of Work and Identity Learning Cycles in the Customization of Identity among Medical Residents. *Academy of Management Journal*, *49*(2), 235-262. 10.5465/AMJ.2006.20786060

Råheim, M., Magnussen, L. H., Sekse, R. J. T., Lunde, Å., Jacobsen, T., & Blystad, A. (2016). Researcher-Researched Relationship in Qualitative Research: Shifts in Positions and Researcher Vulnerability. *International Journal of Qualitative Studies on Health and Well-being*, *11*(1), 1-12. https://doi.org/10.3402/qhw.v11.30996

Recker-Hughes, C., Wetherbee, E., Buccieri, K. M., Fitzpatrick Timmerberg, J., & Stolfi, A. M. (2014). Essential Characteristics of Quality Clinical Education Experiences: Standards to Facilitate Student Learning. *Journal of Physical Therapy Education, 28*(Supp 1), 48-55. https://journals.lww.com/jopte/Abstract/2014/00001/Essential_Characteristics_of_Quality_Clinical.9.aspx

Rees, C. (2005). Proto-Professionalism and the Three Questions About Development. *Medical Education, 39*(1), 9-11. https://doi.org/10.1111/j.1365-2929.2004.02025.x

Rees, C. E., & Monrouxe, L. V. (2018). Who Are You and Who Do You Want to Be? Key Considerations in Developing Professional Identities in Medicine. *Medical Journal of Australia, 209*(5), 202-203. https://doi.org/10.5694/mja18.00118

Reeves, S., Freeth, D., McCrorie, P., & Perry, D. (2002). `It Teaches You What to Expect in Future…': Interprofessional Learning on a Training Ward for Medical, Nursing, Occupational Therapy and Physiotherapy Students. *Medical Education, 36*(4), 337-344. https://doi.org/10.1046/j.1365-2923.2002.01169.x

Reid, A., Dahlgren, L. O., Petocz, P., & Dahlgren, M. A. (2008). Identity and Engagement for Professional Formation. *Studies in Higher Education, 33*(6), 729-742. https://doi.org/10.1080/03075070802457108

Ringsted, C., Hodges, B., & Scherpbier, A. (2011). 'The Research Compass': An Introduction to Research in Medical Education: Amee Guide No. 56. *Medical Teacher, 33*(9), 695-709. https://doi.org/10.3109/0142159X.2011.595436

Robert Wood Johnson Foundation. (2006). *Guidelines for Designing, Analyzing and Reporting Qualitative Research. Qualitative Research Guidelines Project.* http://www.qualres.org/HomeGuid-3868.html

Rodger, S., Chien, C.-W., Turpin, M., Copley, J., Coleman, A., Brown, T., & Caine, A.-M. (2016). Establishing the Validity and Reliability of the Student Practice Evaluation Form Revised Edition Package (Spef-R) in Occupational Therapy Practice Education: A Rasch Analysis. *Evaluation & the Health Professions, 39*(1), 33-48. https://doi.org/10.1177/0163278713511456

Rodger, S., Fitzgerald, C., Davila, W., Millar, F., & Allison, H. (2011). What Makes a Quality Occupational Therapy Practice Placement? Students' and Practice Educators' Perspectives. *Australian Occupational Therapy Journal, 58*(3), 195-202. https://doi.org/10.1111/j.1440-1630.2010.00903.x

Rodger, S., Stephens, E., Clark, M., Ash, S., & Graves, N. (2011). Occupational Therapy Students' Contribution to Occasions of Service During Practice Placements in Health Settings. *Australian Occupational Therapy Journal, 58*(6), 412-418. https://doi.org/10.1111/j.1440-1630.2011.00971.x.

Rodger, S., Thomas, Y., Greber, C., Broadbridge, J., Edwards, A., Newton, J., & Lyons, M. (2014). Attributes of Excellence in Practice Educators: The Perspectives of Australian Occupational Therapy Students. *Australian Occupational Therapy Journal, 61*(3), 159-167. https://doi.org/10.1111/1440-1630.12096

Rodger, S., Webb, G., Devitt, L., Gilbert, J., Wrightson, P., & McMeeken, J. (2008). Clinical Education and Practice Placements in the Allied Health Professions: An International Perspective. *Journal of Allied Health, 37*(1), 53-62.

Roulston, A., Cleak, H., & Vreugdenhil, A. (2018). Promoting Readiness to Practice: Which Learning Activities Promote Competence and Professional Identity for Student Social Workers During Practice Learning? *Journal of Social Work Education, 54*(2), 364-378. http://dx.doi.org/10.1080/10437797.2017.1336140

Sawatsky, A. P., Beckman, T. J., & Hafferty, F. W. (2017). Cultural Competency, Professional Identity Formation and Transformative Learning. *Medical Education, 51*(5), 462-464. https://doi.org/10.1111/medu.13316

Sawatsky, A. P., Nordhues, H. C., Merry, S. P., Bashir, M. U., & Hafferty, F. W. (2018). Transformative Learning and Professional Identity Formation During International Health Electives: A Qualitative Study Using Grounded Theory. *Academic Medicine, 93*(9), 1381-1390. https://doi.org/10.1097/ACM.0000000000002230

Schill, J. (2017). The Professional Socialization of Early Career Medical Laboratory Scientists. *Clinical Laboratory Science, 30*(1), 15-22. http://dx.doi.org/10.29074/ascls.30.1.15

Sharpless, J., Baldwin, N., Cook, R., Kofman, A., Morley-Fletcher, A., Slotkin, R., & Wald, H. S. (2015). The Becoming: Students' Reflections on the Process of Professional Identity Formation in Medical Education. *Academic Medicine, 90*(6), 713-717. https://doi.org/10.1097/ACM.0000000000000729

Sholl, S., Ajjawi, R., Allbutt, H., Butler, J., Jindal-Snape, D., Morrison, J., & Rees, C. (2017). Balancing Health Care Education and Patient Care in the Uk Workplace: A Realist Synthesis. *Medical Education, 51*(8), 787-801. https://doi.org/10.1111/medu.13290

Siggins Miller Consultants. (2012). *Promoting Quality in Clinical Placements: Literature Review and National Stakeholder Consultation*. https://www.adea.com.au/wp-content/uploads/2013/08/Promoting-quality-in-clinical-placements-report-20130408.pdf

Silva, L. C., Troncon, L. E. d. A., & Panúncio-Pinto, M. P. (2019). Perceptions of Occupational Therapy Students and Clinical Tutors on the Attributes of a Good Role Model. *Scandinavian Journal of Occupational Therapy, 26*(4), 283-293. https://doi.org/10.1080/11038128.2018.1508495

Slay, H. S., & Smith, D. A. (2011). Professional Identity Construction: Using Narrative to Understand the Negotiation of Professional and Stigmatized Cultural Identities. *Human Relations, 64*(1), 85-107. http://dx.doi.org/10.1177/0018726710384290

Smith, T., Cross, M., Waller, S., Chambers, H., Farthing, A., Barraclough, F., . . . Anderson, J. (2018(b)). Ruralization of Students' Horizons: Insights into Australian Health Professional Students' Rural and Remote Placements. *Journal of Multidisciplinary Healthcare, 11*, 85-97. https://doaj.org/toc/1178-2390

Smith, T., Sutton, K., Pit, S. W., Muyambi, K., Terry, D., Farthing, A., . . . Cross, M. (2018(a)). Health Professional Students' Rural Placement Satisfaction and Rural Practice Intentions: A National Cross-Sectional Survey. *Australian Journal of Rural Health, 26*(1), 26-32. https://doi.org/10.1111/ajr.12375

Spiers, M. C., & Harris, M. (2015). Challenges to Student Transition in Allied Health Undergraduate Education in the Australian Rural and Remote Context: A Synthesis of Barriers and Enablers. *Rural and Remote Health, 15*(2), 1-18.

Stalmeijer, R. E., McNaughton, N., & Van Mook, W. N. K. A. (2014). Using Focus Groups in Medical Education Research: Amee Guide No. 91. *Medical Teacher, 36*(11), 923. 10.3109/0142159X.2014.917165.

Steinert, Y. (2016). Educational Theory and Strategies to Support Professionalism and Professional Identity Formation. In R. L. Cruess, S. R. Cruess, & Y. Steinert (Eds.), *Teaching Medical Professionalism. Supporting the Development of a Professional Identity* (2nd ed., pp. 68-83): Cambridge University Press.

Stepteau-Watson, D. (2012). Ready or Not, Here We Come: Field Education and Developing a Professional Identity. *Reflections: Narratives of Professional*

Helping, 18(2), 15-18. https://reflectionsnarrativesofprofessionalhelping.org/index.php/Reflections/issue/view/Volume%2018%20Number%202%20(Spring%202012)

Sternszus, R. (2016). Developing a Professional Identity: A Learner's Perspective. In R. L. Cruess, S. R. Cruess, & Y. Steinert (Eds.), *Teaching Medical Professionalism. Supporting the Development of a Professional Identity* (2nd ed., pp. 26-36): Cambridge University Press.

Stull, C. L., & Blue, C. M. (2016). Examining the Influence of Professional Identity Formation on the Attitudes of Students Towards Interprofessional Collaboration. *Journal of Interprofessional Care, 30*(1), 90-96. https://doi.org/10.3109/13561820.2015.1066318.

Telio, S., Ajjawi, R., & Regehr, G. (2015). The "Educational Alliance" as a Framework for Reconceptualizing Feedback in Medical Education. *Academic Medicine, 90*(5), 609-614. https://doi.org/10.1097/ACM.0000000000000560

ten Cate, O., Snell, L., & Carraccio, C. (2010). Medical Competence: The Interplay between Individual Ability and the Health Care Environment. *Medical Teacher, 32*(8), 669-675. https://doi.org/10.3109/0142159X.2010.500897

ten Cate, O. T. J., Kusurkar, R. A., & Williams, G. C. (2011). How Self-Determination Theory Can Assist Our Understanding of the Teaching and Learning Processes in Medical Education. Amee Guide No. 59. *Medical Teacher, 33*(12), 961-973. https://doi.org/10.3109/0142159X.2011.595435

Thackrah, R. D., Hall, M., Fitzgerald, K., & Thompson, S. C. (2017). Up Close and Real: Living and Learning in a Remote Community Builds Students' Cultural Capabilities and Understanding of Health Disparities. *International Journal for Equity in Health, 16*(1), 1-10. https://doi.org/10.1186/s12939-017-0615-x

The Speech Pathology Association of Australia. (2017). *Competency-Based Occupational Standards for Speech Pathologists. Entry Level.* https://www.speechpathologyaustralia.org.au/SPAweb/Resources_For_Speech_Pathologists/CBOS/SPAweb/Resources_for_Speech_Pathologists/CBOS/CBOS.aspx?hkey=c1509605-c754-4aa8-bc10-b099c1211d4d

Thomas, J., Jinks, A., & Jack, B. (2015). Finessing Incivility: The Professional Socialisation Experiences of Student Nurses' First Clinical Placement, a Grounded Theory. *Nurse Education Today, 35*(12), e4-e9. https://doi.org/10.1016/j.nedt.2015.08.022

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated Criteria for Reporting Qualitative Research (Coreq): A 32-Item Checklist for Interviews and Focus Groups. *International Journal For Quality In Health Care: Journal Of The International Society For Quality In Health Care, 19*(6), 349-357. https://doi.org/10.1093/intqhc/mzm042

Trede, F., Macklin, R., & Bridges, D. (2012). Professional Identity Development: A Review of the Higher Education Literature. *Studies in Higher Education, 37*(3), 365-384. https://doi.org/10.1080/03075079.2010.521237

Trede, F., & Smith, M. (2012). Teaching Reflective Practice in Practice Settings: Students' Perceptions of Their Clinical Educators. *Teaching in Higher Education, 17*(5), 615-627. https://doi.org/10.1080/13562517.2012.658558

Trevitt, C., & Grealish, L. (2005). Developing a Professional Identity: Student Nurses in the Workplace. *Contemporary Nurse, 19*(1-2), 137-150. https://doi.org/10.5172/conu.19.1-2.137

Trochim, W. M. K. (2006). *Research Methods Knolwedge Base*. http://www.socialresearchmethods.net/kb/intres.php

Turpin, M., Fitzgerald, C., & Rodger, S. (2011). Development of the Student Practice Evaluation Form Revised Edition Package. *Australian Occupational Therapy Journal, 58*(2), 67-73. https://doi.org/10.1111/j.1440-1630.2010.00890.x

Turpin, M. J., Rodger, S., & Hall, A. R. (2012). Occupational Therapy Students' Perceptions of Occupational Therapy. *Australian Occupational Therapy Journal, 59*(5), 367-374. https://doi.org/10.1111/j.1440-1630.2011.00988.x

University of Southern Queensland. (2018). *Master of Professional Psychology*. https://www.usq.edu.au/study/degrees/master-of-professional-psychology?msclkid=1b8a6a9e916a19c792b8370427957b96&utm_source=bing&utm_medium=cpc&utm_campaign=USQ_Search_Brand_School_Psychology%20Counselling_Postgraduate&utm_term=usq%20master%20of%20professional%20psychology&utm_content=Discipline_Health%20%26%20Community_PG_Master%20of%20Professional%20Psychology_Exact#program-structure

Valutis, S., Rubin, D., & Bell, M. (2012). Professional Socialization and Social Work Values: Who Are We Teaching? *Social Work Education, 31*(8), 1046-1057. https://doi.org/10.1080/02615479.2011.610785

van de Ridder, J. M. M., Stokking, K. M., McGaghie, W. C., & ten Cate, O. T. J. (2008). What Is Feedback in Clinical Education? *Medical Education, 42*(2), 189-197. https://doi.org/10.1111/j.1365-2923.2007.02973.x

Van Maanen, J. E., & Schein, E. H. (1977). *Toward a Theory of Organizational Socialization*. https://dspace.mit.edu/bitstream/handle/1721.1/1934/SWP-0960-03581864.pdf?sequence=1

Varpio, L., Ajjawi, R., Monrouxe, L. V., O'Brien, B. C., & Rees, C. E. (2017). Shedding the Cobra Effect: Problematising Thematic Emergence, Triangulation, Saturation and Member Checking. *Medical Education, 51*(1), 40-50. https://doi.org/10.1111/medu.13124

Vieira, A., de Padua Carrieri, A., Monteiro, P. R. R., & Roquete, F. F. (2017). Gender Differences and Professional Identities in Health and Engineering. *BAR: Brazilian Administration Review, 14*(1), 1-21. https://doi.org/10.1590/1807-7692bar2017160082

Vivekananda-Schmidt, P., Crossley, J., & Murdoch-Eaton, D. (2015). A Model of Professional Self-Identity Formation in Student Doctors and Dentists: A Mixed Method Study. *BMC Medical Education, 15*(83), 1-9. https://doi.org/10.1186/s12909-015-0365-7

Volpe, R. L., Hopkins, M., Haidet, P., Wolpaw, D. R., & Adams, N. E. (2019). Is Research on Professional Identity Formation Biased? Early Insights from a Scoping Review and Metasynthesis. *Medical Education, 53*(2), 119-132. https://doi.org/10.1111/medu.13781

Wald, H. S. (2015). Professional Identity (Trans)Formation in Medical Education: Reflection, Relationship, Resilience. *Academic Medicine, 90*(6), 701-706. https://doi.org/10.1097/ACM.0000000000000731

Wald, H. S., White, J., Reis, S. P., Esquibel, A. Y., & Anthony, D. (2019). Grappling with Complexity: Medical Students' Reflective Writings About Challenging Patient Encounters as a Window into Professional Identity Formation. *Medical Teacher, 41*(2), 152.

Walker, S., Dwyer, T., Broadbent, M., Moxham, L., Sander, T., & Edwards, K. (2014). Constructing a Nursing Identity within the Clinical Environment: The Student Nurse Experience. *Contemporary Nurse, 49*(1), 103-112. https://doi.org/10.1080/10376178.2014.11081960

Wearne, S. (2016). Effective Feedback and the Educational Alliance. *Medical Education, 50*(9), 891-892. https://doi.org/10.1111/medu.13110

Weaver, R., Peters, K., Koch, J., & Wilson, I. (2011). 'Part of the Team': Professional Identity and Social Exclusivity in Medical Students. *Medical Education, 45*(12), 1220-1229. https://doi.org/10.1111/j.1365-2923.2011.04046.x

Webster, S., Lopez, V., Allnut, J., Clague, L., Jones, D., & Bennett, P. (2010). Undergraduate Nursing Students' Experiences in a Rural Clinical Placement. *Australian Journal of Rural Health, 18*(5), 194-198. https://doi.org/10.1111/j.1440-1584.2010.01153.x

Weissman, S. H. (2015). Additional Suggestions for Facilitating Professional Identity Formation. *Academic Medicine, 90*(6), 697-698. https://doi.org/10.1097/ACM.0000000000000722

Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*. Cambridge University Press.

White, S., & Humphreys, N. (2014). Undergraduate Physiotherapy Students' Expectations and Perceptions of Rural/Regional Clinical Placements. *The Australian Journal of Rural Health, 22*(4), 172-178. https://doi.org/10.1111/ajr.12102

Wiles, F. (2013). 'Not Easily Put into a Box': Constructing Professional Identity. *Social Work Education, 32*(7), 854-866. https://doi.org/10.1080/02615479.2012.705273

Willig, C. (2012). Perspectives on the Epistemological Bases for Qualitative Research. In H. Cooper, P. M. Camic, D. L. Long, P. A.T., D. Rindskopf, & K. J. Sher (Eds.), *A.P.A. Handbook of Research Methods in Psychology* (Vol. 1, pp. 5-21): American Psychological Association.

Wilson, I., Cowin, L. S., Johnson, M., & Young, H. (2013). Professional Identity in Medical Students: Pedagogical Challenges to Medical Education. *Teaching and Learning in Medicine, 25*(4), 369-373. https://doi.org/10.1080/10401334.2013.827968

Wong, A., & Trollope-Kumar, K. (2014). Reflections: An Inquiry into Medical Students' Professional Identity Formation. *Medical Education, 48*(5), 489-501. https://doi.org/10.1111/medu.12382

Workman, B. (2007). "Casing the Joint": Explorations by the Insider-Researcher Preparing for Work-Based Projects. *Journal of Workplace Learning, 19*(3), 146-160. https://doi.org/10.1108/13665620710735620

Yardley, L. (2000). Dilemmas in Qualitative Health Research. *Psychology and Health, 15*(2), 215-228. https://doi.org/10.1080/08870440008400302

Yardley, S., Teunissen, P. W., & Dornan, T. (2012). Experiential Learning: Transforming Theory into Practice. *Medical Teacher, 34*(2), 161-164. https://doi.org/10.3109/0142159X.2012.643264.

Young, L., Lindsay, D. B., & Ray, R. A. (2016). What Do Beginning Students, in a Rurally Focused Medical Course, Think About Rural Practice? *BMC Medical Education, 16*(1), 310-310. https://doi.org/10.1186/s12909-016-0829-4