Investigating Students’ Perceptions of Collegiality in Doctoral Education

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Abstract

Collegiality in the doctoral environment and collegial peer communities are under-researched, and their potential to enhance doctoral education is under-utilised. Academic developers, researchers, government departments, corporate and industrial bodies, and students have reported that more could be done during doctoral education to develop students’ collegial practices.

This thesis adopts a collective, student-centred approach to determine how students define and practise collegiality in the doctoral environment of one research-intensive university. Using a hybrid methodology of social practice theory and phenomenography, the research involved 43 doctoral student participants from all divisions of the university. Students took part either in focus groups, or in hierarchical card sorting activities; eleven students participated in both activities. For the card sorting activity, students worked in pairs to rank what they considered were the most important features of collegiality, then discussed their rankings.

The doctoral students in this study demonstrated complex and subjective understandings of collegial practices and collegial relationships, and identified those involved in their doctoral education as colleagues. The students’ expectations of collegial relationships were shaped by codes of conduct that often go unarticulated. This study created a unique context in which doctoral students could name otherwise tacit codes of conduct that facilitate productive and respectful collegial practices. These doctoral students explained how their participation in collegial practices helped to mitigate some of the emotional work of isolation, which they accepted as part of doctoral study. While students in this study were the main architects of their collegial environment, I argue that those responsible for doctoral
education can do more to foster collegial cultures in order to enhance students’ experience of the doctorate, contribute to measures that help safeguard students’ wellbeing, and support students’ preparations for diverse career trajectories after graduation.

Key words: doctoral students; doctoral education; collegiality; colleagues; peers; emotional work
Acknowledgements

A friend described doing a PhD as an exercise in persistence; I would agree. But in these last moments as I prepare my thesis for submission, I would also describe doing a PhD as a form of liberation, where a PhD candidate can test the boundaries of what is currently known about the topic of inquiry. I started my research wanting to instigate a ‘collegial turn’ in doctoral education, a lofty aim for a modest project, but an aim that I now find myself in a position to put into practice. In my new post as a professional practice fellow, one of my responsibilities is to create opportunities for doctoral students to participate in collegial learning networks.

I have been fortunate to experience a collegial doctoral education, and I am very much grateful and humbled by the generosity and commitment that a range of people have shown to me in my endeavours to carry out my study, and develop professionally as a researcher and a teacher. The willingness of my participants to share their experiences of collegiality in the company of strangers was critical to enabling this study to happen. For this, I am indebted to the 43 doctoral students who voluntarily took part. I give huge thanks to my supervisors, Associate Professor Karen Nairn and Associate Professor Clinton Golding, for their intellectual support and rigour in helping me to shape my thesis; their expertise and patience sustained my persistence throughout this research process. I thank Professor Kerry Shephard, who perhaps unknowingly, has also mentored my academic development, challenging me to justify my arguments during our informal chats.

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provided not only the material resources for study, but a warm environment where staff regularly stopped to enquire about the progress of my research. My friends at the College of Education were and are a constant source of collegiality and support.

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Chapter One: Introduction

Collegiality, like a pulse, beats through this thesis. My own ethical and philosophical commitments to collegiality have shaped my life experiences, as have the collegial commitments that I have encountered from working and interacting with others. It is the purpose of this research study to investigate what collegiality means to doctoral students. When I embarked upon this study, I thought of collegiality as a set of principles that drive people to relate and interact with others in ways that are mutually respectful and productive. I have subsequently learned that while many students in this study also share my view, they bring sophisticated and diverse expectations to their collegial practices and relationships.

During my postgraduate study prior to commencing my PhD, I experienced a mismatch in terms of my expectations for collegial interactions and the types of learning opportunities I encountered. Based on my collegial workplace experiences in schools and in multi-disciplinary teams, I anticipated that a higher education environment would be the same. Certainly, I have met students and academics who shared similar collegial values as I, but collegiality in everyday practices was less apparent than I imagined.

Collegial principles were instrumental in the social practice research design and methodological approaches of this PhD, and in my participation in research communities, all of which contributed to this study. Certainly, while I intend to submit a thesis that makes an original contribution to the field of doctoral education, this thesis will by no means be the outcome of a solo endeavour. This thesis represents an accumulative effort involving conversations and collaborations with numerous people, in a variety of ways within and beyond the university. As participants in this study noted, at the very least, a thesis requires
working with supervisors. In this respect, a thesis represents the outcome of a partnership arrangement in some form. It is my intention therefore to investigate how doctoral students perceive collegial relationships, who might be involved, and what collegial practices might entail. From my findings, I hope to learn more about what students’ collegial activity contributes to their doctoral education.

**Introducing this study**

Collegiality is seldom the phrase of choice in literature pertaining to collegial practices in doctoral education. Instead, researchers have inclined to use ‘peer groups’, ‘peer support’, ‘peer learning’ and ‘research communities’. Notably, students in this study appeared to regard people who could make contributions to their doctoral education as colleagues, with the term ‘colleague’ arising from students’ own dialogue. This perspective marks a shift in how researchers and academic developers generally frame peer learning, broadening who and what types of practices are involved. The collegial perspective suggested by students emerged early in my research process, impacting how I subsequently chose to frame ‘peer’ learning as collegial practices. Accordingly, while I locate this study in the field of peer learning in doctoral education, I seek to bring a new understanding of peer learning in terms of collegial relationships, and collegial practices.

Many doctoral students seek to be a part of peer groups and research communities for relationships that foster personal and academic development (Buissink-Smith, Hart, & van der Meer, 2013; Hunter & Devine, 2016; Stracke & Kumar, 2014; Stubb, Pyhältö, & Lonka, 2011; The Graduate Assembly, 2014). A growing body of research on students’ doctoral study practices explores how learning opportunities can occur beyond the conventional supervisor/student relationship. Framed as informal learning and peer support, networks among doctoral students contribute to successful study experiences, and
provide tacit knowledge of both research processes and institutional processes (Flores-Scott & Nerad, 2012; Foot, Alicia, Tollafield, & Allan, 2014; Hakkarainen, Hytönen, Makkonen, & Lehtinen, 2016; Pilbeam, Lloyd-Jones, & Denyer, 2013). Some researchers have focused on how doctoral students use non-traditional sites for peer learning (Buissink-Smith et al., 2013), such as monthly breakfast meetings (Devenish, Dyer, Jefferson, Lord, van Leeuwen, & Fazakerley, 2009). Students can sometimes feel constrained in their learning practices by the formal study environments of their offices and the library, or they desire neutral or more sociable environments (Barnacle & Mewburn, 2010; Buissink-Smith et al., 2013). Importantly, doctoral students who express satisfaction with their learning environment are more likely to consider themselves members of a research community, and less likely to report stress, anxiety, and exhaustion (Hargreaves, De Wilde, Juniper, & Walsh, 2017; Hyun, Quinn, Madon, & Lustig, 2006; Mitchell, 2014; Pyhältö, Stubb, & Lonka, 2009; Pyhältö, Vekkaila, & Kreskinen, 2015; The Graduate Assembly, 2014).

Academics and academic developers focus on effective ways of enabling doctoral students to create and sustain peer groups and research communities during their doctoral education (Boud & Lee, 2005; Pilbeam et al., 2013; Pyhältö et al., 2009; Stracke & Kumar, 2014). Peer learning offers a powerful tool through which to re-imagine and extend the learning and teaching environment for research education (Boud & Lee, 2005). However, to more fully re-imagine the learning and teaching environment for research education, I argue that we should look beyond who is currently considered a ‘peer’ in peer learning, and establish who students count as peers in research communities (Cumming, 2010a). Furthermore, we should regard peer learning and peer support as two of many interpretations of collegiality in the doctoral environment. Collegiality draws from complex understandings and commitments to reciprocal learning, which students relate to on emotional, relational, and material levels (Kelly, 2017). It is my belief that doctoral
educators require nuanced understandings of reciprocity and relationships, in order to facilitate how students interact and learn with ‘peers’ in more meaningful and valued ways.

Students are not simply recipients of efforts to enhance doctoral programmes, many students demonstrate self-directed agency in generating a range of solutions to their learning or social needs (Blaj-Ward, 2011; Buissnick-Smith et al., 2013; Devenish et al., 2009; Green, 2006; Hawthorne & Fyfe, 2014; Littlefield, Taddei, & Radoch, 2015). There are some academics, however, who are cautious about institutional interventions intended to replicate or manage ‘organically-conceived’ peer learning interactions (Buissink-Smith et al., 2013; Littlefield et al., 2015). One concern is that institutional efforts to encourage formal peer learning opportunities may be declined by students, who perceive doctoral study as an independent endeavour (Jazvac-Martek, 2009). Jazvac-Martek, Chen, and McAlpine (2011) relate this situation of self-assumed independence to a narrative of ‘academic individualism’. Pilbeam et al. (2013) note that university policies encouraging formal peer groups and informal networks of peer learning may run counter to government policy on doctoral education, which advocates independent learning. Although, as discussed in Chapter Three, the transferable skills agenda in doctoral education, which seeks to prepare graduates for diverse career trajectories outside of academia, may impact the types of peer group and peer network opportunities that universities provide and doctoral students encounter. Given the confluence of apparently contradictory sets of expectations, it is not surprising that some students may ‘choose’ partial engagement in or isolation from peer groups and peer learning, believing that independent practices are expected of doctoral students (Jazvac-Martek et al., 2011; Pilbeam et al., 2013). Students who experience isolation during their doctoral studies can encounter effects that are detrimental to their wellbeing and their capacity to learn (Burford, 2014; Conrad, 2012; Fisher, 2012; Pyhältö et al., 2009).
In this study, I investigate how doctoral students define and practice collegiality in a doctoral environment. I analyse how students discuss collegiality to establish what they define as collegial practices and collegial relationships. I aim to deepen understanding of how students’ collegial practices might contribute to doctoral learning, and to discern what students value as meaningful learning opportunities. The following research questions guided this study:

1. How do doctoral students define and practise collegiality in a doctoral environment?

2. What forms of collegial practices do doctoral students at Otago engage in, and how are these characterised in terms of learning (or knowledge making)?

3. What do doctoral students perceive they are getting from collegial activities, and how does this contribute to their doctoral experience?

4. From the perspectives of doctoral students, what are the relationships and practices that lead to purposeful collegial practices?

5. What can institutions do to foster more collegial practices and skills among doctoral students?

These questions will help to assess whether my initial concerns about opportunities for collegial interactions during the doctorate were founded. If collegial practices are currently underdeveloped in doctoral education at the university where this study took place, perhaps this may be the case for collegial practices in doctoral education elsewhere?
The purpose of this study

I intend in this thesis to privilege students’ voices in the discussion of doctoral education, and provide a place for students to speak to contemporary imaginings of what a doctorate could look and feel like (Kelly, 2017). Perhaps predictably, students are rarely the instigators or investigators of research into their doctoral educational experiences and programmes, although academic developers express much concern about doctoral students’ wellbeing (Conrad, 2012; Hargreaves et al., 2017; Hunter & Devine, 2016), their evolving identities (Foot et al., 2014; Jazvac-Martek, 2009), and their doctoral experiences (Buissink-Smith et al., 2013; Cuthbert & Molla, 2015; Hughes & Tight, 2013). As a doctoral student researcher, recruiting and conversing with other doctoral students, I am in a position to shift the lens as to whose concerns are driving the research.

My purpose is to ascertain how doctoral students interpret collegiality in a doctoral environment, and whether doctoral students perceive that collegial practices contribute to their learning and enhance their doctoral experiences. This purpose is addressed through research questions one to four. A deeper understanding of how students conceptualise collegiality and collegial practices may contribute to initiating and informing collegial interventions for doctoral education practices. Consequently, in response to research question five: ‘What can institutions do to foster more collegial practices and skills among doctoral students?’ I will refer to findings from this study to make recommendations on the types of interventions or actions institutions might adopt to cultivate a culture of collegiality within doctoral research communities.

For this study, I apply a social practice methodology; practitioners of social practice methodology often use the methodology for the purpose of initiating and informing specific changes in practice (Danby & Lee, 2012; Gherardi, 2012; Saunders, Sin, & Dempster,
For such social practice researchers, their research has a change-focused agenda, such as changing institutional or organisational practices (Cumming, 2010b; Danby & Lee, 2012; Gherardi, 2012), changing leadership practices (Wilkinson, J. & Kemmis, 2015), or changing the practices of one team (Saunders et al., 2015). While much research may share a similar sense of purpose, Trowler (2014) advocates that social practice methodology enables researchers to unpick the “saying, doing, relating, feeling, valuing” (p. 27) of the social world to indicate what may or may not work in a specific environment. For my purposes, a social practice methodology provides the means to find out what may or may not work for doctoral students who value participating in a collegial doctoral community at this university.

**Key terms**

Most key terms used in this thesis slip into everyday conversation without too much regard, for example, ‘collegiality’, ‘practice’, and ‘emotions’. However, in this thesis I will frame these terms within the context of social practice theory, which considers social phenomena as inherently relational and interconnected (Reckwitz, 2012; Schatzki, 2005a). From a social practice perspective, people’s understandings of the social world are always situated within interconnected circumstances, challenging taken for granted or reductive assumptions about what we see and hear (Nicolini, 2009). When we start to consider taken-for-granted terms under a different lens, our everyday and routine use of language can become unfamiliar (Trowler, 2014).

**Collegiality, collegial practices, and colleagues**

A lack of definition characterises the literature concerned with collegial practices in academic environments, suggesting that what is meant by collegiality and collegial
practices is perhaps taken for granted. It is part of the purpose of this thesis to establish how doctoral students define collegiality in one university, but it is useful to develop a working definition to establish the parameters of this study. The root of ‘collegiality’ stems from the Latin ‘partnership’ (Oxford Dictionary, 2017). Partnership is an apt descriptor for doctoral practices intent on creating collegial research communities, and offers an early suggestion of the importance of relationships in collegial practices. Partnership infers people relating to one another as partners, or in this research, people relating to one another as colleagues. Many people may attribute their familiarity with the term ‘colleague’ to a workplace environment, but in this thesis the term is a more fitting descriptor of the nature of the relationship between students and others, than the place or person involved. As an example, a collegial relationship might involve doctoral students sharing resources, helping one another with proof-reading, or being attentive to one another’s health and wellbeing.

**Practice and practices**

Thinking of practices simply as everyday activities that people do, such as yoga practice, recognises the mundaneness of practice, but often obscures the contingent nature of practices (Trowler, 2014). The contingent details of everyday practices comprise complex interconnections of circumstance, relationships, emotions, and material objects. As a teacher, my teaching practice is comprised of my relationships and interactions with students, my gestures and movement, the places where teaching happens, and the objects I use. My teaching practice requires that I am in the classroom before students arrive. I try to greet students as they enter the room, making eye contact and smiling at the very least, a relational connection that aims to make each student feel a member of the group. Once ready to start, I share the learning objectives for the forthcoming lesson, and the purpose of the learning. I stand or sit where the whole class can see and hear me. Perhaps the least
obvious dimension of my teaching practices is the emotional dimension; but were I not to greet students as they entered the classroom, nor try to make students feel part of the group, my teaching practice would likely have a very different emotional effect on students and myself.

**Emotions**

From a social practice perspective, emotions are conceived of as practices (Scheer, 2012). Emotions are sensations felt on the body that people *have* in relation to a set of circumstances (Burkitt, 2014; Hardt, 2007; Reckwitz, 2012; Schatzki, 2008). But emotions are also something people *do* (Burkitt, 2014; Kemmis, Edwards-Groves, Wilkinson, & Hardy, 2012; Scheer, 2012; Solomon, 2008), because people’s emotions are generally contingent on the context or circumstances where they demonstrate their emotions. Joy is an emotion that is felt on and in the body, but joy is also expressed to in the way that a person acts. An observer could make an informed decision about whether a person is feeling joyous based on what the person does. Emotions are bound up in people’s practices because the “routinized way in which bodies are moved, objects are handled, subjects are treated, things are described” (Reckwitz, 2002, p. 250) helps an observer to recognise a person’s display or performance of emotion. I will elaborate on a social practice perspective of emotions in Chapter Two, but at this point I am preparing the reader to perhaps think of emotions in new or different ways, and as more than everyday ‘feelings’.

**Mapping the thesis structure**

This thesis comprises eight chapters. In the seven chapters that follow, I build a response to the question, how do doctoral students define and practice collegiality in a doctoral environment. I will argue that doctoral students have expectations of collegiality
that incorporate seemingly mundane everyday activities and material objects, such as sharing an article, but their expectations also include sophisticated understandings of collegial relationships and responsibilities. In addition, I will argue that students place value on collegial practices for the benefit of their learning, their wellbeing, and for their trajectories beyond their doctoral studies.

In Chapter Two, I establish the social practice theory that frames this thesis. I expand upon the definition of practice introduced in this chapter, which underpins my conceptualisation of practice and practices for the rest of the thesis. I consider how doctoral students’ practices offer a means of making sense of the social world of doctoral education. In addition, I elaborate on the idea that doctoral students’ emotions should be thought of as a dimension of their practices. Concerns about doctoral student wellbeing and the emotional challenges of doing a doctorate are already expressed in literature on doctoral education, conceptualising students’ emotions as a part of their practices provides a potentially useful lens to better understand students’ experiences of doctoral education.

In Chapter Three, I focus on three key themes in literature from the fields of doctoral education and academic development: peer learning, transferable skills, and doctoral student wellbeing. These three themes represent priorities in doctoral education research, and ideally this thesis will contribute to these fields. From the perspectives of academic developers and researchers, these themes all pertain to improving doctoral students’ experiences of doctoral education. For example, research findings propose that students who feel part of a researcher community, generally experience increased wellbeing and are more likely to feel engaged in their doctoral programme (Devenish et al., 2009; Hargreaves et al., 2017; Hunter & Devine, 2016; Mitchell, 2014; Stubb et al., 2011; Vekkaila, 2014). Academic developers and researchers who report on the development of transferable skills
focus on how doctoral programmes might better prepare doctoral students for diverse employment trajectories after completing a PhD (Boulos, 2016; Gokhberg, Meissner, & Schmatko, 2017; John & Denicolo, 2013; Nerad, 2014). Of the three themes, transferable skills are most debated among academic developers and researchers. One argument is that students’ pursuit of knowledge during the doctorate might be compromised by the rhetoric of economic policies and the supposed needs of industry, throwing into question the usefulness or appropriateness of transferable skills programmes in doctoral education (Kelly, 2017, Neumann & Tan, 2011). These three themes frame my analysis of data in Chapters Five, Six, and Seven.

In Chapter Four, I focus on the overarching social practice methodology adopted to investigate how students’ collegial practices and relationships contribute to doctoral learning. I discuss how I devised a hybrid methodology which reflects an epistemological synergy between social practice theory and phenomenography. Both methodological approaches adopt the position that people make sense of phenomena through socially mediated practices. I foreground how ethical and reflexive practices informed my research. I discuss my ethical obligations to participants, data, and findings, and how reflexivity in the research process has meant attending to two sets of practices during this study (Gherardi, 2012; Nicolini, 2009). The practices were students’ understanding of collegiality and their collegial practices, and my own practices in coming to understand collegiality in a doctoral environment. I then explain the research design and my approach to data analysis.

In Chapters Five to Seven, I report on the multiple ways that students conceptualise collegiality in the doctoral environment. Effectively, these chapters represent my findings of this study. In Chapter Five, I explore the ways that students conceive of colleagues in
doctoral education. This chapter makes links with the literature on peer learning and transferable skills. In Chapter Six, I examine the value students place on relationships in collegial practices. In Chapter Seven, students’ talk of autonomy and the emotional work of doctoral education particularly relates to existing research on students’ wellbeing and mental health during their doctoral studies. In this chapter, I demonstrate how collegial practices and relationships help some students to manage the emotional work of the doctoral project.

In the final chapter of this thesis, I present six main findings relating to how students define and practise collegiality at this university. I discuss students’ expectations of collegial practice, who might be counted as a colleague, what students gain from their participation in collegial practices, and how collegiality might contribute to students’ wellbeing. I then discuss the contributions that this study makes to the fields of doctoral education and academic development in terms of understanding doctoral students’ perspectives of collegiality in doctoral education. I present three sets of recommendations, and acknowledge challenges related to the research process and findings. Finally, I propose some possible directions for future research, and reflect on what I have learnt from this PhD endeavour.

**Summary**

I have commenced this thesis by locating my investigation of doctoral students’ understandings of collegiality in current conversations about doctoral education, peer learning, and student wellbeing. Academic developers, researchers, government departments, corporate and industrial bodies, and students have reported that more could be done during doctoral education to develop students’ collegial skills (Cuthbert & Molla, 2015; Manathunga et al., 2009; Spronken-Smith, Cameron, & Quigg, 2018; Vitae, 2010).
The capacity of doctoral students to be agents of their own learning is well-recognised in the research literature, but there are fewer accounts in the literature of what students themselves have done to cultivate a culture of collegiality, and what their motivations are for doing so (Batty & Sinclair, 2014; Boud & Lee, 2005; Flores-Scott & Nerad, 2012; John & Denicolo, 2013). As a doctoral student researching the practices of my peers, I am responding to each of these reported gaps in current researcher understanding of collegiality and peer learning.
The often-routine nature of practices means that we might easily overlook practice as a theoretical concept. There are commonalities in the things that people say and do to help make practices recognisable to others (Reckwitz, 2002, 2012) but variations and nuanced differences add depth to researchers’ understanding of practices. Social practice theory provides me with a set of theoretical lenses to examine the commonalities and variations in the ways that doctoral students in this study spoke of and described their collegial practices and relationships. Social practice theory is not a classically unified theory of practice (Nicolini, 2012; Schatzki, 2005a; Whittington, 2011), rather it encompasses diverse concepts of how to understand the social world with practices as the primary unit of analysis. In the field of academic development, there is growing interest in the application of practice-focused approaches to enhance doctoral education (Danby & Lee, 2012; Cumming, 2010b; Trowler, 2014). In this chapter, I will establish a definition of practice relevant to this thesis.

In this thesis, I utilise the work of social practice theorists associated with what is called the ‘practice turn’ in contemporary social theory (Schatzki 2005a). Schatzki is credited by many practice theorists as a key architect of the contemporary turn in social practice theory (Kemmis et al., 2012; Nicolini, 2009; Reckwitz, 2012; Trowler, 2014; Turner, S.P., 1994). I include practice theorists who operate in diverse academic fields such as education (Cumming, 2010b; Kemmis et al., 2012; Saunders et al., 2015; Trowler, 2014; Wilkinson, J. & Kemmis, 2015), philosophy (Reckwitz, 2002, 2012; Scheer, 2012; Solomon, 2008), organisational studies (Gherardi, 2012, 2014, 2017; Nicolini, 2009, 2012; Tsoukas, 2003), and psychology (Von Scheve & Ismer, 2013). Social practice theory also
includes the work of highly regarded and widely known theorists, for example, Bourdieu’s (1995) work on habitus, and Giddens’ (1984) work on structuration. For the most part, I have made little mention of these aspects of social practice theory due to my interpretation of social practice theory as both theory and methodology (Gherardi, 2012; Nicolini, 2012; Trowler, 2014). A common theoretical principle unites these diverse theorists, namely that social phenomena are inherently relational and interconnected (Reckwitz, 2012; Schatzki, 2005a).

The specific aspects of social practice theory that I address in this chapter are organised in three sections (see Table 1). The three sections explain the social practice theory approach for this thesis.

Table 1: An Outline of Social Practice Theory for this Thesis

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I begin in the first section by developing a working definition of social practices and social practice theory as a theoretical approach. This definition is foundational to the theoretical and methodological approach I took in this study. In the second section, I show how social
practices can be used as a theoretical lens for explaining social phenomena, and for making sense of, or coming to understand the social world. The theoretical ideas explained in this section are important for nuanced analysis of how students in this study understood collegial practices. In the third section, I present an interpretation of emotions as social practices. Thinking of emotions as practices is a contested idea (Bericat, 2016; Burkitt, 2014; Scheer, 2012; Solomon, 2008), which I elaborate further in Chapter Seven.

**Defining social practices**

With practices functioning as the main unit of analysis for this study, it is necessary to establish a clear definition of what I mean when I refer to a practice-focused approach. Our everyday use of the term ‘practice’ suggests practices are the kinds of actions or behaviours that we might do for a specific purpose. We have workplace practices, we have childcare practices, we have sporting code practices, and so on. It would be easy to take for granted the meaning of the term practice as the activities we do for specific purposes (Hager, Lee, & Reich, 2012; Turner, S.P., 1994), which are defined by certain conventions of behaviours and/or interactions (Reckwitz, 2012).

However, the familiar and routine use of the term practice in everyday life is problematic from a theoretical perspective (Geiger, 2009; Whittington, 2011). Thinking of our practices simply as behaviour and activity to achieve a given purpose obscures the array of relationships and connections that tie our practices to a set of circumstances. Sometimes referred to as ‘situated’ (Burkitt, 2014; Reckwitz, 2012; Scheer, 2012), the circumstances in which practices take place are integral to understanding social practices (Kemmis et al., 2012; Schatzki, 2005a); I return to the situated and circumstantial nature of practices throughout this thesis.
The conversations students shared in this study represented their participation in collegial practices related to their own specific circumstances of doctoral education. The circumstantial commonalities and differences of students’ doctoral experiences help to identify what commonalities and variations exist more broadly within doctoral practices. Commonalities in their understanding of what doctoral practices entail meant that students in this study could converse with one another in meaningful ways, oftentimes irrespective of their discipline or departments.

*Doing* is a key dimension of the concept of practice, but more is implied. Schatzki (2008) hints at the greater complexity involved by describing practices as “temporally unfolding and spatially dispersed nexus of doings and sayings” (p. 89). As a PhD student, I do numerous activities that contribute to doctoral research. These activities substantiate and make intelligible my claim to be a doctoral student. How I know myself when I study is a consequence of my *doing* a PhD. In this regard, research practices constitute both doctoral research and doctoral students (Cumming, 2010b; Scheer, 2012). I embody or perform the patterns of doctoral research, repeating and modifying these practices as appropriate for my circumstances. At the same time, my doctoral practices are informed by what I understand doctoral research *should* be, or *appears to be* as demonstrated by the activities of other doctoral students around me.

I will further elaborate on a definition of practice as applied to this thesis by considering three theoretical ideas. Firstly, practices can be recognised as patterns of activities (Scheer, 2012). Secondly, practices can be thought of as multi-dimensional (Stubbs et al., 2011), which builds on the theoretical principle that practices are situated in (Burkitt, 2014; Reckwitz, 2012; Scheer, 2012), and shaped by, a set of circumstances (Kemmis et al., 2012; Schatzki, 2005a). Thirdly, people’s practices can be considered at a
collective level. Thinking of some doctoral practices as collectively performed by students is an important aspect of both the theory and methodology of this thesis.

**Thinking about people’s practices as patterns of activities**

Doctoral education as a practice makes sense when we consider how multiple activities form a pattern, or ‘nexus’ of doings (Schatzki, 2008). Other social practice theorists might refer to a pattern of activities as a ‘network’ (Reckwitz, 2012) or an ‘ecology’ (Cumming, 2010b; Wilkinson, J. & Kemmis, 2015). I have adopted the term ‘pattern’ (Scheer, 2012) because in everyday language we might understand patterns as repeated or unique, but nevertheless recognisable. Furthermore, a pattern is comprised of different elements. The same justification of different elements coming together can be applied to the terms nexus, network, and ecology, yet these terms carry other common meanings with the potential to disrupt clarity. For example, ecology is often associated with biology.

Patterns of activities that make up doctoral research might include reading, writing, analysis, and meeting with supervisors for example. Depending on the circumstances of the doctorate, research might include activities specific to students of a certain discipline, but not to other students. To complete my research, I had no need to enter a lab; a friend who completed a PhD in freshwater ecology had no need to interview participants. Yet we share an understanding of the doings of doctoral research, and the common activities that form a pattern recognised as doctoral research practices.

The activities that form doctoral research practices are interconnected, and occur as patterns of activities repeated in universities worldwide. In other words, these patterns are spatially dispersed (Schatzki, 2008). My friend studied for her PhD in Northern Ireland; I am studying for my PhD in New Zealand, but both of our practices are clearly recognisable
as doctoral research. Time also separates our respective studies since my friend graduated in 2003. Yet the commonalities between our respective doctoral education remain. The doctoral practices that I perform are still recognisable to my friend as doctoral research.

Doctoral practices are simultaneously contemporary and historical (Park, 2005, 2007; Wellington, 2012). The doctoral practices that I perform are in many regards the same basic doctoral practices that other students have performed for centuries. Doctoral students must produce a thesis, they interact with supervisors, they present their knowledge-making processes to peers using spoken, written, and visual forms. These interrelated activities may differ from student to student, but the basic pattern has continued from university to university over time.

In 1999, European nations signed the Bologna Accord, agreeing to compatible standards and quality of doctoral qualifications (Bernstein, Evans, Fyffe, Halai, Jensen, Marsh, & Ortega, 2014). The Accord has repercussions for how students experience doctoral education, and demonstrates how transnational processes can be used to promote commonality within doctoral practices. The temporally and spatially dispersed nature of practices referred to by Schatzki (2008) includes patterns of activities that appear to traverse time and place.

**Understanding the dimensions that make up people’s practices**

Having established a definition of practice(s) and the relevance of social practices to making meaning of the social world, I now explain the theoretical approach to understanding practices. Reckwitz’s (2002) definition addresses the complexity of practice in a disarmingly simple way: “A practice is thus a routinized way in which bodies are moved, objects are handled, subjects are treated, things are described and the world is understood” (p. 250). A practice from this perspective suggests repetition, reiteration, and
details of practice that become invisible and normalised (Trowler, 2014). A great deal of activity and interaction is contained within this sentence that accounts for how relationships comprise people’s practices. Reckwitz’s (2002) summary extends how we think about relationships to incorporate the ways that people relate to material objects and their manipulation. In a later publication, Reckwitz (2012) added the ways that people relate to place/space and the impact of time as dimensions of practice. Other practice theorists have included culture, discourse, and the socio-political environment as conditions that shape people’s practices, and therefore necessary to take into consideration (Wilkinson, J. & Kemmis, 2012).

I will refer to the different types of relationships, and the different ways of relating as ‘dimensions’ of people’s practices. To assist with understanding students’ collegial practices, I will acknowledge seven interrelated dimensions of practice: people, activities, material objects, emotional phenomena, environment, discourses, and occasion or time. Teasing out these dimensions from students’ talk of their practices will help to shed light on the circumstances which shape people’s practices. In social practice terms, thinking about the dimensions of practices relative to a set of circumstances is akin to thinking about the ways in which people’s practices are ‘mediated’ (Scheer, 2012).

Writing offers an example of a doctoral practice that students might understand and experience differently depending on the dimensions of their practices that are most meaningful to them within a set of circumstances. The time of day, place and environment in which a student chooses to write, the resources and materials at their disposal, and their bodily and emotional state, are all dimensions of writing practices that are mediated by the circumstances of writing. Emboldened by positive feedback from peers or supervisors, a student might feel confident and motivated to write. Yet the emotional dimension of writing
can have a different effect on writing practices, creating anxieties for students around doctoral writing (Burford, 2014; Cotterall, 2013a), or the pressures to write within a discursive environment of ‘publish or perish’ (Plume & van Weijen, 2014). At times, it may seem to people that certain dimensions dominate their practices, like emotions. I take the view that practices are multi-dimensional, and that all dimensions of practice interrelate.

The interrelationships between the different dimensions of practices create patterns of actions or activities. For example, to establish their ‘shut up and write’ group as a regular practice, students might set certain guidelines around group interactions and behaviours, or where and when they meet. The interrelationship between the different dimensions of the writing group sets in place a pattern of actions, behaviours, and activities that, over time, become recognisable to the students participating as writing-group practice. It is the repeated and routinised nature of these interrelated dimensions that transform actions and activities into practices (Reckwitz, 2002, 2012).

Social practice theorists refer to the interrelationship between the different dimensions of practices in a variety of ways: arrangement (Schatzki, 2008), practice texture (Gherardi, 2012), practice architecture (Wilkinson, J. & Kemmis, 2015), or a confederation (Nicolini, 2012). I will generally refer to this interrelationship as a set of circumstances because I feel the term ‘circumstances’ acknowledges the situated and dynamic nature of how and why the dimensions of practice come together.

For example, I organised three different focus groups for this study. The focus group method of research generally involves a common set of practices to enable researchers across a global research community to recognise and legitimise the method. Even though I endeavoured to maintain the same organisational format for each focus group, the circumstances for each were slightly different. These circumstantial differences had the
potential to shape participants’ practices in nuanced ways. The venue for each focus group changed for each meeting, participants changed each time, the time and day of the week changed too. In each focus group, the student participants acted in ways that were commensurate with the practice of taking part in a focus group, yet their participation was shaped by different circumstances. Had any one student participated in a different focus group, relationships between people, place, and time would have changed. Accordingly, the circumstances or new arrangement of people, place, and time might have facilitated nuanced changes in the students’ participation.

**Considering why it matters that people’s practices can be collective**

I adopt the position that people are inherently social and interdependent (Nicolini, 2012; Reckwitz, 2002), which means acknowledging that some practices are collectively performed. Through their interdependence, people learn to collectively reproduce practices (Barnes, 2005; Nicolini, 2012), or collectively adapt practices with some understanding of shared purpose, social conventions, rules, or norms (Barnes, 2005; Bourdieu, 2010). Collective practices give structure and meaning to what people do in a social context (Barnes, 2005; Nicolini, 2012; Wenger, 1998). On this basis, collegial practices performed by a diverse student group can create a pattern of interdependent activities or ways of doing collegiality that, when considered collectively, offers a window on what collegiality means to students at this university.

Among practice theorists there are different positions on collective practices. Notably, S.P. Turner (1994) rejects the idea that collective practices are representative of social interdependence, advocating instead that practices represent people’s individual habits and habituated activities. From such an individualistic perspective, there is no sense in the claim for ‘social’ and collective practices (Turner, S.P., 2005). S.P. Turner’s
arguments (1994, 2005) provoke considerable debate among practice theorists, yet my position on interdependent and collective practices remains the same.

Thus far in the chapter, I have introduced the key theoretical ideas that people come to understand the social world through practices; their own and the practices of others. People recognise practices as patterns of actions and activities, repeated, routinised, and often collectively performed. Placing a pen on a piece of paper is an action, but does not constitute the practice of writing. For a doctoral student, regularly spending time at a computer, typing with a purpose in mind, building on what was written before, and aiming for new goals, becomes a writing practice. Practices are recognisable because people’s actions and activities are repeated and become routine; the practice has a pattern. But practices are also intrinsically circumstantial because practices are comprised of interrelated dimensions. The student who has a regular writing practice may find their practice interrupted by environmental disruptions, people chatting, or a computer fault. Their emotional state may facilitate a sense of satisfaction or frustration, and affect their capacity to resume writing. The idea of interrelated dimensions adds complexity to understanding practices, and determines how practices are more than simply “doings and sayings” (Schatzki, 2008, p. 48), although, ‘doings’ and ‘sayings’ are an obvious place to start.

**Social practices as a means to making sense of the social world**

In this section, I explore a theoretical account of why we recognise practices as sources of meaning in, and for, the social world. I turn to three interrelated social practice concepts to provide a theoretical lens on the social world: tacit knowledge (Collins, H. M., 2005, 2010), social order (Nicolini, 2012; Schatzki, 2005a, 2008), and interactional
expertise (Collins, H. M., & Evans, 2002). The three concepts are bound together, with tacit knowledge encompassing the others.

Tacit knowledge

Tacit knowledge has an important function in social practice theory since people’s tacit knowledge becomes implicit in how practices are replicated and recognised in seemingly intuitive ways. Often referred to as instinctual or intuitive, tacit knowledge can be linked to the body as movement, tactile experiences, and the senses (Nonaka & von Krogh, 2009). Theorists use tacit knowledge as a means to explain how practices become routine, and part of the fabric of the social world (Burkitt, 2014; Collins, H. M., 2005, 2010; Reckwitz, 2012; Schatzki, 2008). Tacit knowledge is particularly relevant to this thesis in Chapter Six as a tool for theorising how students seemed to understand collegial relationships in terms of unarticulated codes of conduct. Additionally, in Chapter Seven I apply tacit knowledge to analysis of data related to emotions (Burkitt, 2014).

The concept of tacit knowledge is contentious for some theorists, not least within social practice approaches, on the basis of what seems to be a lack of empirical explanation to account for how practices are shared (Turner, S. P., 1994, 2005, 2014). Nonaka and von Krogh (2009) suggest that knowledge ranges along a continuum between tacit and explicit knowledge, meaning that some tacit knowledge might be articulated and some explicit knowledge might, over time, become seemingly instinctive and part of routine practices.

Some forms of tacit knowledge can be considered as embodied intuition, which we perform as bodily movements, tactile experiences, and the senses (Nonaka & von Krogh, 2009). This perspective relies on an acceptance that we intuitively perform actions in the moment, based on a form of tacitly ‘knowing’ what to do. In some respects, this perspective
goes beyond a mind-body binary because it regards the work of the mind and body as one (Bateson, 1973; Burkitt, 1999; Reckwitz, 2012; Schatzki, 2008).

A further theoretical proposal is that we gain tacit knowledge as learned behaviour or acquired habitual responses to circumstances (Nonaka & von Krogh, 2009; Turner, S. P., 2014). Once habituated, many of our activities, actions, emotions, and practices become instinctive, and rarely thought of in explicable ways. For example, a student who walks into a conference auditorium for the first time might instinctively know how to behave because they recognise similarities in the circumstances that remind them of school, their place of work, or places of worship, for example. They have tacit knowledge of the social protocols involved when people of differential status come together. These protocols are not necessarily articulated among the other people present, but nevertheless exercise certain expectations of social conduct (Bourdieu, 1992). Based on their knowledge of social protocols, the student may instinctively know how to behave according to the circumstances. If the student were in doubt, they might discretely observe the behaviour of those around them to ascertain how others demonstrate knowledge of protocols in their behaviours. The collective behaviour of attendees at a conference should offer a coherent demonstration of the protocols since their behaviour reflects their tacit knowledge (Tsoukas, 2003).

A further consideration regarding tacit knowledge is that tacit knowledge ‘resides’ within people’s practices (Collins, H. M., 2010; Hildreth & Kimble, 2002; Ribeiro & Collins, 2007), and that people tacitly learn through their participation in practices (Tsoukas, 2003). This idea is usefully applied to the supervision process because supervisors tacitly know both disciplinary and institutional practices. To explain, I will first refer to a study of senior designers in an engineering manufacturer. The study demonstrated
how the senior designers often had tacit overview knowledge of complex product designs, and the respective project roles and expertise of those involved in the product manufacture (Flanagan, Eckert, & Clarkson, 2007). Supervisors can similarly be understood as senior designers.

Supervisors have considerable tacit knowledge of how to produce a thesis: the complexities of research procedures, data analysis, and presentation of findings in various formats; the doctoral process more generally; and the institutional and academic environment. Effectively, supervisors have tacit knowledge of what needs to be done to submit a thesis, and while supervisors endeavour to make explicit a considerable amount of this knowledge, it is unlikely that supervisors could articulate all this knowledge, or are necessarily aware that they know so much of it. Instead, some of the disciplinary and institutional knowledge that supervisors have resides tacitly in their supervision practices (Collins, H. M., 2010; Hildreth & Kimble, 2002; Ribeiro & Collins, 2007).

I propose that within the supervisory relationship of mentor/mentee, students learn tacit knowledge of doing a doctorate. The supervisor, in the role of mentor, guides the practices of a learner, who is less experienced, in ways that are important for developing tacit knowledge (Hildreth & Kimble, 2002; Ribeiro & Collins, 2007; Wenger, 1998). Students gain tacit knowledge of the doctorate through the actions they take to solve problems related to their work, and their participation in relevant practices (Nonaka & von Krogh, 2007). The guidance that supervisors provide also socialises students in disciplinary and academic practices (Becher & Trowler, 2001; Schatzki, 2005a; Tsoukas, 2003), facilitating students’ acquisition of tacit knowledge. In this regard, social practices shape tacit knowledge (Collins, H. M., 2010; Hildreth & Kimble, 2002; Ribeiro & Collins, 2007), and tacit knowledge is a foundation for social practice (Nonaka & von Krogh, 2007,
Schatzki, 2005a). In the following sub-section, I elaborate further on how tacit knowledge functions within people’s practices.

**Social order**

‘Social order’ relates to how we tacitly know what to expect, or what makes sense to us as appropriate practices according to a certain set of circumstances, and in this regard, helps to explain some of the tensions students discussed in their experiences of doctoral practices. Practices provide the context in which we establish meaning and come to understand the social world (Schatzki, 2005a, 2008). When practices become routine and readily recognisable, the practices and the context in which those practices take place have a ‘social order’ (Nicolini, 2012; Schatzki, 2005a, 2008). It is important to clarify that from a practice perspective, social order is not about reproducing macro-level social systems, such as the class system, nor about social control and regulation, such as law and order (Reckwitz, 2002, 2012). Rather, how people tacitly ascribe meaning to everyday practices and the relationships involved creates an understanding of social order (Nicolini, 2012; Reckwitz, 2002, 2012).

I have come to know doctoral education as having a certain social order, which commences with my journey through the university building to my desk. Along the way, I interact with objects and people, I maintain relationships through social interactions, and I have routines that operate at individual, group, and institutional levels. I understand my doctoral education in discursive terms, such as self-improvement or creating opportunities, and am aware of the practices required of a ‘competent’ student (Nicolini, 2012). Now, as a late-stage PhD student, I need to evolve and adapt the practices that I considered constitutive of a social order for doctoral education to fit a new research environment. At the same time, what I understand as a social order of research is changing too, and aspects
of my practices are changing accordingly. People’s understanding of social order is therefore not fixed. People tacitly draw on an understanding of social order to recognise practices that they can apply from one set of circumstances to the next (Schatzki, 2005b, 2005c). But as changes in practices become routine, what counts as social order might change too.

Rather than accepting social order as given or normative, we might adapt our social orders to accommodate changing circumstances. A person who graduates with a PhD and joins a non-academic workforce may encounter different understandings of what counts as professional practices. For example, having habituated practices to successfully fit the social order of academic integrity and professionalism, the person might tacitly recognise nuanced differences in workplace understandings of integrity and professionalism and adapt accordingly. Adapting to new circumstances is not always a smooth process, as Schatzki (2005b, 2005c) notes, and when people struggle to make sense of the differences, it may feel like their social order ‘dissolves’.

**Interactional expertise**

Interactional expertise offers a way to think about how we adapt social order to changing circumstances. Interactional expertise relates to how we use tacit knowledge to generate new knowledge, without necessarily participating in the corresponding social practices (Collins, H. M., & Evans, 2002; Collins, H. M., 2010). Sometimes, we recognise that the social order of how practices ought to be is not maintained, so we implicitly adapt our practices based on our tacit knowledge of what should work. Having knowledge and a repertoire of practices relevant to similar circumstances means we can perform in unfamiliar circumstances with some success by demonstrating interactional expertise.
Teaching adult students serves as a useful example of interactional expertise. From previous employment, I have experience of working with pupils, teachers and senior managers in diverse socio-economic and cultural contexts. Consequently, I have a social order of what I understand effective teaching and learning to be. When teaching adult students at university, however, my social order of effective teaching and learning practices and relationships dissolves somewhat. I have needed to demonstrate interactional expertise, adapting my teaching practices from interacting and facilitating learning with primary-aged children to interacting with a diverse age-range of adult learners. Many practices are translatable with minor modifications, which I tacitly undertake, often with little time for contemplation in the immediacy of the moment. In these moments, I demonstrate interactional expertise. In reviewing these practices with colleagues and students afterwards, we can discuss teaching and learning practices more explicitly, and interactional expertise is less of a feature of my practices.

People’s tacit knowledge provides them with a means to participate in complex relationships. Their interactional expertise goes some way to ensuring that they do so in a way that fits with social conventions. People understand social conventions because their social order is situated within a set of circumstances, such as the university. Difficulties appear to arise when people’s practices do not align with the circumstances. The consequences of misaligned practices can invoke considerable emotional work, as some students discussed.

**Understanding people’s emotions as social practices**

In this section, I lay the foundations for making sense of emotions from a social practice perspective. I take the view that people’s emotions are intrinsically social phenomena (Bericat, 2016). I present theory that accounts for emotions by “studying the
social nature of emotions and studying the emotional nature of social reality” (Bericat, 2016, p. 495). On a simplistic level, emotions are something a person has (Scheer, 2012). We have bodily sensations, perceptions, and instincts as parts of our emotions (Burkitt, 2014; Hardt, 2007; Reckwitz, 2012; Schatzki, 2008). But emotions are also something a person does (Burkitt, 2014; Kemmis et al., 2012; Scheer, 2012; Solomon, 2008). Different emotions reside in the act of crying: happiness, grief, hilarity and joy, depending on the circumstances. When we take circumstances into consideration, emotions become an additional dimension of our practices (Burkitt, 2014; Kemmis et al., 2012; Reckwitz, 2012; Schatzki, 2012; Scheer, 2012). Indeed, Reckwitz (2012) ponders how life in the social world could be free of emotions?

**A relational account of how emotions form part of people’s practices**

While two people involved in a conversation might feel different emotions; from a social practice perspective, the relationships within which people’s emotions occur are important. People’s relationships and interactions provide an anchor for their emotions (Burkitt, 1999, 2014; Colombetti & Roberts, 2015; Reckwitz, 2012). So, a person might experience anger upon reading discriminatory discourses on social media, joy from participating in a special ceremony, or tranquillity upon entering a calm place. Importantly, emotions acquire social meaning because people come to recognise patterns in their emotional responses to particular relationships (Bateson, 1973; Bericat, 2016; Burkitt, 1999, 2014).

A student might associate a sense of anxiety with presenting their research, for example. If in the past, they had received unconstructive feedback at a departmental seminar, or observed similar behaviour towards other students, they may experience anxiety when standing in front of an audience to present their research. Anxiety could
register in their body as physical sensations, and manifest in their behaviour as nervous movements, or speaking in a low volume. Each time a student is about to present to an audience, they may experience the same feelings and exhibit the same behaviours. These feelings and behaviours occur under similar circumstances and begin to form a pattern. Importantly from a social practice perspective, the student’s anxiety is anchored both in their perceived relationship with the audience, and in the circumstances of presenting to an audience (Burkitt, 2014; Kemmis et al., 2012; Reckwitz, 2012; Schatzki, 2008, 2012). A person makes sense of their bodily, perceptual, or instinctual experiences by attributing social meaning to the emotions they feel under certain circumstances. The student comes to equate presenting to an audience with anxiety, and their practice acquires a recognisable emotional dimension.

As people repeat their emotional practices, they habituate or create regular behavioural patterns that make their emotions intelligible to others (Schatzki, 2008). Our shared knowledge of emotional practices subsequently enables us to comprehend the emotions involved in the patterns of people’s behaviour (Burkitt, 1999; Reckwitz, 2012). Returning to the anxious student presenting to an audience, nervous movement and changes in volume of speech might well be recognised by audience members as signs of anxiety since they had similar experiences. In some regards, our knowledge of emotional behaviours and performances represents shared tacit knowledge, which means that people collectively make sense of a set of circumstances in deciding how to best react.

Just as people might become habituated in emotional behaviours, they might learn to control or constrain emotional behaviours (Solomon, 2008). We laugh at a joke when laughter seems appropriate, but at other times we might stifle laughter, such as during a serious ceremony. We could say that our society and culture exercise ‘feeling rules’
(Burkitt, 1999), or moral expectations that anticipate ways of feeling and behaving (Foucault, 2001). This means we learn to regulate and express behavioural aspects of our emotions so that our practices appear to fit with the social environment, even if our emotions sometimes might feel at odds with our behaviour (Burkitt, 1999).

We may work hard to regulate our emotions, but this performance does not mean that our practices are emotion-free or emotion-neutral (Burkitt, 1999; Reckwitz, 2012; Solomon, 2008). Writing practices are recognised as fraught with emotions for doctoral students (Burford, 2014). When writing a thesis chapter, a student might feel uncertain and stressed, whereas, writing an email to a friend might provoke feelings of contentment and/or amusement. As the circumstances for writing change, so does the emotional dimension of students’ writing practices. Emotions represent a dynamic dimension of the relationships that form our practices (Burkitt, 2014; Fischer & van Kleef, 2010; Reckwitz, 2012; Scheer, 2012; Solomon, 2008; Stets, 2010). Emotions are contingent on our relational practices and tied to the circumstances in which our relational practices occur (Burkitt, 2014; Kemmis et al., 2012; Reckwitz, 2012; Schatzki, 2008, 2012).

**Unpacking a bundle of emotions**

One further consideration of emotions concerns our tendency to ‘bundle’ people’s complex emotional behaviours into a single word. In everyday talk we tend to ascribe narrow, quantifiable distinctions to emotions (Burkitt, 1999, 2014). Burkitt (2014) explains using ‘aggression’, which we might normally ascribe to the actions of a perpetrator or an aggressor, but not necessarily attribute to the responses of a victim who retaliates with similar verbal or physical force (Burkitt, 2014). Let us take feeling isolated as a more pertinent example, an emotional description regularly attributed to the experience of doctoral education (Burford, 2017). A student might experience emotions such as being
anxious, lonely, self-doubting, and/or insecure. Furthermore, the student might attribute these emotions to unsatisfactory relationships with others, which contributes to a feeling of cultural distance (Collins, H. M., 2010) from the doctoral environment, and feeling lost within the university infrastructure. Rather than bundling emotions, Burkitt (2014) proposes that we should give more attention to how we tend to socially and morally evaluate emotions. Feeling isolated represents a configuration of emotions and circumstantial factors, which will differ for individuals who feel isolated.

Describing a student as feeling isolated tends to direct attention to the individual concerned, rather than placing a lens on the complex set of circumstances and structures that might engender feelings of isolation for students. Within individualistic discourses of education, students are often positioned as self-responsible for how they engage and perform in the educational environment (Morrissey, 2015; Nairn, Higgins, & Sligo, 2012). In this regard, educators’ evaluations of students’ emotions can be shaped by the social, moral, and/or cultural tone of the discursive environment at the time (Burkitt, 2014). The important point to note from Burkitt’s argument is that students’ emotions may be situated within circumstances connected to their doctoral learning, but are by no means exclusively determined by their doctoral learning. Students’ lives outside the university environment are interrelated to their university practices and experiences, and these circumstances may need unpacking too.

The relationship between people’s emotions and their goals

Ironically, a student’s relationship to their thesis may be for many the most emotionally challenging relationship they will encounter during their doctorate. A final consideration of the emotional dimension of people’s practices concerns the link between emotions and goals. Given that the goal of a doctorate is to submit a thesis, the link between
emotions and goals is important in terms of how students’ experiences of collegial practices contribute to their goal. A social practice account of students’ emotional relationships with goals relates to the principle of teleoaffective structures in human activity (Kemmis et al., 2012; Schatzki; 2005a, 2005b, 2012).

Teleoaffective structures refer to the link between the emotions people experience, and the practices they undertake, as they work towards their goals (Kemmis et al., 2012; Schatzki, 2005a, 2005c, 2012). Achieving goals involves emotionally-charged practices. I met a student working on their thesis who had spent four years writing. The student’s thesis subsequently had a word count of close to one million words, and the student, keen to submit the thesis, was in a quandary regarding how to go about reducing the word count. The teleoaffective structure of this student’s writing practices involved conflicting emotions concerning the goal of submitting the thesis. On the one hand, the student described feelings of pleasure from writing so passionately towards the final thesis. On the other hand, the student was now feeling anxious and uncertain about the necessary process of reducing the word count to fulfil the goal of submission.

Accepting that doctoral practices have emotional dimensions means that doctoral practices also have a teleoaffective structure, since doctoral practices implicitly work towards a final goal. Kemmis et al. (2012) refer to the teleoaffective structure of practices as a ‘project’, recognising the inclusive and focused nature of the practices and emotions involved in achieving an end goal. The term ‘project’ seems fitting in the context of this thesis for thinking about the doctorate in ways that include students’ emotions, purpose, and goals. From this point hence, I will refer to the teleoaffective structure of students’ doctoral practices as a ‘doctoral project’.
Summary

A social practice approach to the doctoral project takes account of the circumstances that intrinsically contribute to students’ doctoral practices. It is convenient to think of practices as the ‘sayings’ and ‘doings’ of everyday life, but such a view merely skims the surface of the multi-dimensional complexities that might arise within people’s practices. In this chapter, I have established the seven dimensions of practice that interrelate to render practices recognisable, and which I anticipate emerging in students’ conversations about the doctoral project. The seven dimensions are: people, activities, material objects, emotional phenomena, environment, discourses, and occasion or time.

A social practice approach offers a fitting theoretical lens through which to examine how commonalities arise within the routine practices of a diverse group of students, while still accounting for nuanced variations in practices and experiences. Interest is growing in the use of social practice theory to further develop and enhance academic development (Cumming, 2010b; Danby & Lee, 2012; Trowler, 2014). By adopting such a theoretical lens, this thesis will contribute to research and academic development practices concerned with improving doctoral education. In the next chapter, I provide a review of literature, locating this thesis in three specific fields of doctoral education: peer learning, transferable skills, and wellbeing.
With this chapter I aim to orient the reader to research in the field of doctoral education pertinent to this thesis. Variously described in research, doctoral education is spoken of as researcher training, academic apprenticeship, and an interface between study and work. Metaphors abound, the most common of which talks of doctoral education as a journey (Hughes & Tight, 2013). Certainly, students who perceive their doctoral education as a process rather than a product, or a journey rather than a destination, report less stress, less exhaustion, and less disengagement from their thesis (Verkkaila et al., 2013). Learning more about how students experience doctoral education from existing research provides a foundation for understanding what involvement in collegial practices can contribute to students’ education.

Collegiality as a concept is seldom addressed in the literature on doctoral education. Given the historic providence of collegiality in matters of education (Tapper & Palfreyman, 2010), it is worth considering why ‘collegiality’ seldom appears in research literature titles or abstracts. Over two decades ago, Balsmeyer et al. (1996) wrote that behaviours synonymous with collegiality in an academic community were ambiguous and likely to be unspecified in literature. Recent research seems to suggest that ambiguity remains (Ambler et al., 2014). Instead, a reader is more likely to see the term ‘collegiality’ used in passing (see for example, Manathunga et al., 2009). In response to this conceptual gap, I synthesised and assessed literature from the broader field of doctoral education to gain an understanding of what collegiality might be. I identified three themes that each contribute a particular perspective to collegial practices: peer learning, transferable skills, and wellbeing. Peer learning in doctoral education provided the original focus for this literature review; while
transferable skills and wellbeing emerged as topics of interest from my data analysis of students’ conversations, discussed in greater detail in Chapters Five through to Seven. These three themes overlap (see Figure 1), and inform my overall argument that student participation in collegial practices has the potential to enhance doctoral education.

*Figure 1: The three overlapping themes of doctoral education: collegiality, transferable skills, and wellbeing*

Literature that discusses peer learning and wellbeing overlap because researchers claim these factors enrich and increase student participation in the doctoral project (Devenish et al., 2009; Hargreaves et al., 2017; Hunter & Devine, 2016; Mitchell, 2014; Stubb et al., 2011; Vekkaila, 2014). A second overlap emerges between peer learning and transferable skills because researchers assert that peer learning contexts are important for students’ development of transferable skills during doctoral learning (Boulos, 2016; Carter & Laurs, 2014; Flores-Scott & Nerad, 2012; Humphrey, Marshall, & Leonardo, 2012; Manathunga et al., 2009; Platow, 2012). Overlaps between research on transferable skills and student wellbeing are more tenuous, but relate to how well-prepared students feel they are to meet
their doctoral and post-doctoral goals (Boulos, 2016; Cumming, 2010a; Haynes, Bulosan, Citty, Grant-Harris, Hudson, & Koro-Ljumberg, 2012; Pyhältö, Toom, Stubb, & Lonka, 2012).

I address peer learning, transferable skills, and wellbeing in doctoral education as three separate sections of this chapter. I review research from peer-reviewed publications, government-commissioned reports, university-commissioned reports, and academic development texts. I conclude this chapter with a summary of the three themes.

**Peer learning in doctoral education**

Research on peer practices in doctoral education that foster peer learning are sparse (Batty & Sinclair, 2014; Boud & Lee, 2005; Flores-Scott & Nerad, 2012; John & Denicolo, 2013). Peer learning, peer-assisted study, and near-peer mentoring are widely encountered as established and highly regarded pedagogical tools in undergraduate education (Havnes, 2008; Zhao & Kuh, 2004). Little ambiguity exists regarding who the peers are, since all are students. Complex understandings of who is a peer emerge in doctoral education, where supervisory practices, hierarchical research teams, autonomous study, and digital communities complicate the clarity of peer relations and peer practices (Cumming, 2010a, 2010b; Eyman, Sheffield, & DeVoss, 2009; Gibson & Gibbs, 2013). The importance of peer practices to doctoral education is undisputed, and while peer practices are not viewed as completely unproblematic, researchers acknowledge that the potential of peer learning to enhance doctoral education is under-utilised (Batty & Sinclair, 2014; Boud & Lee, 2005; Flores-Scott & Nerad, 2012; John & Denicolo, 2013).
**Peer learning contexts**

Research suggests that peer groups who share collectively understood goals are willing to take intellectual risks with their learning (Ambler et al., 2014), students become more creative and inventive in their thinking (Lenz Taguchi, 2013), and collaborate towards knowledge innovation (Paavola, Lipponen, & Hakkarainen, 2004). Some research, looking at how students are placed in trans- or interdisciplin ary learning activities as part of research training programmes, proposes that students develop deep conceptual understanding of research approaches as a consequence of their peer learning context (Blaj-Ward, 2011; Flores-Scott & Nerad, 2012; Phillips & Pugh, 2010). The transdisciplinary structure of collaborative peer groups is said to facilitate distributed expertise (Blaj-Ward, 2011), implying that students’ role as experts in the group changes as they engage in research skill learning (Flores-Scott & Nerad, 2012).

Writing groups are promoted as an important vehicle for peer activity (Aitchison & Guerin, 2014; Batty & Sinclair, 2014), and provide the context for many studies. Supervisors, academic developers, and librarians report efforts to teach doctoral students how to engage in, and learn the practice of peer review in the writing group context. Such circumstances have the potential to offer students purposeful skill development, and opportunities to experience writing as a ‘social’ practice (Cumming, 2010b; Kamler & Thompson, 2006). Interpretations of the format of writing and reading groups as a form of peer learning differ. Swadener, Peters and Eversman (2015) reflect on the benefits of maintaining an ethos of feminist alliance in a writing group, where female students were mentored in writing and publishing skills. This group evolved and adapted to the needs of its changing student members under the constant mentorship of one academic. Some academics manage writing groups using models that they note are more akin to group
supervision practices (Batty & Sinclair, 2014). A project in an Australian university sought to build a sense of belonging to a research community using structured opportunities for peers to connect and learn from one another (Batty & Sinclair, 2014). The academics conducting the research maintained their identities as supervisors, rather than as peers within the group, contending that institutional interventions such as theirs, with clearly articulated aims and objectives, can be instrumental in fostering peer learning practices.

Some doctoral students have encountered vibrant opportunities for collegiality in digital environments. Blogging, for example, can provide the conditions to build a community of learners (Simmons-Johnson, 2012), where bloggers and followers can use the platform to present ideas and examples of work, and to ask questions and give feedback. Trust between participants represents an important feature of such communities (Gibson & Gibbs, 2013). Social media cultivates new forms of peer learning, including broadening collaboration between academics and students with shared research interests via digital networks (Eyman et al., 2009), blurring the concept of who is a ‘peer’.

The use of post-doctoral students for facilitating peer learning is common in some disciplines, and represents further variation on who the ‘peer’ might be in peer learning. For example, using a quantitative method and survey instrument, Crede and Borrego (2012) investigated the mechanisms for doctoral peer learning in three different engineering programmes. Their findings highlight how mentoring from post-doctoral and senior students was influential to building a sense of community among doctoral students in the engineering departments concerned. The authors describe that from the departments’ perspectives, mentoring relationships acculturated new students to the department, provided informal lab and research teaching, and afforded problem-solving interactions for students. Students, on the other hand, reported that they developed high levels of informal
communication when their groups were able to sustain their interactions over longer durations, and their mentors could readily foster learning practices (Crede & Borrego, 2012). This departmental endorsed approach to peer learning was clearly reliant on the skills of the post-doctoral and senior students who acted as peer-mentors, but who in many instances seemed to manage their role productively.

Thus far, the literature reviewed has focused on how universities and academics use structural mechanisms to create different contexts for peer learning as part of doctoral education programmes, grouping students or inviting students to join organised groups. While these groups differ from the ‘organic’ arrangements often attributed to student-formed groups (Buissink-Smith et al., 2013; Stracke & Kumar, 2014), these groups offer clearly-defined contexts for peer learning, such as regular writing groups. Student-initiated peer learning practices are often of a collaborative nature, involving students groups, which are loosely bonded, and formed according to need (Littlefield et al., 2015). Possibly for the reason that it is difficult to define and research spontaneous manifestations of peer learning, research conducted by doctoral students on peer learning contexts is less well-represented in the field of doctoral education literature (Boud & Lee, 2005; John & Denicolo, 2013). Nevertheless, some students have reflected on their experiences, and what they perceive to be productive conditions for peer learning.

Relationships feature regularly in research reported by doctoral student authors (see for example, Christensen & Lund, 2014; Hawthorne & Fyfe, 2014; Lahenius, 2012; Littlefield et al., 2015; Vekkaila, 2014). Next, I examine more closely two case studies, which represent different doctoral environments, disciplines, and programmes of study. Taken together, these case studies illustrate some of the common relational conditions that doctoral students identify as productive to peer learning contexts.
Using an ethnographic approach to their study, Christensen and Lund (2014) reported on their experiences as doctoral students in a health research centre. Their research identified the importance of a balanced ‘emotional atmosphere’ among research team members to guiding the students’ practices. In particular, Christensen and Lund noted four features of the emotional atmosphere that they felt fostered successful doctoral education: mutual appreciation, balanced humour, a shared desire to research, and shared ambition to produce high quality research. These ‘emotional’ conditions for peer learning offered testament to the types of relationships that were encouraged among peers in the research centre by the principle researcher in the team. While students did not initiate the ‘emotional’ conditions for peer learning in this case, the authors describe how students worked hard to maintain this environment (Christensen & Lund, 2014). The next study reviewed also considers the effort students are willing to commit to sustain a productive peer learning environment.

Using narrative inquiry, Littlefield et al. (2015) researched their own peer learning context during their part-time studies of HE leadership. The authors first met on a course, and sustained their peer learning practices once the course had finished. Reflecting on the conditions that enabled the authors to sustain and evolve their peer learning practices dynamically over time, they identified four themes. Littlefield et al. propose to facilitate longevity in peer learning practices, peers within the group should share a common purpose or goal, be committed to contributing equally and fully, be willing to provide emotional support, and get involved in reciprocal learning and sharing of ideas. The authors also emphasised the importance of mutual respect for underpinning all peer relationships (Littlefield et al., 2015).
The two studies reviewed illustrate some commonalities in the relational conditions for peer learning that are identified in other research conducted by doctoral students. Namely, research suggests that productive peer learning contexts are characterised by peers who share a commitment to the object/topic of their learning, and peers who commit to interacting with one another in respectful ways (see also, Hawthorne & Fyfe, 2014; Lenz Taguchi, 2013; Macoun & Miller, 2014). Some researchers caution that institutions may be mistaken in underestimating the potential for doctoral students to create their own learning opportunities (Hawthorne & Fyfe, 2014; Vekkaila, 2014). Yet the relational complexity involved in student-initiated and student-maintained peer learning contexts, as discussed here, illustrate some of the challenges faced by institutions seeking to replicate dynamic and organic contexts for peer learning. Some researchers acknowledge this challenge and appear instead to focus research attention on understanding how peer groups function, rather than trying to replicate them.

**How peer groups operate**

Researchers report that being recognised as equal or near-equal within peer and collaborative groups is important for many students (Boud & Lee, 2005; Craswell, 2007; Devenish, et al., 2009). ‘Distributed expertise’ among group members, achieved through a network of loose connections, offers one route to greater equality of group structure (Edwards, 2012; Engeström, 2008). In practice, this means that students can learn from student peers and ‘dispersed’ others in a variety of ways (Boud & Lee, 2005). Furthermore, the distributed nature of student interaction with others traverses location, and students have reported that they value transdisciplinary interactions with peers from other universities, national and international (Craswell, 2007). Distributed expertise is distinct from conventional research community relationships, where expertise is more
hierarchically differentiated between academics, researchers, and students (Boud & Lee, 2005; Devenish et al., 2009). How students’ perceive their status in a peer group is one of several factors reported in research on how peer groups operate, a key factor identified in many studies is trust.

Mutual trust between group members is identified as essential to productive peer relationships (Ambler et al., 2014; Devenish et al., 2009; Edwards-Groves, Brennan, Kemmis, Hardy, & Ponte, 2010; Zaqout & Abbas, 2012). Research shows a climate of trust enables peer group members to develop a sense of companionship and togetherness, which for some peer groups has meant increased respect for different views, voices, and opinions (Smith, Salo, & Grootenboer, 2010; Lenz Taguchi, 2013). Trust among peer group members affects the quality of communication that occurs (Ambler et al., 2014), creating an environment of openness and willingness to share knowledge (Edwards & Mackenzie, 2005; Zaqout & Abbas, 2012). Trust enables students to set common goals that relate to both individual and collective achievement (Devenish et al., 2009; Littlefield et al., 2015; McAlpine & Amundsen, 2009). Members of peer groups report that trust enables relationships, group dynamics, and reciprocal activity to flourish (Devenish et al, 2009; Edwards, 2005; Edwards & Mackenzie, 2005; Vekkaila, 2014).

Student peer groups additionally play a role in socialising fellow students into a research community as mentors (Crede & Borrego, 2012), as facilitators of peer learning (Christensen & Lund, 2014; Flores-Scott & Nerad, 2012), and imparting tacit institutional knowledge and research skills to support social and academic integration of peers (Gittens, 2014; Jones, 2013; Pilbeam et al., 2012). Researchers point out that students are responsive to these socialisation processes (Gardner, Jansujwicz, Hutchins, Cline, & Levesque, 2014; Newswander & Borrego, 2009), evaluating and adapting their practices in the context of
their peers and the doctoral programme, as well as the broader researcher community (Gardner et al., 2014). However, despite the potential for peer groups to play an active role in the socialisation of doctoral students in research practices, Gardner (2010) found the role of student peers in doctoral socialisation was undervalued. Only one PhD programme in her research seemed concerned about the absence of peer community in their department (Gardner, 2010). The literature illustrates a mixed picture of how some departments and academics recognise the potential of peers groups for doctoral education.

Some researchers have investigated doctoral peer groups whose membership has included supervisors. Peer groups comprised of supervisors and doctoral students have to manage hierarchical relationships that some academics view as unproblematic. For example, Stracke (2010) suggests it is a supervisor’s responsibility to structure opportunities for peer learning. A supervisor is expected to create a ‘partner-like’ relationship between supervisor and students, which contributes to “an equal power relationship” (Stracke, 2010, p. 7). The claim of equality seems optimistic, and contrasts with a substantial body of research on how doctoral students perceive their relationship with supervisors as unequal (Cornér, Löfström, & Pyhältö, 2017; Hunter & Devine, 2016; Hyun et al., 2006; Peluso, Carleton, & Asmundson, 2011).

I do not wish to underestimate the capacity of formal groups comprised of students, supervisors and/or other academics to cultivate productive, creative, or innovative conditions for learning (for example, see Batty & Sinclair, 2014). Rather, to suggest that the role of ‘peer’ in formal groups comprised of students, supervisors, and/or others with an academic role, requires further research attention in terms of how student members experience ‘peer’ relationships within such groups. Supervisors may perceive their position as equal, but often there is little evidence of students’ voices, or student-initiated research,
within this body of research to illustrate students’ views on the matter. Additionally, students who participate in their supervisors’ research may be compromised by issues of power, affecting what they might feel comfortable to say.

The literature indicates that students encounter a variety of challenges when trying to navigate peer groups and how groups function. Some researchers have suggested that international students can observe language and cultural distance between themselves and domestic students, which may affect their willingness to participate in peer groups when speaking in a second language is required (Cotterall, 2013b; Fotovatian & Miller, 2014). Although researchers should exercise caution to avoid essentialising the experiences of international students, who are a diverse student group. These authors advocate for increased institutional interventions that foster informal peer experiences between international and domestic students to improve cultural awareness and breakdown communicate barriers (Cotterall, 2013b; Fotovatian & Miller, 2014), Challenges related to the conventions of communication are not necessarily limited to the experiences of international students, and nor are they generalisable to all international students.

Gender, ethnicity, dis(ability), age, and the backgrounds of students from non-traditional groups operate as complex and interrelated factors that shape how students encounter problematic communication in peer groups. Communication conventions within groups can exclude members who are not familiar with the norms of the group (Hopwood & Paulson, 2012; Leonard, Metcalfe, Becker, & Evans, 2006). Hopwood and Paulson (2012) describe, for example, the gendered expectations that a female student encountered in an otherwise male peer group. Whereas, Leonard et al. (2006) point out that communication is not limited to speech, and advise that students who participate in peer groups may need to be aware of diverse interaction styles.
On occasion, the literature portrays normative expectations of how peer groups operate in different disciplines. For example, students undertaking a science doctoral programme are often assumed to encounter a collaborative peer environment due to their membership of a research team (Christensen & Lund, 2014), structures of peer mentorship (Crede & Borrego, 2012), and collective supervision models (Pyhältö et al., 2015). Yet, assumptions that students researching in lab groups will automatically provide mutual social support to their peers due to their working environment can prove illusory (Phillips & Pugh, 2010). Students conducting scientific doctoral research may instead experience feelings of anxiety, for example, that their place in the process of co-producing knowledge is at risk should a peer’s research inadvertently render their own work irrelevant (Phillips & Pugh, 2010). Assumptions about students’ experiences of peer groups appear too in literature pertaining to doctoral education in the humanities, arts, and social sciences. As Pyhältö et al. (2009) note, while it may be assumed that doctoral students in the humanities and social sciences encounter limited opportunities to participate in peer groups, and are more likely to experience their doctoral programme as a solitary journey, this situation is often not the case.

Making assumptions that barriers to participation are reduced in groups of like-peers, fails to consider workings of power within group dynamics, or the effects of differences between students. Some students have found that their individual voice diminishes in a peer group setting (Littlefield et al., 2015), or that scrutiny of their research by peers can trigger self-censorship (Brodin, 2014). Issues of power (Boud & Lee, 2005), and competition within the peer groups (Littlefield et al., 2015) can also be detrimental to student learning. Students’ perceptions that their peers make unequal contributions impacts peer dynamics, and has implications for students understanding that practices involved with reciprocity embrace give-and-take obligations (Cooksey & McDonald, 2011). And
studying in a peer group simply does not suit all students, and normative expectations to do so may be problematic (Pilbeam et al., 2013). Left unchecked at a department level, stereotypical expectations of how peer groups function could leave problems unaddressed, and affect students’ progress. Barriers to equal access or to satisfactory participation in peer groups exist for many students. While calls are made for institutional intervention to address inequalities, the situation remains that more research needs to focus on the peer learning practices of doctoral students (John & Denicolo, 2013). Having considered extant literature on how peer groups function and are experienced differently by students, I move now to a commonly attributed function of peer groups, peer support.

**Peer support**

In academic development literature, researchers frequently frame student peer groups as supportive communities. According to doctoral study handbooks or advice guides, peer support groups counteract or enable students to ‘survive’ feelings of isolation (Burford, 2014; Conrad, 2012; Fisher, 2012; Satchwell, Partington, Barnes, Gurjee, Ramsdale, Dodding, & Drury, 2015). Indeed, Cooksey and McDonald (2011) discuss the ways that a network of trusted peers can aid a despairing student to “cross the isolation river without drowning” (p. 197). The metaphor provides a dramatic description of what seems to be many doctoral students’ experiences, positioning peer support communities as an institutionally endorsed buoyancy aid. Nevertheless, Janta, Lugosi, and Brown (2014) argue that relatively little research addresses doctoral students’ experiences of loneliness and isolation, nor institutional responses to students’ emotional needs. This situation is certainly shifting, and will be discussed in greater detail later in the chapter.

Institutional encouragement of peer support groups indicates practices constitutive of an ethics of care (McAlpine, Paulson, Gonsalves, & Jazvac-Martek, 2012). Devenish et
al. (2009) call for greater emphasis in institutional policies to relational practices in doctoral education programmes, in addition to instrumental and supervision provisions. Some academics, however, are cautious about the extent that institutional intervention or ‘manufacturing’ can authentically recreate the conditions for communities, and connections that foster personal and academic development (Buissnick-Smith et al., 2013; Stracke & Kumar, 2014).

Misgivings such as those surrounding authenticity of institution-initiated peer groups may be misplaced. Several studies have described how student-based teams have evolved organically beyond university arrangements to further collaborate in mutual support and learning-focused practices (Blaj-Ward, 2011; Buissnick et al., 2013; Devenish et al., 2009; Green, 2006; Littlefield et al., 2015; Satchwell et al., 2015). Peer relations as a key area for learning remains largely unchartered (Boud & Lee, 2005; John & Denicolo, 2013), and it is this function of peer groups that this thesis seeks to investigate.

**Transferable skills**

The literature on transferable skills highlights contrasting author perspectives. On the one hand is the transferable skills ‘agenda’ driven by national and supranational economic policies, which identify a need for highly educated knowledge workers (Neumann & Tan, 2011; Peters & Besley, 2006). The transferable skills agenda emphasises student development of pre-determined sets of transferable skills and competencies as part of their doctoral education (Hargreaves et al., 2017; John & Denicolo, 2013; Levecque et al., 2017; McGagh, Marsh, Western, Thomas, Hastings, Mihailova, & Wenham, 2016; Nerad, 2014). On the other hand, academics contest the influence of business and corporate interests in doctoral education, which appear to dominate what are considered as transferable skills (Cuthbert & Molla, 2015; Kelly, 2017; Morrissey, 2015). The
transferable skills agenda, critics note, appears to be based on assumptions of what the knowledge economy needs, and what PhD graduates apparently lack in terms of generic skill sets (Cuthbert & Molla, 2015; Kelly, 2017). The term ‘transferable skills’ is used in the literature field in similar ways to ‘generic skills’ and ‘graduate attributes’. Each author’s choice of terminology generally reflects the national origin of the research, but effectively refers to comparable educational approaches. In New Zealand, academic developers tend to use the term ‘graduate attributes’ (Carter & Laurs, 2014; University of Otago, 2015).

In Europe, Australia, and North America, the transferable skills agenda has seen a variety of initiatives in doctoral education. Although by no means the start of the transferable skills agenda (Neumann & Tan, 2011), a notable turning point in terms of provoking initiatives and research was the publication of the Roberts Report (Roberts, 2002) in the UK. The Roberts Report was commissioned by the UK Government to initially consider increasing the number of researchers going into science and engineering, but the transferable skills agenda has since been applied more universally to justify changes in doctoral education programmes.

The implications for developing transferring skills and research learning to environments and contexts outside of academia have led universities in many nations to review doctoral education programmes and provision (Cuthbert & Molla, 2015). At the same time, universities are also seeking to create richer learning environments for doctoral students, in an endeavour to attract new students, and improve rates of completion (Nerad, 2010). Students participate in courses, training, and/or internships focused on developing a range of transferable skills considered of value to a career in research and outside academia (Gokhberg et al., 2017). Despite the rhetoric and supposed economic urgency for a skilled knowledge workforce, some research indicates that universities’ responses to the changing
conditions for highly educated workers are perhaps slower and less adaptable than anticipated (Maheu, Scholz, Balán, Graybill, & Strugnell, 2014). For many universities, doctoral education continues to be reproduced within traditional parameters of provision and models of supervision (Maheu et al., 2014).

Academic arguments regarding the relative merits and motivations underpinning a transferable skills agenda proliferate (see for example Carter & Laurs, 2014; Kelly, 2017; Platow, 2012). Discourses associated with transferable skills have shaped a policy environment where emphasis on doctoral education has shifted from serving the public good, to the potential for doctoral education to develop ‘human capital’ in economic terms (Kelly, 2017; Neumann & Tan, 2011; Peters & Besley, 2006). Issues that concern academics arise from policy pressures for students to submit their thesis on time (Gokhberg et al., 2017), and the possible compromise of doctoral education as a unique opportunity for doctoral students to explore and construct knowledge (Kelly, 2017). Cuthbert and Molla (2015) caution that a “crisis discourse” frames doctoral education as a key response to a supposed urgency to develop knowledge-driven economic growth and innovation, without governments attending to broader structural and systemic issues beyond the university.

Some researchers point to ineffective policies for encouraging employment of PhD graduates outside of academia. Reasons suggested by researchers relate to concerns that employers are not necessarily familiar with the skill sets doctoral graduates might bring to the workplace (Boulos, 2016; Cuthbert & Molla, 2015), governmental and corporate reluctance to invest in research and development, and economic structures that limit diversification of sectors that might employ highly skilled knowledge workers (Santos, Horta, & Heitor, 2016). Some studies even question whether there are “too many” PhD graduates. In a Portugese context, Santos et al. (2016) indicate there are shortages of PhD
graduates in some sectors beyond the university. The ‘crisis’, as it is generally framed, may actually be a factor of insufficient government intervention and investment in the knowledge economy, rather than a lack of capable graduates.

**What the transferable skills agenda means for doctoral students**

The literature presented thus far demonstrates that what it now means to be a doctoral student is in some ways shaped by the global knowledge economy (Kelly, 2017; Neumann & Tan, 2011; Peters & Besley, 2006). By the end of their doctorate, students are increasingly expected to demonstrate skills and competencies appropriate both to research, and professional sectors beyond academia (Bernstein et al., 2014). Where once a PhD might have led to an academic career, this certainty is no longer assured (Group of Eight, 2013; McAlpine, 2016; Neumann & Tan, 2011). Recent studies in Australia, European nations, and North America suggest that more than half of PhD graduates leave academia, with some variation across disciplines (Neumann & Tan, 2011). But this figure can drop as low as five percent of graduates achieving full-time academic employment in some countries (Group of Eight, 2013; The Royal Society, 2010). The variation between these numbers appears substantial, yet lacks contextual information such as the type of academic employment achieved, the nature of employment, such as fixed-term or permanent, and demographic details. Nevertheless, we can estimate that up to one half of doctoral graduates secure some form of temporary academic employment, while fewer secure permanent employment.

Given the increasing number of doctoral graduates on a global scale, finding employment post-graduation is increasingly challenging, with graduates encountering ‘precariat’ working conditions not simply in academia (Hartung, Barnes, Welch, O’Flynn, Uptin, & McMahon, 2017; Levecque et al., 2017; Standing, 2016), but in other employment
sectors too (Boulos, 2016). Reasons why students embark on doctoral study are varied, but some research suggests an explanation commonly given by students is for vocational purposes (Boulos, 2016; Elaine Walsh, Seddon, Hargreaves, Alpay, & Morley, 2010). Two Australian studies found that over half of graduates enter doctoral education not contemplating an academic career, findings not unique to Australia (Neumann & Tan, 2011). From this perspective, it could be thought that transferable skills programmes might appeal to doctoral students as an opportunity to prepare for diverse career trajectories in advance of graduation. But research suggests that students do not always hold this view.

Some studies have shown that graduates seem to recognise the value of transferable skills and graduate attributes after PhD completion, and having applied their repertoire of transferable skills in an employment context (Boulos, 2016; Platow, 2012; Elaine Walsh et al., 2010). In other studies, students have reflected that they have fewer opportunities to develop certain graduate attributes than others; teamwork is one such attribute often considered by students an area that is underdeveloped during the doctorate (Cuthbert & Molla, 2015; Manathunga et al., 2009, Spronken-Smith, Brown, & Mirosa, 2018). This finding in published research is significant for this thesis.

While teamwork is considered an important skill by students and employers, there is little research that directly addresses teamwork skill development, nor the longer-term impact of teaching transferable teamwork skills (Opatrny, McCord, & Michaelsen, 2014). In an undergraduate study, peer evaluation identified that students with prior experience of teamwork contributed more to their peer’s learning and their team’s performance (Opatrny et al., 2014). This finding appears pertinent, given the suggestion that students often perceive they enter doctoral education with well-developed generic skills (Cumming, 2010a; Manathunga et al., 2009).
Notably, my literature search for research on “teamwork + doctoral students” proferred two relevant articles over a number of search pages. The first study by Sudano, Patterson, and Lister (2015) described efforts by the researchers to develop a collaborative primary health care programme to teach doctoral students teamwork and leadership skills for a vocational healthcare environment. The second study, by McAlpine and Asghar (2010), reflected on an opportunity for a small group of doctoral students and academics to develop a programme to increase doctoral student engagement in the faculty. While the authors celebrated the ‘authentic’ learning gained by this group of students in terms of academic development and ‘becoming’ academics, the students’ learning was predominantly framed as developing leadership skills. The two teamwork projects described both seemed to offer meaningful opportunities for the students concerned. But both interventions were exclusive in the sense that one context developed teamwork skills for a specific vocational trajectory, while the other context provided opportunities for a very small number of students. These interventions were commendable in their own right, but reflect a more general trend in transferable skills programmes, which seems to be an absence of sufficient experiential and active learning opportunities for students to meaningfully develop transferable skills for employment beyond the academy (Manathunga et al., 2009), including collegial teamwork (Stracke & Kumar, 2014).

One possible exception, in terms of doctoral education provision, is The Researcher Development Framework (RDF) (Vitae, 2010), which identifies collegiality as a professional competency. Originally devised for the HE context in the UK, the RDF framework supports researcher professional development, and is also applied in doctoral education programmes. The RDF locates collegiality as a competency related to ‘Personal Qualities’ and ‘Working with Others’, in effect, two of its four themes of professional development. This research-informed Framework was devised as a result of over 500
interviews with researchers, and was then subject to extensive consultation (Vitae, 2010). Researchers were asked to identify the competencies demonstrated by an excellent researcher. It is notable, therefore, how researchers, when consulted, valued collegiality, and hence the related competencies are progressively described. I introduced the RDF as a ‘possible’ exception to doctoral education for collegial teamwork skills because research does not yet appear to offer sufficient evidence of whether this framework is making a substantial difference to students’ experiences of teamwork during their doctorates.

In the next section, I review literature that discusses an increasingly pressing concern of policy-makers, institutions, academic developers and educators regarding doctoral education, doctoral student wellbeing.

**Student wellbeing**

Concerns regarding doctoral student wellbeing and mental health needs have become more prevalent in the literature in recent times, but for some researchers, more needs to be done to address student wellbeing (Aitchison & Mowbray, 2013; Burford, 2015; Cotterall, 2013a). Universities have considered postgraduate student mental health needs for well over three decades, but numbers of publications on student wellbeing seem to have spiked since 2010 according to my Google Scholar search. In the last decade, universities have conducted major doctoral student surveys to inform institutional practices, paying attention to student wellbeing and mental health. Examples include studies in Finland (Stubb et al., 2011), the UK (Hargreaves et al., 2017), and USA (Hyun et al., 2006; Oswalt & Riddock, 2007; The Graduate Assembly, 2014). Although, the wellbeing of the HE workforce (Hayter, Smeed, & Robertson, 2011), and undergraduate students (Juniper, Walsh, Richardson, & Morley, 2012; Mokgele & Rothmann, 2014) receives greater research attention than that of the postgraduate population (Guthrie,
Lichten, van Belle, Ball, Knack, & Hofman, 2017). Predominantly, I have looked to studies published within the last ten years, but I make reference to some studies concerned with doctoral students’ mental health and emotional distress that predate this time, if relevant and heavily cited.

Research specifically into doctoral student wellbeing appears to take one of two approaches: surveys or semi-structured interviews. I will attend first to the form and nature of the survey research, followed by the more qualitative, interview approach. Globally, universities and researchers have undertaken large-scale student surveys, applying quantitative methodology with generally large samples. Researchers have in some instances adapted clinical instruments to non-clinical settings (for example, Hargreaves et al., 2017). While survey return rates vary, in many instances the size of the student population targeted renders participant numbers relatively high even when respective return rates are low. For example, Levecque, Anseel, De Beuckelaer, Van Der Heyden, & Gisle (2017) report a survey of 4069 students in Flemish universities, and a 33% response rate; whereas Hargreaves et al. (2017) report findings from a UK university involving 1248 students and a response rate of 40%, and Hyun et al (2006) report a study in the US involving 3121 students and 33.8% response. Generally, these studies are undertaken with a view to inform institutional practices that seek to improve conditions for student wellbeing and mental health.

The second approach is qualitative and mainly involves semi-structured interviews, and occasionally focus groups, with small participant numbers. In terms of the literature reviewed in this chapter, participant numbers in these qualitative studies range from analysis of one student’s reflections (Burford, 2014), to 24 students (McAlpine et al., 2012).
These studies aim for a more nuanced and individualised picture of student wellbeing, embracing the complexities of students’ lived experiences.

Recent recommendations from research studies appear increasingly reflective of the ‘affective turn’ in social science understanding (Burford, 2014; 2015; Ticineto Clough, 2007; Wetherell, 2012). The affective turn marks a development in academic attention to the body and emotions, and critiques previous research that reproduced a mind-body split (Hardt, 2007). In some research recommendations, universities and researchers in academic development or HE studies appear to interpret the affective turn in terms of integrating individual and institutional wellbeing (Haynes et al., 2012). In practice, this perspective of doctoral student wellbeing integrates social and health lenses as ways to think about enhancing students’ experiences of their doctoral education (Haynes et al., 2012). Researchers who apply an integrated perspective consider implications for students’ wellbeing as requiring structural, social, and individual agency responses. However, despite the affective turn and integrated approaches to student wellbeing, some academics speak of a continued tendency for research to take a dichotomous approach to student wellbeing and mental health, reiterating a mind-body binary (Burford, 2014; Cotterall, 2013a).

In the following section, I first establish what is often meant by the term ‘wellbeing’ in the literature. Second, I consider what researchers identify as influential factors affecting student wellbeing, either in positive and/or detrimental ways. Third, I examine the emotional terrain identified in the wellbeing literature. I primarily attend to the perspectives of doctoral student groups most likely to be identified as experiencing emotional distress, or detrimental impacts on their wellbeing during doctoral study. Consistent with the
approach throughout the chapters, literature cited in this section relates to doctoral students unless stated otherwise.

**What is meant by wellbeing**

A range of personal, dispositional, and emotional descriptors are attributed to wellbeing, such as ‘balanced’ and ‘happy’ (The Graduate Assembly, 2014). Wellbeing in terms of doctoral study can mean enthusiasm and a joy for learning, which students feel sustains and inspires them to participate in their scholarly community (Stubb et al., 2011). Some students experience wellbeing as a ‘force’, or the resilience to face the intensity of doctoral study (Haynes et al., 2012). A challenging feature of wellbeing, according to one study of work-life balance, is a student’s ability to reconcile various ‘trade-offs’ associated with doing a doctorate (Martinez, Ordu, Della Sala, & McFarlane, 2013). Wellbeing includes students’ perceptions of their general health, and how their health impacts day-to-day functioning (The Graduate Assembly, 2014).

Some researchers appear to avoid the term ‘wellbeing’ altogether, focusing instead on ‘emotions’ or ‘affect’ as a theoretical frame for students’ lived experiences (Aitchison & Mowbray, 2013; Burford, 2015; Cotterall, 2013a). Studies that place emotions and affect as central dimensions for understanding students’ experiences, conceive emotions and affect as learned behaviours situated within socio-cultural processes and contexts. Emotions are embodied and performed (Aitchinson & Mowbray, 2013; Burford, 2015; Burkitt, 2014; Cotterall, 2013a; Reckwitz, 2012), influential to identity (McAlpine et al., 2012), and part of the “psychosocial texture” (Wetherell, 2012, p. 2) of students’ lived experiences.
Impacts on wellbeing

An often-cited quote in wellbeing research suggests that “stress is at the core of the graduate student experience” (Offstein, Larson, McNeill, & Mwale, 2004, p. 396). This position might explain why definitions of ‘illbeing’ are easier to find in studies on wellbeing, than definitions of wellbeing itself. Common descriptors include emotional exhaustion (Rigg, Day, & Adler, 2013; Hunter & Devine, 2016; Pyhältö & Keskinen, 2012), burnout (Mokgele & Rothmann, 2014; Rigg et al., 2013; Stubbs et al., 2011), anxiety (Hunter & Devine, 2016; Pyhältö & Keskinen, 2012), stress and depression (Hyun et al., 2006; Offstein et al., 2004; Peluso et al., 2011). Haynes et al. (2012) found some students changed the metaphor of ‘force’ from a positive to negative meaning when the intensity of doctoral study became overwhelming and stressful. Other students described “maintaining sanity” and “coping” with everyday life (Martinez et al., 2013, p. 49) as measures of their work-life balance. Students’ perceptions of their ability to cope when the doctoral project becomes overwhelming can lead to emotional and physical exhaustion (Haynes et al., 2012; Offstein et al., 2004; Oswalt & Riddock, 2007).

The research and academic environment is increasingly identified as a high-pressured workplace. A recent report commissioned by the Royal Society and Wellcome Trust in the UK found that university academics are among the occupational groups with the highest levels of common mental health conditions at 37% (Guthrie et al., 2017). Doctoral students are likely to report similar or greater levels of stress-related problems and depression to academics (Guthrie et al., 2017; Levecque et al., 2017; The Graduate Assembly, 2014). Student burnout or leaving doctoral study is clearly problematic (Cornér et al., 2017; Rigg et al., 2013; Stubb et al., 2014), but additionally has implications for sustaining a healthy researcher workforce in the long-term (Juniper et al., 2012; Levecque
et al., 2017). Consequently, attrition rates present a concern in HE not only in terms of individual student wellbeing, but lost global intellectual competitiveness, and economic productivity (Guthrie et al., 2017; Hargreaves et al., 2017; Levecque et al., 2017).

**Who experiences diminished wellbeing and mental health issues?**

Large numbers of doctoral students report emotional distress, stress, and symptoms of depression or mental health. For instance, one UK report suggests over 40% of doctoral students (Guthrie et al., 2017), a Belgian study at Flemish-speaking universities indicated 51% of doctoral respondents (Levecque et al., 2017), and over half of doctoral students surveyed at a large university in western USA (Hyun et al., 2006) had experienced diminished wellbeing. The numbers are alarming. Some research focuses on wellbeing and mental health needs of particular groups of doctoral students, such as female students, or students from non-traditional university backgrounds, but across all groups, students seem to increasingly report impacts on their wellbeing (Hargreaves et al., 2017).

Frequently, studies indicate that female students experience a lower sense of wellbeing and higher levels of stress (Carter, Blumenstein, & Cook, 2013; Hargreaves et al., 2017; Haynes et al., 2012; Hyun et al., 2006; Martinez et al., 2013; Schmidt & Umans, 2014). There are always exceptions; some studies report no wellbeing gap by gender (The Graduate Assembly, 2014; Stubb et al., 2011). Hargreaves et al. (2017) note over a five year period the number of men who reported diminished wellbeing increased, but not to the same extent as women, while Stubb et al. (2011) found men in their study reported greater exhaustion than women.

The wellbeing of students who identify as indigenous or as a member of a minority ethnic group is sparsely represented in the literature, particularly at postgraduate level (Barney, 2013). For example, when discussing Māori students’ experiences of cultural and
academic tensions in their doctoral learning and supervision, students’ emotional “pain” can be inferred, but is not expressly addressed (McKinley, Grant, Middleton, Irwin, & Williams, 2011). Indigenous doctoral students in Australia speak of their feelings of isolation as an effect of the university being a “white space”, lacking cultural understanding, safety, and support (Barney, 2013). Similar experiences are expressed by minority ethnic Black doctoral students in USA (Barker, 2016). A sense of fit between student and supervisor expectations experienced by many students (Stubb et al., 2011) can be complicated by supervisors’ lack of cultural understanding and familiarity with an indigenous worldview. But non-indigenous supervisors who adopt an approach of openness and flexibility certainly help to enhance students’ sense of belonging and value (Manathunga, 2017; McKinley et al., 2011).

The picture of diversity and difference in terms of doctoral student wellbeing is convoluted. Difficulties arise in comparing research studies due to the differences in the scale of the research study, research instruments, or research questions. For example, in the literature examined in this section, only one research study comments on the wellbeing of lesbian, gay, bisexual, and queer (LGBQ) students (The Graduate Assembly, 2014); no other study seemed to enquire specifically about students’ wellbeing and sexual identities. There is a risk that the wellbeing of certain student groups remains invisible if the ways that students identify themselves are not taken into consideration.

Non-traditional students are generally more likely to experience a wellbeing gap (Hargreaves et al., 2017; Hyun et al., 2006; Pyhältö & Keskinen, 2012; Rigg et al., 2013; The Graduate Assembly, 2014). The term ‘non-traditional’ is used to account for increasing diversity among the doctoral student population. Students who could be categorised as non-traditional may be mature students, and students who return to studies after professional
careers (Clegg, 2014). Other factors might include students from ethnic groups traditionally underrepresented in universities (Barker, 2016; The Graduate Assembly, 2014), class (Hyun et al., 2006), and being a first-generation student (Mitchell, 2014). The wellbeing of international students receives more research attention than most other groups, and these researchers claim that the wellbeing of international students continues to warrant greater institutional attention (Cotterall, 2013b; Hyun et al., 2006; Offstein et al., 2004).

Differences in student wellbeing emerges between disciplines. The Graduate Assembly (2014) found 64% of students in Arts and Humanities are likely to experience depression, while a Finnish study found education and behavioural science students most likely to experience diminished wellbeing, struggle with persistence, and consider themselves as outsiders role in relation to their research communities (Pyhältö et al., 2009). One final group of students mentioned in research as particularly vulnerable to stress are late-stage students close to submitting their PhD (Hargreaves et al., 2017). This group of students are not only experiencing cognitive stress, but face time and financial pressures, uncertainties around future employment, and identity transition as they move from being a student to potentially the unknown (Hargreaves et al., 2017; Levecque et al., 2017). Given the varied picture of research findings, institutions and departments would benefit from more detailed analysis pertinent to their own environments (Hargreaves et al., 2017; Rigg et al., 2013).

**Doctoral education and student wellbeing**

As previously acknowledged, the context of doctoral study is complex, and situated within broader social and structural arrangements (Pyhältö et al., 2012; Schatzki, 2008). Although the circumstances of each student differ, research identifies commonalities in how students experience their wellbeing during doctoral study. In the following sub-
sections, I consider three predictors of student wellbeing pertinent to this thesis. I commence with supervisory relationships and what might be effective supervisory practices, given that the greatest amount of research attention has focused on this, (Juniper et al., 2012). Second, I address the often-overlooked importance of being prepared for doctoral study. Third, I consider the implications for student wellbeing of being integrated into a researcher community.

**Student wellbeing and supervisory relationships and practices**

How students experience supervisory relationships and supervisory practices has major implications for how they experience their wellbeing during doctoral study (Cornér et al., 2017; Hunter & Devine, 2016; Hyun et al., 2006; Peluso et al., 2011). Students who have functioning, supportive relationships with supervisors are less likely to report mental health needs (Hyun et al., 2006; Peluso et al., 2011), and are more likely to experience reduced emotional and physical exhaustion (Hunter & Devine, 2016). Collegial practices and relational connections help indigenous students to feel a sense of cultural respect and recognition, which enables students to feel that they are “walking alongside their supervisors” (Berryman, Glynn, & Woller, 2017, p. 8). Frequent, high quality supervision increases students’ satisfaction with the doctoral process (Pyhältö et al., 2015), meaning they are less likely to burnout or leave their studies (Cornér et al., 2017). Supervisors also wield influence over how students might experience other aspects of their wellbeing, such as feeling valued and included, their academic progress and preparation, and career prospects (Cornér et al., 2017; The Graduate Assembly, 2014).

While supervisors are well-placed to recognise clear signs of emotional distress, they seem less able to recognise subtle emotional signals that might precede a student’s mental health condition or burnout (Hyun et al., 2006). Other research has suggested that
supervisors are often unaware of issues affecting students’ wellbeing (Gardner, 2009; Hargreaves et al., 2017). In combination with disciplinary norms and practices (Becher & Trowler, 2001), and an acknowledged high-stress academic environment (Guthrie et al., 2017; Hayter et al., 2011), supervisors encounter multiple influences on their attitudes and responses to student wellbeing and mental health needs (Hyun et al., 2006). Since supervisors play a key role in socialising students (Becher & Trowler, 2001; Clegg, 2014; Cornér et al., 2017), their own experiences of wellbeing and mental health in the academic environment is likely to play a part in how they attend to the wellbeing of students.

Supervisory relationships and practices impact student wellbeing. Dysfunctional supervisory relationships, and poor or problematic supervision are found to contribute to depression among students (Hunter & Devine, 2016; Peluso et al., 2011), and student burnout (Cornér et al., 2017; Stubb et al., 2011). Students report that communication problems and power dynamics impact negatively on their doctoral experience (Cornér et al., 2017; Löfström & Pyhältö, 2013). For some students, supervisory relationships can be influential in their decision to leave their studies (Pyhältö, et al., 2015).

To better understand how supervisors can become more aware of students’ emotional and physical health, researchers have attempted to evaluate different models of supervision, and how these models might impact student wellbeing. Cornér et al. (2017), for example, compared dyadic and collective models of supervision. The dyadic model of doctoral supervision is generally considered to be the traditional supervisory model that involves students receiving individualised attention from one or two supervisors (McCallin & Nayer, 2012; Stracke, 2010). Students benefit from the expertise of their supervisor (Cornér et al., 2017), and are well-prepared for independent research (McCallin & Nayer, 2012). In research-intensive universities, the dyadic model has been critiqued for being too
rigid, placing research productivity before student learning, which leads to student disengagement (Wergin & Alexandre, 2016), and impacts on their wellbeing (Pyhältö et al., 2012; Stubb et al., 2011). The dyadic model has limitations from a non-Western perspective too, privileging individual sources of learning between student and supervisor at the expense of interconnected and relational cultural perspectives (Grant, C., 2014). Students may experience cultural distance (Collins, H. M., 2010) under such circumstances, which can result in withdrawal from their programme (Grant, C., 2014).

Collective models of supervision involve various configurations of team supervision and groups of students, and can offer a meaningful approach for non-traditional students (Grant, C., 2014). Reflecting on the South African context, for example, C. Grant (2014), advocates a “communal approach” (p. 112) to supervision that is more representative of the historically interconnected South African cultures. Other researchers promote collective models because they provide students with opportunities to access multiple sources of learning, support, and feedback (Cornér et al., 2017; Botha, 2014; Grant, C., 2014; McCallin & Nayer, 2012; Pyhältö et al., 2015). Collective models enhance students’ familiarity with disciplinary cultures and practices (Botha, 2014; Christensen & Lund, 2014; Cornér et al., 2017) since students have multiple role models or mentors. At the same time, collective models reduce student-supervisor reliance on the one-to-one relationship (McCallin & Nayer, 2012), and can increase student satisfaction with their supervisory experience (Pyhältö et al., 2015).

In terms of student wellbeing, the collective model of supervision can present challenges with regard to students’ workload (Cornér et al., 2017). Students might find themselves managing multiple research demands arising from their membership of a research team (Pyhältö et al., 2015), and risk burnout (Cornér et al., 2017). The time
requirements for participating in collective models can prove problematic too (Botha, 2014). The collective model is also dependent on supervisors’ co-operation among themselves (Botha, 2014; Cornér et al., 2017). Without sufficient supervisory support in place, collective models of supervision can be detrimental to student wellbeing, and lead to attrition (Cornér et al., 2017). As influential as they are, supervisory relationships are only part of a complex picture of student wellbeing.

**Being prepared for doctoral study**

Adequate preparation before commencing the doctorate potentially helps to mitigate some of the wellbeing and mental health problems that students encounter during their studies. Students may benefit from knowing departmental expectations, conditions, and student requirements at the recruitment stage (Pyhältö et al., 2015; Rigg et al., 2013), or during orientation (Hunter & Devine, 2016). Thereafter, students should receive assistance in setting “realistic” long-term personal goals for their doctoral study (Haynes et al., 2012; Pyhältö et al., 2012). This process might help students adjust their expectations and study plans accordingly for their progress, reducing the potential for emotional distress and burnout if expectations are not realised (Haynes et al., 2012; Martinez et al., 2013; Rigg et al., 2013).

Having a sense of direction and purpose impacted favourably on female students’ sense of wellbeing in a study by Haynes et al. (2012). Students could measure how well they were doing, enhancing their sense of wellbeing. Schmidt and Umans’ (2014) study found similar findings, and added having clarity about departmental procedures mattered for female students (Schmidt & Umans, 2014). Stability and structure in their studies helped students to balance the emotional challenges and “mental rollercoaster ride” of their doctoral experience (Schmidt & Umans, 2014, p.8).
Students and supervisors having complementary perceptions of their respective roles and responsibilities can improve students’ levels of satisfaction with their doctoral experience, contributing to motivation and persistence (Pyhältö et al., 2015). The converse mismatch between students’ and supervisors’ perceptions can create symptoms of depression for students (Peluso et al., 2011), or anxiety and stress (Stubb et al., 2011; Pyhältö et al., 2015). A mismatch of expectations suggests a need for agreeing and establishing joint expectations early in the doctoral programme. While this process is likely to already be part of doctoral programmes, research findings suggest this process could be undertaken more effectively to improve wellbeing for some students (Pyhältö et al., 2015).

Universities could be better prepared to address student wellbeing and mental health, such as providing integrated support to all students, as well as targeting services and guidance to under-represented and non-traditional groups of students (Hargreaves, 2017; Hyun et al., 2006; Pyhältö et al., 2012; Rigg et al., 2013; The Graduate Assembly, 2014). Improved signposting of institutional services and resources was recommended by many authors to support staff to address students’ wellbeing and mental health needs (Hargreaves et al., 2017; Haynes et al., 2012; Hyun et al., 2006; The Graduate Assembly, 2014). There are recommendations too for supervisors to receive increased professional development and up-to-date information on the types of wellbeing and mental health support available (Hargreaves et al., 2017; Levecque et al., 2017; The Graduate Assembly, 2014).

Integration in research communities and wellbeing

Research communities are recognised as important sites for addressing and improving student wellbeing and are often comprised of mixed academic, researcher, post-doctoral and student membership (Hargreaves et al., 2017; Hyun et al., 2006; Mitchell, 2014; Pyhältö et al., 2009; Pyhältö et al., 2015; The Graduate Assembly, 2014). How
students experience their place in a research community is instrumental to their levels of satisfaction with doctoral study, their engagement with their learning, and their sense of belonging (Hunter & Devine, 2016; Stubb et al., 2011). The research community can be a source of empowerment for students (Levecque et al., 2017), and a factor in higher levels of life satisfaction (The Graduate Assembly, 2014).

An inclusive and supportive research community has the capacity to respond with flexibility to assist students in meeting their goals. For students from underrepresented groups inclusive strategies can prove particularly beneficial for their wellbeing (Hargreaves et al., 2017). Being part of a community provides students with greater access to resources, informal and formal support structures, to information and expectations, networks, and opportunities. Students who feel part of a community are likely to feel a sense of equality with others, which reduces some of anxieties they might experience (Cornér et al., 2017).

In some cases, the community might extend beyond academia when significant mentors or advisors support students with their learning. Some Māori students, for example, have collaborated with community-based mentors during their doctoral studies. On these occasions, their mentors supported students as research advisors due to their expertise in an indigenous worldview, expertise that academic supervisors were unable to provide (McKinley et al., 2011). From a Māori worldview, inclusion in a supportive network acknowledges “collective unity of purpose” (Berryman et al., 2017, p. 12). In doctoral study, this means co-constructing knowledge, making reciprocal commitments to support and care for one another, and taking collective responsibility and accountability for research (Berryman et al., 2017). Integration in a community, in this regard, seeks also to acknowledge and enhance students’ cultural wellbeing.
It would seem many students find their membership of research communities troubling (Hyun et al., 2006; Pyhältö et al., 2009; Stubb et al., 2011), and in particular, students from non-traditional groups express unease in research communities (Barker, 2016; Barney, 2013; Berryman et al., 2017). Students’ perceptions of departmental support are likely to impact how many perceive they are being cared for or valued, affecting their wellbeing and persistence with their studies (Hunter & Devine, 2016; Pyhältö et al., 2012; Stubb et al., 2011). Students who feel isolated from research communities talk of themselves as “outsiders” (Pyhältö et al., 2009; Pyhältö et al., 2012), and are more likely to leave academia, including after graduation (Hunter & Devine, 2016). How students experience inclusion in the research community contributes to their perception of a research/academic career, and what membership of a research community might entail in the long term (Hunter & Devine, 2016).

Having a sense of belonging, however, does not guarantee wellbeing (Stubb et al., 2011). Students’ views of who might be included in a researcher community are subjective (Stubb et al., 2011), meaning their expectations and experiences will differ. Additionally, universities could better attend to students’ lives outside of their doctoral studies, which often remain as separate entities to ‘university life’ causing stress and anxiety for some students (Haynes et al., 2012). Nonetheless, students’ sense of belonging provides a buffer against disengagement and subsequent effects on wellbeing (Pyhältö et al., 2012).

**Summary**

Undoubtedly doctoral education has undergone, and continues to encounter substantial shifts in social expectations. Massification of higher education has affected changing demographics and diversifying student populations, with greater numbers of non-traditional and under-represented groups of students entering doctoral education. This
means that doctor education is further complicated by the situated or contextualised nature of students’ subjective experiences, and their expectations for learning. In addition, recognition of the economic potential of research, and resulting governmental drives towards knowledge capitalism on a global scale, have given rise to anticipated trajectories for graduate research students beyond conventional academic pathways. Among the social and economic maelstrom which is doctoral education, I focused in this literature review on three key themes that can contribute an understanding to what collegiality might be in the doctoral project.

The literature on peer learning, transferable skills and student wellbeing has illustrated how these three aspects of doctoral education are inherently interconnected. I argue that students’ relationships with others involved in their doctoral education, their sense of purpose, and their capacity to interdependently create opportunities for learning provide important lenses for engaging with and understanding the three respective bodies of literature; peer learning, transferable skills, and student wellbeing, and for subsequent research findings reported in this thesis. In the following chapter, I consider how I applied social practice theory as a form of methodology (Gherardi, 2012; Nicolini, 2012; Trowler, 2014). I demonstrate how social practice theory operates both as a tool to investigate, and explain, students’ collegial practices.
Chapter Four: Methodology

This chapter focuses on the overarching qualitative social practice methodology I adopted to investigate how collegiality is understood and practised by doctoral students at this University. The chapter is organised into five sections. In Section One, I explain a hybrid methodology I developed by synthesising compatible methods from social practice and phenomenography. Researchers using these respective methodologies share a commitment to collective ways of knowing and making sense of the social world, and an understanding that knowledge is relational. Underpinning the hybrid methodology in this study is the principle that people make sense of phenomena through socially-mediated practices. I provide explanations of both social practice and phenomenographic methodologies and how I synthesise the two as a hybrid methodology. In Section Two, I describe ethical procedures for this research, and discuss ethical challenges that arose during the research.

In Section Three, I present the research design and data collection methods, and explain how these are representative of the hybrid social practice and phenomenographic methodology that informed my study. In Section Four, I elaborate on how I specifically applied phenomenographic principles to my data analysis practices, and the processes by which I identified five analytic themes in the data. Finally, in Section Five I summarise the methodology discussed in this chapter, and evaluate its usefulness as a tool for academic developers in their endeavours to research and enhance doctoral education.
A hybrid methodology

I adopted a hybrid methodology, rather than a mixed methods methodology, but it is difficult to ascertain from the literature a clear distinction between the two methodologies since researchers often use the terms interchangeably (Nightingale, 2016; Sui & DeLyser, 2012; Trowler, 2014). Hybrid methodology usually refers to a synthesis of research methods (Fielding, 2012). Hybridity in this sense means to blur boundaries, seeking synergy between methods to create a new way doing research, and of making sense of social phenomena (Nightingale, 2016; Sui & DeLyser, 2012; Trowler, 2014). Researchers seek to do more than align complementary methods, as would be the case with a mixed methods methodology, or identify methods that will respond to the research questions as with a multiple methods approach. If we accept that no research methodology is neutral (Ashworth & Lucas, 2000; Nightingale, 2016), then researchers using hybrid methodology need to be aware of various tensions between differing ontological and epistemological positions on how phenomena can be interpreted (Nightingale, 2016). For example, researchers should attend to tensions between methods, and question whether each method generates data on the phenomenon under investigation (Fielding, 2012; Nightingale, 2016). Hybrid methodology requires researchers to acknowledge there are different ways of conceptualising a research problem (Fielding, 2012; Nightingale, 2016; Trowler, 2014). When done well, hybrid methodologies assist in illuminating silences in data using multi-lensed analytic approaches, which enable researchers to seek meanings that might otherwise remain unseen and unheard (Fielding, 2012; Nightingale, 2016; Trowler, 2014).

Social practice theory shares epistemological synergy with phenomenography because people make sense of phenomena through socially-mediated practices; knowledge is relational. This epistemological synergy is for me further evidence that the methodology
I take is hybrid, rather than mixed methods. Academics in both fields share a commitment to collective ways of knowing and making sense of the social world (Åkerlind, 2012; Barnes, 2005; Collier-Reed & Ingerman, 2013; Collins, H. M., 2010; Nicolini, 2012; Trigwell, 2006). But the two theoretical perspectives also differ.

Social practice theory supports diverse methodological research approaches (Gheradi, 2012; Saunders et al., 2015; Trowler, 2014). Phenomenographic methods, on the other hand, are generally informed by rigid conventions. The strength of a hybrid methodology lies partly in the researcher’s ability to recognise these methodological tensions (Fielding, 2012; Nightingale, 2016), I used specific aspects of phenomenographic and social practice methodologies for this study, which I now elaborate on.

Phenomenographic methodology seeks to deepen understanding of how we think and act in relation to the world around us. Researchers tackle variation in how people experience phenomena (Booth, 1997), producing insights into collective human experience (Åkerlind, 2012; Collier-Reed & Ingerman, 2013; Trigwell, 2006). Phenomenography first gained attention in Sweden in the early 1970s, in researching about how students conceptualised their learning (Tight, 2016). As a qualitative methodology, phenomenography is highly regarded for its usefulness in HE contexts (Collier-Reed & Ingerman, 2013). The application of phenomenography in HE reflects a focus on how differing conceptualisations of student learning are situated within, and related to, a given context (Entwistle, 1997). In the case of this study, the context is one New Zealand university.

I synergised aspects of phenomenography with aspects of social practice theory in two main ways: the first synergy was based on the principle that students have collective understandings of collegiality. In practice, this principle meant that I questioned whether
each method that I adopted would generate collective data on collegiality. Accordingly, I designed the research to both facilitate collegial interactions between participants, and to elicit their understanding and definitions of collegiality. The second synergy involved a phenomenographic approach to data analysis, which I argue added rigour and structure to this hybrid methodology. I used computer-assisted qualitative data analysis software (CAQDAS) for revisiting, revising, and thematically organising data in an increasingly parsimonious way. While unremarkable in other methodologies, the use of CAQDAS is uncommon in phenomenographic research (Penn-Edwards, 2010; Tight, 2016), but a useful tool for facilitating a hybrid method of data analysis as I will demonstrate in Section Three. Next, I elaborate on how social practice functions as both theory and methodology.

**Social practice theory as methodology**

A social practice methodology positions practice as the primary unit of analysis (Gherardi, 2012), meaning that social practice theory functions as a ‘theory-method’ package (Nicolini, 2012). In Chapter Two, I established that social practice theory, as applied in this thesis, refers to a multi-dimensional arrangement of people, activities, material objects, emotional phenomena, discourses, environments, and occasion or time. People’s practices are shaped by everyday relationships and contexts (Reckwitz, 2012), and by broader socio-cultural-historic contexts (Nicolini, 2012). In this regard, practice as a unit of analysis avoids ‘interactional reductionism’ (Levinson, 2005), or a simplistic description of what people do.

In common with some of the theories associated with social practice methodology, such as ethnography (Trowler, 2014), ethnomethodology (Gherardi, 2012; Nicolini, 2009), and constructivism (Saunders et al., 2015), literature on social practice methodology seems to offer broad or non-specific guidance to researchers on how to undertake social practice
research. I came across no ‘preferred’ methods of research; indeed, one description identified a practice approach as method-neutral (Saunders et al., 2015). A more consistent theme reflected social practice methodology as a form of praxis to invoke change in situated practices (Gherardi, 2012; Saunders et al., 2015; Wilkinson, J. & Kemmis, 2015). Trowler (2014), for example, suggests that a practice approach could help to indicate what change strategies might or might not work within an HE practice context, and why. Danby and Lee (2012), in their consideration of re-shaping doctoral practices, advocate greater attention to doctoral pedagogy as social activity, where practices and relationships are constantly ‘in-flux’. In this regard, a social practice methodology can be defined as a ‘research strategy’ (Gherardi, 2012), which aims to understand the dynamics of practices within a situated context, how the various dimensions of practices are connected, and how people’s and/or institutional practices can subsequently evolve (Saunders et al., 2015).

I took insight from research in the fields of education (see for example, Kemmis et al., 2012; Saunders et al., 2015; Wilkinson, J. & Kemmis, 2012), organisational studies (see for example, Gherardi, 2012, 2014, 2017; Nicolini, 2009, 2012; Tsoukas, 2003) and psychology (Von Scheve & Ismer, 2013). Educational researchers have applied practice-focused methodologies to investigate leadership of change processes (Wilkinson, J. & Kemmis, 2012), for example. Researchers in the field of organisational studies, where peer-reviewed studies have proliferated for a long time, seem familiar with the use of social practice methodology to inform change in various organisational and institutional contexts, or institutional tacit knowledge (Tsoukas, 2003). Whereas, in psychology, researchers have adopted a practice focus to explain collective emotions (Von Scheve & Ismer, 2013). Irrespective of the field, the complexities of practices are embraced as providing researchers with opportunities to investigate different ways of knowing and doing, and the connections between these (Gherardi, 2012; Saunders et al., 2015).
A critique of social practice methodology concerns the opacity of practices. First, the sheer complexity of practices suggests that researchers might struggle to render people’s practices visible with a single research method (Nicolini, 2009). Second, people’s tacit knowledge of how and why they might participate in practices, by definition, remains unarticulated (Collins, H. M., 2010), or informed by a ‘logic’ that enables people to act in a way that seems appropriate at a given moment (Bourdieu, 1992). Accordingly, people might articulate their practices in ways that are not necessarily representative of how their practices make sense to them (Gherardi, 2014); although it should be noted, this critique can apply to other research methodologies too.

To address concerns about the opacity of people’s practices, I took inspiration from Gherardi’s (2012) discussion of the usefulness of social practice methodology for representing the ‘texture’ of practices. I determine that the ‘texture’ of practices is created by the interrelationships between people, activities, material objects, emotional phenomena, environment, discourses, and occasion or time (Reckwitz, 2002, 2012; Wilkinson, J. & Kemmis, 2012), discussed in greater depth in Chapter Two. The term ‘texture’ also alludes to how these seven dimensions of peoples practices may be intricately interwoven. For example, a student who talks about study practices in their office may take for granted that a researcher tacitly shares an understanding of the office environment, material objects found there, times of day, and study-related activities, all of which contribute to the texture of their study practices. The work of the researcher will be to untangle the complex texture of practices when some dimensions of practices may be implied, or certain dimensions take precedence in students’ conversations. And while a student may not refer to a computer, for example, this is not to assume the material dimension is altogether absent from their study practices, rather material objects are an interwoven dimension of study practices in their office. Challenges aside, I advocate that
researcher attention to these seven dimensions of practice helps to dispel the opacity of people’s practices.

An additional methodological tool to address the opacity of practices is to analyse people’s practices from the ‘inside’, the ‘outside’, and to analyse practices with regard to the reproduction of society (Gherardi, 2012). Analysing practices from the ‘inside’ attends to the ways that people seem to collectively ‘know’ what to do in a certain practice context (Gherardi, 2012). Students in this study seemed to intuitively know what constituted collegial practices, and an inside lens is concerned with analysing these ways of knowing. A lens that seeks to make sense of practices from the ‘outside’ focuses on the patterns of activities that form practices (Gherardi, 2012), creating a sense of social order that makes practices recognisable (Nicolini, 2009, 2012; Schatzki, 2005a, 2008). For example, examining how a university provides pastoral care to students would be well-served by an ‘outside’ practice lens because analysis could focus on the patterns of relationships between students, information distribution services, service providers, and the locations/resources involved. Applying lens for understanding how students know about collegiality and how students practise collegiality were most pertinent for my analysis.

The third practice lens advocated by Gherardi (2012) concentrates on how practices reproduce society, or how society discursively and materially informs people’s practices. For example, the literature review in Chapter Three offers a demonstration of how this lens can be applied to understand the effects of a transferable skills agenda on HE provision of doctoral programmes. One lens on this situation suggests that an econo-centric agenda has created a crisis discourse in doctoral education, provoking HE institutions to adapt or develop doctoral programmes to teach transferable skills (Cuthbert & Molla, 2015). Each
of the three analytic lenses advocated by Gherardi (2012) provide a methodological tool to understand the interrelated context of people’s practices.

My research questions warranted a practice-focused methodology to access students’ understandings of collegial practices. The challenge was to provide research contexts where student participants could ‘anchor’ their ways of knowing collegial practices (Gherardi, 2012; Swindler, 2005). I sought methods that enabled collegial interaction between participants, and a context to share their understandings of collegial doctoral practices through informal conversations. Given the ‘adaptive’ capacity of social practice methodology (Saunders et al., 2015), I looked to phenomenography to complement the social practice theory. I had previous experience with phenomenography, but would by no means consider myself an expert (see Brown, Shephard, Warren, Hesson, & Fleming, 2016). In the next section, I examine what phenomenographic methodology offers a social practice methodology, and argue that the two methodologies can be synergised in complementary ways as a hybrid methodology.

**Synergising phenomenography in a hybrid methodology**

Phenomenography is the study of how people collectively experience phenomena (Åkerlind, 2012; Collier-Reed & Ingerman, 2013; Trigwell, 2006). Hybrid methodologies with phenomenography represent a recent evolution of phenomenographic research practices (Åkerlind, MacKenzie, & Lupton, 2014), and the body of literature is small relative to conventional phenomenography. Yet the potential for developing complementary and varied ways to understand how students know collegiality led me to persist with a hybrid methodology.

Phenomenographic researchers place emphasis on how different categories of meaning ‘describe’ the phenomena participants are experiencing (Marton, 1994).
Researchers use categories as overarching descriptions of data, and to explore underlying meaning within categories (Marton & Pong, 2005). Some researchers refer to themes, rather than categories, a position I will take in this research. Following a process of iterative analysis of data, phenomenographic researchers aim to identify a logically inclusive structure within and/or between the themes that make up the overall findings (Marton & Booth, 1997). The resultant findings, or ‘outcome space’, illustrate variations in how participants conceptualise phenomena that is context-sensitive. Findings are not, therefore, considered readily generalisable (Åkerlind, 2012; Tight, 2014; Trigwell, 2006). Importantly for this thesis, findings retain the principle of representing an analysis of collective human experience.

The aim of this study was to understand how a group of students from the general doctoral population at Otago made sense of collegial practices in ways that were influential to their learning. Since participants in this study were doctoral students at the university at the time of the research, the various ways that students experienced collegial practices would be logically related by the common phenomenon of doctoral education at Otago. The variations within students’ understandings of collegial practices represented collective experience of doctoral education, and offered a lens on ways of ‘knowing’ and ‘doing’ collegiality.

**Positioning phenomenography in this research**

A long-standing concern regarding phenomenographic approaches relates to an apparent lack of detail or clarity offered by researchers on how research design and analysis are undertaken (Ashworth & Lucas, 2000; Entwistle, 1997; Tight, 2016). The endeavours of some researchers to set aside their own assumptions regarding phenomena, leave other researchers questioning what ontological and epistemological assumptions underpin their
theoretical approaches to a study (Harris, 2008; Eleanor Walsh, 2000). I acknowledge the advice that a more transparent approach to phenomenographic research is achieved when researchers have a clear theoretical frame and make their knowledge interests explicit (Åkerlind, 2012; Hallett, 2014).

Some researchers express concern that findings represent a potentially narrow snapshot of participants’ understandings (Ashworth & Lucas, 2000). This critique, however, could apply to various research methods that are not longitudinal, both qualitative and quantitative. Questions arise too of whether to analyse for internal structure in participants’ conceptualisations of phenomena (Harris, 2008; Kember, 1997; Tight, 2016; Webb, 1997). Recent developments in phenomenographic research argue that analysing structure within conceptualisations could offer greater understanding, particularly in terms of how people make sense of their learning (Marton & Pong 2005; Pang & Marton, 2013). For example, is one conceptualisation of collegiality more or less sophisticated than another? Or is one conceptualisation of collegial practices reliant on another conceptualisation of collegial values? These arguments are relevant to this thesis because I apply social practice lenses to ascertain how students’ understandings of collegial practices reflect interrelated ways of knowing and doing doctoral education.

Ultimately, however, I decided not to wholly adopt a phenomenographic approach. The sometimes rigid expectations of phenomenographic research practices led me to consider the potential challenges of attempting to meet these expectations as a solo researcher, particularly since phenomenographic research is often carried out in teams (Bowden, 2005). Instead, I have developed a hybrid methodology to understand students’ collective experience of collegiality. This methodology enabled me to focus on the commonalities and variations in how students defined and practised collegiality, how they
‘know’ and ‘do’ collegial practices, using methods that were adaptive to collegial interactions between participants. In the following section, I establish how I considered the ethical implications of this research process, and how I put these ethical considerations into practice.

**Ethical practices**

At this university, research involving human subjects requires ‘procedural’ ethical approval (Guillemin & Gillam, 2004), and as part of this expects ‘process’ ethics. This research project required University of Otago Human Ethics Committee Category B approval. Category B is considered low risk, and is submitted at departmental level for scrutiny, and then approval. A second component of procedural ethics at this university involves consultation with the Ngāi Tahu Research Consultation Committee. This process requires researchers to consider how their research may be of interest and importance to Māori, and reflects the university’s partnership with Māori as tangata whenua (indigenous people) under the Treaty of Waitangi. As an outcome of this process of consultation, the Ngāi Tahu Research Consultation Committee indicated that I inform the Committee of any findings that might benefit the education experiences and academic achievement of Māori students.

Procedural ethics provide participants and researchers with some assurances of anticipated conduct, but cannot mitigate for all that might happen during qualitative research. Student conversations had potential to present problems or ethical challenges if the tone of the conversation became confrontational, for example, or a student disclosed information highly confidential in nature, which I noted on the Ethics B form. My duty of care involved being attentive to the emotional comfort of participants, who had voluntarily agreed to participate in a conversation with co-participants who were likely to be strangers.
This situation could potentially make participants feel ill-at-ease. I acknowledged that conversations about peer groups, collegial activities and doctoral learning might seem unlikely to present ethical challenges, but the full nature of semi- or unstructured conversations cannot be determined in advance. I planned to mitigate for emotional discomfort by alerting participants to the nature and topics of conversation, and by encouraging participants to interact with one another in respectful and confidential ways.

While researchers might plan for ethical challenges, participants’ conversations during qualitative research can take an unpredictable course. These conversational deviations from the topic of inquiry present researchers with the potential for ‘ethical dilemmas’ (Guillemin & Gillam, 2004). For example, a researcher may be party to a participant disclosing information of a highly personal nature about themselves or another person. In such instances, a researcher needs to decide how to respond to the participant in the moment, and this decision might equate to an ethical dilemma. Researchers demonstrate “ethics in practice” (Guillemin & Gillam, 2004, p. 262), when they responding to situations that present ethical dilemmas.

Ethical dilemmas need not be serious situations. ‘Ethics in practice’ can also refer to both the everyday and not-so-common issues that researchers encounter while undertaking research of seemingly minor importance. In this research, I encountered few ethical dilemmas of a challenging nature. Most common examples related to participants’ complaints about the practices of supervisors. In such instances, both the co-participant(s) and I needed to make an individual appraisal of how we would respond, demonstrating ethics in practice. My decisions also related to how I would subsequently engage with, and represent, the data in my analysis. The dilemma I faced regarded how to manage data that was ‘one-sided’. The appraisals I made in such situations was to privilege student voices,
while acknowledging the limitations of the data and absence of the supervisor's voice. On this basis, ethics in practice represent a researcher’s obligation to act in ethical ways when ‘ethically-important’ moments present (Guillemin & Gillam, 2004).

From a social practice theory perspective, ethics in practice can be understood as the routine and everyday actions of a researcher for whom ethical conduct and duty of care are embedded in their practices. This is the type of researcher I aspire to be, and the type of researcher competencies I hope to develop. I move now to discuss how reflexive practices have a place in my researcher development and practice repertoire.

**Reflexive research practices**

Reflexive research practices are fundamental to social practice methodology (Nicolini, 2009). Effectively, researchers attend to two sets of practices at the same time: the practices that form the object of scrutiny, and the researcher’s own practices in coming to understand the object of scrutiny (Gherardi, 2012; Nicolini, 2009). As a researcher of collegial practices in doctoral education, my situation was further complicated by being a student. I both study and practice within the context of my research, and I have positioned my values about community and collective endeavour at the fore of this thesis. In response to this set of circumstances, I needed to attend to the routinised ways that I understood and re-iterated doctoral practices, and was aware of how these understandings informed my research practices, particularly during analysis. By maintaining a reflexive awareness of my own practices, I was better positioned as a researcher to realise the critical potential of how participants in this study articulated their understandings of collegial practices (Nicolini, 2009).

From a phenomenographic perspective, the analysis process provokes greatest concern about whether a researcher can set aside their own conceptions when analysing
data (Eleanor Walsh, 2000). Researchers need to take into consideration the relationship between the researcher and participants, between the researcher and phenomenon under investigation, and the relationship between participants and phenomenon (Bowden, 2005; Eleanor Walsh, 2000). Yet researchers should not simply be attentive of relationships because of the potential to distort data and findings; researchers have ethical obligations towards their participants, data, and findings to make their position, assumptions, or biases clear (Hallet, 2014). These are challenges of ethical and self-reflexive research (Åkerlind, 2012).

During the research process, I adopted a relational and collective approach to interacting with participants, and felt able to achieve two key practices that contributed to reflexive awareness. The first research practice involved creating opportunities for participants to share self-chosen aspects of their doctoral experiences. These environments were intended to be socially informal and comfortable. The second practice involved taking a peripheral position in conversations, which enabled me to monitor participants’ apparent level of social comfort or ease, and to discretely intervene in the conversation if required. Reflexive awareness and my duty of care towards participants extends beyond the research process, and indeed the submission of this thesis to consider how my findings are used and for whose benefit (Connelly, 2016; Guillemin & Gillam 2004). In this regard, I aim to amplify students’ perspectives on how doctoral education programmes might better engage student participation, and improve outcomes for student wellbeing.

I commenced this section by primarily considering how ethical practices in qualitative research might relate to human participants. But researchers are also expected to demonstrate ethical practices in terms of how they process, analyse and represent data, and disseminate findings. One further means for researchers to demonstrate ethical
practices throughout the research process is to apply a set of research tools that help to illustrate that the process was transparent (Cope, 2014; Given & Saumure, 2008). Transparent procedures and protocols during research are key to demonstrating the integrity of research (Cope, 2014). In the next section, I expand upon the research design and methods used to investigate students’ understandings of collegiality and collegial practices, and outline the types of procedures and protocols that I used in an effort to make my research practices transparent.

**Research design and data collection methods**

In this section, I outline the methods I adopted to put this hybrid methodology into practice. The research design was informed by the collective principles of social practice theory and phenomenography, and by the following research questions:

1. How do doctoral students define and practise collegiality in a doctoral environment?

2. What forms of collegiality do doctoral students at Otago engage in as part of their everyday and routine practices, and how are these characterised in terms of learning (or knowledge making)?

3. What do doctoral students perceive they are getting from collegial activities, and how does this contribute to their doctoral experience?

4. From the perspectives of doctoral students, what are the relationships and practices that lead to purposeful collegial practices?

5. What can institutions do to foster more collegial practices and skills among doctoral students?
The research questions informed my investigation of what students understood of their experiences of collegial practices during their doctoral education. The sub-questions tease out further how students know and do collegial relationships and practices. With question four, I sought to ascertain implications from the research for institutional practices. While the over-arching and sub-research questions offer scope for analysis both from the ‘inside’ and the ‘outside’ (Gherardi, 2012), my subsequent explanation of the research methods used demonstrates how I attended primarily to data analysis from the ‘inside’, that is, students’ ‘knowing’ of collegial relationships and practices.

**The research context**

This study took place at the University of Otago, a research-intensive, multi-campus, and publicly-funded institution in New Zealand. The doctoral student population numbers approximately 1300 students across four divisions of the university (Spronken-Smith et al., 2018), of whom approximately half are international students. The university admits doctoral enrolments on a monthly-basis, meaning there is no cohort intake like many other universities. This factor may be relevant in that some students might enter a department as the only new doctoral student for extended periods of time.

Most research activity in this study occurred on the main campus, with two exceptions. The first exception involved an informal interview with a single student completing their doctoral studies at a satellite campus in a different city (see Table 2). I happened to be in the city where the student lived, and as previously explained, responded to the student’s willingness to participate in the research study. The second exception occurred when I facilitated a workshop session at a conference, which took the form of a focus group-like dialogue. Facilitating this workshop at an early stage of my doctoral project allowed me to hear the perspectives of the conference attendees, a group that
included doctoral students, supervisors, and academic developers, about their collegial experiences of doctoral education. This workshop was informative for my research design, but the conversations and feedback were not part of my data set.

My analysis of the data set, discussed in Chapters Five to Seven, reflects the research context of doctoral education at this University. By gaining a deeper understanding of how students perceive doctoral education at this University, I aim to provide the University with information that might help foster an enhanced culture of collegiality, facilitate practices for collegial activity, and improve conditions for doctoral education. Findings from this study may be relevant to other universities if similar circumstances prevail, including diverse student populations, but generalisability is not the aim of this type of study (Entwistle, 1997).

**Outlining the research**

An important point to re-iterate is that I devised a hybrid methodology where I sought to incorporate multiple methods into the research design. In Table 2, I outline the main steps, methods, and activities forming the research process. Table 2 offers a general indication of what I sought to achieve through each activity. I mention ‘card sorting’, a research method explained in greater detail in this section.

Table 2: *Outline of the Research Process*
<table>
<thead>
<tr>
<th><strong>Research step/method/activity</strong></th>
<th><strong>Number of participants</strong></th>
<th><strong>Consent</strong></th>
<th><strong>Purpose</strong></th>
</tr>
</thead>
</table>
| Ethics B approval                |                           | Departmental; Ethics Committee | Confirm research design  
Consider ethical concerns and measures in advance of research  
Acquire ethical approval as a means of assurance for volunteer participants |
| Māori Consultation process (Ngāi Tahu) |             | Consultation only | Recommendations for the research on how findings might benefit Māori students |
| Recruitment of participants      |                           |                          | Aim to recruit approximately 50 students  
Email to all doctoral students, sent by the Graduate Research School  
Advertisement included in a Graduate Research School newsletter  
Posting on a student Facebook group  
Snowballing approach |
| Focus groups x3                  | #1: N=4  
#2: N=13  
#3: N=14 | Written informed consent | Piloting whether collegiality is a worthwhile topic of investigation for doctoral education  
Elicit conversation and interaction on how students experience collegial practices as part of their doctoral education  
Analysis of data about collegial relationships and practices |
| Informal interview               | N=1           | Written informed consent | Accommodate the individual circumstances of a satellite-campus student  
Elicit conversation on how the student experiences collegial practices as part of their doctoral education  
Analysis of data for collegial relationships and practices |
| Conference workshop (TERNZ)      | N=15,         | Verbal informed consent | Present preliminary analysis from the focus group conversations  
Engage participants in further discussion regarding collegial relationships and practices in other HE institutions. Not used in data set |
| Trial card sorting method        | N=6           | Verbal informed consent | Test the card sorting activity in terms of fostering collegial interactions, and usefulness for generating data. Not used in data set |
| Card sorting method              | N=24          | Written informed consent | Observe 12 card sorting activities |
| Immersion in data                |               |                          | Upload all audio and photographic data to CAQDAS  
Listen to all audio recordings for the first time  
Insert initial notes/comments and coding of data  
Listen second time and transcribe extracted quotations verbatim |
| Iterative analysis               |               |                          | Revisit initial codes and revise number of codes  
Identify emerging themes by grouping codes  
Listen to all recordings a third time  
Revisit and revise themes  
Interrogate relationships within and between themes in greater detail |
| Presentation of preliminary findings |             |                          | Present preliminary anonymised findings at an international conference (QPR), two departmental seminars, and four departmental colloquia  
Engage with audience responses as a form of peer review, and as validation of analysis and transparency  
Return to data for re-analysis where relevant |
Table 2 illustrates how I used focus groups, a single informal interview, and card sorting as data collection methods. In the following sub-sections, I consider the various methods in greater detail and explain why I selected them, but first I discuss how the trials and tribulations of recruiting participants was influential to how the research design evolved.

Participant recruitment

A question that many qualitative researchers face is how many participants are sufficient? In phenomenographic research, for example, 20-30 participants are accepted as a reasonable sized sample to enable commonalities and variation in phenomena to be reflected adequately in data (Bowden, 2005). Variation in people’s collective experiences helps researchers deepen their understanding of the ways that people think and act in relation to the world around them (Booth, 1997; Bowden, 2005). An important concern for me, therefore, was to recruit enough students to generate qualitative variation in how they understood collegial practices in doctoral education. In total 43 people voluntarily participated in this study, all of whom were doctoral students at this University.

Recruiting voluntary participants from the student population at the University to take part in focus groups seemed straightforward. I sent an email via the Graduate Research School to all doctoral students. The email offered a brief description of the project and had the participant information sheet attached (see Appendix A). I received 31 participants, to which I replied offering a series of possible dates. This initial experience of seeking participants was encouraging.

In terms of the card sorting method, I hoped to recruit between 40-50 participants to enable approximately 25 card sort activities, considered to be in the range of a sufficient sample size (Bussolon, 2009; Harloff & Coxon, 2005; Tullis & Albert, 2013; Tullis & Wood, 2004). With this number of card sorts, I could generate sufficient quantitative data
to add a factor analysis to the hybrid methodology. As participant recruitment transpired, I was unable to take this opportunity. Over a period of six months, 24 students volunteered to take part in the card sorting activity, 13 of whom had participated in focus groups.

In a research-intensive university, recruiting participants can be challenging. Students encounter many requests for participation in research, and seem to reach a point of request-saturation. In response, I took several approaches to recruitment. In the first instance, I contacted participants from the focus groups who had indicated that they would be happy to receive a second invite. I sent individualised invitations, which resulted in 13 participants re-joining the research study. Recruiting further participants took six months.

My second round of recruitment involved an open invitation to participate in the research that was included in a postgraduate e-newsletter compiled by the Graduate Research School. The e-newsletter was sent to all doctoral students enrolled in the university. Unfortunately, this invitation was ‘buried’ as the last item of a long newsletter, and garnered no responses whatsoever! Undeterred, I took to using a snowballing approach (Morgan, 2008).

Participants and friends suggested names of people they thought might be willing to take part, enabling me to recruit two participants. I directly invited three people known to me in divisions under-represented in the sample. One of my supervisors introduced me to students from a different division; two participants responded. Three students approached me having heard about the project from people who had participated and then asked around their peers for further willing participants. My final means of recruiting participants was through the university postgraduates’ Facebook page; one participant came forward. A considerable amount of effort and networking went into recruiting these remaining 11 participants over a period of six months. Once I had reached 24 participants
for the card sorting method, I made a strategic decision to terminate recruitment and adapt my research design to a wholly qualitative approach.

In accordance with recommendations from the Ngāi Tahu (Māori) Research Consultation Committee, I offered participants the option to anonymously self-identify ethnicity and gender data (see Appendix B). Ethnicity criteria mirrored those options offered in the latest New Zealand Aotearoa census form (see Table 3).

Table 3: Participant Demographics

<table>
<thead>
<tr>
<th>Participants</th>
<th>N=43</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>34 female; 9 male</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>New Zealand European; Cook Island Māori; Chinese; Indian; Other: American European; American-Polish/German/Irish; American (non-indigenous)-Polish-Irish; British; Dutch; Japanese; Latin American; Persian; Welsh-Kiwi; Canadian</td>
</tr>
<tr>
<td>Domestic/international</td>
<td>29 domestic; 14 international</td>
</tr>
<tr>
<td>Stage of study</td>
<td>1st – 4th year of study</td>
</tr>
<tr>
<td>Students who were also permanent staff members</td>
<td>N=8</td>
</tr>
<tr>
<td>Divisions at the University of Otago</td>
<td>Commerce: N=3; Health Science: N=5; Humanities: N=23; Sciences: N=14 (2 students studying across 2 Divisions)</td>
</tr>
<tr>
<td>Departments at the University of Otago</td>
<td>Anatomy; Anthropology; Applied Maths; Archaeology; Business Studies; Chemistry; Education; Genetics; Geography; Geology; Higher Education; Human Nutrition; Law; Linguistics; Māori, Pacific and Indigenous Studies; Marine Science; Maths and Statistics; Medicine; Peace and Conflict Studies; Pharmacy; Physics; Physical Education; Psychology; Science Communication; Tourism (9 students studying across 2 departments)</td>
</tr>
</tbody>
</table>

The participant demographics demonstrate a diverse sample of students, which included students who were staff members completing their PhD whilst working, students beginning their research journey, and those about to graduate. The number of international students
was less representative than the general university intake, which varies between 40-50% annually. I collected data related to stage of study, university role, and department of study as informal questions during the meet-and-greet stage of the research activities. Stage of study refers to length of doctoral study at that moment in time. Officially, study time is measured as Equivalent of Full-time Study (EFTS), although in conversation, several students talked about having deferred for a period of time. Deferrals officially interrupt EFTS, but do not necessarily interrupt study activities, hence a few students had engaged in doctoral research for longer than their EFTS might officially recognise.

Having established the research context, and who took part in the study, I now explain the research methods undertaken in two research phases; Phase One involved the use of focus groups, and Phase Two, a hierarchical card sorting method. First, I elaborate on the purpose and application of focus groups in this study, and then describe card sorting as a research method for eliciting collective ways of knowing social phenomena.

**Focus groups**

My initial intention with piloting focus groups was to test whether researching students’ experiences of collegial practices was valuable from the perspectives of students themselves. Focus groups provide an important research process for facilitating social interaction (Liamputtong, 2011). Within the dynamics of social interaction, participants discuss, share, or challenge ways of knowing the phenomena under investigation. For the observant researcher, focus groups offer a means to explore how people’s understandings are negotiated or co-constructed, and how people collectively make sense of the matter at hand (Wilkinson, S., 2004). In this regard, focus groups seemed to match the collective principles that I applied in this study and enabled participants to express variation and commonalities in the ways that students know and do collegial practices.
I arranged three focus groups and attempted to make the social environment unthreatening and informal for each. I provided a buffet each time, both as a way of thanking participants for their time, and to make participants feel comfortable and at ease. Having food available for participants has a simultaneous introductory and management purpose since participants and I had an opportunity to build a rapport (Liamputtong, 2011). From these initial introductions, I gauged a sense of how much moderation might be required of me during the focus group conversation.

Focus groups were conducted with all participants and myself sitting around a large table. Once participants had introduced themselves, I established a “non-threatening and non-evaluative” environment (Stewart, Shamdasani, & Rook, 2007) by encouraging participants to speak freely and respectfully. I reminded participants of confidentiality. I then introduced the topics of conversation, which comprised of the following three broad questions that I had written on wall-mounted boards as conversation prompts:

- **What type of peer groups are you involved in?**
- **How do you organise peer group activities?**
- **What are some of the benefits/challenges of peer group activities?**

I chose to act as a flexible moderator adopting a feminist perspective that seeks to enable participants to do most of the talking (Liamputtong, 2011). The moderator position functioned well during all three focus groups since students conversed fluently. I felt the necessity to intervene on two occasions during focus group #2 to make space for a participant to speak, and after doing so the group moderated themselves by taking turns for contributions or questions.
I believe I achieved a relaxed and informal environment; participants interacted, conversation was animated and flowing, and all remained for the previously-determined one hour for the focus group. After one focus group, some participants stayed longer to chat as a smaller group. While the focus group process was ultimately successful in terms of data, there were logistical challenges that might also have hindered data collection.

There is a suggestion that focus groups should ideally number between six and 10 participants (Liamputtong, 2011). However, focus group #1 had four participants, focus group #2 had 13 participants, and focus group #3 had 14 participants. The reason for this imbalance in participant numbers was in some part due to some participants either not confirming their attendance in advance, or changing their focus group slot without prior warning. When participants volunteer to take part in social research, I propose a degree of researcher flexibility is required, and I felt unable to turn participants away once they had arrived.

On the whole, the focus groups functioned purposefully, despite the less than ideal participant numbers. As previously mentioned, after some minimal intervention on my part during focus group #2, the participants moderated themselves. Learning from this situation, I suggested at the start of focus group #3 that the group might function more effectively by taking turns from the beginning, and participants were attentive throughout to ensure all were included. In focus group #1, participants seemed to see me as inherently part of the group (Liamputtong, 2011), making eye contact and addressing me directly with comments. For my part, I endeavoured to maintain a passive role.

With the consent of participants, I recorded each focus group and additionally made field notes about the main lines of conversation, common agreement, and any particular issues aired by participants. I summarised my field notes for each focus group, and sent
copies to participants for checking and approval. I received one response, where a participant suggested an additional conversational point for inclusion.

My initial analysis of the focus group data identified how students alluded to different types of people as peers, not simply students. By their inclusion of a seemingly broad definition of peer, students appeared to place greater emphasis on the types of interactions they valued when asked about peer group activities. Their emphasis seemed less intent on forming groups than collaborating, interacting, and supporting or being supported in a collegial ways. In response, I adapted my research focus from *peer groups* to *collegial practices* because collegial practices seemed more relevant to how students described their doctoral practices. The data analysis subsequently contributed to writing a series of collegial statements for the card sorting activity, and assured me that the research focus was worthwhile.

**Card sorting**

Card sorting methods seek to examine the possible cognitive hierarchies that people apply to their thinking about phenomena (Harloff, 2005) In this regard, the card sorting method facilitated data collection appropriate for analysis from the ‘inside’, or how students understood collegiality (Gherardi, 2012). The cards themselves presented variations on collegial practices, and included variations of simple statements, such as ‘people show willingness to help others’, but more generally might also include graphics, descriptions, or figures (Harloff, 2005). To elicit the possible cognitive hierarchies that participants ascribe to a phenomenon, Harloff (2005) developed a variation of card sorting that required participants to undertake a card sorting activity twice. The first sort prompted participants to identify the similarities that they perceive in a phenomenon, while the
second activity involved hierarchical sorting. Participants determined the respective weighting of each card against a set of prescribed criteria.

In this research, the sorting cards presented 27 different statements describing collegiality, each sourced from my literature review or analysis of focus group data (see Table 4). I tested the statements and the card sorting method with six volunteer postgraduate participants prior to embarking on this phase of research. I adapted the activity to involve two participants at the same time, instead of one, to elicit conversation between participants and to encourage participants to offer descriptions of collegial practices and ways of doing collegiality. The postgraduate participants worked in pairs and carried out a two-part activity as intended for the research study. First, participants grouped the cards thematically, and explained the rationale for their themes. The purpose of this first activity was primarily for students to gain familiarity with each other and the statements on the cards. The second part of the activity required participants to hierarchically sort the statement cards on a grid according to an X-axis ‘increasing importance to collegiality’, and a Y-axis ‘increasing importance to doctoral learning’. Once all the cards were placed, participants undertook a thematic analysis of their sorting, ascertaining whether cards that were grouped close to one another were related in any way, or similarly placed without a relationship. Having identified thematically related cards, participants once again were asked to name the theme and explain their reasoning. The activity took between 45 minutes and one hour, which was useful to communicate to future participants.

The test determined that the 27 statements provided sufficient variation for participants to negotiate and discuss their views on collegiality and collegial practices (see Table 4). The test also demonstrated that the statements on the sorting cards were open to interpretation in several ways.
Table 4: Features of Collegiality Listed as Statements on the Sorting Cards

<table>
<thead>
<tr>
<th>Participation supports personal wellbeing</th>
<th>Relationships are strong</th>
<th>Intellectual openness/consider different viewpoints</th>
</tr>
</thead>
<tbody>
<tr>
<td>People have diverse knowledge and skill sets</td>
<td>Socially bring people together</td>
<td>People agree on shared goals</td>
</tr>
<tr>
<td>People are willing to negotiate</td>
<td>People demonstrate integrity to one another</td>
<td>People make contributions/share/add</td>
</tr>
<tr>
<td>Trust</td>
<td>People involved have equal or near-equal status</td>
<td>People demonstrate commitment to one another</td>
</tr>
<tr>
<td>People are self-directed</td>
<td>People share an achievement-orientation</td>
<td>People take on responsibility</td>
</tr>
<tr>
<td>Activities have a clear purpose</td>
<td>Collaboration</td>
<td>Participation is empowering</td>
</tr>
<tr>
<td>People show willingness to help others</td>
<td>Reciprocity (give and take)</td>
<td>Networking</td>
</tr>
<tr>
<td>People involved share a collective identity</td>
<td>Companionship</td>
<td>Communication</td>
</tr>
<tr>
<td>People offer and accept advice</td>
<td>Collectively look for opportunities</td>
<td>People behave respectfully to one another</td>
</tr>
</tbody>
</table>

Firstly, I deliberately used ‘people’ as a subject of collegial activity in relevant statements to facilitate variation in participants’ conversations regarding who was involved in their collegial doctoral practices. Secondly, I chose to phrase some features of collegiality as abstract nouns, for example, ‘companionship’, to elicit interpretation and prompt participants into articulating what they understood by the abstract noun within the context of doctoral education. Nevertheless, it transpired throughout participants’ conversations that some abstract nouns, such as ‘trust’ and ‘communication’, required little elaboration. Participants seemingly agreed on what was meant by ‘trust’ with little articulation.

The work of doctoral participants throughout the card sorting activity was to qualitatively identify importance in what the statements on the cards meant to them.
Meaning emerged through participants’ conversations as shared topics of discourse (Säljö, 1997). Meaning could also emerge from the hierarchical positioning of cards negotiated between the participants, and from participants’ own analysis (see Figure 2).

Figure 1: Example of participants’ thematic analysis of their hierarchical card sort (P13/14)

In Figure 2, the two doctoral participants identified the relationship between three features of collegiality as ‘mana’. Mana is an important concept in a Māori worldview, and relates to personal and collective prestige (Berryman et al., 2017). Mana was used by the participants in this context to define ways that people should relate to one another in collegial practices. No other participants used the concept of mana, although all participants talked in different ways about relational conduct. This example demonstrates how qualitative variation could emerge within and between how participants expressed their experiences and understanding of collegial practices in doctoral education, which was context-specific to each pair. Independently, or in a different pairing, participants might
have positioned cards differently, demonstrating how data have the potential to be both fluid and context dependent (Fielding, 2012).

I purposefully paired participants who formally took part in the card sorting activities with another participant from a different division. My reasoning was to provoke greatest variation in how participants might have experienced their doctoral education, creating increased discussion and conversation. Pairing participants from different divisions for the card sorting activity meant that participants were consistently intrigued about how practices operated differently in different departments. The nuanced and not so subtle differences between the divisions and departments, and between participants from the same department, created variation in how collegial practices in doctoral education were experienced.

With participants’ consent, I audio-recorded every card sorting activity, took multiple photographs during and after each pair’s card sorts, and took observational field notes while participants conversed and sorted the cards. Each card sorting activity involved only one pair of participants at a time. Videoing the card sorting activities might have provided data on participants’ body language during the activity, but I did not think that this would necessarily have added a great deal to the richness of the data base. Additionally, video methods of recording are more intrusive and present greater challenges for protecting the anonymity of participants. At the end of every sorting activity, I invited participants to add further comment, or to suggest any statements describing collegiality that might be missing. Finally, I recorded the position of each sorted card against the X- and Y-axes.

As I prepared each file, I allocated a number identifier that related to each pair of participants. For example, Audio_P3/4 relates to the audio-recorded conversation of participants 3 and 4, and likewise, Photo#2_P8/9 was the second photograph I took during
the card sorting activity of participants 8 and 9. From this point hence, numbers became my only means of referencing the participant sources of data in written contexts, such as this thesis. Once all the card sorting activities were completed, I uploaded the data into the software.

Research design that includes a rating scale can be problematic in some qualitative methodologies, and could be seen as limitation of the card sorting method I used. Ashworth and Lucas (2000) caution that use of a rating scale has potential to distort participants’ responses to the phenomenon in question, ‘bending’ data to the particular format of the research technique in ways that may not be compatible with gaining clarity about how participants share commonalities and variations in their experiences. From this perspective, using a rating scale to sort statements of collegial practices could reflect assumptions made by myself about collegial practices, thereby ‘bending’ students’ responses about how they experienced doctoral education. However, I follow the position of Collier-Reed and Ingerman (2013), who place emphasis on designing a data collection strategy that facilitates participants reflecting on their relationship with the phenomenon. My research design involved students using the rating scale in pairs, negotiating and discussing their decisions, sharing their experiences of collegiality and doctoral education while they conversed. And on two occasions in separate card sorts, students chose to reject the rating scale altogether for some statement cards because they judged the statement had no relevance to collegiality nor doctoral learning.

The card sorting activity presented opportunities for participants to stray from the focus of collegial practices, potentially introducing ‘unplanned’ deviations some researchers would seek to avoid (see Bowden, 2005, for example). Everyday conversation
tends to function in this way, and where conversation constitutes data, asides and deviations present important insights for analysis. I explore this proposal further.

**Considering participant conversations as a form of interviewing**

Creating an atmosphere conducive for conversation is critical to interview contexts to enable participants’ reflection and conversation (Åkerlind, 2005). The conventional semi-structured approach to interviewing used in phenomenography relies on the researcher being an attentive listener (Ashworth & Lucas, 2000; Booth, 1997). Beyond a few introductory questions, researchers are advised to adopt an open-question approach to facilitate participants to reflect deeply on the phenomena of interest (Åkerlind, 2005; Bowden, 2005). In this study, the participants were involved instead in a communicative encounter (Säljö, 1997), effectively interviewing one another. Participants often told stories, asked one another questions, sought clarification, and tested ideas, while negotiating where to place statement cards. The focus on collegial practices provoked by the statements on the cards maintained a structure for open conversation about collegiality, without limiting changes in possible directions of conversation. This encounter created an occasion for deep reflection when participants asked one another questions, sought clarification, and provide alternative perspectives.

Researchers who seek to control the direction of conversation can present as being dogmatic (Säljö, 1997; Tight, 2016), and this approach can narrow participants’ opportunities for reflection (Säljö, 1997). When participants strayed from the focus of collegial practices and began talking about other relationships in their doctoral education, I judged this deviation to be important. Deviations have the potential to illuminate participants’ experiences of collegiality. In this research, deviations offered variations in participants’ accounts and their ways of ‘knowing’ doctoral education. Had I controlled for
deviations, I might have missed insights into how participants made sense of their supervisory relationships, for example.

A final advantage of using participant conversations as a source of data was the opportunity for me to ‘listen in’ while participants sorted their cards. Liberated from the role of interviewer, I became an ‘engaged listener’ in the conversation, with the space to become more attentive to students’ ways of knowing and doing collegiality.

**Listening-in**

‘Engaged listening’ requires the researcher to be attentive to conversation, and alert to how participants build and articulate their conceptualisations of the world around them (Gerard Forsey, 2010). I attended to how participants related their experiences to their understandings of collegiality, who they counted as colleagues, and their references to or descriptions of collegial practices during all the focus groups and card sorting activities.

As an engaged listener, I remained part of the social organisation of conversation. My participation was active in terms of engaged listening and participant observation, but at the same time, socially passive in the sense of being an observer of the conversation, rather than a regular contributor. Listening-in enabled me to make extensive field notes for future reference should I need them. In addition, I photographed and listed arrangements of sorted cards. This combination of listening and observing during the research activities facilitated productive data collection. Keeping field notes additionally represented an early stage of my noting commonalities and variations among students’ understandings of collegial relationships and practices, and their experience of doctoral education.

I suggest listening-in demands a different type of reflexivity to interviewing. While participants conversed, I did not need to decide which line of questioning to pursue next, as I might do when conducting a semi-or unstructured interview. I found myself more able
to focus on what was remarked upon, or remarkable about how participants were engaging in their conversations about collegial practices. I could identify participants’ conceptualisations of collegiality that were contested or agreed upon in a conversation, making a note to see if such conceptual differences or similarities arose during the next pairing of participants. For example, the question of whether collegial activities needed to be purposeful prompted particularly varied responses. The practice of listening-in was the start of immersing myself in participants’ conversational data. I audio-recorded all conversations, which subsequently afforded multiple opportunities for listening-in.

**Using audio recordings of conversations as a form of transcript**

At the start of each research activity, I asked permission from participants to record their conversation using a digital recorder. This request was in the Participant Information Sheet too. I explained to participants that I would not conventionally transcribe the recording of the conversation because, once saved as an mp3 file, the recording has analytic or evidential use for a researcher as a transcript (Ashmore & Reed, 2000). A further advantage that I identified was that an mp3 file could be analysed using software technologies. My use of a recording device and an mp3 file transcript were examples of transparency in this study, providing an audit trail back to the conversation sources of data. Participants were comfortable with this information, and all granted me permission to record their conversations.

A researcher switching on a recording device embodies a set of social and cultural discursive assumptions, and the device has a material role in mediating research practice (Nordstum, 2015). While I asked permission to use the recording device, I assumed that in a university research environment, all the participants were likely to share similar understandings of how a recording device would mediate data collection. Were I speaking
with participants elsewhere who were not doctoral students doing research themselves, I would not have made such assumptions. On reflection, I took for granted the university environment as a research context. Participants were doing their doctorates in different divisions and disciplines, and while some may have been familiar with qualitative research and its tools, others may not. My research practice was more reflexive when I began to engage with the data I had collected.

Researchers should demonstrate further caution when considering the potential of data to mediate authentic meaning (Ashmore & Reed, 2000; Tessier, 2012). Nordstrum (2015) cautions that researchers risk instilling the recorded conversation with “ontological realities, meanings, and experiences of stable subjects and objects that exist outside of the researcher” (Nordstrum 2015, p.389). In other words, the recording device works as a tool to mediate what researchers suppose is the ‘real’ world of participants’ experiences. And researchers risk creating a ‘new’ social reality for participants when they assume that recorded data is an authentic representation of a participant’s meanings. Nordstrum’s caution regarding researcher assumptions served as a reminder for me to return to ideas about how practices both construct, and are constructed by, the social world (Gherardi, 2012; Schatzki, 2008), and about the researcher’s relationship to the research (Bowden, 2005).

Next, I demonstrate how phenomenographic principles facilitated a rigorous analytic method. Specifically, I elaborate on the stages of analysis I undertook to identify three main thematic conceptualisations, and the relationships within and between them.

**Applying phenomenographic principles to data analysis**

Phenomenographic researchers are advised to ‘bracket’ their prior assumptions and biases regarding a phenomenon. The aim is to achieve researcher objectivity and openness
to meanings in data (Ashworth & Lucas, 2000; Marton, 1994). Researcher objectivity is less compatible with social practice perspectives, where the researcher should recognise their practices as implicitly part of the research arrangement (Schatzki, 2008). In response to this apparent tension, I devised a set of theoretically-informed principles that would scaffold my awareness of my relationship to the data. These principles, extrapolated from literature on phenomenography, were aimed at maintaining ethical and methodological trustworthiness as a solo researcher managing and analysing large amounts of data.

Effectively, I saw the principles as a tool for making visible my assumptions regarding data, before I decided on the most appropriate way to ‘bracket’ or acknowledge assumptions. In addition, I envisaged that the principles would facilitate consistency in analysis practices, enabling me to ‘hear’ the variations and commonalities within participants’ experiences of collegial practices. The three phenomenographic principles are as follows:

- Researcher familiarity with data through immersion
- Researcher openness to how commonalities and variations appear to participants
- Researcher attention to interrelated understandings that reflect collective conceptualisations of phenomena

The three principles are sequential when put into practice, in a sense of developing familiarity with the data set, adopting a sense of openness to meanings within the data, and then attending to interrelationships between and within themes (see Figure 3).
The three principles are also bi-directional, and I backtracked on numerous occasions during my data analysis to reiterate analytic procedures. I used these three principles to frame the following explanation of my data analysis process.

**Aiming for familiarity with data through immersion**

Immersion in data is an iterative process, and this analytic principle played an important role in developing my familiarity with commonalities and variations in collective meaning across the participant group (Åkerlind, 2012). As Figure 3 indicates, I first needed to immerse myself in data (audio, visual, and field notes). I systematically uploaded each file to the software, adding field notes to contextualise each photograph, and listened to each conversation recording without initially making a direct analytic response.

On the second listen to audio files, I commenced a general coding stage, attentive to the seven dimensions of practices that I outlined earlier in this chapter, and in Chapter Two. At this early stage, I kept a list of the seven dimensions of practices to hand, and created initial codes that I felt described the content of the conversation (refer to Figure 4, second column). Interestingly, participants rarely mentioned material objects, but did offer intrapersonal reflections which I coded as ‘self’. The seven dimensions as illustrated in

*Figure 2: Phenomenographic principles guiding data analysis*
Figure 4 served an initial organisational purpose for more rigorous data analysis, I needed a further layer of codes, partially listed in the third column.

Figure 3: A representation of early stage data analysis following immersion principles

Whenever an extract of conversation appeared to illustrate or infer one of the seven dimensions of practice, I highlighted the mp3 file of the conversation in the software in a similar way to highlighting a piece of text. I then added a code to the software, such as relationships with people.

Where I recognised several dimensions of practice or a variation on a similar idea present in the conversation extract, I attached several codes (see Figure 4). For example, some participants spoke about their doctoral relationships with people in ways that they explicitly identified, or that seemed to infer, professional development. Some participants
also spoke of doctoral learning in terms of professional development. At this stage of immersion, I simply attached notes to the codes using a software facility.

On my third listen of all the audio files, I commenced transcribing verbatim extracts of conversation as quotes. Using the software meant that I could replay extracts of conversation as often as required. I was additionally able to refer to field notes when the spoken word was unclear, or when the general tone of conversation changed for any reason.

Commensurate with the principle of immersing myself in data with an open-mind (Åkerlind, 2012), I coded data freely, and after listening to each audio file three times, I had identified 183 different codes. Hence Figure 4 illustrates a partial selection of codes. The large number of codes was probably symptomatic of my insufficiently differentiating at this point between the collective view and individual participant views (Åkerlind, 2005). Such a quantity of codes was clearly unworkable, but the purpose of the immersion stage of analysis was for me to develop familiarity with the data. These initial codes, while numerous, began to show a picture of what collegial practices meant to this group of participants when asked to contemplate doctoral education in this way.

**Openness to how commonalities and variations appear to participants**

Phenomenographic principles require the researcher to be open and willing to adjust analytic themes as awareness of the data set grows (Åkerlind, 2012). Having immersed myself in a substantial data set, I systematically revisited each coded extract of conversation, image, and text. My purpose was to begin to recognise greater depth of commonalities and variations in codes. As I revisited each extract of participant conversation, I checked the comments and quotes for accuracy, and whether I still agreed with the initial coding.
I noticed that I had attended to individual stories far more when coding my first few audio files of the card sorting conversations. Yet from a phenomenographic perspective, variation in the collective experience takes precedence over individual experiences (Bowden, 2005). It is reasonable to suggest that as my analytic practices developed, conversations analysed later in the process may have benefitted from my growing awareness of the data set, and of how each conversation related to the next, and to the group as a whole. Participants’ meanings more easily shifted from an individual conversation, to commonalities across the whole data set (Marton, 1994). Additionally, I decided some codes could merge since there were commonalities between these codes. Revisiting coded data was also important for analytic rigour.

Despite this step, the quantity of data remained considerable, and applying the principle of openness was challenging. The software helped to remove ambiguity around the context of participant’s comments, and maintain the analytic principle of focusing on participants’ meaning (Bowden, 2005). But to commence the analytic process of thematically sorting each quotation or comment, I printed and separately cut all the quotations into individual strips. At this point, I resorted to hand-sorting.

The physical movement of data enabled me to iteratively test meanings and create thematic groupings accordingly. Placing a quote in a thematic group of quotes with a similar sense of meaning created a new set of contextual relationships, while maintaining the former context of the data (Marton, 1986). In the early stages of phenomenographic analysis, maintaining familiarity with the context of a participant’s data provides an important means to maintaining the primacy of the participant’s voice, and avoids researcher assumptions (Bowden, 2005). With the codes abandoned momentarily, I focused on gaining a greater sense of participants’ meanings. The more familiar I became with the
data, the better placed I was to identify relationships within and between the different ways participants talked about collegial practices. I began to achieve some stability in meaning across the data set (Marton, 1986), and I identified seven thematic groups: learning; environment/conditions; intention; networks; relational practices; emotions; and self-as-context (Table 5).

Table 5: *Thematic groups that emerged from commonalities and variations in data*

<table>
<thead>
<tr>
<th>Thematic group</th>
<th>Commonalities</th>
<th>Variations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral learning</td>
<td>169 data items</td>
<td>Academic integrity; distraction; doctoral learning; knowledge; learning; peer learning; professional development; reflective learning; supervisors</td>
</tr>
<tr>
<td>Environment/conditions</td>
<td>51 data items</td>
<td>Circumstance; departmental relationships; disciplinary discourses; types of networks</td>
</tr>
<tr>
<td>Emotions</td>
<td>29 data items</td>
<td>Types of emotions; isolation; mental health; wellbeing</td>
</tr>
<tr>
<td>Intention</td>
<td>60 data items</td>
<td>Goals; purpose; reciprocity</td>
</tr>
<tr>
<td>Networks</td>
<td>53 data items</td>
<td>Expertise; networking; types of networks</td>
</tr>
<tr>
<td>Relational practices</td>
<td>268 items</td>
<td>Code of conduct; collaboration; collective identity; collectivity; collegiality; commitment; communication; community; group dynamics; integrity; leadership; mutuality; participation; peer support; power; reciprocity; relationships; socialising; sociality; status; trust; wellbeing</td>
</tr>
<tr>
<td>Self</td>
<td>128 data items</td>
<td>Autonomy; completing PhD; isolation; openness; personal dispositions; reflexivity; respect; self as context; self-direction; self-efficacy</td>
</tr>
</tbody>
</table>
My next step was to test whether commonalities were indeed present within each thematic group of data. This process involved systematically working with the respective quotes or comments allocated to each group. Taking ‘Networks’ as an example, I now illustrate how I analysed this data.

A facility of the software enabled me to explore relationships between 53 items of data that I had thematically grouped under ‘Networks’, enabling me to build a sense of how participants conceptualised networks in doctoral education. I identified commonalities in the data related to participants’ motivations for networking, different networks that they belonged to and identified with, network practices, values attached to concepts of networking (such as self-interest), and perceived benefits of networks to doctoral learning (and employment). Revisiting the data, I analysed for more nuanced variations, and identified three variations related to the ‘Networks’ thematic group: expertise, networking, and types of networks (see Table 5). I felt the commonalities and variations within the data were sufficiently interrelated to demonstrate ‘stability’ in my analysis of ‘Networks’ as a thematic group (Marton, 1986).

I subjected each of the seven thematic groups to the same analytic process of looking first at commonalities in the data and coding of the group, and then at variations in how the different codes related to each other within the thematic group. By the end, I was confident that I had identified seven stable thematic groups that I could argue demonstrated collective understandings of collegiality and collegial practices of doctoral students in this study (see Table 5).

The final step of a phenomenographic analysis process involves working towards a more interrelated and parsimonious number of themes. I move now to explain how I focused on relationships simultaneously between and within the thematic groups to develop
a deeper understanding of how students made sense of collegial practices in their doctoral education. The outcome of this analytic process would be my identification of three main interrelated themes.

**Attending to interrelated understandings of collegial practices**

Identifying how analytic themes interrelate represents one of the most challenging aspects of phenomenographic analysis (Åkerlind, 2012). Ultimately, my approach was informed by the overarching research question for this thesis: *How do doctoral students define and practise collegiality in a doctoral environment?* Seven thematic groups emerged from student participant data, and all contributed to an understanding of collegiality. But I was not yet in a position to present a parsimonious set of interrelated themes. To present an argument regarding what counts as collegiality in a doctoral environment, I needed to examine more closely the ‘critical variations’ within the ways that students made sense of collegiality (Åkerlind, 2012; Collier-Reed & Ingerman, 2013).

Critical variations represent the structure and meaning within the themes (Collier-Reed & Ingerman, 2013) of how students conceived of collegiality in doctoral education. Influenced by recent phenomenographic debates, I aimed also to identify relationships between the themes (Marton & Pong 2005; Pang & Marton, 2013). I returned to the data set again to identify critical variations in the data, and subsequently a parsimonious set of interrelated themes representing how students understood collegiality.

I listened to all audio-recorded data a fourth time, revisited summary texts from the focus groups, and looked back on field-notes. With a refreshed familiarity with the data set, I returned to the thematic groups to analyse for relationships between these groups. In effect, the process of seeking clear relationships between the thematic groups is a process
of establishing structure and meaning. As an outcome, three themes emerged that reflected students’ understandings of collegiality. The themes are as follows:

1. **An understanding that collegiality involved interactions with colleagues.**
2. **An understanding that collegial practices involved relational responsibilities to others who participate.**
3. **An understanding that collegial practices helped to mitigate the emotional work of the doctoral project.**

All three themes were qualitatively different (Collier-Reed & Ingerman, 2013), and had internal structure and meaning. In Figure 5, I offer as an example a diagrammatic representation of the internal structure of one theme, ‘An understanding that collegiality involved interactions with colleagues’.

![Thematic groups and codes that contributed structure and meaning to the theme](image)

**Figure 4**: A diagrammatic representation of the structure and meaning of one analytic theme

On the right side of the diagram, I illustrate the structure within this theme that represents students’ perceptions of colleagues by identifying the interrelated thematic groups, whose
meanings contributed to the theme. It should be noted that I concentrated on data from five of the seven thematic groups. I felt data from the groups Self and Emotions did not strongly support this theme, although some extracts of data or quotations may feature. On the left, I illustrate the structure within each thematic group by listing the specific codes that I felt constituted meaning of the theme of colleagues. To select these specific codes, I concentrated on the ways that data from each thematic group expressed students’ understanding of collegial practices involving colleagues. This theme is discussed in detail in Chapter Five.

I repeated this process for the remaining two themes, each are discussed respectively in Chapters Six and Seven. Other thematic interpretations of the data were possible, but the constraints of a thesis require parsimonious findings, and the outcome of my analysis was three themes, each of which had structure and meaning. I also identified structure and meaning between the three themes in the following way. Students’ understandings of collegiality inferred that students see diverse others as colleagues during their doctoral project (theme 1). Furthermore, students perceived that relationships between colleagues involve relational responsibilities (theme 2). Students valued collegial relationships as productive to their doctoral learning, and because collegial relationships helped to mitigate some of the emotional work of the doctoral project (theme 3). I discuss how the interrelationships between the themes create structure and meaning further in Chapter Eight.

**Summary**

An important consideration of social practice methodology is to provide researchers with tools for changing practices (Gherardi, 2012; Saunders et al., 2015; Trowler, 2014; Wilkinson, J. & Kemmis, 2015), while phenomenography is often applied in student-
centred research (Collier-Reed & Ingerman, 2013; Entwistle, 1997). I have demonstrated how the collective principles of social practice methodology and phenomenography, and complementary research methods, combined to form a hybrid methodology that is both student-centred and a tool for change. In this chapter, I outlined the hybrid methodology I used for this study, which can also support students and academic developers as they consider how to enhance doctoral education.

I maintained collective principles throughout the research process in terms of data collection methods, and my adaptation of phenomenographic analysis. Phenomenographic analysis is recognised as involving a lengthy process. Indeed, Marton (1986) describes the process as: “… tedious, time-consuming, labour-intensive, and interactive” (p. 42). I wish I could argue! The last of Marton’s descriptors is perhaps the least represented in this chapter, since I conducted this research primarily as a solo researcher. The main form of interaction took place with supervisors, whose role in scrutinising the research design, analytic practices, and findings provided a crucial contribution to rigour and transparency in the research and its contributions (Cope, 2014).

In the following three chapters I present the three themes introduced in the previous section. In Chapter Five, I discuss the role of colleagues in doctoral education. In Chapter Six, I move on to relational responsibilities in collegial practices. In Chapter Seven, I argue that collegial practices and relationships help to mitigate some of the emotional work that students experience as part of their doctoral projects. The final chapter of this thesis, Chapter Eight, presents the main findings and the research recommendations. The context of doctoral education, as discussed in Chapter Eight, and earlier in Chapter Three, does not lend itself to easy solutions; nevertheless, more could be done to encourage and assist students to cultivate collegial practices and relationships during their doctoral studies.
Analysis in this chapter focuses on students’ definitions of collegial relationships and how they positioned people involved in their doctoral practices in different ways. Students valued the contributions that colleagues could make to their learning, and saw themselves as colleagues to others. Students understood who counted as a colleague in terms of previous, current, and possible future practices. Given that students view having colleagues as productive for their doctoral experiences, I argue that colleagues could have a more prominent function in doctoral education than current conventions seem to permit.

A key theoretical idea underpinning this thesis is that relationships weave through all practices (Kemmis et al., 2012; Nicolini, 2012). Analysing relationships from a practice perspective means taking into consideration the circumstances and different dimensions of practices involved (Kemmis et al., 2012; Reckwitz, 2002; Wilkinson. J. & Kemmis, 2015). Previously in Chapter Two, I identified seven dimensions of practices that concern me in this thesis: people, activities, material objects, emotional phenomena, environment, discourses, and occasion or time. It may be the case that students’ talk of their collegial relationships infers some of these dimensions more than others. The apparent prevalence of some dimensions over others in students’ conversations will help to build an understanding of the practices and people involved in collegial relationships.

A key outcome of the analysis in this chapter is that students perceived a variety of people involved in their doctoral education as colleagues. This finding is notable because while colleagues is a term that people in the workplace might use to describe who they interact with, colleagues is not a term usually associated with doctoral education, or with doctoral students. My analysis will demonstrate that students based their judgements of
who counted as a colleague on a range of circumstances. For example, students inferred or used the term ‘colleagues’ to refer to people they met at conferences, members of the community who had helped them, and other students and academics. Students regularly acknowledged the potential colleagues had to contribute to their doctoral education, which meant that colleagues were a diverse group of people not always directly involved in students’ studies. Noticeably, when talking about colleagues, students spoke about supervisors in a different way, appearing reluctant to consider their supervisors as colleagues, but anticipating collegial practices nonetheless.

This chapter is divided into three sections. In the first section, I briefly establish how students used the term ‘colleague’ to describe a variety of people involved with or connected to their doctoral project. I elaborate on the people and circumstances where students seemed to think of others as colleagues, and theorise students’ perceptions. In the second section, I explore the apparently unique position that students apply to their supervisors when they talk about colleagues. This analysis is important to collegiality in doctoral education because of possible implications for supervisory practices. In the third section, I summarise that doctoral students understood who counted as a colleague, and related to colleagues in ways that were flexible, responsive to circumstance, and that drew on familiar practices.

**Who counts as a colleague?**

As an introduction to this section, I explain why I decided to switch my focus from discussing students’ collegial relationships and practices with peers, to those with colleagues. In some respects, students’ use of the term colleague became remarkable because in my original research design I used the term ‘peer’ in the recruitment emails and participant information sheet (see Appendix A). Although I offered little definition of who
students might consider a peer, it became clear from students’ conversations during the focus groups that students interpreted the term peer as various people they interacted with as part of their doctoral education.

Throughout the research, students spoke about interacting and learning with people within their departments and from other departments, people in the community, friends, and, to a lesser extent, people online (focus group #1; individual interview; conversations P7/8, P11/12, P15/16, P17/18, P1/2, P5/6). Students described interacting with people in various social arrangements: groups that comprised of mature student members; people they had met at conferences; online networks; Facebook groups; departmental and professional development events; writing and journal groups; and outreach activities.

‘Colleague’ seemed to provide a more meaningful expression of students’ relationships than the term ‘peer’. Other descriptors used by students included: “the group” (P5/6; P7/8); “the team” (P9/10); “other people” (P19/20); “a community” (P5/6); “collaborators” (P11/12); “casual acquaintances” (P15/16); and “old farts” (focus group #2). Students’ use of the term colleague stood out because of its uncommon use in doctoral education, and its link to the research focus on collegiality. Notably, students’ reference to colleagues varied in two main ways: who they counted as colleagues included a broad group of people, and who they contemplated might be future colleagues. These variations in students’ perspectives built an intricate picture of collegial relationships in the doctoral project shaped by the environment, and the purpose of their interactions, such as meeting their current or future needs. Students referred to past and present practices, changing identities, and places of learning. Unravelling this intricacy commences with students’ inclusive use of the term colleague to refer to people in their immediate environment.
Thinking about colleagues in ways that are shaped by familiar surroundings

In the following conversation extracts, students directly used the term ‘colleague’. In other extracts cited in this section, students spoke in more general terms, which I analysed as talking about others as colleagues. The conversations occurred during six card sorting conversations and a focus group. The conversations demonstrate how students held broad and diverse perspectives of how people in their immediate environment might be considered a colleague.

Students’ familiar or sociable relationships, and their understandings of place and purpose seemed to shape their judgement of who counted, or did not count, as a colleague. One student responded to the word ‘colleague’ in a way that initially appeared to focus on a sociable relationship, but additionally implied that the students’ understanding was shaped by the university environment. Asked by another student, “Who do you think of as your colleague?” the student replied: “I just automatically think of my office-mate there… To me she’s my friend” (conversation P1/2). In clarifying that an office-mate can be both colleague and friend, the student demonstrated the relevance of context for judging who might be considered a colleague. A researcher’s office is an environment where practices are bound by relational ethics and professional integrity. Schatzki (2008) discusses how arrangements interact to enable or constrain practices. The office, research activities, and a relationship with an office-mate provided the student with a context for understanding who counted as a colleague. Outside of the office and in a different context, the student concerned might configure this relationship between two office-mates differently. Yet the arrangement of office space, research activity, and relationship seemed to shape the student’ description of a friend as a colleague for the purposes of collegial doctoral practices.
In a separate conversation, a student configured the environment, relationships, and purpose differently. The context of this extract of conversation reflects a discussion about sharing achievement goals. The two students agreed that shared goals were less of an imperative to collegial practices than sharing some form of mutual interest and benefit. Ideas around mutual interest and benefit seemed to help the student define who counted as colleagues: “Feeling supported and comfortable by my colleagues in a way that allows me to learn well, both on my own and collectively” (conversation P7/8). I inferred from the context of the conversation that the colleagues who ‘supported’ and made the student feel ‘comfortable’ seemed to be familiar to the student, but not necessarily in the immediate environment, such as the same office. Moreover, the student seemed to suggest that colleagues participated in doctoral education in ways that collectively enhanced learning.

While it seems that familiar surroundings contributed to students’ judgements about who counted as colleagues, students’ conversations indicated that the nature of their relationship with colleagues was influential too. It seems that for students, being a colleague means more than simply placing an identity marker on a person, relationships and actions matter. I move on now to discuss how students’ perceptions of being part of a community shaped who they referred to as a colleague.

**Colleagues and a research community**

In the following analysis, I illustrate how the idea of community appealed to some students, and seemed to shape their perceptions of who counted as a colleague. For some students, their membership of a departmental community and the membership of their colleagues was an indicator of collective identity and responsibility.

In focus group #3, students likened colleagues who demonstrated leadership within their departments to being active members of the doctoral community. One student
described organising a day of disciplinary seminars as evidence of why they saw themselves as a colleague to others. Whereas, a second student remarked upon the importance of a colleague “being a team member who had something to share or add”. Colleagues, it would seem from the perspectives of these students, were people who actively contributed to their departmental community.

While the students cited in the following conversation extracts did not directly use the term ‘colleague’, they alluded to similar ideas of colleagues being active members of a community. In separate circumstances of a card sorting activity, two students discussed the statement, *people involved share a collective identity*. One student talked about organising a colloquium, and reflected why they had done so: “I think it [collective identity] can be quite important just in the broader sense, you know, of belonging to a community, you know with learning” (conversation P19/20). Two other students articulated their sense of belonging to a community differently: “Sort of having a sense of shared responsibility for the department itself, like as an entity sort of thing, your commitment to that sort of thing and the subject” (conversation P13/14). What seemed to be important for students in these two different sets of circumstances and in focus group # 3, was that colleagues could be counted on in terms of their willingness to contribute and take on responsibility for others with whom they shared a sense of collective identity.

Accepting that students judge who counts as a colleague in terms of actions, students in this analysis offered clear indications of the types of actions a colleague takes. Colleagues take on leadership roles, organise events and activities, act as team members, and contribute to the community. When students participated in these types of practices, they were demonstrating to others in the community that they were ‘competent’ colleagues (Barnes, 2005; Nicolini, 2012; Reckwitz, 2012). Their practices give structure and meaning
to what they do within their department community (Barnes, 2005; Nicolini, 2012; Wenger, 1998), implying that other members of their department community can identify them as colleagues.

While the practices of colleagues who organise and contribute to their department community may be more readily recognisable by others, the students who talked about collective identity and collective responsibility inferred that there were other ways to recognise who counts as a colleague. In their discussions of collective identity and collective responsibility, students seemed to suggest tacit ways of knowing others (Tsoukas, 2003) as colleagues. It may be that simply being a member of a departmental community is enough for students to count others as a colleague, but the student who talked about having “…a sense of shared responsibility…” (conversation P13/14) implied more. For students, who counts as a colleague, or how to be thought of as a colleague, may not always involve explicitly collegial activities, but may require students to have tacit knowledge of which practices matter in the day-to-day life of a departmental community (Collins, H. M., 2010; Hildreth & Kimble, 2002; Ribeiro & Collins, 2007).

In a separate conversation, a student described colleagues as “… collaborators in other institutions, and internationally they’re doing similar things. It’s more about building a community within the field than the institution” (conversation P5/6). This students’ conversation represented the third set of circumstances where students spoke of colleagues; colleagues were dispersed beyond the institution as community of researchers who shared a goal of enhancing their field of research. At this point the student was explaining how a small group of doctoral students knowledgeable in data analysis software were teaching other doctoral students. The students were inspired to act after learning about similar practices at a conference. The student explained how the workshops formed part of a wider
set of practices carried out with “collaborators in other institutions” (conversation P5/6). This student and colleagues were motivated to not only teach other students new skills and understanding, but to contribute to a broader international community in the field.

For this student, collaborating with others counted as being a colleague. Furthermore, this community of colleagues shared a goal to increase the number of people able to understand and carry out statistical analysis, thereby growing their community beyond the site of one university. It could be said that colleagues in this IT community had a shared sense of identity, responsibility, and purpose.

Thus far I have analysed data where students have discussed who counts as a colleague in terms of a colleague’s place in familiar surroundings, departmental communities, and disciplinary communities. The environment and practices involved in relationships enable or constrain how we come to see others (Schatzki, 2008; Wilkinson. J. & Kemmis, 2015). Students in conversations P1/2, P5/6, P7/8, P13/14, P19/20, and focus group #3 also established high expectations of the types of practices and actions that helped to identify who counted as a colleague. In the next conversation, one student seemed to dispense with the importance of place and familiarity for identifying a colleague, introducing alternative criteria for colleagues who were dispersed.

**Dispersed colleagues**

Students who identified others unknown to them as colleagues, did so because these colleagues were in the practice of sharing knowledge. Accordingly, I ascribe students’ relationship to dispersed colleagues as founded on ‘knowledge affinity’. The following conversation extract illustrates knowledge affinity:
A certain amount of intellectual collegiality, you know, you read some person’s thing you say, “Yes! This person and I are colleagues even though he doesn’t know me, or whatever.” I think, yeah you’re right, you person you! There’s a collegiality that happens there. (conversation P9/10)

This student appeared to relate their concept of colleague to knowledge affinity. One academic’s work resonated to the extent that the student could identify with the academic’s way of thinking. The student interpreted the practice of publishing research as a form of intellectual collegiality, and positioned the academic involved as a colleague. Practices involved in sharing knowledge are conventions of academic practices, and include the use of everyday academic material (or digital) objects such as journal articles, books, hardware and software. Importantly, people take meaning from everyday, routine practices (Nicolini, 2012; Schatzki, 2005a; 2008). The idea of intellectual collegiality offers an inclusive perspective on who students might consider a colleague, based as it was by this student on familiar practices, rather than a familiar place or familiarity with people socially.

A common thread in how students articulated who counted as a colleague related to familiar practices, collective experiences, and/or shared goals. In the next section, I consider how students’ familiar or habituated practices might have informed how they saw others as colleagues.

Past practices informing current practices

Students’ use of ‘colleagues’ could be contextualised in terms of their experiences prior to commencing doctoral study, particularly if they had returned to university after a period of employment. Five of the students, whose conversations were quoted in the last section, talked at some point of their previous careers. One of the students was studying on an interdisciplinary research project, which involved working with different people from
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three departments and two different divisions. Students’ use of ‘colleagues’, when taking previous work into account, may have involved transferring workplace habits to doctoral study practices.

Transferring workplace identifiers to colleagues at university makes sense if a student has spent a good part of their adult life as a professional, an employee, or in community service. The student may have habituated practices where thinking of others as colleagues becomes part of their everyday practices (Reckwitz, 2012; Turner, 1994). Various students throughout the research mentioned previous employment and careers including the following non-university sectors: management, tourism, teaching, fitness, archaeology, youth work, community development, viticulture, journalism, surveying, and health. Eight students specifically referred to careers prior to study to explain their viewpoints, or to differentiate between collegiality in university settings and non-university settings (focus group #1; conversations P3/4, 7/8, 9/10, P17/18, and P23/24). Students’ references to their employment histories illustrated how people adapt previous practices to new locations, to help them understand new and different situations (Schatzki, 2008). Past practices may have helped students understand academic practices as they looked for familiar clues for what practices constituted the work of colleagues in university settings.

Overall, students in focus group #3 and twelve students in six different card sorting activities, perceived others as colleagues partly based on collective identity, collective responsibility, and a colleague’s willingness to contribute to their community. Students seemed to take the view that a colleague reciprocated collegial practices. In short, students valued the practices and relationships of colleagues because the practices and relationships were purposeful and interdependent (Barnes, 2005; Nicolini, 2012). Students understood colleagues and collegial relationships since many of the activities that they identified as the
work of colleagues were collectively performed (Barnes, 2005), such as teaching, statistical analysis, or supporting others, working towards goals, sharing knowledge, and organising events for their communities.

Some students seemed to bring pre-existing expectations of colleagues and collegial practices to their doctoral studies. Students’ references to past employment and workplace practices is likely to have informed who counts as a colleague in the new circumstances of research activities, relationships, and physical spaces in the university. Next, I discuss how students reflected on the potential for current colleagues to become future colleagues.

**Future colleagues**

Six students acknowledged that colleagues involved in their learning now could potentially become future colleagues in some capacity. Discussing the merits of networking, one student reflected on the academic environment “Doing a doctorate isn’t just about learning the material, it’s also about learning how to work in that environment right?” (conversation P5/6). “Doing a doctorate” and “learning how to work” illustrates ‘knowledge-in-action’ (Price, Johnsson, Scheeres, Boud, & Solomon, 2012). For students who aspired to work in an academic environment, as was the case for one of the students in this pair, knowledge-in-action describes a process whereby practices become recognisable by doing them. Students may receive explicit training in skills and practices involved in research, service, and teaching, but learning about mundane and everyday academic practices are important too. Learning to work in an academic environment may require students to tacitly navigate departmental and institutional cultures, applying skills and knowledge which may not feature in a formal workshop, and learn the types of mundane practices that experienced practitioners are likely to perform without thinking
In doing so, students might learn to cultivate their identity as a future colleague. Students who aspire to fit-in as a future professional might recognise the importance of taking up the position of a colleague and acting collegially. How people see others in their working relationships relates to how they see themselves (Cumming, 2010a), and Hull (2006) notes that, discursively at least, education environments have long had a reputation for collegial practices. Participants 5/6 had previously talked about colleagues, and agreed that networking involved practices that could help students learn and contribute to others. The inference I took from the comment “…learning how to work in that environment…” (conversation P5/6) was that while they already considered themselves as colleagues to others, the challenge for these students was becoming recognisable as a future colleague.

With future employment on the minds of many doctoral students, some students considered that how they conducted themselves now as colleagues could have ramifications for the future. One student made the comment while debating with a second student whether networking could be considered collegial activity. There was some initial disagreement between the two students on this point, until one student commented:

You can potentially come out of a department of people that, you know, are all doing similar things. You can end up in roles where you may well do something together again, so the bonds that you sort of create in your department, and even outside of that, may influence your ability to get a job. (conversation P11/12)

The reference to departmental relationships resonated with the second student, who suggested that students network to “make connections either for learning or work-related stuff, jobs, collaborating” (conversation P11/12). As in the previous example, neither student conversed using the term colleague, but they described similar circumstances to
other students who identified what counts as a colleague in previous sub-sections: familiar people, and a departmental community. The “bonds” that students create while studying, if considered in terms of future employment, could be the bonds with a long-term, and potentially influential colleague. Although it was not clear in this instance whether the student inferred employment in the university or outside of academia, who counts as a colleague was a person who might be instrumental in future employment.

The four students whose comments I analysed in terms of who counts as a future colleague (conversations P5/6 and P11/12), constructed themselves as student colleagues. Yet at the same time, these four students were aware that they were ‘becoming’ colleagues for some unspecified future employment role. Being recognised by others as a ‘competent’ colleague carries additional weight if a student is also thinking about being recognised as a future ‘competent’ colleague. A current global trend in doctoral education focuses on student development of transferable skills (Hargreaves et al., 2017; John & Denicolo, 2013; Levecque et al., 2017; Manathunga et al., 2009; McGagh et al., 2016; Nerad, 2015). From this perspective, students’ recognition of the importance of the transferable skill of being viewed as a future colleague was well-founded.

**Summarising inclusive ways of thinking about colleagues**

To summarise the analysis thus far, students had clear ideas about who counted as a colleague, and related to colleagues in ways that were flexible, responsive to circumstance, and that drew on familiar practices. In theoretical terms, considering others as colleagues involves understanding practices anchored in tacit knowledge and in relationships (Reckwitz, 2012; Schatzki, 2008). The material environment and place can also be considered as anchors for students’ conceptualisations of colleagues, although these dimensions of practice were less apparent in most students’ conversations. Many students
enter university with habituated workplace practices, recognising others as colleagues, and having shared, yet unspoken, knowledge of the relationships involved in being a colleague. Becoming a doctoral student, therefore, may entail adapting and developing existing practices to new circumstances, including ideas about who counts as a colleague.

In terms of the argument I presented in this section, approximately half of the students participating in this research saw people involved in their doctoral education as colleagues. Students viewed colleagues as an asset to doctoral learning based on their intellectual collegiality and willingness to help. Colleagues were people with whom students could share goals, and who participated in purposeful activities. Colleagues now might also be useful people to know beyond the doctoral project as future colleagues. Importantly students also saw themselves as colleague to others, and described ways that they had reciprocated collegiality. A notable exception to their flexible ways of thinking about colleagues, students did not appear to consider supervisors as colleagues.

Interestingly, when asked whether participants thought any statements were missing from the sorting cards, one student remarked there was no mention of supervisors (P5/6). I deliberately chose the noun people for the descriptors on the cards, such as people offer and accept advice, to enable students to specify a subject. At no point did my research design intentionally seek to introduce discussion of students’ relationships and practices with supervisors. The following section examines how and why discussion of supervisors occupied a considerable amount of student conversation.

Supervisors, colleagues, and collegial relationships

To students, supervisors embodied too much status to be considered a colleague, but at the same time embodied too much importance to doctoral learning that they could be left out of the conversation. Using students’ own terms, this situation reflected hierarchy
and hierarchical relationships. How students understood hierarchy seemed to create a contradiction in thinking about collegial doctoral learning and who could be thought of as a colleague.

Many students appeared to anticipate that their supervisor would act in a collegial manner, because they spoke on numerous occasions about supervision practices when talking about collegial learning. Contradictions emerged when it became apparent that students were reluctant to explicitly name or describe supervisors as colleagues. They acknowledged the expertise and academic status that supervisors had, and seemed to anticipate collegial relationships and practices with their supervisors. But students were reluctant to call their supervisors colleagues due to the hierarchical dynamics of student-supervisor relationships.

Before embarking on this analysis, it is worth establishing first the circumstances in which students placed their supervisors so prominently in conversations about collegial peer learning. Supervisors would seem an unlikely topic in a conversation initially focused on peer learning. Yet I identified supervisors as a code on 51 separate occasions, more than any other code in the data set. Consequently, students’ talk of supervisors represented an important variation in the theme of who counts as a colleague. The prevalence of students talking about supervisors was notable, since students from all four divisions of the university and 22 departments were involved in the research. I will draw on the theoretical explanations of habituation (Turner, 1994), competence (Reckwitz, 2012), and constitutive rules (Swindler, 2005) to frame why hierarchy might deter students from regarding their supervisors as colleagues when they appeared to view others as such, including other academics.
For students, institutional hierarchy meant supervisors could not be considered colleagues. Drawing on student conversation extracts and focus group data, I first illustrate, how students considered hierarchy in relationships with supervisors. Then, I discuss the emotional work experienced by some students when managing hierarchy in supervisory relationships. These students experienced emotional work due to their attempts to disrupt what they saw as hierarchical conventions of supervisory practices. For these students, hierarchical supervisory practices were more challenging for them than most students in this study seemed to experience.

**How students considered hierarchy in relationships with supervisors**

In this subsection, I discuss how students seemed to frame their supervisory relationships in terms of perceived hierarchical rules, which restricted the possibilities for them to contemplate alternative models of supervision. Most students seemed to find supervisory practices too marked by hierarchy, and too “complex” (conversation P5/6) to be considered a form of peer interaction. During focus group #1, one student described being placed in an office with another doctoral student along the corridor from their supervisor. The student explained that the supervisor thought being close-by would be in the best interests of the students, even though this meant the students were housed in a separate building to the other postgraduate students in the department. The student described finding this situation quite difficult and isolating at first, and then pointless when the supervisor went on a period of prolonged leave. But at no point did the student challenge or discuss the matter directly with the supervisor. Instead, the student considered seeking advice from the Graduate Research School. I would suggest that the hierarchical relationship between student and supervisor, particularly at the start of doctoral study,
meant this student accepted a situation that was unsatisfactory both for learning, and for a sense of belonging.

Other students offered more direct observations on hierarchy in supervisory practices:

Doctoral learning is all about hierarchy. I guess it’s just recognising that the university is [pause]

High class?

Yeah, I’m just thinking about academic status or job status, whatever, it’s a hierarchical organisation. There’s students and there’s academics. I think it’s very hierarchical. (conversation P15/16).

The simple summary: “There’s students and there’s academics. I think it’s very hierarchical” (conversation P15/16) sums up this perspective. This statement was not challenged by the co-participant in the conversation, signalling acceptance that the university environment is hierarchical. Yet it is important to consider why hierarchy appeared to be so readily accepted.

In many respects, students’ alignment of supervision practices to hierarchical practices is not surprising. Students’ acknowledgement of hierarchy reflected a relational pattern that has a long legacy. Doctoral supervision practices draw on hierarchical conventions of university settings, and some practices could be considered resilient and long-lasting (Swindler, 2005). Conventional supervision practices replicate hierarchical relationships and practices such as ‘expert-novice’ (McAlpine & Amundsen, 2009), ‘mentor-apprentice’ (Austin, 2002; 2009; Pyhältö et al., 2009), and ‘principal researcher-research team member’ (Littlefield et al., 2015). Despite universities being places of knowledge creation, discovery, and innovation, universities are also places where
traditional system-wide practices are reproduced. Supervisors might be enacting supervisory practices in ways that presume the rules of interaction between supervisor and student have remained the same (Swindler, 2005).

Students arrive at university habituated to hierarchy. These practices commence from being a learner in school, and are habituated or further embodied and adapted through tertiary education, ultimately evolving to meet the assumed expectations of a doctoral research setting. Effectively, habituation is embodied through prolonged engagement and repetition of practices (Turner, 1994). Students repeat and internalise patterns of interactions and relationships over such a long period of time that hierarchical practices become stable and anchored in structures (Swindler, 2005).

Entering university involves students seeking recognisable educational structures, and adapting to different circumstances. Educational practices for most learners have defined hierarchical roles, spaces, and practices. Classrooms and how to address teachers might change, but many conventions are sustained so that students reproduce familiar patterns of hierarchical interactions. In this respect, habituation may well have led students in this study to an acceptance of hierarchy, or to anticipate hierarchy where it may not exist.

Students appeared to unquestioningly accept hierarchy as part of the status quo of doctoral learning during all conversations where they spoke of supervisors. The following extract suggests an explanation:

While it’s not viable for your learning that you have equal [status]…You’d hope at the end of it you’d have more status, or at least a little bit more of it. Maybe just learn how much you don’t know? (conversation P13/14)
Hierarchical practices and structures seemed to represent a taken for granted or normative convention of university life for students. The statement: “It’s not viable...” (P13/14) suggested that for this student in their doctoral education, equal status between student and supervisors was not possible. Certainly, at the start of a doctorate a student is unlikely to ‘equal’ their supervisor in terms of specialised knowledge and academic expertise. Some students might interpret this difference in status at the start of their studies as being representative of the ‘constitutive rules’ (Swindler, 2005) of hierarchical supervision, restricting their perceptions of how supervisory relationships might evolve and change during candidature. Perhaps for this reason, the student seemed to struggle to imagine a point when their status might change.

**Relational boundaries with supervisors**

Students nevertheless had clear relational boundaries in how they wanted to interact with their supervisors, which included high expectations for collegial practices between themselves and their supervisors. Most students anticipated boundaries in their relationships with supervisors, recognising the academic status of supervisors, their expertise, and conventions of formality in their interactions. Students positioned their supervisors as more knowledgeable others: “At least with your supervisor it’s important that … [you] feel that they are the expert but at the same time, like, they need to be approachable” (conversation P11/12). This comment is illustrative of the level of familiarity with supervisors that most students in the study felt comfortable with. Students acknowledged their supervisor’s status as an “expert”, and felt sufficiently comfortable to approach their supervisor on matters related to their thesis and learning, such as sharing goals (conversations P1/2; P3/4; P7/8; P13/14; P15/16; P17/18).
Some students discussed social boundaries with supervisors, preferring social distance in their relationship: “I don’t know if I’d be comfortable with that level of relationship with a supervisor; I don’t need to come to your house for dinner once a month thank you!” (conversation P15/16). Students appeared to indicate a level of ease with tacit ‘constitutive rules’ of how to interact with supervisors and for what purposes (Swindler, 2005). It is likely that some supervisors would feel similarly.

Students’ acceptance of supervision practices as examples of hierarchical structures contrasted with their expectations of how they should experience relationships with supervisors. For example, during nine card sorting activities students related a range of collegiality statements from the cards to supervision situations (see Table 6).

Table 6: Collegiality statements that students attributed to supervisory relationships and practices

<table>
<thead>
<tr>
<th>Collegiality Statement</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>People agree on shared goals</td>
<td>Conversations P1/2; P3/4; P7/8; P13/14; P15/16; P17/18</td>
</tr>
<tr>
<td>Trust</td>
<td>Conversations P1/2; P3/4; P7/8; P13/14; P15/16</td>
</tr>
<tr>
<td>People are willing to negotiate</td>
<td>Conversations P1/2; P3/4; P5/6; P13/14; P15/16</td>
</tr>
<tr>
<td>Relationships are strong</td>
<td>Conversations P3/4; P7/8; P11/12; P15/16; P21/22</td>
</tr>
<tr>
<td>People demonstrate commitment to one another</td>
<td>Conversations P7/8; P11/12; P15/16</td>
</tr>
<tr>
<td>Communication</td>
<td>Conversation P5/6</td>
</tr>
<tr>
<td>Intellectual openness/consider different viewpoints</td>
<td>Conversation P7/8</td>
</tr>
<tr>
<td>People make contributions/share/add</td>
<td>Conversation P13/14</td>
</tr>
</tbody>
</table>
Students’ comments included one conversation where a student reflected that they and their supervisor both needed to improve their practices for meeting agreed goals (conversation P13/14). A student in a different conversation proposed that collegiality and doctoral learning both rely on having trust in peers and supervisors (conversation P1/2). Two students talked about how their supervisors shared articles, information about conferences, and job advertisements. The statement, ‘people are willing to negotiate’, was notable because students talked about this statement of collegiality in terms of their supervisors more than colleagues.

The statements of collegiality listed in Table 6 could also be regarded as inferring egalitarianism. Indeed, ‘openness’, ‘contributing’, ‘sharing’, ‘negotiating’, and ‘commitment’ are descriptors that would not look out of place in some form of egalitarian collegiality (Waters, 1989). Yet this raises an interesting question about whether collegiality needs to be egalitarian?

Students seem to suggest that collegial relationships and collegial practices do not require participants to be equal, and do not need to take place under egalitarian circumstances. The collegiality statements that students discussed in Table 6, and the types of comments they made in many ways described routine supervisory practices. Negotiating goals with students and demonstrating commitment to students’ research are fundamental expectations of a supervisor (University of Otago, 2016). It is worth noting, however, that students often acknowledged these descriptors as “ideally” (conversation P15/16), “nice to have” (conversation P7/8), and/or important to collegial doctoral learning, rather than as necessarily illustrative of their experience of supervisory relationships.

While students seemed to accept hierarchy as part of the social order (Nicolini, 2012; Schatzki, 2005a, 2008) of doctoral education, acceptance of hierarchy did not
necessarily mean emotional ease for students. Students’ reluctance to identify supervisors as colleagues could reflect their endeavours to reduce challenging emotional work during their doctorate. As analysis demonstrates in Chapter Seven, students faced a range of emotional challenges during their doctoral project, of which hierarchical supervisory relationships was just one challenge among several.

The emotional work of hierarchy in supervisory relationships

In this sub-section, I discuss two occasions when students seemed to aspire to interacting with their supervisors as colleagues, and described the emotional work that arose when they felt hierarchy in the supervisory relationship created a barrier. The two occasions stand out in the data because most students appeared to accept the status quo of supervisory relationships, and said little more about the emotional work of hierarchical relationships. In the first of these conversation extracts, one student reflected on how informality in supervisory relationships could not be sustained. In the second conversation extract, a student considered the emotional work of power dynamics in supervisory relationships. From both students’ perspectives, their expectations of greater collegiality were not reciprocated by their supervisor, resulting in emotional work for the students concerned. I should note that the stories are not told from the perspectives of the respective supervisors in this thesis, nor do I know their side of events. This study focuses on students’ experiences, and how they made sense of those experiences in terms of the collegiality in the doctoral environment.

The first example refers to the emotional work that arose when a student appeared to feel let down by their supervisor. The student described a sociable relationship that was undermined when according to the student, the supervisor seemed to take over the data analysis and findings of the student’s research (conversation P21/22). The student
discussed the socialising part of the story during the card sorting activity, and talked about the data analysis towards the end of the meeting just as the two students were finalising their analysis of the thematic groups on the card sorting board.

The first part of this story occurred while the two students considered where to place the collegiality statement card, ‘*socially bring people together*’, on the sorting board. The student whose story is discussed here, described a sociable supervisory relationship. The co-participant expressed surprise at the apparent level of familiarity with supervisors:

… we go out, like we go out for coffee with our supervisors and we’ll hang out with our lecturers and they say, you know, ‘I find it so strange that students don’t talk to us’. And I was like, well, you know it’s, you don’t really go up and say do you want to go out for dinner…

It’s very unusual, but it’s that hierarchy; you think ‘oh I wouldn’t socialise with them’.

Yeah, but they [supervisors] don’t see it that way, that’s really cool.

(Conversation P21/22)

“Going out for coffee” and “hanging out” represented the only mention of socialising with supervisors in the whole data set. In a separate conversation (P15/16), two students talked of departmental social events, which for analytic purposes I considered to be part of regular, conventional supervision practices. But in this instance, it seemed socialising provided the student with a basis to question hierarchical supervisory relationships, and also to infer that the supervisors were challenging the hierarchical norm too. In the student’s comment: “… they [supervisors] don’t see it that way, it’s really cool [emphasis added]” (Conversation P21/22), the student seemed to celebrate the supervisors’ apparently unconventional approach to supervision, and to position supervisors as colleagues.
It was clear from the tone and comments of the second student’s response that socialising with supervisors was an unusual occurrence from their experience, as data in this study substantiates. Lots of students meet their supervisors in a café for supervisory meetings, which supervisors may see as building a working relationship with students, and as a way to lighten the atmosphere of the meeting. Clearly, something about the first student’s comments rendered the situation unusual from the perspective of the second student, who justified their view by drawing on the concept of hierarchy.

Later near the end of the card sorting while the two students were starting to wind down from the activity, the student who had introduced the topic of socialising with supervisors unexpectedly recounted a challenging turn in their supervisory relationship. The student explained that one supervisor wrote up analysis from the student’s research for an article, before the student felt they had analysed their data properly, and in doing so, had effectively written the student’s findings chapter. The student offered little more detail about the reasons for this turn in events; circumstances may well have dictated that the supervisor needed the analysis to fit a timeframe that the student could not meet, such as funding requirements, but the effect was undermining for the student.

The second student and I glanced at one another, and the student who had recounted the story was visibly outraged. Simply recounting the story generated considerable emotional work for the student. The supervisor’s actions seemed to destabilised our collective understanding of what constituted appropriate doctoral research practices, and disrupted what the student understood as the types of practices expected of a ‘competent’ doctoral researcher (Reckwitz, 2012), thereby undermining the student’s doctoral identity.

This story demonstrates how a student-supervisor relationship sits within a broader arrangement of practices and structures, for example, academics needing to publish
research findings or meet funding deadlines. Supervision practices, as Becher and Trowler (2001) note, do not exist in a vacuum, rather they are always embedded in a context. Furthermore, in the data set there is only one side of the story. Sociable practices, such as going out for coffee, might have engendered a sense of goodwill between students and supervisors, but hierarchy was a tool clearly available to the supervisor when required. The student’s aspiration to see the supervisor as a colleague was undermined and the student was left feeling powerless. Unequal power relations played a key role in the next example too.

In this second example, a student used the concept of power to make sense of a perceived absence of collegiality in their supervisory relationship. This student sought to be recognised by their supervisor as a colleague, but felt their efforts were thwarted when the supervisor appeared not to respond. The students were discussing the statement card ‘people have equal or near-equal status’. One student remarked, “that’s an interesting political question for doctoral students, for doctoral learning” (conversation P7/8), and both agreed that equal or near-equal status was not the case for doctoral education. The students went on in their conversation to equate status to power:

I think power relations [pause]

They’re important.

Can be a bit funny, can’t they?
Precisely. I put a lot of importance in understanding the power dynamic between an advisor [supervisor] and a mentor, and I think those dynamics can be very different depending on precisely the people involved. So long as you understand what they are, you’re good!... And honestly I do feel best when I feel like I’m working with an advisor who understands that I’m not an equal, but treats me as someone who has something to offer, treats me as an adult, treats me as a person who has something to contribute to him as well. (conversation P7/8)

In their discussion of power dynamics, the two students illustrated the complexity of relationships where students simultaneously negotiate perceived hierarchical structures or ‘rules’ and a desire to be seen as a colleague. Initially, one student described being comfortable with hierarchy in the supervisory relationship, but then seemed to strive for greater recognition and reciprocity. Reciprocity seemed to entail mutually sharing knowledge, and being recognised for doing so, referenced by: “…treats me as a person who has something to contribute to him as well”. Status and contribution to knowledge are not mutually exclusive, but the student seemed to be seeking a supervisory relationship more akin to “intellectual collegiality” (conversation 9/10) discussed in a previous sub-section in this chapter.

Intellectual collegiality in doctoral practices rests on collective recognition of the importance of sharing knowledge within an academic environment. Routine practices involved with sharing knowledge, such as publishing research or supervisory discussions, as may have been the case here, give meaning to intellectual collegiality (Nicolini, 2012; Schatzki, 2005a; 2008). The stage of students’ study may also play a role, for example, students who are at a late stage of their study may feel more confident about leading discussions and sharing their knowledge with supervisors.
Both students in this instance were early-stage candidates, and during earlier conversation, had compared their experiences of collegiality in a university setting to previous experiences of collegiality in a working environment. Some of the difficulties this student was encountering may have arisen from trying to translate prior expectations of being recognised as a colleague to a new context.

The emotional work involved in one student’s attempt to be recognised as an intellectual colleague, was illustrated by the treatment the student alluded to. In any relationship, wanting to be treated as “an adult” or as “someone who has something to offer… contribute” (conversation P7/8) would seem reasonable, and supervisory relationships are no different (University of Otago, 2016). The student elaborated that the supervisor seemed only interested in talking about their own research during supervisory meetings, leaving the student feeling frustrated. Although, the supervisor’s viewpoints are missing in this comment, the student reported feeling undermined and unacknowledged in their endeavours to share knowledge.

The focus of this sub-section was to discuss how students experienced the emotional work of wanting to be acknowledged by their supervisors as colleagues. Despite implying otherwise, both students seemed to seek relationships that were less hierarchical with their supervisors, socially and in terms of intellectual collegiality. The students also seemed to seek acknowledgement within their respective supervisory relationships, either as a competent researcher or as a competent learner, each with something to offer their supervisor. Wanting to do your own data analysis, and wanting to share knowledge were not unreasonable expectations of supervisory relationships and practices, nor particularly challenging to hierarchy. Yet the emotional work for the two students involved made these two examples stand out in the data set.
The students attempted to navigate power dynamics in supervisory relationships seemingly beyond their control, engaging in challenging emotional work as a consequence. Yet, their supervisors’ apparent lack of awareness of the power dynamics in their supervisory practices (at least from the students’ perspectives since supervisors’ perspectives are absent), created circumstances where these students found aspects of hierarchy unacceptable, and a relationship as colleagues untenable.

Power dynamics in relationships between students and supervisors might restrict most students from viewing their supervisors as potential colleagues. I suggest that for most students, interpreting hierarchy as part of the structural, cultural, and historic context of a university setting, and then accepting hierarchy as a part of supervision practices, seemed more palatable than trying to resist hierarchy. In social practice terms, most students acknowledged hierarchy as part of the constitutive rules (Swindler, 2005) and therefore the social order (Nicolini, 2012; Schatzki, 2005a, 2008) of the university.

**Summary**

Students talked about others involved in their doctoral learning as colleagues in broadly inclusive ways, yet most refrained from referring to their supervisors as colleagues. The explanation most often given by students referred to hierarchy. I proposed that most students were habituated to see hierarchy as part of the social order of universities, or the way that universities function, including supervision contexts. Students have encountered hierarchical relationships in education settings throughout their lives, and doctoral education represents a continuation of this situation.

It may seem contradictory for students to aspire to collegial relationships with supervisors, but not see supervisors as colleagues. A possible account for this apparent contradiction rests with the teleoaffective structure (Kemmis et al., 2012; Schatzki, 2005a;
2005b; 2012) of the doctoral project. According to students in this study, collegial relationships had the potential to contribute to their goal of completing a PhD, but the teleoaffective structure of collegial relationships would mean thinking about the emotional work involved in reaching the goal. While collegial relationships were not problem-free, students seemed to find collegial behaviours and participating in activities with colleagues less emotionally challenging than what they perceived as trying to disrupt the hierarchical conventions of supervisory relationships. The position of supervisor was simply too marked by hierarchy to be seen by students as a colleague. In the two separate instances where students sought to relate to their supervisors as colleagues, both students encountered challenging emotional work when their supervisors did not reciprocate as they had anticipated.

Students’ acknowledgement of colleagues as diverse others demonstrated the complexity of doctoral practices and relationships. Students identified colleagues from a broadly inclusive group that included peers, academics, digital communities, friends, and community members. One implication of relating to a broadly inclusive group of colleagues is that students will navigate collegial relationships with a diverse range of people, in diverse places. A collegial relationship with a colleague who shares an office may demand different types of collegial practices to a colleague at an international university, who the student knows only from a digital community context. The doctoral environment as a physical, dispersed, and digital space represented an additional factor that shaped students’ collegial relationships and practices, as illustrated by the student who explained that a friend became a colleague when they both shared an office environment.

Students saw the doctoral environment as a space where past and future employment practices met. They drew on familiar practices from previous relationships
with colleagues to make sense of relationships in the university environment, and seemed to use these practices as a template for collegiality. People, who students identified as colleagues now, had the potential to become colleagues of the future, whether students saw themselves as academics–in-the-making or not.

Intellectual collegiality emerged from students’ conversations as a means to identify others as colleagues. For one student, personally knowing a colleague was less important than feeling a sense of affinity with the colleague’s work and contribution to knowledge. This student’s use of the phrase “intellectual collegiality” (P9/10) summed up how other students gained a sense of knowledge affinity and collective identity from sharing knowledge. Thinking about intellectual collegiality as involving familiar and routine practices has potential for students, supervisors, and academic developers to reframe aspects of doctoral education that might be perceived negatively. For example, peer review which was mentioned by a number of students as a practice that could create anxiety (focus group #1; conversations P1/2, P3/4, P7/8).

Students valued the contributions that colleagues could make to their learning, and in the position of a colleague, the contributions that they themselves could make to others. Students’ conceptualisations of colleagues resonated with previous, current, and possible future practices, and for this reason could have a more prominent function in doctoral education than conventions currently seem to permit. In the next chapter, I will look more closely at collegial relationships. In particular, I outline students’ perceptions of a relational ‘code of conduct’ to inform collegial practices.
In this chapter, I examine the different ways that students thought collegial relationships between colleagues should be conducted. These insights are helpful for students, supervisors and academic developers because, while students were comfortable discussing collegial conduct in a research setting, it seems that students’ expectations generally remained unarticulated in everyday collegial relationships and practices. In this chapter, I link the term ‘relational responsibilities’ with ‘collegial conduct’; relational responsibilities represent students’ expectations of how colleagues should conduct themselves in collegial settings. Students from diverse backgrounds and disciplinary fields appeared to share common understandings of the types of conduct, dispositions, and values that constituted relational responsibilities, and enhanced their doctoral education.

In the previous chapter, my analysis indicated that students had broadly inclusive expectations of who might count as a colleague in universities. While students seemed disinclined to call their supervisors a colleague, students still anticipated or hoped for a collegial relationship with supervisors. Students’ expectations of collegial supervisory relationships are revisited in this chapter, where it appears that students applied similar expectations of relational responsibilities to their supervisors’ conduct as they did to the conduct of their peers, despite their reluctance to refer to supervisors as colleagues.

In the first section of this chapter, I analyse three common key themes identified by students as important for collegial relationships. The first theme is reciprocity and mutual commitment; the second theme is helping others, and the third theme relates to respect and integrity. In the second section, I consider the nuanced ways that students talked about relational conduct. The analytic approach adopted in the second section is influenced by
phenomenography, and explores relationships within and between the different ways students spoke about relational conduct. In the final section of the chapter, I will present a brief discussion supporting my argument for why relational responsibilities matter to collegial doctoral learning.

**Commonalities in how students understood relational responsibilities**

In this section, I analyse students’ expectations of how people should conduct themselves when they participate in collegial practices. I refer to students’ expectations of conduct as ‘relational responsibilities’ to practices involved with research, collegiality, and the academic environment. Importantly, it would seem from analysis of the data that much of students’ expectations regarding relational responsibilities remained implicit and subjective. Students might have easily verbalised or made explicit to others their expectations of relational responsibilities during their collegial practices, yet they did not indicate that they had ever had such conversations. It seems that the research context elicited students’ expectations, which otherwise were rarely spoken about. The first set of students’ expectations relates to the theme, reciprocity and mutual commitment.

**Reciprocity and mutual commitment**

In this sub-section, I explore students’ anticipation that colleagues would reciprocate collegial acts, and their ideas about why mutual commitment mattered for collegial practices. Reciprocity in collegial relationships was important to students, irrespective of people’s different levels of expertise. Students in focus group #3 asserted that collegial relationships with supervisors and academics could be reciprocal; a sentiment echoed by students who participated in hierarchical card sorting conversations (conversations P7/8, P11/12, P15/16). This assertion highlights the apparent contradiction
in who counts as a colleague in Chapter Five. I argue, however, that students’ assertion might illustrate a subtle difference between who counts as a colleague, and whose collegial practices matter to the doctoral project. From this perspective, students may have collegial expectations of their supervisors because supervisors’ practices matter to their doctoral education and completing their PhD.

Students were more explicit about what they expected of reciprocal practices when they talked about reciprocity as mutual commitment. Some students anticipated that demonstrating commitment to colleagues would be met with commitment in return, signifying a reciprocal relationship. When discussing the statement reciprocity, one student made a direct link with commitment: “It’s similar to demonstrating commitment to one another. It’s a reciprocal thing, it’s two-way” (conversation P3/4). The two students elaborated that people in a group fulfilled their commitments to one another by attending meetings, and by complying with agreed deadlines (conversation P3/4). For other students, meeting agreed deadlines represented an important indicator of commitment, which applied equally to supervisors (conversations P7/8, P11/12, P13/14, P15/16; focus group #1).

One student described the effect of a supervisory relationship where they perceived commitment on the part of the supervisor to be absent. The conversation had come about during a debate about whether commitment was important to doctoral learning. Interestingly, the following comment came from a student who had initially felt commitment was not so important to collegial practices:

I’m relatively alien, well I shouldn’t say alienated from my advisor [whispered tone]. My supervisor and I spend very little time together and I don’t feel like he’s very committed to me, and I’m trying [emphasis] very hard to not make that affect my doctoral learning too badly.

So commitment is important?
Well, I’d like it to be but I’m not sure. Hmm.

See, I would say it is. I feel like I need to know that somebody is going to respond and stuff. (conversation P7/8)

For the student concerned, a perceived lack of commitment on the part of a supervisor had created considerable emotional work and challenges. The emotional work experienced by the student was emphasised when the student indicated they were “trying” to not let the supervisor’s conduct affect them “too badly”. The implication being that the little time the student and supervisor were spending together was having an effect. The student changed tone mid-sentence, and in a whisper, acknowledged their alienation from their supervisor. It is difficult to know why the student felt the need to whisper. People generally whisper to keep a comment contained within earshot of the listener, but there were just three people in the room (and a digital recorder). From my perspective as a listener, the whisper seemed to represent a rhetorical move (Billig, 2001) that enabled the student to say what was normally left unsaid.

Despite the student’s suggestion earlier in the conversation that commitment was unimportant to doctoral learning, this student’s position was less ambivalent having described their supervisory relationship. The issue seemed to be the supervisor’s unwillingness to reciprocate commitment to the student. The other student in the conversation had no such doubts about commitment as a reciprocal relational responsibility, a view shared in other research contexts (conversations P11/12, P13/14, P15/16; focus group #3). This conversation supports the argument made in Chapter Five; many students anticipated collegial relationships with their supervisors.
Students spoke also of commitments in everyday relationships that functioned in more subtle ways. One student anticipated mutual commitment from colleagues, but acknowledged that the people involved did not need to be sociable with one another:

You could have a collegial relationship, but not necessarily, your interpersonal relationships might not be so strong with people, but you can still demonstrate commitment.

That’s so true! (conversation P21/22)

For these students, knowing colleagues well was not a pre-requisite for collegial relationships, nevertheless, commitment remained an important relational responsibility. The inference I took was that colleagues still had a commitment to one another even if they did not know one another well. A student in a different conversation recounted an experience that helps to illustrate the point.

A student described volunteering to help at an out-of-town conference (conversation P3/4). The student had not met the organiser or co-volunteers before the conference, and had no prior relationship with the conference team. Nevertheless, the team shared a commitment to organising the conference, and demonstrated commitment to one another as colleagues. The student’s commitment was rewarded by the lead organiser, who gave the student an opportunity to chair a panel. Commitment between colleagues in this case did not necessitate long-term relationships, nor familiarity between colleagues, rather the colleagues worked well together with a specific shared purpose.

Other students talked about situations that did not require colleagues to demonstrate long-lasting commitment to one another. One student described providing a workshop for other students (conversation P5/6), while a different student talked about preparing for a presentation (conversation P11/12). These situations shared similarities with the example
of the conference; a colleague’s commitment to achieving the task in hand was valued by the students (focus groups #2 and #3). Commitment was more important than whether the student knew the individuals at the workshops (conversation P5/6), or whether the student’s support involved a series of short meetings over two weeks to prepare for the presentations (conversation P11/12).

Likewise, commitment between students could materialise in small and seemingly undemonstrative ways, illustrating how students mediated relational responsibilities within everyday interactions. Two students contrasted formal commitments, such as attending meetings with showing commitment in less obvious ways:

I mean, you can have that commitment to one another just by, it sort of appears in small ways maybe just like we said. Like meeting in a hallway and listening to someone talk about their PhD for a little bit and then mentioning a journal article to them. (conversation P3/4)

The student’s use of the phrase “small ways” illustrates how relational responsibilities might become embedded in everyday practices as habituated behaviour. Regular practices, like chatting in the hallway, have potential for productive incidental learning. Indeed, Hurdley (2010) celebrates university corridors as sites of connection, problem-solving, and meaning at work. What transforms an incidental chat into a learning opportunity is commitment, and knowing enough about another person’s research project to make a contribution (focus groups #1 and #3).

For most students in this study it made sense to regularly participate in collegial activities because doing so demonstrated commitment to colleagues. In turn, students anticipated that colleagues might reciprocate a similar level of commitment towards them. I remarked upon this finding in Chapter Five, and considered the likelihood that some students might be habituated from their workplace experiences to expect collegial conduct
between colleagues. A different explanation emerged when some students questioned whether reciprocity came about because certain people are willing to help others. In the next sub-section, I discuss how students identified a willingness to help others as important for collegiality, and identified in their own practices, and those of colleagues, willingness to behave in reciprocal ways.

**Helping others**

In this sub-section, I elaborate on the second theme in my analysis of how students understood relational responsibilities. I identified three key ways that students discussed their willingness to help others: first, helping others is “fundamental”; second, ‘paying it forward’; third, altruism. I start with the view that helping others is a fundamental aspect of collegial conduct.

Two students discussed a contradiction inherent in their view that people cannot complete a PhD on their own, yet are expected to do so. Responding to the collegiality statement, ‘people show willingness to help others’, one student reflected: "It’s fundamental thankfully, but it’s probably to the point that you don’t even think about it” (conversation P3/4). Willingness to help others, from the perspective of this student, was almost taken for granted. A behaviour that is taken for granted, or has become routine, is likely the result of habituated practices (Reckwitz, 2012; Turner, 1994). The other student agreed, and proposed that helping others might be “an integral part of completing a PhD” (conversation P3/4). During three other conversations, students elaborated on the benefits to doctoral learning of helping others.

Two students debated whether willingness to help others could be useful for “self-learning” (conversation P17/18):
There is always an opportunity to learn more when you help others to learn. Like, I learn much more when I explain something to others.

Yeah, that’s definitely true. (conversation P17/18)

In a different conversation, two students made similar connections between personal learning and willingness to reciprocate: “… in a sense of like learning things, teaching other people is good for you when you’re willing to share, then they’re willing to share their knowledge with you” (conversation P19/20). In both these extracts, the students acknowledged the importance of helping others as a form of reciprocal learning. Through explaining and teaching, students demonstrated commitment to other people’s learning while enhancing their own (Flores-Scott & Nerad, 2012). Additionally, demonstrating a willingness to share, explain, or teach positions a doctoral student as a legitimate source of knowledge (focus group #1). These perspectives reflect advocacy for “distributed and horizontalized” approaches to doctoral education (Boud & Lee, 2005, p. 514), which seek to acknowledge the different practices and relationships deployed by students for learning purposes.

Students, in the case of these three conversation extracts, referred to activities that provided or provoked immediate reciprocal learning opportunities. Other students spoke of being willing to help colleagues by “paying it forward” (conversations P5/6; P9/10; focus groups #2 and #3), inferring dispersed opportunities for reciprocal learning over time. During a hierarchical card sorting activity, one student asked the other how they would rate themselves in terms of collegiality. The student replied that they saw themselves as highly collegial. The following extract illustrates how the student justified their self-assessment:
I actually go out looking at how we can get people involved because every time somebody presents something and a discussion comes in, the person who presents, and everybody else, learns at the same time. And the bond that forms becomes stronger; people start engaging with each other so there’s a lot more learning opportunities… but of course, collegiality does not mean that we’re out there all the time, but enough to help us. (conversation P9/10)

This reflection offers a sense of what is involved in collegial practices. Firstly, the student appeared to be proactive in generating opportunities for reciprocal learning. Secondly, the student reflected that the task of organising opportunities for learning might be reciprocated by others when colleagues develop a “bond” with one another. The bonds that form between colleagues might facilitate others taking on responsibility for reciprocating learning in some way. Thirdly, the student appeared to imply that collegial opportunities to learn were circumstantial or reactive to need, encapsulated in the phrase “enough to help us”. I got the sense from this phrase that collegial activities do not need to be an elaborate event, but an activity could simply be enough to address a colleague’s needs at a given moment. For example, testing research ideas with colleagues during an informal presentation.

Other students in a different conversations shared similar ideas regarding ‘paying it forward’, namely, being proactive, reciprocating learning, and responding to need. I start with the understanding that students who appreciate collegial conduct may need to be proactive in their actions to generate collegiality.

The student in conversation 9/10 was not alone in recognising the need for an individual to take on leadership for organising collegial activities. In focus groups #2 and #3, students also discussed this matter, with several participants advising others that it was better to accept the workload of being a leader to enable collegial activity to happen than to have no
activity happening at all. In this regard, ‘paying it forward’ represented collegial conduct that placed responsibility and associated workload on the initiator of collegial activity.

The second understanding of ‘paying it forward’ relates to students’ hope that by generating opportunities for others to learn, colleagues will recognise their efforts, and in time, will be motivated to reciprocate. The same idea of ‘paying it forward’ (and indeed the same phrase) arose in other students’ conversations. During a different hierarchical card sorting activity (conversation P5/6), one student described their motivations for teaching colleagues IT skills as “paying it forward” since one day they would need some form of help from a colleague. In focus groups #2, a student recounted “paying it forward” by helping a colleague write an abstract for a conference, hoping their colleague would reciprocate when the student’s abstract was due. In focus group #3, a student reflected that organising a research symposium was “paying it forward’ because hopefully a colleague would organise the next symposium the following year. Later in conversation P9/10, the student articulated this understanding of collegial conduct as: “…paying it forward, it’s cyclical” (conversation P9/10). Once one person has demonstrated collegial conduct and a willingness to help others, their efforts and learning will be recognised by other colleagues, who will in turn reciprocate, demonstrating the benefits of collegial learning, and paying it forward to others.

The third understanding of ‘paying it forward’ relates to the suggestion that collegial acts can be spontaneous and responsive to a colleague’s needs. It seems from the circumstances described by students (conversations P5/6, P9/10; focus groups #1, #3) that paying it forward means being willing to help out colleagues and respond to the immediacy of their needs. A student who spontaneously responds to the needs of a colleague may well
be motivated by paying it forward, but also demonstrates that helping others is “fundamental”, as previously discussed.

The efforts of students who advocated ‘pay it forward’ can be interpreted as establishing reciprocal collegial practices as part of the ‘cultural scheme’ (Reckwitz, 2012) of their department or community. Reciprocity, from this perspective, represents an aspect of doctoral culture that is shaped by students’ shared experiences of doctoral education and is influential to creating what Boud and Lee (2005) describe as a “horizontalised pedagogical space” (p. 511). Students seem to recognise their own capacity to teach, support and facilitate learning for colleagues, knowing that one day they might need help from colleagues themselves. For ‘paying’ it forward to exist as part of the cultural scheme (Reckwitz, 2012) of doctoral education, however, it would seem that students would need to be aware of the relational responsibilities, such as commitment, that enable reciprocal collegial practices to happen. Yet, as students pointed out, there were tensions inherent in collegial practices and ‘paying it forward’, notably that colleagues might not reciprocate, or might take advantage of other people’s efforts (conversation P7/8, P11/12, P14/15; focus group #2 and #3).

While acknowledging that tensions accompanied students’ willingness to help colleagues, I now consider how students appeared to frame their actions in selfless terms, or view altruism as a means mitigate the possibility that a colleague might not reciprocate collegiality. I present three occasions when students explicitly reflected on altruism, or similar practices of acting “without payback” (focus group #2) to justify the value they placed on helping colleagues, and expecting nothing in return.

A lively debate sprung up in focus group #2 when one student provoked the group with a question about whether collegial practices were open to “exploitation” by students who
might simply take advantage of the goodwill of others. Most students acknowledged that this was indeed a possibility, but offered pragmatic responses such as acceptance and advice not to be deterred by ‘exploitative’ behaviour, and weigh up the negatives of people taking advantage versus the gains of collegial activity. But pertinent to this analysis of altruism, one student indicated that they were willing to organise activities for colleagues “without payback” (focus group #2), suggesting that for some students, their sense of collegial conduct or relational responsibilities was altruistic.

In the second example, students reflected on why they might be motivated to act in the interests of colleagues. Two students contemplated whether colleagues needed to have a shared goal in order to participate in collegial activities. After a lengthy discussion, both agreed that collegiality could be summed up as “being helpful” (conversation P7/8). One student recounted a recent experience of helping out a student at a different university, expecting nothing in return. The other student commented:

I’d say you’re being very collegial in that sense. You’re getting something out of it in some nebulous way, in some altruistic way shall we say?

Yes

But clearly your main goal is not self-profit. Your main goal is…

To help this poor girl who’s clearly sinking! (conversation, P7/8)

Helping others meant adapting practices to a particular set of circumstances, for example, helping the “girl” identify relevant theory for her research (conversation P7/8). The helper and recipient shared knowledge of the discipline, but were not familiar with one another. The student’s interpersonal skills provided the basis for collegial learning with a relative
stranger. The student felt comfortable with advising on academic practices, and was motivated by “being helpful”.

Students’ altruistic practices could also be considered as part of the ‘teleoaffective structure’ (Kemmis et al., 2012; Schatzki, 2012) of the doctoral project. While submitting a thesis is the ultimate goal for most students, graduation is by no means the only goal. Students are likely to set themselves a range of goals throughout their studies, including goals related to their relationships with others. Altruistic practices clearly serve different purposes for students, for example, providing an opportunity to explain or teach. Altruistic practices also presented opportunities for emotional reward, and establishing a culture of collegiality within a department.

In a separate conversation, two students considered the implications of doctoral education devoid of altruism or willingness among students to help one another with their learning:

You don’t come into your PhD knowing absolutely everything you have to learn; you have to learn a lot. And if people are not willing to help you with things, you’re not.

[interjection] Getting anywhere?

Going to go anywhere. Exactly! (conversation P15/16)

For these students, altruism was implied by their acknowledgement that students will need to rely on the willingness of others to help them through their doctoral project. Their conversation illustrated a sense of humility and reflexivity: students have a lot to learn and need others to help them make progress.

It seems that students in this study valued altruistic practices in doctoral education both as the colleague who gave their time and the colleague who received the help of others.
Importantly too, students placed value on reciprocal practices as grassroots or self-generated responses to the enormity of the doctoral project, indicated by “you have a lot to learn” (conversation P15/16), and to the everyday needs that arise during doctoral study, such as advising on an abstract. Many students were familiar with acting in reciprocal ways, and were also willing to help others with no return. Saying that helping others was “fundamental” also inferred that helping others was a matter of personal values, described by one student as altruism. These practices positioned students as “self-organizing agents” (Boud & Lee, 2005), motivated by goals to facilitate and enhance learning opportunities for themselves and others.

**Respect and integrity**

In this sub-section, I examine the third theme of relational responsibilities, respect and integrity. Students considered respect and integrity as interchangeable relational and academic responsibilities, which complemented their understandings of reciprocity and commitment. Respect meant a lot to students, who discussed colleagues behaving respectfully in the doctoral environment (focus groups #1 and #2; individual interview; conversations P1/2, P3/4, P7/8, P11/12, P15/16, P19/20, P21/22). On those occasions that students talked at length, they often linked respect to integrity, or if not using integrity directly, implied people demonstrated personal, relational, and academic integrity.

Students reflected that supporting one another’s learning in collegial ways involved expecting to be treated respectfully, and behaving respectfully in return. While discussing their own thematic analysis of their card sorting, two students identified the following statements as constitutive of “respect” (conversation P21/22): ‘trust’, ‘people are willing to negotiate’, ‘intellectual openness/consider different viewpoints’, ‘communication’, and ‘people demonstrate integrity to one another’. Important for analysis of relational
responsibilities, this selection of collegiality statements illustrate what respect might actually entail in practice. Respect seems to permeate ways of thinking, doing, and saying (Schatzki, 2008). In terms of relational responsibilities in collegial practices, students considered respectful behaviour important, but what they meant by respectful behaviour was likely to involve some sophisticated relational practices.

Two other students reflected that behaving respectfully was important for collegial relationships, but of less importance for doctoral learning. Students could “kind of get-by” (conversation P3/4) without it. Disrespect on the other hand might be far more problematic:

… like the opposite, people behaving disrespectfully towards you could have a really big negative impact on your learning. Like if you had a, I don’t know, at a conference or a seminar or something, and someone was really harsh, asked you really harsh questions… (conversation, P3/4)

In some regards, this comment implicitly redefined people behaving respectfully as more important to learning than originally indicated. When the students considered the consequences of people behaving disrespectfully, they concluded that disrespect was detrimental to doctoral learning and emotional wellbeing. At different times, other students agreed (focus group #1, #2; individual interview).

The student’s choice of “harsh” to describe audience members posing questions about research inferred harsh questions were beyond the remit of respectful practices. Students in conversation P1/2, and focus groups #1 and #2 made similar observations about “harsh” peer review experiences. Separately, they appeared to share tacit knowledge of how to participate in academic practices in ways that acknowledged relational responsibilities to colleagues while still upholding academic conventions, such as peer review.
Some students anticipated that respect and integrity represented relational responsibilities commonly upheld by people involved in doctoral education, irrespective of their role (conversations P1/2, P21/22). In the next conversation extract, one student reflected on the integrity of a former supervisor:

I don’t know about you but I’ve had a pretty crap former supervisor who had zero integrity towards pretty much anyone but himself. Erm, and it made it really difficult to include him in anything, or to get anything accomplished because he had no integrity. So, I think it is very important on a doctoral learning scale. (conversation P15/16)

There were few occasions during this study where students were openly critical of supervision practices (focus group #1; conversations P7/8, 13/14; P15/16; P21/22). Students were more likely to anticipate collegial relationships with their supervisors, as suggested in Chapter Five. Like the student in this conversation, students experienced challenging emotional work when they found their expectations of relational responsibilities and collegial practices were unmet.

In a different conversation, two students connected relational integrity to academic integrity. One student remarked:

I think like having integrity with your learning and towards other people is quite important. Just in terms of, yeah, like using other people’s research…

How do you see integrity there? [pause] Well, I can also visualise what you say with the people and integrity to one another.

Yeah, so just sort of like respect, being respectful in terms of you know communicating with your peers. And then also with learning, doctoral learning and the context of research being of other people’s work. (conversation, P19/20)
The students appeared to share tacit knowledge of relational integrity. Having moved interchangeably between integrity and respect, the first student then referenced academic integrity. I interpret this comment to mean how students make use of published research in their own studies, although other interpretations are possible. Academic integrity was a topic of conversation elsewhere: “If we take learning, in the broadest sense, if you’re falsifying your data, you’re not learning very well [pause] but that’s personal integrity. It’s not collegial integrity” (conversation P7/8). Falsifying data would clearly be a transgression of academic integrity, and probably personal integrity for many students too. Some of the rules that constitute academic integrity are explicit and published by universities, such as falsifying data or plagiarising the work of others. What counts as personal and collegial integrity is likely to be more implicit in the conduct of colleagues.

Unlike falsifying data, making sense of collegial integrity is likely to demand tacit knowledge of relational responsibilities. To define collegial integrity one student offered examples of practices that were swiftly acknowledged by the student they were paired with. “Keeping your promises” and “showing up” (conversation P7/8) sufficiently illustrated what collegial integrity should look like without the need for the student to elaborate. Yet, what these students identified as collegial integrity, other students had identified as mutual commitment (conversations P3/4, P7/8, P11/12, P13/14, P15/16; focus group #1). It seems that students’ understandings of collegial integrity and of mutual commitment could indicate a similar set of expectations, namely, that students should be able to anticipate collegial relationships that are interdependent and respectful. What counts as integrity to students, however, may be subjective and influenced by context.

One student questioned whether integrity was important, speculating: “you can probably still get great learning and having everyone being [laughs] having no integrity
whatsoever. But at the level of doctoral research learning, is integrity needed?” (conversation P11/12). As an example, the student went on to recount a rumour of ripped pages from textbooks and hidden library books attributed to medical students. The student then quipped, “but Med School still produces doctors!” This story, apparently passed on by a medical student, notes the importance of material objects to learning practices, yet also reproduces a disciplinary discourse that speaks of the hidden curriculum of medical education, and more specifically of competitive learning environments (Lempp & Seale, 2006). I have no wish to endorse the veracity of the rumour, rather the focus is on the student’s questioning of the value of integrity to collegial conduct and doctoral learning. Similar to students’ observations about respect, perhaps integrity was more noticeable when absent from collegial practices, as the following comment illustrates: “Because if there’s like so little integrity in a group, you’ll probably high-tail it out of that group [laughs]!” (conversation P15/16).

While I have discussed students’ interchangeable use of respect and integrity in this sub-section, my analysis also demonstrates how some students perceived relational responsibilities as depending on context. For example, what one student might consider commitment under one set of circumstances could be considered integrity under another set of circumstances, such as keeping promises. Given my previous proposal that students’ expectations of collegial conduct are often implicit, the suggestion that students’ expectations might often be contextual too adds a nuanced understanding of what counts as relational responsibilities for students.

Two important points emerge from my analysis thus far. First, students perceived that collegiality, research, and the academic environment involve practices that intrinsically incorporate relational responsibilities. Second, while some relational responsibilities, such
as institutional expectations of academic integrity, might be explicit within an academic environment, much of students’ expectations of relational responsibilities remain implicit and subjective.

**From social responsibilities to a code of conduct**

This section serves to demonstrate how using a hybrid methodology provides researchers with a different set of analytic tools and a different lens to apply to the same data. In this section of the chapter, I analyse data to identify a ‘structure of meaning’ (Åkerlind, Bowden, & Green, 2005) within students’ perspectives of relational responsibilities and collegial conduct.

The ways that students spoke about relational responsibilities illustrate how collegial practices involved complex expectations: students need tacit knowledge of valued collegial practices, and need also to understand what counts as relational responsibilities might be context-specific. The following analysis differs from the first section because I predominantly analyse conversation extracts taken from five different card sorting activities with ten students. On the surface, ten students may seem too small a sample, but I argue that the analysis in this section contributes a nuanced understanding of students’ expectations of collegial conduct. The students represented a diverse group at different stages of their studies, all four divisions of the university were represented, half were international and the other half were domestic students.

By analysing a structure of meaning within this theme, I illustrate variations within students’ understandings of relational responsibilities. I emphasise that this analytic approach engages with the data as representative of students’ collective experiences of collegial relationships in doctoral education at this university. The extracts of data that I present are representative of a collective conceptualisation, rather than uniquely the
conceptualisation of the individuals cited, and illustrate how variations in students’ understandings develop complexity in their conceptualisation of relational responsibilities.

Students’ conceptualisation of relational responsibilities was characterised initially in broad terms of “social responsibilities” (conversation P1/2). The second construct of relational responsibilities was “common courtesy” (conversation P15/16), which appeared more specific in terms of students’ relational expectations than social responsibilities. Common courtesy implies commonly shared understandings of how to interact. The third construct, “professional relationships” (conversation P19/20), signalled a change in students’ expectations, inferring that students anticipated formal conventions within their relationships. With the fourth construct, “interaction rules” (conversation P23/24), students introduced an understanding of relational responsibilities that seemed to implicitly determine what types of conduct were acceptable as collegiality. I interpreted the final construct, “code of conduct” (conversation P7/8), as demonstrating a sophisticated set expectations related to relational responsibilities because a code of conduct seemed to guide students’ collegial practices in ways that included awareness of one another’s wellbeing.

Separately, these constructs illustrate variations within how students across the whole data set made sense of relational responsibilities. Taken as a structure of meaning, this analysis represents a collective conceptualisation of relational responsibilities that reflect students’ experiences of collegiality at this university. I commence with ‘social responsibilities’, and build an interrelated and nuanced conceptualisation of students’ expectations of relational responsibilities.
Social responsibilities

When asked to analyse their hierarchically arranged cards (see Figure 6), the two students in this conversation determined that one set of collegiality statement cards represented the theme “social responsibilities” (conversation P1/2).

Figure 5: “Social responsibilities” (conversation P1/2)

Specifically, this group of cards contained four statements of collegiality: ‘collaboration’, ‘networking’, ‘socially bringing people together’, and ‘people demonstrate integrity to one another’. The students were quick to identify the connection between these collegiality statements as networking, but then contemplated:

Social relations?

So it’s social responsibilities? (conversation P1/2)

In everyday contexts, the phrase ‘social responsibilities’ is generally used to refer to citizenship or social justice, but the students were sorting statement cards in relation to their relative importance for collegial doctoral learning. When considering the statements, the students’ theme, social responsibilities, inferred that integrity represented a key relational responsibility when colleagues collaborate, network, or interact socially. In terms of my
analysis of a structure of meaning, one student in the pair initially suggested “social relations”, which is descriptive of ‘doing’ collegial practices, but the “social responsibilities” elaborates on ‘doing’ collegiality by setting up expectations for ‘knowing’ collegiality (Gherardi, 2012). Social responsibilities appeared to serve as a foundation for what counts as relational responsibilities in collegial conduct, notably that students collectively have a responsibility to demonstrate integrity to one another.

The conceptualisation, *social responsibilities*, established students’ expectations of reciprocal relational responsibilities in collegial practices, but what was meant by integrity and social responsibility remained open to interpretation. “Common courtesy”, the second construct, spoke more clearly of students’ expectations than social responsibilities, and on this basis, I identified *common courtesy* as a second layer of meaning related to students’ conceptualisation of relational responsibilities.

**Common courtesy**

In this sub-section, two students described relational responsibilities as “common courtesy” (conversation P15/16). Conceiving relational responsibilities as *common courtesy*, these two students were suggesting a type of collegial conduct that might be commonly understood among colleagues, and implicitly enacted. Difficulties could arise, however, with the idea of ‘common’ courtesy; what counts as courtesy might not be commonly shared, depending on the social and cultural context.

When asked how a group of collegiality statements related to one another to form a theme, one student responded: “Common courtesy, some of them!” (conversation P15/16). The students had initially struggled to identify a theme linking the collegiality statements that they had positioned on the sorting grid in the quartile that represented the greatest importance to collegial doctoral learning. This particular thematic group contained many
cards, but the students specifically referred to the following collegiality statements: ‘people show willingness to help others’, ‘people make contributions/share/add’, ‘communication’, ‘people offer and accept advice’, and ‘people demonstrate integrity to one another’. When trying to identify the connection between these collegial statements, the students focused on helping, sharing, social interaction, and communication:

A lot of it is about being, getting help from people.

Yeah.

Like social.

Yeah. Sharing... Some of that comes up with communication.
(conversation P15/16)

Common courtesy is generally used to mean good manners, but in this context, the two students placed an emphasis on interactions that reflected collegial conduct, such as helping colleagues, and making contributions to colleagues’ learning. In the previous section, I discussed the value that students in this study placed on helping others. These two students appeared to concur, and by identifying this type of conduct as common courtesy, they seemed to establish an expectation that helping and contributing to colleagues’ learning was both a relational responsibility, and was commonplace.

Students are likely to possess a ‘repertoire’ of practices (Trowler, 2014) that communicate relational responsibilities. Some student practices could probably be termed common courtesy, and are likely to be commonly recognised by others as such, for example, communicating in a polite manner. Yet the students’ apparent readiness to assume relational responsibilities as commonly understood illustrates how practices acquire collective meaning as part of everyday routines (Reckwitz, 2012). Common courtesy is not generally reserved for special occasions, colloquially, people use common courtesy to
describe the nature of everyday interactions. By identifying common courtesy, the two students placed relational responsibilities within the everyday and routine practices of doing a doctorate.

The structure of meaning within how students conceptualised relational responsibilities became more tangible when students’ expectations of collegial conduct were embedded in everyday and generally recognisable practices, such as offering to help a colleague and listening to what a colleague has to say. Common courtesy seemed to mark a shift in students’ expectations of relational responsibilities from an abstract conceptualisation of integrity, framed as a reciprocal social responsibility, to how students should interact courteously with one another on an everyday basis.

The next thematic construct of how students conceptualised relational responsibilities reflected the importance students placed on professional relationships in the doctoral environment. As discussed in Chapter Five, some students considered how people who were currently colleagues during the doctoral project could become future colleagues after graduation, which may have influenced their collegial conduct. The students’ suggestion that collegial doctoral practices are informed by understandings of professional relationships helps to deepen our understanding of relational responsibilities.

**Professional relationships**

I explore in this sub-section how two students interpreted relational responsibilities in terms of professional responsibilities to colleagues as members of an academic community. In their own analysis of the collegiality statements, these two students identified how “professional relationships” develop from “personal relationships”, and help students to develop as professionals (conversation P19/20). The two students had identified three thematic groups from their sorting of collegiality statements (see Figure 7), and on the
sorting grid these three thematic groups appeared to represent a relational continuum: 

personal relationships (PerR), professional relationships (PrR), and professional development (PD).

Figure 6: A thematic interpretation of a relational continuum (conversation P19/20)

The students judged all three thematic groups to be of high importance to collegiality, but their judgement differed for importance in relation to doctoral learning. Personal relationships were placed in the quartile of least importance to doctoral learning. Professional relationships effectively sat in the middle of low and high importance to doctoral learning, with some collegiality statement cards judged of more importance to doctoral learning than others. The students considered the thematic group professional development, positioned in the uppermost quartile, of greatest importance to collegial doctoral learning. Reflecting on how the three thematic groups related to one another, the students initially focused on personal relationships, then focused on the two professional thematic groups. They seemed to infer that relationships with colleagues operate on a progressive continuum:
From the students’ perspectives, personal relationships provided the basis from which professional relationships evolved. Professional relationships then facilitated opportunities for professional development. One student’s use of the phrase “personal benefits” highlighted the importance of professional relationships for broadening and enhancing doctoral learning.

The students’ identification of professional relationships and professional development is pertinent to current trends in doctoral education (McGagh et al., 2016; Manathunga, et al., 2009; Nerad, 2015). As discussed in Chapter Three, professional development and transferable skills have a high profile within current doctoral discourses and academic development initiatives (Bernstein et al., 2014; Humphrey, Marshall, & Leonardo, 2012). These students decided to attribute greatest importance to professional development, which resonates with other students’ discussions of future colleagues in Chapter Five, and reiterates the intentions of some students to conduct professional-type relationships with colleagues during their doctoral project.

What is interesting about the students’ choice of “professional” to describe relationships and learning opportunities, is how professional is used to describe relational responsibilities. A closer look at the collegiality statements that the students included in professional relationships will help to illustrate the connection of professional relationships to relational responsibilities (see Figure 8).
Based on the collegiality statements illustrated in Figure 8, professional relationships involve working together (‘willingness to help’, and ‘reciprocity’), and being attentive of others (‘empowering’, ‘commitment’, and ‘wellbeing’). The students’ inclusion of ‘people share an achievement orientation’ seems to relate to my analysis in Chapter Five, which demonstrated that students value collegial activities that they judged as being purposeful. Thinking about a shared achievement orientation in terms of relational responsibilities seems to make a similar point to that made by a student in focus group #3, that colleagues are respectful of one another’s time by being focused on purposeful activity.

The students also identified the importance to professional relationships of demonstrating awareness of other people’s emotions; ‘participation is empowering’, ‘commitment’, and ‘participation supports personal wellbeing’ extend what might count as relational responsibilities. I will analyse further the emotional work of doctoral practices and the doctoral project in Chapter Seven, but suffice to say here that professional relationships seemed to include an affective dimension. The statement, ‘people involved share a collective identity’ added to an understanding of professional relationships.
A number of researchers have commented on the challenges faced by doctoral students and early career researchers in terms of developing academic identities (Alexander, Huemmert, & McAlpine, 2013; Bansel, 2011; Cotterall, 2013a; Fotovatian & Miller, 2014; Grady, La Touche, Oslawski-Lopez, Powers, & Simacek, 2014; Hartung et al., 2017). Irrespective of their theoretical position, researchers appear to agree that studying for a doctorate represents a period of identity transition. Students may find their identity formation further complicated during doctoral education by other factors contingent on their circumstances. The students in this activity linked collective identity to professional relationships, which I interpret as representative of students’ transitional identities, and what students’ might hope to achieve from their collegial relationships. This may mean students being recognised as a professional colleague now, and in the future.

The inclusion of collective identity as a feature of relational responsibilities adds to our understanding of collegial doctoral environments and how students might see others as colleagues. Additionally, considering collegiality in terms of professional relationships introduced students’ expectations of professionalism in their collegial relationships. Thus far, students have portrayed collegial relationships characterised by social responsibilities, common courtesy, and professionalism. The following analysis discusses relational responsibilities in terms of “rules of interaction” (conversation 23/24), and highlights a further variation in students’ collective conceptualisation of relational responsibilities.

**Interaction rules**

The two students in the following conversation started their analysis of their card sorting with a focus on the thematic groups they felt were most important to doctoral learning. They identified “relationships” and “interactions” (conversation P23/24) respectively (see Figure 9).
In the process of trying to decide how the two thematic groups ‘relationships’ and ‘interactions’ related to one another, one student pointed out:

That’s kind of like that little group we had before, the rules of the group.

Yep.

Isn’t it? The interaction… the *interaction rules* [emphasis added].

(conversation P23/24)

One student referenced an earlier discussion between the two that had occurred during the introductory activity to the hierarchical card sorting; the students had undertaken a simple sorting of the statements without the board to identify thematic groups. Consequently, and early in their conversation, these two students had agreed that relational responsibilities were part of collegial practices. The thematic group identified by the students at this point consisted of the following statements: ‘people offer and accept advice’, ‘people demonstrate commitment to one another’, ‘people show willingness to help others’, ‘people
behave respectfully to one another’, and ‘reciprocity (give and take)’ (see Figure 9). Notably, in their deliberations the students started with “rules” before identifying the theme “interaction”.

 Effectively, the students determined that collegial practices should be guided by interaction rules regarding how people might interact with one another. Interaction rules could be considered a form of ‘constitutive rules’, which provide a means for people to anchor recognisable and acceptable practices across a diverse and disparate group (Swindler, 2005). Analysis of students’ willingness to “pay it forward” discussed in the previous section, demonstrated interaction rules such as commitment, a willingness to help colleagues, and reciprocity. The inference is that in the process of adhering to tacit interaction rules, colleagues maintain a collegial doctoral environment.

 Importantly, when interaction rules are considered in relation to “social responsibilities” (conversation P1/2), “common courtesy” (conversation P15/16), and “professional relationships” (conversation P19/20) an increasingly complex structure of meaning develops of students’ expectations of relational responsibilities. Yet, despite their identification of interaction rules for collegial conduct, at no point during any of the research activities undertaken for this study did students describe a context where they formally agreed expectations of relational responsibilities. The closest example to a formalised set of expectations came when a student recounted “building trust” among writing group members before commencing peer review practices (focus group #2).

 The absence of explicit examples for establishing “interaction rules” (conversation P23/24), led me to interpret relational responsibilities as constitutive rules (Swindler, 2005) of collegial conduct. Not only did students seem to hold high expectations of collegial conduct, their expectations appeared to be tacit, and for the most part unarticulated. In the
final examination of the structure of meaning for relational responsibilities, I consider how a “code of conduct” (conversation P7/8) identified normative tacit expectations of what counts as collegial conduct.

**Code of conduct**

Analysis of a ‘code of conduct’ in this sub-section develops the interrelated ideas of relational responsibilities already discussed into what I argue is the most sophisticated form of students’ expectations for collegial conduct. The students in this conversation took little time to identify and agree on the thematic group, “code of conduct” (conversation, P7/8). The speed with which the students came to an agreement on *code of conduct* was notable in comparison to their analysis of other themes in their hierarchical sorting. I suggest the complete absence of discussion highlighted for these students how integral relational responsibilities were to how they made sense of collegial conduct. Furthermore, it seems that these two students considered that collegial conduct had potential for addressing the emotional work of the doctoral project. The two students based their analysis of a code of conduct on what could be interpreted as emotional dimensions of practice: ‘people demonstrate commitment to one another’, ‘participation is empowering’, ‘people demonstrate integrity to one another’, ‘people behave respectfully to one another’, ‘reciprocity (give and take)’, and ‘participation supports personal wellbeing’ (see Figure 10).
The purpose of a *code of conduct* in terms of relational responsibilities could be to guide collegial practices, and safeguard colleagues’ emotional wellbeing. It is this additional emotional dimension that I argue makes the concept, code of conduct, more sophisticated than previously discussed ways of talking about relational responsibilities.

The collegiality statements that constitute the thematic group *code of conduct* focus on *how* people should implicitly relate to colleagues, these statements do not identify *what practices* people actually need to do to enact a code of conduct. Therefore students’ choice of the phrase, *code of conduct*, in the context of tacit expectations of relational responsibilities seemed to imply that colleagues will need a well-developed awareness of the effect of their conduct on others and their own emotional wellbeing. Having awareness that collegial practices involve a tacit code of conduct, and knowing how to conduct themselves within its parameters, may require students to exercise ‘interactional expertise’ (Collins, H. M., 2010; Collins, H. M. & Evans, 2002). Students who demonstrate interactional expertise in their collegial conduct are able to interpret the tacit expectations of colleagues in a collegial situation, and act accordingly.

I argue that a *code of conduct* represents the most sophisticated form of relational responsibilities on the basis that a *code conduct* requires students to have an affective
awareness of themselves and their colleagues in collegial situations. In addition, given the tacit nature of relational responsibilities, a code of conduct implies that students may need to exercise interactional expertise to determine the most appropriate course of conduct for the context. These are not simple expectations, and suggest that students’ understanding of what counts as relational responsibilities operate on a number of levels, from a broad foundation of responsibility to one another, to demonstrating a sophisticated emotional awareness of oneself and others. Students’ understanding a code of conduct illustrates the interdependence of people’s practices (Barnes, 2005), and how students come to understand the social world of doctoral education through their own practices and the practices of others (Barnes, 2005; Nicolini, 2012; Wenger, 1998). If students do not articulate a code of conduct, then their understanding of relational responsibilities is structured in the practices that they collectively observe and reproduce. A code of conduct, from this perspective can become embedded in the ways that students know and do collegial practices (Gherardi, 2012).

**Summarising relational responsibilities**

In this section, I applied a hybrid methodology to consider students’ reflections on how people should relate to others in order to productively maintain a collegial learning environment. The ways that students spoke about relational responsibilities reflected complex sets, or arrangements (Schatzki, 2008) of expectations, behaviours, and unspoken rules that they applied to collegial contexts. Starting with generic social responsibilities, students’ conceptualisations demonstrated increasingly complex tacit knowledge of relationships, concluding with being aware of the emotional dimensions of collegial practices.
A collegial doctoral environment from this perspective requires students to have a well-developed understanding of relational responsibilities, whether their interactions with others are fleeting or extended. While students are explicitly taught many aspects of doctoral education, through workshops, supervision, and so on, students seemed to rely on interactional expertise to adapt their practices to a collegial doctoral environment. Many students seemed habituated in their collegial practices, but the academic environment presented its own cultural and institutional demands, such as academic integrity and professional relationships.

My second aim in this section was to demonstrate how using a hybrid methodology provides researchers with a different set of analytic tools and a different lens to apply to the same data, specifically, phenomenographic tools. Using a phenomenographic process of analysis with a social practice theoretical lens, I have illustrated a structure of meaning for relational responsibilities that adds a different way of understanding the data that I discussed in the previous section of this chapter. The theme relational responsibilities illustrates a conceptualisation of students’ collegial conduct that has emerged from students’ collective experiences of collegiality in doctoral education. While each layer of meaning within the structure, or each variation of relational responsibilities, came from a different set of students, the phenomenographic influence on my analysis meant that I viewed these different perspectives not as pertaining exclusively to each set of students, rather that these different perspectives represent variations within the collective experiences of all students in this study. The two analytic methods that I adopted enabled me to engage with the data in complementary and nuanced ways to develop a deeper understanding of what collegiality in doctoral practice means to students.
CHAPTER 6: RELATIONAL RESPONSIBILITIES

Summary

How students conceptualised their collegial learning in terms of relational responsibilities represents an important insight for doctoral education. Relational responsibilities seemed to provide students with a set of relational tools to navigate the various relationships and collegial activities that they participated in. Within the university system doctoral students often seem positioned in a liminal state of becoming-researchers, becoming-academics, or increasingly, becoming-professionals. Having an awareness of what counts as relational responsibilities might help students to navigate their transition through this liminal period.

Students who translated tacit knowledge of how collegial relationships work to new circumstances demonstrated interactional expertise (Collins, H. M., 2010; Collins, H. M. & Evans, 2002) that likely enabled them to make the most of collegial relationships. The fact that students drew on interactional expertise suggests they had a sophisticated approach to participating in collegial practices, but interactional expertise is dependent to a certain extent on students’ prior experiences and habituated practices (Reckwitz, 2012; Turner, 1994). There are likely to be circumstances when students might struggle to apply interactional expertise to the collegial practices of their colleagues, or to make sense of the cultural scheme (Reckwitz, 2012) of their department or discipline. Universities may well provide workshops on academic writing and publication, but workshops on enacting relational responsibilities, such as reciprocity and integrity, are likely to be rare.

Students might benefit from some form of education in how to participate in collegial activities, where their expectations of collegial conduct and relational responsibilities are addressed. The format could perhaps be similar to workshops for networking, which are already offered by academic developers and university departments. International students
(Cotterall, 2013b; Curtin et al., 2013), and students from minority ethnic or socio-economic groups (Acker & Haque, 2015), in particular, are more likely to find participation in an academic environment challenging. Providing students with opportunities to make tacit expectations explicit could help to alleviate some of the challenges involved with recognising what counts as a code of conduct for collegial practices, if a student is not familiar with the relational conventions expected by colleagues.

Much of the collegial socialisation experienced by students in this study occurred due to their own, or a colleague’s initiative. To a certain extent, students were socialising and learning relational responsibilities from one another as self-organising agents (Boud & Lee, 2005). Many students spoke of activities and practices beyond the affordances of departmental provision, and in many regards, this could be seen as productive to developing a range of professional research skills and transferable skills beyond the doctorate. Accordingly, I would argue that relational responsibilities are an important aspect of doctoral education that should not be taken for granted or underestimated, but should be encouraged and made more explicit.

In the next chapter, students’ talk of autonomy and the emotional work of doctoral education provide a focus for analysis which I build into an argument that collegial practices and relationships help to mitigate some of the emotional work of the doctoral project for some students.
Chapter Seven: The Emotional Work of the Doctoral Project

Understanding what students want to achieve from collegial practices was one of the key research questions informing this study. In the previous chapter, I demonstrated how students anticipated a ‘code of conduct’ among colleagues who participated in collegial practices. Effectively, students wanted to encounter and put into practice reciprocal responsibilities in collegial practices. In this chapter, I expand on what students wanted to achieve by discussing how collegial practices provided students with emotional respite from the complex demands of autonomous practices, which students saw as a necessary component of the doctoral project.

Students identified autonomous practices as both necessary to doctoral work, and to fulfilling a goal to contribute an original piece of work to their field of study. Yet students reported that autonomous practices could involve demanding emotional work. While it might be too much to claim that autonomous and collegial practices were complementary, this chapter presents the argument that collegial practices can align with students’ perceptions of autonomy to make the emotional work of the doctoral project more manageable.

For instance, students in this study spontaneously talked in different ways about what doing a doctorate feels like. In some respects, this focus of conversation came as a surprise. Publicly talking about emotions is a practice that many people are uncomfortable with; even more unlikely is talking with strangers about emotions. ‘Feeling rules’ (Burkitt, 2014; Swindler, 2005) and discourses that pathologise emotions and matters related to mental health (Burford, 2014) tend to dissuade people from making public their emotional experiences. Students who volunteered for this research knew that they would be
conversing with people they were unfamiliar with. Nevertheless, and with differing levels of discretion or openness, students’ conversations turned to the emotional work of the doctoral project.

This chapter analyses the emotional work of the doctoral project, which manifested in different ways for students in this study. Students identified variations in the types of emotional work they had experienced, spanning a spectrum of emotions that ranged from companionship and social bonds with others, personal agency, to practices marked by frustration and a sense of disempowerment. Given the broad range of emotional work, I will focus on three recurring themes in students’ conversations: autonomy, isolation, and wellbeing.

The three themes were notable due to the ways that the emotional work of autonomy, isolation, and wellbeing interconnected. Autonomous practices, according to students, could lead to feelings of isolation. Students who participated in collegial practices, however, felt that their collegiality helped them mitigate a sense of isolation, and maintain a sense of wellbeing. A growing body of research literature acknowledges the importance of personal wellbeing to doctoral students’ resilience during their studies (Aitchison & Mowbray, 2013; Burford, 2015; Cotterall, 2013a; Holdsworth, Turner, & Scott-Young, 2017), making the findings of this chapter pertinent to current moves in academic development to respond to students’ emotional work and wellbeing.

I will commence my analysis in the first section, by examining how students framed wellbeing and collegial practices in terms of working towards the goals of the doctoral project. A sense of personal wellbeing helped students balance some of the challenging emotional work associated particularly with autonomous practices. In addition, students described how a sense of wellbeing gained from participating in collegial practices
contributed to them feeling motivated and purposeful in their studies. In second section, I will discuss how students identified autonomous practices as an important aspect of the doctoral project, despite the emotional challenges. Students talked of the potential to feel passionate about their research project, demonstrating that for some students, autonomous practices could be emotionally invigorating rather than emotionally demanding. In the third section of this chapter, I will consider how a sense of autonomy could lead to a sense of isolation when students equated autonomous practices to lone scholarship. The discursive construct of lone scholarship seemed influential in students’ willingness to accept challenging emotional work as a necessary part of the doctoral project. Students’ unquestioned acceptance of lone scholarship, and what they saw as the associated emotional work, could run the risk of them setting expectations of autonomous study that were potentially unhelpful to their wellbeing.

Wellbeing and collegial practices as emotional respite within the doctoral project

Students’ sense of wellbeing is important for completing the doctoral project (Holdsworth et al., 2017; Pyhältö et al., 2009). Yet it is important to acknowledge that wellbeing eludes a unitary definition (Burkitt; 2014). Students in this study constructed wellbeing as mental health in the following ways (see Table 7):
Table 7: Students’ constructs of wellbeing

<table>
<thead>
<tr>
<th>Construct of wellbeing</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health</td>
<td>Conversations P3/4; P5/6; P13/14</td>
</tr>
<tr>
<td>Social support</td>
<td>Focus group #1 and #2; conversations P3/4; P23/24</td>
</tr>
<tr>
<td>Trust</td>
<td>Focus group #3; conference workshop; conversations P1/2; P5/6; P9/10; P15/16</td>
</tr>
<tr>
<td>Strong relationships</td>
<td>Focus group #3; conversations P1/2; P5/6; P9/10; P15/16</td>
</tr>
<tr>
<td>Being around like-minded people</td>
<td>Conversation P11/12</td>
</tr>
<tr>
<td>Personal capacity to look after yourself</td>
<td>Focus group #2; conversations P3/4; P7/8; P9/10; P11/12; P13/14; P15/16; P23/24</td>
</tr>
</tbody>
</table>

The constructs of wellbeing listed in Table 7 illustrate how students framed wellbeing in terms of emotional practices, relationships, and social context. My analysis indicates that students spoke directly of wellbeing during nine card-sorting activities (conversations P1/2; P3/4; P5/6; P7/8; P9/10; P11/12; P13/14; P15/16; P23/24), and in focus groups #1 and #2. The majority of conversations occurred during card sorting activities, which might speak to the more intimate or private context of just three people in a room. This intimate context might have enabled students to speak more candidly than in the context of a larger group. In the following sub-sections, I examine the different ways that students felt wellbeing could be achieved, either as individualised or collective endeavours.

Wellbeing and doctoral practices

In this sub-section I consider the different ways that students constructed wellbeing as an individualised endeavour, and the emotional work that they described accompanying
their endeavours. In one conversation, a student posed the question “do you need personal wellbeing for doctoral learning?” (conversation P7/8). The colleague in the conversation was adamant that wellbeing was necessary because the consequence of not having wellbeing was “…you start getting yourself down and isolated and lacking confidence, so you do, you do need high personal wellbeing” (conversation P7/8). This student seemed to be saying that a sense of personal wellbeing was a pre-requisite for doctoral practices and a source of emotional protection against “getting yourself down”. In a separate conversation, two students contemplated a similar question, and agreed also that a sense of personal wellbeing was necessary for the doctoral project:

I was thinking that’s like intrapersonal skills in a way. You know, it’s about looking after yourself, keeping yourself healthy mentally with your wellbeing.

It is. It’s about mental health really. (conversation P13/14)

These students appeared comfortable to talk about wellbeing in terms of mental health. Discourses of mental health have historically pathologised people’s mental health conditions (Burford, 2014) but the comfortable way that these two students spoke of mental health could indicate growing social acceptance. Also notable, was the students’ individualising of mental health as “intrapersonal skills”, (Burford, 2014), where responsibility for resolving challenging emotions is often portrayed as ultimately in the hands of the individual concerned (Parsons, 2001).

Six students positioned the emotional work of wellbeing as an individualised endeavour, and appeared willing to accept wellbeing as a personal responsibility. Placing responsibility for wellbeing and self-care on the individual reflects broader neoliberal discourses of individual responsibility, and the neoliberal university (Grant, B., 1997;
Morrissey, 2015; Nairn et al., 2012). One student invoked use of the term “individual” directly: “[Wellbeing] That is a personal thing, right? It’s to myself, to an individual.” (conversation P9/10). In two separate conversations, students linked individualised wellbeing to learning and success:

Realistically I suppose, if you don’t have personal wellbeing then you aren’t going to do very well. (conversation P13/14)

The whole learning process is dependent on your capacity to look after yourself for three years at least. (conversation P3/4)

These conversations introduced an element of emotional risk to the doctoral project, with a suggestion that the doctoral project is dependent on an individual’s “capacity” for self-care. If student wellbeing is dependent upon personal capacity, how might students fare during the doctoral project if they feel they have insufficient capacity or intrapersonal skills to look after their wellbeing? Student capacity to have wellbeing from this perspective might rest on them developing and enacting the types of emotional practices that keep them feeling productive in the doctoral project.

The implication for student wellbeing is that students need to pay on-going attention to their emotional work. Maintaining and sustaining a sense of wellbeing involves long-term practices throughout the doctoral project; “years” as one student noted. Several students described their strategies for maintaining their wellbeing, which involved regular activities or classes unrelated to their studies. One student participated in dancing classes (focus group #1), while a second student described the benefits to wellbeing of being a member of a quiz team, which demanded being knowledgeable about random things not related to research (focus group #3). And similarly to the findings of Buissink-Smith et al.
(2013), two students described the benefits to their wellbeing of regular social meetings with students where they did not talk about their studies (focus group #2). Clearly when students thought about the emotional work of maintaining and sustaining their sense of wellbeing, they considered self-care as a key factor.

During the course of their conversation (P3/4), two students enacted doubt related to the uncertain outcomes that accompany completion of a PhD. One student posed a perplexing question regarding wellbeing and PhD completion:

Wellbeing supports PhD finishing, but does PhD finishing support wellbeing? It does I guess cos it’s increasing your intellectual capacity and your self-confidence and your ability to work in a whole lot of new fields and things. [pause] But it’s like that, what’s the word? A dialectic, is that what you’d call it? Like, you need to support your own wellbeing in order to do your PhD studies, and then your PhD studies hopefully feedback into supporting your wellbeing. (conversation P3/4)

The enormity of what individualisation feels like is captured in this philosophical contemplation. The student’s self-answered question: “does PhD finishing support wellbeing? … hopefully…” (conversation P3/4), illustrates the doubt that can sit alongside the ongoing emotional work of seeing a doctoral project to its conclusion. The emotional work involved in an uncertain outcome is likely to be challenging, but at the same time the potential gains after completion offered a sense of optimism. The student’s reflection demonstrates how a sense of wellbeing both creates, and is created by, emotional work (Burkitt, 2014; Reckwitz, 2012), meaning that wellbeing can be considered both a dimension and an outcome of emotional practices.

The student’s reflection that the emotional work and uncertainties of doctoral study are worth the effort, suggests a type of self-care that Burford (2014) refers to as the work
of a “rational emotional manager” (Burford, 2014, p. 81). The work of an emotional manager is likely to require strategically selecting from a ‘repertoire’ (Trowler, 204) of emotional practices that help students keep their sense of wellbeing buoyant to see them through the doctoral project.

Students’ talk of individualised wellbeing lays a foundation for further consideration of the emotional work of autonomy later in this chapter, yet contrasts with the analysis discussed in Chapters Five and Six. Analysis in the previous chapters presents students’ understandings of doctoral practices and relationships in terms of interdependence. In the next sub-section, I explore how students achieved balance in their sense of wellbeing, which includes how social and collegial practices contributed to their sense of emotional balance.

**Wellbeing and emotional balance**

In this sub-section, I focus on some of the more explicitly described practices attributed to students’ sense of wellbeing. These practices involved everyday activities that might otherwise seem mundane or inconsequential, and could predominantly be described as social and collegial practices. Taken alongside individualised wellbeing, consideration of social and collegial practices helps to build a picture of the emotional work students engaged in to maintain and sustain their sense of wellbeing.

Some students talked about motivation when considering how they maintained balance in their sense of wellbeing. In one conversation, a student proposed: “When you’re feeling good to do it, that’s like the best time” (conversation, P11/12). A “feeling good” dimension of wellbeing helped a different student persist when faced with writing challenges: “I mean you were talking about the writing thing. They say just write, but if you lack in your writing at the start, it just doesn’t happen, right? You do need high personal
wellbeing” (conversation P7/8). Acknowledging that for most people competency in writing develops over time, this student suggested that writing practices were aided by a sense of wellbeing. Having a sense of wellbeing helped balance a lack of self-confidence in writing practices.

Writing practices are increasingly seen as an emotionally demanding component of the doctoral project. The student’s observation: “they say just write” (conversation P7/8), captured some of the emotional dynamics. The student’s choice of an anonymous “they” set up a relational power interplay that seemed to imply “they” assume doctoral writing is an emotion-free practice. The student clearly contested this assumption by indicating an emotional response to a “lack” of writing skills. Importantly for the argument in this chapter, the student identified a “lack” might be balanced by having a sense of “high personal wellbeing” (conversation P7/8). For another student, the emotional dynamics of writing proved too challenging. After a particularly harrowing experience of peer-review in a group context, this student vowed not to participate in a writing group again in an endeavour to protect a sense of wellbeing around writing (conversation, P1/2). A third student described being part of a writing group, whose members first committed to build up “trust” before they undertook peer-review of each other’s writing (focus group #3). This particular group of students chose to prioritise a sense of personal and collective wellbeing as a prerequisite for skill development.

The link made between writing and wellbeing demonstrates that few practices are emotionally neutral. While writing is generally an everyday doctoral activity in some form, writing is ultimately a high-stakes activity. The level of emotional work students attach to writing is understandable. A rich conversation in the field of academic development seeks to embrace an affective turn in the ways that students develop their writing skills (Burford,
These conversations acknowledge a need to learn more about the emotional dynamics involved in writing practices (Aitchinson & Mowbray, 2013; Burford, 2017; Cotterall, 2013a). Other types of everyday doctoral activities, such as time management, seem less researched in terms of how students’ participation contributes to their sense of wellbeing.

Many students in this study placed value on reciprocity and reciprocal practices, as illustrated in Chapter Six. The following conversation extract shows how thinking of others and undertaking a small helpful act brought emotional rewards for the student concerned. One student explained how sending a journal article to a colleague on the off-chance that they had not read it was helpful for the recipient, and the sender too “because that’s such a good feeling for yourself as well” (conversation P3/4). Behaving in a collegial way was thoughtful and emotionally invigorating. Sending a potentially useful article might seem like a random everyday act, but this student obviously knew enough about the colleague’s research to consider what might be helpful. The sense of wellbeing that the student gained was clear, even though details about the relationship and the recipient’s response were absent from the conversation. Other students talked more openly about this type of relationship as one of support.

Two students had a general opinion that “[Wellbeing] is about supporting each other.” (P23/24), but most students who discussed supportive relationships referred to specific occasions when a group came together around a shared focus. One mature student affectionately described their colleagues as a group of “old farts” (focus group #2), whose informal meetings focused on activities such as research, time-management, and publishing, or sometimes simply “having a yarn” (catching-up). Fundamentally, this cross-departmental group was a source of support for mature doctoral students, and meetings...
allowed for flexibility and social interaction. While age was a characteristic of membership, this student was also a staff member at the university but had prior work experience of a profession outside academia. The student expressed that meeting-up with colleagues who had previously worked outside of academia, or were still employed outside of academia, was an important feature of the relationships within the group.

People become recognisable to others through their practices (Reckwitz, 2002; Scheer, 2012), and members of this group of mature students felt as if they were linked by a common experience. The student described a common experience among members of the group that their identities were caught in a liminal state between how they knew themselves as professionals, and who they were now as students. While the group discussed readings on occasion, and shared writing or advice, it seems that this shared experience of managing identities was ultimately more important to supporting one another than focusing on academic goals. For this student, the doctoral project involved emotional work around identity, which meant recognising themselves as a doctoral student, and be recognised by others as one. The support group contributed to the student’s sense of wellbeing by helping to legitimise doctoral practices, on top of other daily demands of professional and home life.

Supportive practices among like-minded people featured in other conversations: “you’re going to have better collegiality I would say with people who are healthy, wellbeing, participating people” (conversation, P11/12). A shared agenda or values are implied in this comment, suggesting that students who place importance on wellbeing are likely to place importance on collegiality, and vice versa. In a different conversation, one student shared a similar sentiment: “When you’re in a good group, phoaw! It feels so damn good!” (conversation P9/10).
Other students talked about the link between collegial practices and wellbeing in terms of seeing themselves as members of a “community” (focus group #1; conversation P5/6) or being active in trying to create a feeling of “social cohesion” (focus group #3). A collegial environment seemed to provide students with opportunities to maintain their sense of wellbeing, and lighten some of the emotional work involved with the doctoral project. I explore emotional work further in the next sub-section.

**Social solidarity**

The following analysis further demonstrates how collegial environments and practices seemed to provide a mechanism for lightening the emotional workload of studying. When asked in focus group #3 what collegiality in an academic environment looked like, two students reported their summary as “social solidarity”. The students elaborated that they considered social solidarity an outcome of recognising group identity. They seemed to link solidarity to collective organisation. Other students in the focus group talked about collegiality as empathy, illustrating an understanding of social solidarity as people recognising shared emotional experiences (Collins, R., 2014). In this case, students had shared emotional experiences of doctoral study related to their participation in support groups.

Students talked about support groups in terms of regular interactions, such as regular meetings with a common format, fixed duration, and a shared purpose (focus group #1 and #2; conversation, p3/4; P15/16). Students acknowledged a social environment where they felt sufficiently comfortable with their colleagues to talk about their emotional experiences of doctoral study. Routine and regular interactions were important for these students’ understanding of what counts as social solidarity (Collins, R., 2014; Von Scheve & Ismer, 2013).
During a conversation about group contexts, two students introduced the term “social wellbeing” (conversation P15/16). I liken social wellbeing to social solidarity because the students reflected on group interactions as a means for shared (and sharing) emotional experience:

I think that collegiality part of why you form like these groups by choice is the sense of wellbeing you get from it.

The social wellbeing, yeah.

There’s those groups that you join because you’re like, I’m only doing this because I’m getting sole satisfaction of feeling good about it. It makes me happy. My PhD does not make me happy! (conversation P15/16)

This conversation extract touches on a spectrum of emotional work connected to doing a PhD. Clearly, the students found collective aspects of the doctoral project helpful for their wellbeing. The collegial environment that they referred to, like that of the student who talked about their “old farts” group (focus group #2), seemed to be more supportive of wellbeing than completing a PhD. The second speaker summed up the emotional respite created by a collegial group as “social wellbeing”. This term suggests a sense of wellbeing derived from being in a sociable environment, a perspective that resonates with the experiences of the student who joined a dance class, and a second who joined a quiz team.

The conversation between these two students continued, demonstrating in a different way how social solidarity provided students with respite from the emotion work of their studies. The first speaker went on to recount colleagues who reportedly questioned their decision to do a doctorate, and then reflected, “If I could go back, I don’t know if maybe I could put myself through that again?” (conversation P15/16). Airing feelings of dissatisfaction, self-doubt, and uncertainty in a group context could seem negative, but
appeared to provide students with affirmation that their emotions were not unique, but a shared experience, and in doing so provided a sense of social solidarity.

Collegial practices and supportive groups appeared to provide students with a sense of social solidarity, which in turn assisted students in developing emotional resilience (Holdsworth et al., 2017). A student in focus group #2 offered an example of what emotional resilience might look like. The student talked about how group activities provided an opportunity to “develop a sense of perspective” that the PhD is “a finite project”. Having a sense of perspective provided this student with a strategy that helped then manage the emotional work of their PhD, and engendered emotional resilience.

It should be noted that students also identified how groups could be problematic. For example, one student cautioned others to “selectively” choose group activities which could be helpful in “trying to de-stress the study situation” (focus group #2), the implication being that some group activities are not helpful. Whereas, a different student in the same focus group recounted how some groups could feel “cliquey”, which is clearly not an example of social solidarity for the person who feels an outsider.

Limitations aside, thinking about the emotional work of wellbeing in terms of social solidarity acknowledges the possibility for students to collegially work together to mitigate some of the emotional work of the doctoral environment. I complete this section with a brief consideration of how students experienced institutional services that might support their wellbeing.

An aside on institutional practices

Mention of institutional practices and services was largely absent from students’ conversations about looking after their wellbeing. This absence could simply be a matter of student participants not having used services provided by the institution. Alternatively,
students might have opted not to talk about using institutional services, like counsellors or the student health centre, influenced by discourses that pathologise mental health and public disclosure of emotions (Burford, 2014). One exception to the absence of talk about institutional practices or services involved the experience of a student studying on a northern campus.

One student had found that since relocating to a northern campus, institutional support services seemed diminished. The student described the university’s support centre on the northern campus as “not welcoming”, in part due to a “cold student culture” and no apparent institutional effort to change this “cold” culture (individual interview). The student felt a lack of institutional “care”. Primarily, this student was sharing an experience of feeling isolated, which I will discuss later in this chapter, but the student’s description of institutional practices and services is pertinent at this point. Universities recognise there is more they could do for student wellbeing (Hargreaves et al., 2017). Research reflects the endeavours of universities to increase student participation in activities where they might develop supportive and social networks to maintain their wellbeing (Buissink-Smith et al., 2013; Holdsworth et al., 2017).

I move now to the third section, where I present analysis of how students positioned autonomous practices as an important aspect of the doctoral project, despite the emotional challenges. The importance that students placed on autonomy meant that they could potentially set unrealistic expectations of their doctoral practices to the detriment of their emotional wellbeing.

**The emotional work of autonomy**

The focus of this section is to consider some of emotional work involved in sustaining autonomous practices. Students identified the importance of autonomy to the
doctoral project during card sorting conversations and focus groups #1 and #3. Across the data set, some commonalities emerged in the ways that students spoke about autonomy, and the related emotional work of trying to be an autonomous doctoral student. Students’ focus on autonomy represents an unlikely finding for a study on collegiality, but the prevalence of student conversation on the topic makes analysis necessary.

Students’ view of autonomy firmly placed the individual at the centre of the doctoral project: “In actual fact, a lot of this whole thing [PhD] depends on individuals” (conversation P3/4). Such views may not be expressed in all cultural contexts. Māori researchers, for example, place the community at the centre of the doctoral project, based on principles of whanaungatanga, manaakitanga, and reciprocity (Tuhiwai Smith, 1999; Smith, Hoskins, & Jones, 2012). The majority of students in this study expressed views that reflected a more individual perspective of self-responsibility: “Take destiny into my own hands… It’s your own toil.” (conversation P9/10). In similar ways to my analysis of individualised wellbeing, student autonomy resonated with neoliberal discourses and the neoliberal university (Grant, B., 1997; Morrissey, 2015; Nairn et al., 2012). When the doctoral project is positioned as an individualising experience, the stakes are high and success is dependent upon the individual. This perspective is not unique to students; Danby and Lee (2012) critique the dominance of discourses in academic development literature that promote the individualising of the doctoral experience.

An autonomous student is expected to demonstrate competency in disciplinary skills, maintain a clear sense of purpose in their activities and choices, and exhibit confidence in their own distinctiveness (conversations P3/4; P5/6; 7/8; 9/10; 15/16; focus group #1). Having a sense of self-direction was a theme common to all conversations.
Contemplating their endeavours to maintain self-directed practices, students reflected on the importance of passion.

**Passion**

Students’ passion for their studies enabled motivated and purposeful practices concerned with achieving the goal of the doctoral project. The students’ discussion of passion demonstrates Burkitt’s (1999) point that we should avoid simplifying emotions:

> Cos that passion, that’s about why you put yourself through three or four years [laughs] of like what can be a very difficult time… Like intellectual passion and that kind of thing and wanting to make a contribution to the world, or make a contribution to knowledge. (conversation P3/4)

Two students identified passion as an emotion that could get them through the duration of the doctoral project, and in doing so linked passion with individual motivation and persistence. Motivation is often considered from the perspective of conscious cognitive activity (Bandura, 2015), and here one of the students went on to identify “intellectual passion” as a conscious drive for achieving goals (Cotterall, 2013a).

It is likely that students’ passion for their studies involved a repertoire of habituated practices because students claimed that passion for their studies sustained their motivation and self-directed practices. To understand how passion was evident in students’ practices, I will consider how passion manifested in the ways that students talked about “intellectual passion” and intellectual “distinctiveness”, and how passion could present an emotional dilemma when interpreted as self-centredness.

**Intellectual distinctiveness**

An understanding of what could be meant by “intellectual passion” became evident in the data in the ways that students spoke of the distinctiveness and sense of ownership of
their research. It is notable that so few students in this study used the word ‘passion’ yet if we consider passion as representative of a complex pattern of emotions (Bateson, 1973; Burkitt, 1999; 2014), then motivated intellectual endeavour, claims of distinctiveness, and ownership were all indicators of passion.

For some students, having ownership of their thesis meant recognising the distinctiveness of their doctoral project (focus group #1; conversations P9/10; P13/14). Students relished their pursuit of a research topic trajectory that they felt passionate about, striking a note of distinctiveness and individuality (conversations P1/2; P9/10). While two students were analysing their card sorting, one student suggested a possible thematic interpretation for one set of cards as “individualism”. However, there was a note of doubt in the student’s voice that suggested uncertainty about this interpretation. The other student in the conversation seemed to pick up on the uncertainty about individualism, and offered an alternative interpretation, focusing on individuality: “The power of individuality. It’s like the good side of individuality. Distinctiveness, it’s the power of difference” (conversation P9/10). Both students seemed uncomfortable with the types of practices individualism might imply.

Students who volunteered for this research would have been aware that the project focused on collegial activity, so individualism in this regard might seem an unfavourable interpretation. As previously discussed, individualism as a social concept has discursive connotations, and a person’s political values and beliefs might affect how they view individualism (Nairn et al., 2012). Whatever the reason, both students rejected their initial interpretation of individualism, and seemed more comfortable with describing individuality in more positive terms: “The good side of individuality” implied there might be a ‘bad side’ of individuality, such as individualism. Instead, individuality pointed to “distinctiveness”.
For solo student researchers, intellectual distinctiveness is a point of difference, enhancing the autonomy that students can exercise in their doctoral project. The student’s choice of “power” (conversation P9/10), implies an emotional effect of difference that might relate to feeling empowered. In terms of social practice theory, these students were invoking and communicating intellectual distinctiveness within their doctoral practices, which contributed to the teleoaffective structure of the doctoral project.

In other conversations, ownership of the doctoral project contributed to students’ sense of intellectual distinctiveness. For two students, ownership of the doctoral project involved being self-driven and taking on personal responsibility:

I think part of your process really is that it’s independent to a certain extent, so it’s nice to have some help. But in some ways if you get too much, you end up doing somebody else’s work.

That’s true. And not having ownership of it, which I think can actually decrease…

Decrease your commitment to it [thesis]. (conversation P13/14)

These two students seemed to infer that a sense of ownership of the thesis represented an important emotional dimension of autonomous practices. A student could lose a sense of ownership by accepting too much help. Both students seemed to share the perception that diminished ownership might result in diminished commitment to the doctoral project.

Nonetheless, the suggestion that receiving too much help might decrease personal commitment to the doctoral project was at odds with the experiences of other students in this study. Some students felt they received insufficient help; one student resorted to “ambush supervision” tactics and described “ambush[ing]” their supervisor in their office unannounced for supervision support (conversation P15/16). Other students celebrated
receiving serendipitous help (conversation P3/4; focus group #2), or acknowledged the “academic dynamism” (conversation P17/18) of receiving help from diverse sources, notably through networking practices (conversations P5/6; P7/8; P19/20; P23/24).

Students’ sense of intellectual distinctiveness did not necessarily require complete independence or individuality. Many students seemed to find interdependence helpful in the emotional work of maintaining their distinctiveness and passion for their research project.

In the following sub-section, I discuss how students sometimes found the emotional work of individuality and ownership confronting in terms of losing autonomy or because of perceiving oneself as individualistic. Some students encountered these emotional dilemmas when they conflated passion and self-direction with self-centredness.

The emotional work of self-centredness

The emotional resolve required of students to complete the doctoral project prompted some students to reflect on whether their practices might be considered self-centred. In the following conversation extract from a card sorting activity, two students reflected on where they had positioned the collegiality statements on the sorting grid. Attending to the statement, ‘people are self-directed’, the students questioned whether their practices could be characterised as self-centred. The adjective, ‘self-centred’, acknowledges the doctoral project as an autonomous endeavour, but self-centred also references selfishness. Personal goals and self-direction may not necessarily involve or take into consideration other people, and might sacrifice collegial practices for personally beneficial ones:
Actually the PhD programme is a very [pause] self-centred programme. So at the same time that it’s very self-centred, you are the main driver of your car, if you don’t do it nothing will happen, you won’t get a degree, we see the self-directed as one of the least important ones.

… Well this is sort of your core PhD [goals]. At the end of the day you have to finish the PhD on your own or you don’t get a degree. But, I think what we’re seeing here is that the students and the community value a much bigger and wider experience than that. And at the end of the day you’re going to have to work in a research group. You’re going to have to go out into a career and do the same thing. (conversation P5/6).

The second student acknowledged the apparent emotional dilemma of appearing self-centred, offering neither a denial nor an alternative emotional descriptor, but noted: “… students and the community value a much bigger and wider experience than that.” (conversation P5/6). The student understood what was implied by self-centred but instead reconciled self-centredness with personal responsibility and validated the need for self-centred practices to complete a PhD. On a separate occasion, one student was more direct in their justification of self-centred practices.

During focus group #3, a student participant indicated that they always decided on whether to get involved in group or university activities based on whether the activities had a clear purpose relatable to their own studies. If the relatable purpose was unclear, this student, who studied part-time, stated they would not get involved because they did not have the time to spare. This student’s reflection on purposeful participation could be read as self-centred. This student appeared unwilling to consider that they might contribute to colleagues’ learning by getting involved in activities unrelated to their own studies. Additionally, what might have seemed like a strategic course of action for the student, could also disregard opportunities for incidental learning that can occur in unforeseen ways. Like
the previous conversation, this student accepted self-centredness with an element of pragmatism, weighing up the potential gains of collegial practices versus the goal of completing the thesis.

While students were not necessarily negative about their own self-centred practices, they did on occasion question the apparent choices made by other students, whose practices seemed exclusively self-centred rather than collegial. At different times, students remarked on the behaviour of other students who demonstrated little engagement with their colleagues (focus group #1; conversations P7/8; P17/18; P21/22). Discussing collegial practices, one student referred to those who would rather commit to their “personal pie in the sky project” (conversation P7/8). It was an interesting phrase in terms of the emotional work of the doctoral project because as a colloquialism, ‘pie in the sky’ infers an illusory promise or a fanciful notion. On this basis, the student seemed to be questioning the wisdom of students who commit all their efforts to their PhD projects, with little time for their colleagues, because at the end of their PhD they might discover that their self-centred practices were not worth the emotional sacrifices involved.

The doctoral project has situational demands that place what might seem like contradictory expectations on students at times, creating emotional dilemmas (Burkitt, 2014). Does a student concentrate on finishing, or on contributing to others? Can a student do both? These emotional dilemmas in turn create emotional work for students. For some students, managing the emotional dilemma of self-centred practices appeared to involve the students weighing up their individual selves (Bericat, 2016; Burkitt, 2014; Kemmis et al., 2012; Solomon, 2008) against their collegial selves. The intersection of self-centredness and collegiality created circumstances that prompted some students to think about
justifying their practices. Students’ reflections illustrated some of the emotional work that they undertook to make sense of practices necessary to complete a doctorate.

In the next section of this chapter, I discuss students’ reflections on the emotional work of feeling isolated. I will refer to the discourse of lone scholarship as a lens for explaining how students’ autonomous study practices could lead to feelings of isolation.

**A tenuous emotional balance between autonomy and isolation**

Students’ perceptions of autonomous practices sometimes led to unrealistic expectations of personal performance during the doctoral project, creating a situation that required considerable emotional work for some students. Students identified a sense of isolation as a possible consequence of autonomous practice. I identified a lone scholar discourse that seemed to resonate with the practices students saw as necessary for completing the doctoral project. The tenacity of a lone scholar discourse was evident in the ways that students were willing to tolerate the challenging emotional work of loneliness in order to attain the ideal of a ‘competent’ student.

**Setting the scene for lone scholarship**

The lone scholar appears to be historically associated with doctoral study. The first mention of a PhD dates to twelfth century Europe, where a model of study evolved of an independent scholar engaged in an extended pursuit of knowledge, supported by a sole supervisor (Park, 2005; 2007; Wellington, 2013). This early model of scholarship appears somewhat idealised now and is represented in the discourse of lone scholarship. While aspects of the initial model of doctoral scholarship remain, Wellington (2013) suggests the lone scholar is something of a misleading stereotype in current times because much about doctoral education has changed. However, the lone scholar provided a meaningful
discursive construct for students in this study because the lone scholar represents an idealised construct that students felt they needed to match.

Regardless of discipline, many students seemed to find the lone scholar a model to aspire to. A number of students in this study assumed that their peers studying in the sciences were more likely to encounter collegial practices and share a sense of collective identity (focus group #3; conversations P1/2; P7/8; P13/14; P17/18; P21/22). Yet six science students spoke of isolation in their discipline (focus group #1; conversations [numbers omitted for anonymity reasons]). Five of the six students spoke of direct experiences of feeling isolated on the basis of their gender, spatial isolation, field of research, few peers, and of limited socialising among members of the lab group. In terms of disciplinary backgrounds, only two students from humanities departments spoke of feeling isolated at times. Students’ acknowledgement of particular disciplinary experiences challenges generalisations about which disciplines are most inclined to practices of lone scholarship. The following analysis considers how students engaged with the discursive construct of lone scholarship.

Students speculated on whether they were capable of the autonomy required of lone scholarship. In the following conversation, two students considered their potential to rely on self-directed practices to see them through to PhD completion. Despite their recognition of the challenges involved, both students concluded that idealised lone scholarship was possible:

My general view is that self-direction could get you through a doctoral, it’s not necessarily the best course of action but

I think you could get to the end of one.

… I could rough it through a PhD.
Totally, it might not be as good for you or for your learning possibly?
(conversation P11/12)

Clearly the students had reservations about lone scholarship: phrases such as “not necessarily the best course of action”, “rough it through”, and “might not be as good for you” indicate that lone scholarship was not associated with a sense of wellbeing. Yet the students gave the impression that the emotional work involved was acceptable if it meant they would get through the doctoral project. It is worth noting that based on their whole conversation, neither of these two students had opted for lone scholarship having participated in many collegial activities. Nonetheless, both students indicated that while productive, lone scholarship could affect personal wellbeing.

Further conversations demonstrated how the discursive lone scholar took shape in students’ understanding of autonomous doctoral practices. For these students, a sense of purpose and the goal of completing a doctorate meant being willing to forgo collegial practices in favour of autonomous study:

I could be making contributions: I could be making cakes and bringing them in, you know, I could be providing the entertainment. We are very collegial. We are getting along but we are not in any way focusing on the purpose in mind. (conversation P9/10)

If you’re a doctoral student and you are not willing to help others, you’re not very collegial but you might achieve a lot of learning... (conversation P7/8)

Both perspectives presented compelling arguments for autonomous study; disruptions are not helpful for completing a PhD. But by suggesting that students may have to sacrifice
collegial interactions with colleagues, these students illustrated how autonomous practices can become lonely.

**The tenacity of the discursive lone scholar**

Students seemed willing to endure considerable emotional challenges to be purposeful and productive in their endeavours to complete their PhD. They seemed to justify the emotional work of ‘mythical’ anonymous peers whose successful PhD completion added to the appeal of lone scholarship. In the following conversation extracts, students alluded to anonymous lone scholars, who opted for reduced social and intellectual collegiality during their doctoral project:

If participation is important, have you seen those PhD candidates who never show up in the department, or they never show up in any social? Yeah, yeah, yeah [both laugh].

And they’re still successful. They still finish their PhDs! (conversation, P17/18)

I know some people who don’t have that great a relationship with people in their lab or supervisors, and still do equally as good. (conversation P21/22)

It is difficult to know whether these PhD candidates actually exist, but clearly the conception of lone scholarship is a powerful one that sets up idealised expectations of doctoral performance. From the students’ descriptions, these lone scholar students seemed peripheral to the socialising and collegiality that occurred among other students, and perhaps for this reason others knew little about them. The students who commented seemed to know of the accomplishments of their lone scholar peers, but offered little other insight
on the basis that these peers “never show up”, or “don’t have a great relationship with people”. In some respects, the unknown quality of their relationships might have led students in this study to ‘mythologise’ the status of their lone scholar peers, nonetheless, these students seemed to find the apparent success of lone scholar practices compelling.

Among those who alluded to the discourse of lone scholarship, students often displayed an acceptance that lone endeavour was to be expected as the lot of an emerging scholar. For these students, lone endeavour equated to the status quo of the doctoral project:

In another way that isolation can be part of the value of a PhD… In the end it is an intellectual journey of your own, and so some of that isolation it’s almost like a, what would you call it? Like a trial or an initiation.

It’s a rite of passage.

Yeah a rite of passage and that doesn’t necessarily have to be easy for it to be good. (conversation P3/4)

These two students seemed to normalise isolation as a necessary dimension of the PhD that allowed students to prove themselves as emerging academics. “Trial”, “initiation”, and “rite of passage” have a place in the theory of emotions in terms of ‘rituals’ (Turner, J. H. & Stets, 2005). Like feeling rules (Burkitt, 2014) and social solidarity (Collins, R., 2014), ritualised emotions serve to sustain culture and social structures in specific contexts, and are codified in language, bodily movement, interactions, and the symbols of the group (Collins, R., 2014; Turner, J. H. & Stets, 2005). From the student’s perspective, lone scholarship involved structurally anticipated practices of independent study, and structurally anticipated emotional work of feeling isolated. As evidenced by the students’ use of “value” and “good”, enduring the emotional work of isolation meant that students
could graduate not only with a PhD, but emerge from a rite of passage with additional cultural capital befitting this academic group (Turner, J. H. & Stets, 2005).

Power and status dynamics are important dimensions of rituals or rites of passage (Collins, R., 2014), and in some part help to answer the question: what would students gain from normalising isolation as acceptable emotional work of the doctoral project? Potentially, students who emerge from the doctoral rite of passage may find their emotional resilience enhanced. They might experience “emotional energy” (Collins, R., 2014,) that increases a sense of group solidarity with other doctoral graduates and academics. If emotions are the glue that holds social groups together (Collins, R., 2014), then a student who perseveres through the emotional work of isolation might encounter a sense of solidarity at the end of the “intellectual journey”.

**Isolation**

Not all students appeared to embrace the emotional work of lone scholarship. It would seem the lone scholar was also lonesome. Two students, discussing the card *companionship*, found time for a joke:

I find I’m alone a lot doing my PhD [laughs].

I know.

Companionship, who has time for that [laughter]! (conversation P15/16)

Joking aside, one aspect of lone scholarship that some students found challenging was the emotional work of loneliness. The following analysis examines how students considered implications for their wellbeing and the emotional work involved in the doctoral project when autonomous study became imbalanced. The metaphor of balance is useful for thinking about student autonomy and a sense of isolation in the doctoral project. It would
seem from students’ conversations that the balance can tip, and what started as an autonomous trajectory, can become an isolating one.

Students seemed quite willing to talk about isolation; the matter of isolation arose during half of the card sorting conversations, focus group #1, and an individual interview, but not always in ways that were emotionally explicit. When asked about alternative statements for collegiality in doctoral learning, one student suggested isolation should have been included among the statements. According to this student, isolation as an aspect of doctoral learning was missing from the statement cards. Perhaps the student had forgotten that the statements related to collegiality in doctoral learning. Nonetheless, by suggesting the inclusion of statements related to isolation, the student highlighted the importance of isolation to the doctoral project:

It might have been interesting to have some of those more isolated … whether that’s quite a theme for me, but it’s something that maybe is indicative of what I’m doing [and] is distinct in how a lot of people experience their postgrad. But I think there’s probably a lot of people who get very isolated in postgrad work. (conversation P13/14)

This student acknowledged feelings of isolation had arisen from circumstances including being a student who was also a staff member, and from doctoral research that involved a great deal of individual study at a computer. This student’s reflexive consideration of their own sense of isolation illustrated Burkitt’s (2012) argument that emotions are central to the way people relate to themselves. At first, the student seemed to engage in emotional ‘self-monitoring’ (Giddens, 1991), placing the self as the key agent in the process of isolation. The student deliberated on a sense of isolation as potentially self-created, then reflexively drew attention to circumstances relative to their doctoral experience. This student was also
a staff member, and students in this role might find themselves in a liminal position that further complicates the emotional work of the doctoral project.

Students’ willingness to talk about isolation seemed to go so far; students often talked about isolation from a third-person perspective. In a similar way that students alluded to peers who they considered as lone scholars, students spoke of isolation generally as something that others experienced. Students empathised with peers who found themselves in isolated circumstances, even if they had not experienced a sense of isolation themselves.

The following extracts of conversation offer three different perspectives of isolation in the doctoral project drawn from the conversations of six students:

…If you’re really isolated, like in your department, I’m just thinking about participation in a broad sense, if you don’t feel a sense of…belonging or being involved in something, if you don’t have that, as a doctoral candidate that can be a really really not a nice place to be. (conversation P21/22)

If you feel you can’t approach your supervisor or approach people around you then are you going to be as potentially, yeah does that have an effect on your learning? (conversation, P11/12)

I think it’s easy then to slip into not completing if you don’t participate and you kind of get in a rut. (conversation, P13/14)

Each student highlighted potential outcomes of isolation in the doctoral project. The first student contemplated how isolation might affect wellbeing. For this student, isolation had considerable emotional consequences that could diminish a person’s sense of belonging or involvement in a community. The second student reflected on the potential consequences
on learning for a student who felt unable to participate in the doctoral community. The third student reiterated the ease with which students might find themselves feeling isolated if they withdrew from participating in collegial activity, and the ongoing emotional impact of being “in a rut”. This student noted how isolation could potentially contribute to attrition from the doctorate.

Having made the argument in this chapter that a student’s doctoral project has a teleoaffective structure, it makes sense that isolation has disruptive implications for a student’s sense of purpose, their wellbeing, and their doctoral practices. Feelings of isolation can affect the mundane and everyday practices that make doctoral study recognisable for students. Students who normalise the emotional work of isolation as part of their doctoral practices risk setting a new norm for how the doctoral project should be experienced. If isolation becomes a normal part of the doctoral project, then by implication, the doctoral project is a challenging emotional and relational project too.

One student, who made a geographical move due to personal reasons, described feeling isolated while trying to complete a thesis (interview #1). This student found the rituals (Collins, R., 2014) of doctoral study and doctoral interactions disrupted by distance and limited university infrastructure. The everyday practices, symbols and materials that made doctoral life recognisable, such as an office space and a desk, were no longer available. The student encountered emotional work arising from a change of living circumstances and a move back to the family home. This student seemed to have isolation thrust upon on them by their move, and importantly to note, their changed circumstances impacted their sense of wellbeing quite quickly.

Students’ inability, reluctance, or unwillingness to participate in collegial activity could easily tip into feeling isolated, as several students noted. This interpretation seems to
imply that students’ own practices were implicated in their isolation, which may be the case to a certain extent. But from a social practice perspective, people are always defined in relation to others, to place and so on, and their emotions take shape in relation to circumstances too. Some students mentioned personal circumstantial details, such as being a staff member, while other students commented on departmental culture (focus group #2; conversation, P21/22), but generally, students offered limited or no critique of how the structural environment might affect the ways that isolation is experienced. Instead, students seemed to accept an academic discourse of lone scholarship with little critique. Many of the practices and emotional work students associated with lone scholarship, such as self-direction and passion, may serve students well in doctoral study if they are successful in autonomous study. However, accepting the emotional work of isolation as a rite of passage has potential to be less productive for students’ wellbeing.

**Summary**

Students spoke of the emotional work of their doctoral thesis in terms of everyday practices, such as writing. For this reason, emotional work plays an integral part in how students come to understand their doctoral project and the types of practices they adopt to fulfil their goals. What we might consider to be everyday practices of the doctoral project can sometimes demand considerable, yet invisible emotional work (Bolton, 2006), for example, students specifically mentioned the emotional work of writing (conversation P7/8). There are implications for students, and those who provide the academic support structures around them, to be aware of the invisible emotional work of the doctorate, and to facilitate emotional supports to contribute to students’ wellbeing (Burford, 2014).

A sense of wellbeing helped students to balance emotionally challenging practices with the everyday work of the doctoral project. Students found social solidarity in their
shared emotional experiences of some of the more challenging aspects of doctoral practices. Collegial practices and support groups seemed to provide students with the means to generate or identify social solidarity. Although it is important to be aware that students found some group dynamics or collegial practices less purposeful or productive than others, for social solidarity and for completing their thesis. Ironically, some purported collegial contexts might create emotional work, rather than provide respite from emotional challenges.

Passion and an associated pattern of emotional work appeared to represent an important dimension of the teleoaffective structure (Kemmis et al., 2012; Schatzki, 2012) of the doctoral project for students in this study. Passion seemed to enable students to sustain motivation and a sense of purpose through the toil and difficulties of their research, and to work towards a goal of creating a distinct contribution to knowledge. While a number of students associated passion with autonomous study, many students perceived that passion for their research could be closely aligned with collegial practices and networking to advance their disciplinary knowledge and research practices. In this regard, it is important to acknowledge how collegial practices can help students to maintain their intellectual distinctiveness, as well as deflect some of the emotional work involved in striking a note of difference and making an original contribution to knowledge.

Students’ autonomous doctoral practices have the potential to diminish their sense of wellbeing. One consequence of autonomous doctoral practices seemed to be students’ acceptance of lone scholarship as an idealised and ‘mythical’ approach to doctoral success (Cumming, 2010b). But with this acceptance came a tolerance of isolation. I argue that the tenacity of the discursive lone scholar can be unhelpful for students, setting unrealistic and contradictory expectations of the doctoral project and personal performance. As a
discursive construct, the lone scholar has cultural and institutional resilience, which needs to be challenged.

A more productive discourse to perpetuate in doctoral education is that of a balanced approach to study between autonomous and collegial practices. When students participated in collegial activity alongside their self-directed activities, students identified gains for their learning, their research practices, and their wellbeing. Furthermore, much of the collegial activity that students referred to was self-initiated, demonstrating how collegial practices can complement autonomous doctoral practices and vice versa.

In the concluding chapter of this thesis, I present six main findings from my analysis. I summarise the methodology that led me to these findings, and discuss the contributions and recommendations that this study makes to the field of doctoral education and academic development.
Chapter Eight: Conclusion

This thesis builds on and contributes to work in the field of academic development and doctoral education. To date, there has been little focus on how doctoral students perceive collegiality in their peer interactions and doctoral education, although a number of studies have focused on peer learning, or have expounded the need for further research about peer learning in doctoral education. This thesis contributes a deeper understanding of how doctoral students define and practise collegiality, who they view as colleagues, and the types of relational conduct they expect of colleagues. This thesis also builds on research that investigates the wellbeing of doctoral students, and contributes an understanding of how collegiality helps students to mitigate some of the emotional work of autonomous study and isolation. This research differs from previous studies in the field of doctoral education by adopting a collegial hybrid methodology, which has resulted in findings that represent collective understandings of collegiality offered by student participants in this study.

This research arose in response to misgivings about doctoral education that I encountered during my Masters study: in speaking to friends and doctoral students I gained the impression that doctoral education seemed short of opportunities for collegial practices and collegial relationships. I was not alone in my misgivings. Academic developers, researchers, government departments, corporate and industrial bodies, and students too, have reported that more could be done during doctoral education to develop students’ skill base for collegiality and teamwork (Cuthbert & Molla, 2015; Manathunga et al., 2009; Spronken-Smith et al., 2018; Vitae, 2010). There is less attention in the literature to what students have done to cultivate a culture of collegiality, and what their motivations are for
doing so (Batty & Sinclair, 2014; Boud & Lee, 2005; Flores-Scott & Nerad, 2012; John & Denicolo, 2013). In this chapter, I offer my contribution to the work of students and academic developers who seek to establish collegiality as a way of knowing and doing doctoral education.

I present this chapter in five sections. I commence by revisiting the research questions and summarising my theoretical and methodological approach. I then present my discussion based on six main findings, which relate to how students define and practise collegiality in doctoral education. Next, I highlight four contributions that this study makes, three to the field of doctoral education and academic development, and one to the study of methodology. I then make three key sets of recommendations for doctoral education. In the fourth section, I address the challenges presented by this research study and suggest future research directions. Finally, I reflect on what I learned from undertaking this study.

Revisiting the research questions

I commenced this research study with the following research questions:

1. How do doctoral students define and practise collegiality in a doctoral environment?
2. What forms of collegiality do doctoral students at Otago engage in as part of their everyday and routine practices, and how are these characterised in terms of learning (or knowledge making)?
3. What do doctoral students perceive they are getting from collegial activities, and how does this contribute to their doctoral experience?
4. From the perspectives of doctoral students, what are the relationships and practices that lead to purposeful collegial practices?
5. What can institutions do to foster more collegial practices and skills among doctoral students?
The purpose of these questions was both to establish what doctoral students understood and practised as collegiality, and to consider how this resultant understanding could inform institutional and student practices to include greater opportunities for collegiality. In this regard, I have demonstrated that opportunities for students to participate in collegial practices were underdeveloped in doctoral education at this institution. If this situation is the case elsewhere, then this research could inform the development of collegial doctoral education more broadly. The theoretical and methodological tools that I adopted to answer the research questions drew primarily from social practice theory.

A summary of theory and methodology

In this thesis, I utilised the work of social practice theorists associated with what is called the ‘practice turn’ in contemporary social theory (Schatzki 2005a). Schatzki is credited by many practice theorists as a key architect of the contemporary turn in social practice theory (Kemmis et al., 2012; Nicolini, 2009; Reckwitz, 2012; Trowler, 2014; Turner, S. P., 1994), although in Chapter Two I included practice theorists who operate in diverse academic fields such as education (Kemmis et al., 2012; Saunders et al., 2015; Trowler, 2014; Wilkinson, J. & Kemmis, 2015), philosophy (Reckwitz, 2002; 2012; Scheer, 2012; Solomon, 2008), organisational studies (Gherardi, 2012; 2014; 2017; Nicolini, 2009; 2012; Tsoukas, 2003), and psychology (Von Scheve & Ismer, 2013). A common theoretical principle unites these diverse theorists, namely that social phenomena are inherently relational and interconnected (Reckwitz, 2012; Schatzki, 2005a). I now draw on this principle to argue that collegiality and students’ collegial practices have potential to enhance students’ experiences of their doctoral education by contributing to their learning, professional development, and wellbeing. To this end, a theoretical emphasis on practices is especially useful for thinking about collegiality because doctoral students’
collegial practices constitute not only their performance of collegiality in a doctoral environment, but also their understanding of collegiality in this context (Cumming, 2010b).

The principle that social phenomena are inherently relational and interconnected further lent itself to thinking about students’ perspectives on collegiality at a collective level (Barnes, 2005). When diverse student participants articulated their conceptualisations of collegial practices and collegial relationships, their conversations collectively offered a window on what collegiality meant to students at this university. In turn, this collective conceptualisation of collegiality may be of value to academic developers for informing how they might understand students’ perspectives of collegiality in other doctoral programmes.

In Chapter Four, I presented the hybrid methodology of social practice theory and phenomenography that I adopted for this study. I synthesised elements of each approach on the basis that both methodologies make sense of phenomena through socially-mediated practices. Researchers in both fields share a commitment to collective ways of knowing and making sense of the social world, and an understanding that knowledge is relational. All participants in this study were students, and, in accordance with my commitment to collective ways of knowing, the research methods involved participants collegially interacting with one another.

In practice, my research methodology involved adopting two conversational methods in two phases. In the first phase, I conducted three focus groups, which I organised at this university’s campus. I made an exception for one student, who was unable to attend any of the focus groups; instead, we met for an informal interview. In the second phase, I used a hierarchical card sorting activity, where students participated in pairs. Having hierarchically organised a set of statements related to collegiality, students were asked to analyse how and why they had grouped sets of statements. The process of sorting and then
analysing their decisions in pairs required students to articulate their thinking about collegiality. On occasions, such interactions required students to provide a justification for their thinking, to argue their case, to tell a personal story, or share an example that related to the collegiality statements and their decision-making processes. Ultimately, each pair of students needed to arrive at a consensus, which meant that their conversations shed light on how students defined and practised collegiality. Both methods facilitated collegial interaction among student participants, and provided valuable contexts for students’ conversations. In this regard, the collective and collegial principles informing this research were embedded in the methodology.

I received ethics approval for this research study, and sought to enact ethical practices by adopting a reflexive approach throughout the research process. A reflexive approach primarily concerned my duty of care to participants, which meant I was attentive to how I handled participants’ experiences and understandings in face-to-face contexts, and then in writing this thesis. My duty of care will continue beyond the submission of this thesis, when I seek to publish and present findings more widely in peer-reviewed contexts, in order to contribute to a ‘collegial turn’ in doctoral education. In the next section, I summarise the six main findings that form the discussion for this research. The six findings are based on my analysis reported in Chapters Five through to Seven.

**Discussion**

The six main findings of this research study are summarised below. These findings derive from the experiences and understandings of a diverse population of doctoral students at one research-intensive university. On this basis, I do not claim that these findings are necessarily generalisable to the experiences of all doctoral students. I present my six findings in an order that relates to the research questions (see Table 8).
### Table 8: Relating the Main Conclusions of this Study to the Research Questions

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How do doctoral students define and practise collegiality in a doctoral environment?</td>
<td>One: Students’ understandings of collegiality informed who they saw as a colleague during their doctoral education, and shaped their expectations of collegial conduct within doctoral practices.</td>
</tr>
<tr>
<td>2. What forms of collegiality do doctoral students at Otago engage in as part of their everyday and routine practices, and how are these characterised in terms of learning (or knowledge making)?</td>
<td>Two: These students entered doctoral education with an existing well-developed sense of collegiality. Three: Supervisors occupy a unique position in how students think about collegiality. Students were unlikely to view supervisors as colleagues, yet they still perceived that supervisors have a role in collegial practices.</td>
</tr>
<tr>
<td>3. What do doctoral students perceive they are getting from collegial activities, and how does this contribute to their doctoral experience?</td>
<td>Four: Students’ participation in collegial practices and collegial relationships helped to make the emotional work of the doctoral project more manageable. Five: Participation in collegial practices helped students balance their expectations of autonomous learning and accomplishment.</td>
</tr>
<tr>
<td>4. From the perspectives of doctoral students, what are the relationships and practices that lead to purposeful collegial practices?</td>
<td>Six: Collegial practices and collegial relationships represented complex subjective acts, involving students’ unspoken expectations around reciprocal responsibilities.</td>
</tr>
</tbody>
</table>
I address question five, in a later section since it relates to recommendations. Next, I provide a summary of each finding, referring to the relevant analysis chapters as appropriate.

**Finding one: Students’ understanding of collegiality informed how they saw others involved in their doctoral education as colleagues**

Students in this study regarded people who could make contributions to their doctoral education as a colleague. The term colleague arose from students’ own dialogue, and is notable because the idea of colleagues is not usually referred to in literature that discusses doctoral education; the more favoured term is ‘peer’ (see for example, Boud & Lee, 2005; Pilbeam et al., 2013; Pyhältö et al., 2009; Stracke & Kumar, 2014). Additionally, students talked in inclusive ways about those they saw as colleagues in their doctoral education. Considering diverse others as colleagues meant students navigated collegial relationships with students, academics, and dispersed colleagues such as community members, digital communities, and friends. Drawing on students’ appraisals, collegial relationships had the potential to influence their research practices, their contributions to knowledge, and submitting their thesis.

Students’ aspirations for future employment were acknowledged as part of collegial relationships too. Some students recognised that current doctoral colleagues could later become workplace colleagues. This perspective positioned the doctoral environment as a space where past and future employment practices met, and reflected how some doctoral students in this study were navigating transitional identities while working on their PhD, transitioning from seeing themselves as students to seeing themselves as academics- or professionals-in-the-making. Research indicates that the identity work of doctoral students can be a source of anxiety and stress (Boulos, 2016; Hargreaves et al., 2017; Levecque et
al., 2017). I argue that students’ practices of seeing others as colleagues provided them with a more meaningful and contemporary perspective of collegial relationships in the doctoral environment.

Students’ practices of seeing others as colleagues related to current and future contexts; in the next section I argue that students also brought their existing collegial practices into the doctoral environment.

Finding two: Students enter doctoral education with an existing well-developed sense of collegiality

With the average age of beginning doctoral students reported as over 30 years in numerous countries, and the composition of the student population diversified due to the widening participation of non-traditional and international students (Clegg, 2014; Hyun et al., 2006; Barker, 2016), it makes sense that students are likely to (re-)enter university with increasingly varied life and employment skills in comparison to the past (Cumming, 2010a). The situation at this university replicates the international trends of age and diversity (Spronken-Smith et al., 2017). Eight students in this study used their previous experiences of collegiality as a rationale for their perspectives on collegiality in a university setting. In Chapter Five, I noted how 13 students mentioned 11 different types of career or employment prior to commencing their doctorate. Acknowledging the likelihood of students’ prior experiences of collegiality is important in doctoral education, as people apply existing practices to new settings, or reflect on their existing practices to make sense of different situations. Many students in this study seemed habituated or accustomed to collegial practices and collegial relationships, and consequently had a well-developed sense of collegiality that informed their expectations of doctoral education.
Students appeared to apply their collegial skill sets in ways that worked for their learning and wellbeing, but also enhanced the doctoral environment for others. For example, providing workshops for other students, looking out for research literature that was useful for a colleague, and helping a recently-met acquaintance with writing. As discussed in Chapter Six, students were willing to be agentic and initiate collegial interactions because they intuitively saw themselves as colleagues to others. This finding contrasts with a recent Graduate Opinion Survey at this university, where students identified teamwork skills as poorly developed during their doctoral programme (Spronken-Smith et al., in print), and with literature on transferable skills and graduate attributes, where skills related to teamwork were also judged as underdeveloped (Cuthbert & Molla, 2015; Manathunga et al., 2009). I explain this disjuncture on the basis that doctoral students’ collegial skill sets may be insufficiently harnessed by their doctoral education programmes, such that students generate their own opportunities for collegiality according to the circumstances and the nature of their relationships.

Accepting that students enter doctoral education with an existing well-developed sense of collegiality has implications for doctoral education programmes that seek to develop transferable skills and graduate attributes. Deficit models of transferable skills that consider students’ development in terms of skills that students should acquire (and by implication, currently lack), may not be paying sufficient attention to the skills that students already have and ‘transfer’ to university. In conclusion, I agree with Cumming’s (2010a) argument that universities could do more to acknowledge the skill sets doctoral students already have, which in this case means collegial skills useful for research teams and various other employment contexts. Next, I discuss how students’ definitions and expectations of collegiality related to their supervisory relationships, and the implications for supervisory practices.
Finding three: Supervisors occupy a unique position in how students think about collegiality

Students in this study were unlikely to view supervisors as colleagues, yet still perceived that supervisors had a role in collegial practices. Many students saw their relationships with supervisors as too marked by hierarchy to call their supervisors colleagues, and accepted academic hierarchy as part of the ‘social order’ of higher education (Nicolini, 2012; Schatzki, 2005a; 2008). It made sense to many students to think of their supervisors’ status and expertise in their field as evidence of their supervisors’ hierarchical position in supervisory relationships. Having accepted relational boundaries with their supervisors, these students did not anticipate egalitarian relationships. Two students described their attempts to position themselves in more equal terms to their supervisors, and the emotional work that ensued from trying to disrupt what they saw as hierarchical relations of power. Hierarchy and status notwithstanding, students aspired to collegial relationships with their supervisors, and for supervisory relationships to be more collegial.

In Chapter Five, I outlined some of the features of collegiality that students attributed to supervisory relationships and practices, such as trust, commitment, and intellectual openness (see Table 6). Although, it should be noted that several students talked about these practices in terms of an ideal, rather than as illustrative of their actual experience. One explanation for students’ aspirations could be that most students recognised the potential collegial benefits of supervisory practices to their research development and doctoral learning.

Some students characterised collegiality with their supervisors in terms of learning and knowledge making. While these students acknowledged the expertise of their
supervisors, they also valued opportunities to demonstrate their own knowledge. One student celebrated sharing of knowledge as “intellectual collegiality”. Intellectual collegiality for a different student meant their supervisor recognising that the student’s growing expertise in an academic field was now possibly more advanced than their own, and for a third student, intellectual collegiality meant their supervisor acknowledging that the student had knowledge to contribute to their conversations.

I was surprised by the prevalence of supervisory practices as a topic of conversation among student participants, given the peer-learning focus of this research study. Notable too was that student participants in this study came from each of the four divisions in this university; this would imply that across the participant group students were likely to experience a range of supervisory models. But the fact that students dedicated a considerable amount of conversation to supervisory relationships and practices demonstrates the importance of my finding. Students’ framing of supervisory relationships in terms of collegiality indicated that collegial relationships and practices do not require participants to be equal, nor do the circumstances need to be egalitarian. Nevertheless, supervisors occupied a unique position in how students thought about collegiality, which suggests that there are implications for how collegiality is expressed within supervisory practices. Intervention may be needed to reconcile how students see collegial supervisory practices, and how supervisors might interpret the same. I move now to consider what doctoral students perceived they were getting from collegial activities, and how this affected their doctoral experience.
Finding four: Students’ participation in collegial practices and collegial relationships can help to make the emotional work of the doctoral project more manageable

Everyday practices of the doctorate, such as writing, were often-times a source of invisible emotional work, where students encountered feelings of dissatisfaction, self-doubt, and uncertainty. It is worth re-iterating that students spoke about the emotional work of doctoral education in unsolicited ways. To some extent, students described how collegiality helped to mitigate the emotional challenges of everyday doctoral practices. One student, recognising the stress that another student was under due to problems with theory writing, took the time to help the student. While this act may seem altruistic as well as collegial, this example of one student’s empathy and willingness to help another also demonstrated a form of social solidarity. Collegial practices provided students with a sense of social solidarity and affirmation with others in different ways. For example, a group of mature students, who shared similar professional backgrounds, found navigating their identities as doctoral students difficult. This group organised regular meetings, which were a source of social solidarity as well as collegial learning. Members of the group found social solidarity in terms of the emotional work they encountered navigating their collective identities as mature doctoral students and professionals at the same time. The student described how their shared experiences provided group members with a sense of affirmation, a sentiment echoed by other students in this research related to different circumstances. Regular meetings additionally provided the students in the group with opportunities to share tacit institutional knowledge, which proved particularly useful for some members who were part-time students. On other occasions, the students focused on academic tasks, such as writing for publication. For this group, a sense of social solidarity and collegiality contributed to the longevity of the group.
Participation in collegial activities and feeling part of a collegial environment provided students in this study with emotional respite that contributed to their sense of wellbeing, motivation, and purpose. For one student, group activities helped them to develop a sense of perspective that the PhD is a finite project. In this regard, the student gained a sense of emotional balance and motivation from collegial practices. Two other students made a connection between collegial groups, emotional support, and “social wellbeing” (conversation P15/16), while other students spoke of support groups with regular meetings, a common format, and an agreed purpose. Collective organisation and collegial practices meant that many students felt part of a community based on shared identities, shared aims, and shared emotional experiences. Although, it is also worth acknowledging that some students experienced group dynamics and collegial practices as less purposeful or productive, both for social solidarity and for completing their thesis.

The emergence of emotional work from the data is unsurprising given the growing acknowledgement of matters related to student mental health and wellbeing reported in Chapter Three (Barney, 2013; Cotterall, 2013a; Guthrie et al., 2017; Hargreaves et al., 2017; The Graduate Assembly, 2014). Students seemed willing to bring their experiences of emotional work into conversations with strangers in a research setting. I suggest that students’ willingness to share their personal stories was testament to the safe environment achieved collectively by the students and myself, and to students’ willingness to contribute to research focused on informing ways to develop collegiality in doctoral education. Moreover, I argue that students’ willingness to consider the emotional work of the doctorate demonstrated the importance of social solidarity and a collegial environment to student wellbeing during the doctorate. Next, I extend this understanding of what doctoral students perceived they gained from collegial activities, with particular regard to students’ interpretations of independent study and the emotional work of isolation.
Finding five: Participation in collegial practices can help students balance their expectations of autonomous learning and accomplishment

Students seemed to wrestle with their expectations of doctoral study as lone scholarship, in contrast to their everyday experiences of collegial practices. In Chapter Seven, I interpreted students’ discussions of this apparent contradiction in terms of expectations of autonomy and autonomous doctoral practices. Students recognised the need for self-direction, passion, and intellectual distinctiveness in their studies, while appreciating the intellectual, social, and emotional benefits of participating in collegial activities and demonstrating collegiality to others. Collegial practices helped students in this study to balance the emotional work involved in sustaining autonomous practices throughout the doctoral project.

Many of the practices and emotional work students associated with autonomy, such as self-direction and passion are pertinent to doing a PhD, and represent the teleoaffective structure (Kemmis et al., 2012; Schatzki, 2012) of the doctoral project. Passion seemed to enable students to sustain motivation and a sense of purpose through the emotional turbulence of achieving their goal to make a distinct contribution to knowledge. But students’ acceptance of the emotional work of isolation as a rite of passage has potential to be less productive for their wellbeing. Students’ references to anonymous others, whose lone scholarship had apparently enabled these ‘others’ to achieve doctoral success, contributed to the myth of the lone scholar. In contrast, several students spoke in personal terms of experiencing isolation or loneliness as part of their doctoral project. Given the numbers of students who experience mental health needs that are reported in international studies (Hargreaves et al., 2017; Hyun et al., 2006; Stubb et al., 2011), these students’ experiences were unlikely to have been unique. Research literature indicates that some
students struggle to reconcile various trade-offs associated with doing a doctorate (Martinez et al., 2013). I propose that the cultural and institutional resilience of the lone scholar construct creates conditions for an emotional trade-off that may be too high for many students to manage, and needs to be challenged.

Collegial practices seemed to help students maintain their sense of autonomy by creating a balance, which enabled students in this study to negotiate some of the emotional work involved in achieving their goals. In effect, for some students their collegial practices enhanced the teleo affective structure of their doctoral project. My study demonstrates how students’ collegial practices can complement autonomous doctoral practices, and vice versa. Those students who participated in collegial activity alongside self-directed, autonomous activity identified gains for their learning, their research practices, and their wellbeing, all of which contribute to the quality of students’ experiences of doing a doctorate. I move now to the final finding, which responds to the research question, what are the relationships and practices that lead to purposeful collegial practices?

**Finding six: Collegial practices and collegial relationships represent complex subjective acts**

Collegial practices and collegial relationships represent complex subjective acts, involving students’ unspoken expectations around reciprocal responsibilities. Students’ collegial practices were influenced by their personal values, their sense of purpose, and their interactional and learning needs at a given moment. In addition, students’ practices were shaped by features of the institutional context, such as where they were located for their study, and the model of supervision they experienced. The contextual and circumstantial nature of students’ collegial practices meant that collegial practices were both complex and subjective.
Students’ conceptualisations of collegial practices and relationships demanded tacit knowledge of relationships. Students’ expectations of colleagues incorporated a broad sense of mutual commitment and respect, but could also involve sophisticated expectations of emotional awareness of others. Students anticipated mutual respect and integrity in their relationships with colleagues, and expected colleagues to demonstrate an inclination to reciprocate collegiality.

Students in this study indicated that collegial practices were informed by relational responsibilities and an implicit code of conduct, which helped to maintain respectful and reciprocal collegial relationships. Students’ understanding of these responsibilities as a collegial code of conduct meant they could apply relational tools to navigate various relationships and collegial practices. While clearly articulated during the research, the relational responsibilities of which students spoke seemed implicit in everyday practices. Students’ ability to enact and interpret relational responsibilities seemed reliant on their tacit knowledge of how collegial relationships work, and their interactional expertise in managing these unspoken codes of conduct.

In Chapter Six, I demonstrated how students’ understanding of a collegial code of conduct could be explained in terms of an increasingly complex structure of meaning (Åkerlind, Bowden, & Green, 2005). Across the participant group, students’ relational responsibilities to one another operated on a number of levels. In the broadest sense, students acknowledged that they had social responsibilities to colleagues involved in collegial activity. However, enacting a code of conduct also seemed to involve students being aware of professional conduct, and tacit “interaction rules”. The meaning of a code of collegial conduct became most complex when students discussed their relational responsibilities in terms of demonstrating awareness of the wellbeing of others involved in
collegial activities. Students’ acknowledgement that their collegial relationships had implications for safeguarding one another’s wellbeing reiterates my argument that collegial practices can help students’ mitigate the emotional work of the doctoral project. In summary, students’ expectations of collegial conduct were highly sophisticated, depending on the context, and reflected the value that students placed on collegial relationships.

The six main findings discussed in this section confirm previous research findings that claim peer interactions play an important role in doctoral education (Boud & Lee, 2005; Cumming, 2010a, 2010b; Pilbeam et al., 2013; Pyhältö et al., 2009; Stracke & Kumar, 2014). Taken together these findings suggest a role for collegial practices in doctoral students’ relationships with their peers, their supervisors, and research communities. Findings from this research support the claim that universities could do more to acknowledge the skill sets doctoral students already have (Cumming, 2010a), which will also have implications for supervisory relationships and the importance of a match between a student’s and supervisor’s expectations of supervisory practices (Pyhältö et al., 2015). Although this study set out to focus on students’ understanding and practising of collegiality, the findings may well have a bearing on recent research concerned with students’ experiences of mental health and wellbeing during their doctorate which determine the importance of students feeling that they can contribute to a research community (Hargreaves et al., 2017; Hyun et al., 2006; Stubb et al., 2011). Next, I consider the ways in which findings from this research study can contribute to the field of doctoral education.

**Contributions**

This thesis makes four main contributions to the field of doctoral education and academic development. To locate the first three contributions, I return to the three main themes in the
doctoral education literature that I reviewed in Chapter Three: peer learning, transferable skills, and wellbeing. The first of the three contributions I make is to knowledge about collegiality in doctoral education, the second is to the transferable skills debate, and the third is to research on student wellbeing. The fourth is a methodological contribution to social practice theory.

Understanding collegiality in doctoral education

The situated or contextualised nature of doctoral study, and students’ subjective experiences complicate doctoral education in unique ways. The complexity of this terrain has meant that much of the research into peer learning in doctoral education falls into two categories. The first is research communicated as academic development guides, which serve the purpose of offering more generalised or generic advice for doctoral students, such as forming or maintaining peer groups. The second is conventional peer-reviewed research, which tends to focus on specific research questions or interventions, such as how students experience group supervision arrangements. Both types of contributions are important but while students are the subject of this research, they are rarely the researchers.

As a doctoral student myself, I was uniquely positioned to do the research reported here in comparison to researchers who occupy other roles in the university, such as academic developers and supervisors. My position was advantageous for the collective principles and practices adopted in this study. As a doctoral student and researcher, I could apply interactional expertise when working with student participants, having some familiarity with what counts as doctoral education at this university. In this regard, my position facilitated different ways to develop an understanding of how students define and practise collegiality in a doctoral environment. My reflexive practices were important for
working with the possible tensions of being a researcher and a member of the research subject group by ensuring I privileged the voices of the participants of this study.

This research makes an original contribution in its collective, student-centred approach to determining what collegiality means to doctoral students as an aspect of their everyday doctoral practices. The six main findings contribute to understanding the meanings that doctoral students bring to their doctorate, and that they seek to enact in their collegial practices, interactions, and relationships.

**Collegial practices and transferable skills**

The phrase ‘teamwork’ is commonly listed as one of a number of graduate attributes or transferable skills that HE institutions aspire to develop among their graduates. Research in this field often debates the merits of such an agenda, or evaluates skills development and training programmes (Cuthbert & Molla, 2015; Gokhberg et al., 2017; Manathunga, 2009). When students are asked whether they see value in transferable skills and attributes, it would seem that many do once they are in the workplace post-graduation (Platow, 2012; Elaine Walsh, et al., 2010). This thesis makes a different kind of contribution. Given that HE institutions internationally are likely to further develop transferable skills provision in doctoral education, including skills such as teamwork, the timing of this research study is pertinent. Rather than thinking about transferable skills, or specifically teamwork, in terms of a list of capabilities that students might use to market themselves and improve their employability, students’ understood collegial practices as ways of knowing and doing doctoral education. I argue that the phrase ‘teamwork’ as a transferable skill is too simplistic, and could be better articulated with references to collegiality. Findings from this study demonstrate that many students are committed to and value collegial practices, and they have complex relational expectations of colleagues. In light of these findings, I advise
institutions to proceed with greater attention to the collegial ways that students work and relate to others to inform what is meant by teamwork. Institutions may need to make students’ implicit expectations of collegiality in teamwork explicit, which could include productive practices for working with colleagues, and fostering respectful collegial conduct.

**Student wellbeing and the emotional work of doctoral study**

Findings from this research study suggest that a collegial culture plays an important role in how students participate in a research community through meaningful and purposeful practices. Consequently, my conclusion that a collegial research culture is important contributes to existing research about the significance of students’ sense of belonging to their wellbeing and their engagement with doctoral education (Hargreaves et al., 2017; Hyun et al., 2006; Hunter & Devine, 2016; Mitchell, 2014; Pyhältö et al., 2009; Pyhältö et al., 2015; The Graduate Assembly, 2014). For example, being part of a community provides students with greater access to resources and information (Hargreaves et al., 2017; Hunter & Devine, 2016; Stubb et al., 2011). In addition, students who feel part of a community can experience reduced emotional and physical burnout because they feel they have similar rights and responsibilities to others in the community, they perceive that they are treated equally, problems are addressed, and they have a good sense of collegiality among researchers (Córner et al., 2017). But simply being part of a community is not enough to mitigate the emotional challenges to student wellbeing of doing a doctorate (Stubb et al., 2011).

The findings from this research study attest to some of the emotional work involved in completing a doctorate. Students shared experiences of dissatisfaction, anxiety, feeling undermined, and feeling isolated or lonely. Rather than offering definitive solutions,
students, in the course of their conversations, illustrated how collegiality represents a way of *doing* doctoral education and doctoral relationships, which has the potential to enhance individual and collective wellbeing. A further contribution this thesis makes is to emphasise the importance of opportunities for collegiality as an integral aspect of students’ everyday doctoral practices. Next, I explain how this research contributes to social practice methodology.

**Hybrid social practice methodology**

Contemporary social practice theorists in the field of HE studies and academic development encourage researchers to explore innovative, new possibilities for research design, refocusing attention on the multi-dimensions of practice (Danby & Lee, 2012; Trowler, 2014). In response, I devised a hybrid methodology informed by practice-focused theory (Trowler, 2014) and the principle of collective human experience advocated in phenomenographic research (Åkerlind, 2012; Collier-Reed & Ingerman, 2013; Trigwell, 2006). Claims regarding the ‘adaptive’ and ‘nimble’ nature of social practice methodology (Saunders et al., 2015) are seldom elaborated on in published research, meaning researchers who wish to adopt a hybrid methodology have little in the way of precedents. Phenomenography, on the other hand, has established protocols, which continue to be debated by practitioners, but are often applied in student-centred research. I found a means to embed collegial and collective research practices throughout my research design by committing to the shared epistemological principle that people have collective ways to understand the social world. I subsequently questioned each aspect of my methodology in light of this collective principle.

This hybrid methodology required that I acknowledged my place as a student member of the doctoral community, but as a researcher I developed the role of an active
by-stander. This position offered research possibilities to apply engaged listening (Gerard Forsey, 2010) and become immersed in students’ conversations. The protocols of phenomenographic research contributed a rigorous underpinning for my analytic approach to discerning how students in this study came to know and understand collegiality (Gherardi, 2012), and whether students collectively enacted collegiality in their everyday practices. This analytic rigour could help practice-focused researchers avoid the pitfall of ‘interactional reductionism’ (Levinson, 2005), which results in analysis that offers simplistic descriptions of what people do when practices form the primary unit of analysis (Nicolini, 2009). My focus on students’ collegial practices as different types of relationships and different ways of relating sought to create depth in understanding how students defined and practised collegiality in the doctoral environment.

The resultant methodology placed collegial interactions as the object of study, as a form of research method, and involved students as both research subjects and co-researchers. I invited students to thematically analyse their own sorting data, which itself was a form of collegial contribution to the research on the part of student participants. My final contribution from this thesis, therefore, is a hybrid methodological approach that demonstrates the potential for researchers to enact the very practices that their research seeks to investigate. In the following section, I present recommendations that derive from the findings of this study.

Recommendations

I propose three main sets of recommendations from this research study. The first set of recommendations acknowledges the importance of fostering a collegial culture for doctoral students to experience purposeful, engaged, and participatory doctoral education. The second set makes recommendations about what this university and its departments
could do to cultivate cultures of collegiality in doctoral education. The third set of recommendations reflect a need for greater attention in supervisory practices to the invisible emotional work that students experience during their doctoral project, which in part may be addressed by recognising students’ aspirations for collegial supervisory practices.

**Fostering a collegial culture**

My first set of recommendations concerns why universities should foster a collegial culture in doctoral education to encourage students’ participation in purposeful and engaged doctoral practices. Students reported how having a sense of purpose from their collegial practices was imperative for feeling that they were contributing and gaining something productive from collegial practices, including a sense of wellbeing.

Being part of a collegial culture was instrumental in how students safeguarded their wellbeing, in part due to their sense of belonging to research communities, but also by interacting with colleagues who could offer social solidarity and a sense of shared experiences. The research environment is increasingly identified as a high-pressure workplace (Hayter et al., 2011), and the numbers of students who report symptoms of stress, anxiety, and depression are rising (Hargreaves et al., 2017; Levecque et al., 2017; The Graduate Assembly, 2014). Findings from this study suggest that students’ participation in a collegial research community has the potential to contribute to the teleoaffective structure of the doctoral project, helping students to balance purposeful practices and the emotional work of achieving goals. But responding to this finding requires universities to recognise that students experience considerable emotional work in their endeavours to achieve their doctoral goals. While students’ sense of membership in collegial research communities will not remove the emotional work of the doctorate (Stubb
et al., 2011), having opportunities to be part of a collegial culture may help students to mitigate some of the emotional work through collegial interactions and practices.

A final consideration of why universities should seek to foster a collegial culture in doctoral education might appear ironic. Participation in collegial practices enables students to become self-organising agents (Boud & Lee, 2005), and architects of their collegial doctoral environment. Students in this study demonstrated how collegiality and self-directed autonomy could generate complementary practices for doctoral learning. But students also alluded to a fine balance between autonomous practices and a sense of isolation, suggesting that students’ self-organising practices have other consequences. Social practice theory reminds us that students’ practices shape their environment, which in turn are shaped by that environment. This leads us to the context of the neoliberal university, which also warrants attention.

Higher Education in New Zealand has been shaped by neoliberal policies, which has implications for how students are positioned within the university environment (Burford, 2015; Grant, B., 1997; Nairn et al., 2012). Critiques of neoliberal policies point to performative cultures (Morrissey, 2015), where students as self-organising agents might too readily become self-responsibilised agents (Burford, 2015; Grant, B., 1997; Nairn et al., 2012). From this perspective, students ‘becoming’ architects of their learning environments could become an imperative if they wish to be recognised as competent in institutional cultures which disproportionately value individualised, autonomous endeavours over collective endeavour and interdependence. Yet, I argue that the potential for students’ collegial practices to complement their autonomous practices illustrates how dominant meanings can be contested. As B. Grant (1997) notes, possibilities reside in
apparent contradictions, and universities should foster collegial cultures because students can benefit from the possibilities of both interdependent and autonomous practices.

**University and departmental action**

The second set of recommendations from this study focuses more closely on what this university and its departments could do to cultivate cultures of collegiality. Institutions that take proactive steps to cultivate a culture of collegiality are more likely to see collegial relationships embedded in doctoral practices, because recognisable practices emerge from routine, everyday activity. While it is commendable that students at this university often seemed to act as architects of their own collegial culture, students in this study remarked that departments could do more to support collegiality.

University-wide interventions that demonstrate an institutional valuing of collegiality and collegial practices have implications for cultivating collegiality in everyday doctoral practices. Students’ collegial practices are situated within a multi-layered context; institutional practices are part of the context that informs what counts as collegiality in doctoral education. Students’ self-generated collegial activity often seems to be opportunistic and needs driven, and some academics are cautious about the extent that institutional intervention or ‘manufacturing’ can authentically recreate the conditions for collegial communities (Buissink-Smith et al., 2013; Stracke & Kumar, 2014). Nevertheless, some research indicates that cohort programmes and inter- or trans-disciplinary groups can prove useful for providing students with mechanisms for collegial learning (Flores-Scott & Nerad, 2012; Elaine Walsh et al., 2010 ). While this university does not operate student cohort intakes, it could do more to provide opportunities for inter- or trans-disciplinary groups for students who share common learning needs, which have a clear purpose such as learning software for their research, or discussing particular theories. Such groups could
differ from existing workshop provision on the basis of fostering collegial relationships between students to encourage interdependence in their learning practices.

Students are more likely to participate in a collegial culture within disciplinary or departmental communities, where membership of a community is known, practices are familiar and established, and being recognised as a colleague is more readily achieved (Hargreaves et al., 2017; Hyun et al., 2006; Mitchell, 2014; Pyhältö et al., 2009; Pyhältö et al., 2015; The Graduate Assembly, 2014). Research suggests, however, that collegiality is often taken for granted in academic environments (Amber et al., 2014), meaning students’ experiences of everyday practices might differ from implicit expectations. It would be easy to assume that departments already function in collegial ways, but the experiences of students in this study paints an inconsistent picture not only between departments, but sometimes within departments too. For example, three students from the same department, who participated in the research separately, described three different experiences of collegiality. One student talked about collegiality in the department in terms of social wellbeing, a second student referred to collegiality as collaborative networking, and a third student had experienced limited collegiality. Based on their experiences of collegiality, it was surprising that all three students came from the same department.

The finding that students experienced inconsistent collegial practices within their departments reiterates my conclusion that collegial practices and collegial relationships represent complex subjective acts. How students define and practice collegiality are shaped by their own subjectivities as well as their circumstances, and the doctoral environment. In this study, I privileged students’ collective conceptualisation of collegial practices and relationships, but this does preclude individual students who may not enjoy collegial practices, nor wish to get involved. Interestingly, a student’s choice to participate in
collegial practices could be a matter for debate in light of transferable skills programmes and graduate attributes in doctoral education.

Graduate attributes and the transferable skills are a contested aspect of doctoral education. Critiques focus on the privileging of business and corporate influences in doctoral education, which appear to dominate the transferable skills agenda (Cuthbert & Molla, 2015), feed the rhetoric of econo-centric education policies (Morrissey, 2015), and diminish students’ freedom to experience doctoral education as a process of knowledge exploration and construction (Kelly, 2017). I empathise with these critiques, yet I agree with Cumming’s (2010a) argument that students’ voices need more space in these conversations, and universities should demonstrate greater recognition that students may enter university with highly developed skill sets, which doctoral programmes could better accommodate. This was the case for some students who expressed frustration that their existing skills felt under-valued. A number of students made reference to collegial practices in prior employment, and applied their existing knowledge of collegial practices to the university environment, notably by referring to others as colleagues. Several students pointed out that current colleagues in the university might become future colleagues in a workplace, which might also be explained by studies that reflect the reason students embark on doctoral study is often vocational (Boulos, 2016; Elaine Walsh et al., 2010). Both past and future employment appear to be part of students’ understanding of doctoral education. Taking these findings into account, I recommend that the university revise teamwork in its graduate attributes to better reflect students’ more developed conceptualisations of collegiality and colleagues, demonstrated in this study.
Collegial supervisory practices and relationships

This third set of recommendations focuses on supervisory practices, first in relation to the invisible emotional work that students experience during their doctoral project, and second in terms of collegial relationships between students and their supervisors. The emotional work of supervision from the perspectives of both students and supervisors is sparsely represented in literature (Burford, 2014), but is touched upon, for example, in research examining how student and supervisor expectations match or not (Pyhältö et al., 2015). I propose that attending to the emotional work of students’ everyday doctoral practices need not generate an unachievable workload for supervisors. Instead, dispersed or collective models of supervision or mentorship models of supervision increase the number of people who can respond to students’ needs, and enhance students’ sense that they are part of a community.

The emotional work that students experience while working towards their doctoral goals reflects the teleoaffective structure of the doctoral project (Kemmis et al., 2012; Schatzki, 2005a; 2005b; 2012). Supervisors who are aware of this emotional work can play a facilitative role in helping students manage some of the emotional challenges they encounter, and demonstrate a form of social solidarity in the supervisory relationship. But a supervisor’s role is rarely thought of in terms of social solidarity; indeed, social solidarity is unexplored in the context of doctoral education. In this study, students were more likely to discuss supervisory relationships in terms of hierarchy, demonstrating the uniqueness and complexity of this relationship. Social solidarity therefore might seem at odds with students’ perspectives of supervision. At this point, I suggest there is potential to interpret the emotional work of supervision as a form of social solidarity, where students and supervisors might come to collective acknowledgement of the emotional work involved in
routine and everyday doctoral practices, and in more significant practices such as goal setting.

Research suggests that students who receive assistance and are guided in setting realistic goals may be better prepared to adjust their expectations and study plans (Haynes et al., 2012; Pyhältö et al., 2012). This support reduces the potential for emotional distress if students’ goals are not realised (Haynes et al., 2012; Martinez, et al., Rigg et al., 2013). I argue that greater acknowledgement of the emotional work involved in the doctoral project by both students and supervisors represents a form of that social solidarity. Social solidarity proved a useful relational tool for students in this study to help manage their wellbeing, and therefore has implications for collegial relationships between students and supervisors.

This research focused on students’ definitions and understandings of collegial practices among their peers, and an unanticipated finding was that students aspired to collegial relationships with their supervisors. An important consideration for collegial relationships between students and supervisors is that students recognise some supervisory practices as collegial, such as trust, negotiating goals, and demonstrating intellectual openness in supervisory conversations. While intellectual openness might seem a given for supervisory practices, students in a focus group and several different card sorting conversations remonstrated about a lack of intellectual openness in their experiences of supervisory practices. Students also valued trust as important for collegial relationships, but some students felt this was missing from their supervisory relationships. I recommend embedding explicit opportunities within the doctoral process for students and supervisors to negotiate a shared understanding of what counts as collegial conduct in the supervisory relationship, such as during progress meetings. Students in this study generally had tacit
expectations of collegial conduct between colleagues, and given the power dynamics they identified in supervisory relationships, explicit opportunities to facilitate shared understanding of collegial practices are likely to be more productive than simply hoping that students will express their aspirations for greater collegiality in supervisory practices and relationships. Thinking about supervisory practices in terms of collegiality provides a catalyst for further debate about what the role of the supervisor could be.

**Future directions**

In this final section, I consider possible opportunities for future research, but first, I acknowledge some of the research challenges and limitations that I encountered during this study.

**Research challenges**

The greatest challenge I faced during this study concerned my recruitment of participants. Recruitment started promisingly with reasonable numbers of focus group participants, but then declined. In Chapter Four I recounted the multiple approaches I took to recruit a total of 43 doctoral student participants. Participant numbers represented a challenge for the hierarchical card sorting method. I required around 50 participants to constitute a sufficient sample (Harlow, 2005), so I redesigned the hierarchical card sorting method as an elicitation tool. Despite these challenges, I feel the hierarchical card sorting method offered an interesting opportunity to develop collegial methods for researching collegiality, which I will discuss later as a future research direction. Students’ conversations proved rich and illustrative of how they defined and practised collegiality, which led me to new understandings of supervisory relationships, and the emotional work of doctoral practices that I had not anticipated.
I do not claim generalisability of my findings. The collective principles informing my hybrid methodology meant that I sought instead to deepen an understanding of how the participants collectively defined and practised collegiality at this university. Consequently, findings from this study are most pertinent to this university, but may also be relevant to other research-intensive universities that share similarities to this one, such as a diverse student population, and no formal transferable skills programme.

While participant numbers were lower than I had originally hoped for, I had planned for diversity among the participants in this study, and was privileged to meet and research with a diverse participant population. Participant diversity included gender, ethnicity, stage of study, discipline and department, domestic/international students, and life experience. Diversity among participants was likely to contribute to variation in how participants collectively experienced the phenomenon in question (Booth, 1997; Bowden, 2005). I would argue, therefore, that those students who volunteered contributed qualitative variation in how they understood collegial practices in doctoral education.

I acknowledge the potential for bias in this study, particularly since the student participants were self-selected, and may have been more inclined towards collegial activity. Their self-selection does not make their experiences, perspectives, and understandings any less important. Rather, their self-selection places the onus on the researcher to adopt rigorous practices (Cope, 2014), which include transparency about the composition of the participant population.

In my hybrid methodology, I addressed the potential for bias in research by seeking a diverse participant population, and by focusing on an understanding of human experience across a collective group (Åkerlind, 2012; Collier-Reed & Ingeman, 2013; Trigwell, 2006). Diversity among participants should produce diversity in experience. Bias was
reduced by attending to the data set as a collective representation of how 43 students defined, practised and understood their experiences of collegiality. I analysed, commonalities in students’ perceptions and experiences of collegial practices and relationships, and then identified variations within each analytic theme.

Some variations within themes were supported by limited data, such as students’ identification of disruptive or non-productive collegial practices, or collegial practices that might feel exclusive rather than inclusive. These limitations in data present important areas for further research that could add different student perspectives on collegial practices. Notwithstanding these limitations, this study adds to our understanding of what collegiality in doctoral education means for doctoral students, and raises questions for future research.

Future research directions

Future research could investigate students’ inclination towards collegial activity to broaden current understandings of what students think of as meaningful collegial practices. The card sorting method worked well as an elicitation tool for generating conversation between the students in their pairs, and additionally provided further opportunities for understanding students’ conceptualisations of collegiality when they analysed their own data. In this regard, the method became a tool for inductive-type analysis and students’ roles shifted to that of ‘colleague co-researchers’. These two dimensions of the card sorting method, collegial interactions among participants to generate data, and then participants analysing their own data, warrant further exploration as applications of practice-focused methodology which might benefit future research.

I sought to illuminate the opacity of students’ collegial practices by analysing the interrelationships between people, activities, material objects, emotional phenomena, environment, discourses, and occasion or time (Reckwitz, 2002; 2012; Wilkinson, J. &
As indicated in Chapter Four, students were more explicit about certain dimensions of their practice than others, with material objects less represented in their conversations, and subsequently in the data analysis. The apparent absence of material dimensions of practice offers a window on the complexity of students’ practices in terms of what students might take for granted, but also offers opportunities for further investigation. Questions arise as to what students perceive as most influential to their being able to habituate reciprocal and purposeful collegial practices.

My discussions of the emotional work of the doctoral project represents a research finding that was not planned for. Consequently, I propose that more could be done to investigate the emotional work of everyday practices of doctoral life. Researchers pay considerable attention to doctoral writing practices and supervisory relationships, and to a certain extent the emotional work involved in these dimensions of the doctoral project are reasonably well-established (Aitchinson & Mowbray, 2013; Burford, 2014; 2017; Cotterall, 2013a). But other everyday doctoral practices, such as balancing family-work-study demands are less well-researched, and increasingly important to the wellbeing of a diversifying student population.

Students spoke briefly about some of the challenges of working collegially with colleagues, such as collegial groups lacking a sense of purpose or feeling exclusive, which raises questions for future research about whether students’ collegial practices are broadly inclusive. Current research indicates that international students, students from non-traditional backgrounds, and female students are less likely to feel a part of a research community. This situation may come about because the university and departments have insufficient mechanisms for integrating or including students in collegial cultures, a recommendation that I addressed in the previous section. Alternatively, perhaps collegiality
is the domain of individuals who feel most familiar with the particularities of an academic environment? Students who experience a cultural distance from the doctoral and academic environment (Collins, H. M., 2010) might struggle to demonstrate interactional expertise in recognising the social codes at work in collegial practices and communities. Alternatively, perhaps collegial practices and communities are more appealing to students who are agentic and self-directed in their doctoral practices. I previously discussed my concerns that over-emphasising students’ position as self-organising agents (Boud & Lee, 2005) may lead to universities and departments reneging on their responsibilities to foster collegial communities as part of doctoral programmes. Further research will help to clarify why some students may seem more disposed to participate in collegial practices than others, and whether there are barriers to participation for students.

Researchers adopt contrasting positions on how effective institutional interventions are for encouraging collegial practices (Buissink-Smith et al., 2013; Stracke & Kumar, 2014), which suggests that more data is needed to clarify the extent to which institutional interventions can effectively foster a culture of collegiality. Future research should evaluate extant literature in terms of what types of intervention might contribute most effectively to the development of collegial cultures. There is scope also for designing and piloting an intervention that is based on university-wide consultation with students. What we do know, is that collegial communities are under-researched and their potential to enhance doctoral education under-utilised (Batty & Sinclair, 2014; Boud & Lee, 2005; Flores-Scott & Nerad, 2012; John & Denicolo, 2013).

Concluding remarks

Finally, I agree with other social practice advocates about the potential of a social practice methodology to instigate a change-focused research agenda (Danby & Lee, 2012;
Gherardi, 2012; Saunders et al., 2015; Trowler, 2014; Wilkinson, J. & Kemmis, 2015). I ventured with some trepidation into the field of social practice theory, and the intellectual experience created some emotional work of my own! The broadness and diversity of theory that sits under the umbrella of social practice theory was overwhelming, but I was guided by my defining commitment to collective ways of knowing. Consequently, I learnt that researchers do not need to be shackled by their values, or apologists for applying research as a social tool for change. While the aims of this research were, in many regards, quite modest, I conclude this thesis by acknowledging the intellectual and emotional investment of my participants and my supervisors, who enacted collective commitment to collegial ways of knowing and doing in doctoral education.
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Appendix A

Collegial peer learning practices amongst doctoral students

Information sheet for student participants (phase 1)

Thank you for showing an interest in phase 1 of this PhD study. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate I thank you. If you decide not to take part there will be no disadvantage to you, and thank you for considering this request.

What is the aim of this project?

Building on my pilot study in 2014 that explored the range of activities doctoral peer groups engage in, I am now investigating how collegiality within a peer group fosters complex learning and freedom for students to direct their own growth. I am using social practice theory, a form of ethnography, in the first phase of this research to refine a definition of what collegiality can look like in a doctoral learning environment.

What types of participants are being sought?

I am seeking up to 30 doctoral students who have had some experience of a collegial environment at university to take part in a small group card sorting activity and discussion. Students from all Divisions are welcome.

Participation in a group will be entirely voluntary and without compensation. I will provide refreshments during the activity, which will last up to one hour at a time that is mutually agreed by all involved. The activity will take place on campus. Findings from this research project have the potential to inform practices in higher education settings and future provision of effective support for doctoral students.
What will you be asked to do?
Should you agree to take part in this project, you will be asked to:

- join a small group of a maximum of 3 doctoral students, and where possible, the groups will be composed of mixed gender and cross-divisional representation;
- take part in two group card sorting activities where you will organise a series of statements relating to collegiality, firstly in a thematic and then hierarchical order;
- through a process of consensus with other group members agree on how to sort the statement cards, and share your reasoning for your particular decisions;
- reflect on what you think might be missing from the statements (if anything).

The card sorting activity is intended to provide an opportunity for collective conversation in a private, comfortable, and respectful environment. The number of participants will be kept low to enable discussion. The nature of the conversation is unlikely to be threatening since you will be reflecting on a set of statements.

Please be aware that you may decide to withdraw from the project at any time and without any disadvantage to yourself.

What data or information will be collected, and what use will be made of it?
Data collected from the group activity will contribute to phase 1 of my PhD research. With the consent of the group, I will audio-record the session to enable me to actively observe and take notes during the activity. After the session, I will analyse the sorting data using a mixed methods approach. Analysis of the conversations around sorting will be transcribed; elements of conversation will not be attributed to any participant in the observation notes or transcripts. Transcripts will be offered to all participants present in the group for you to check and comment on should you choose to do so. Personal information will be kept to a minimum and will relate to your gender, ethnicity, stage in the doctoral process and department of study.

My purpose in collecting data from the card sorting activity is to refine a working definition of collegiality for my thesis, and to inform phase 2 of my PhD study. Anonymous data obtained from group participants may be discussed with my supervisors, Karen Nairn and Clinton Golding, and is likely to be reflected on in the completed research.

The data collected will be securely stored in such a way that only those mentioned will be able to gain access to it. Data obtained as a result of the research will be retained for at least 5 years in secure storage, and on the university server accessed via a password. Any personal information held on the participants may be destroyed at the completion of the research even though the data derived from the research will, in most cases, be kept for much longer or possibly indefinitely. I will endeavour to preserve anonymity of all participants. The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand).
Can you change your mind and withdraw from the project?
You may withdraw from participation in the project at any time and without any disadvantage to yourself.

What if you have any questions?
If you have any questions about this project, either now or in the future, please feel free to contact either:-

**Kim Brown** or **Karen Nairn**

College of Education/HEDC
Ext: 4212
kim.brown@otago.ac.nz

College of Education
Ext: 8619
karen.nairn@otago.ac.nz

This study has been approved by the Department stated above. However, if you have any concerns about the ethical conduct of the research you may contact the University of Otago Human Ethics Committee through the Human Ethics Committee Administrator (ph 03 479-8256). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.
Appendix B

ETHNIC MONITORING FORM FOR STUDENT PARTICIPANTS

The completion of this form is entirely voluntary.

Please indicate your identified gender and ethnicity:

- Male  
- Female  

- New Zealand European  
- Māori  
- Samoan  
- Cook Island Māori  
- Tongan  
- Niuean  
- Chinese  
- Indian  

Other such as DUTCH, JAPANESE, TOKELAUN. Please state: